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

Contributors

Colombo (Sri Lanka). Public Health Department.

Publication/Creation

[Colombo, Ceylon?]: [Municipal printer?], [1911]

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MUNICIPALITY OF COLOMBO.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR



1911.



APPENDIX E.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1911.

1.-Introduction.

The mean temperature of the air during the year 1911 was much the same as the average; but there

was, for the 9th year in succession, a great shortage of rain recorded, amounting to 24.06 inches.

The most noteworthy event of the year was the taking of the Decennial Census upon the night of March 10, 1911, when a population of 212,295 was disclosed, representing the remarkable intercensal increase of 36.02 per cent. This great increase has had a most important bearing upon the health of the town, a point which is referred to later, but which cannot be properly dealt with until the full Census data are available. From the Census figures, it is estimated that the mean population for the year 1911 was 213,974, as compared with the estimate of 202,311 made prior to the taking of the Census, the rate of increase during the recent decade having been higher than in the previous decade.

The birth-rate during 1911 was higher than the average, but owing to the large number of children

of Colombo parents, who are born and registered in districts outside the town, the birth-rate as recorded does not afford a true measure of the fertility of the population, which is undoubtedly great in the case of the

Burghers and the Sinhalese.

The general death-rate during 1911 was rather above the average, owing to an increased mortality amongst Malays, Sinhalese, Burghers, and Tamils. There was, on the other hand, a reduction in the mortality amongst Europeans, "Others," and Moors.

The increase in the death-rate was confined to two wards, viz., St. Paul's and San Sebastian, all the other wards having a lower rate than the average. Amongst the principal causes of deaths, pneumonia and enteric were the only ones which showed an increase; but in the case of enteric, the apparent increase was more than counterbalanced by the decrease in the number of deaths ascribed to simple continued and remittent fever, both of which terms are being to a large extent abandoned by the medical profession, who now, as the result of improved methods of diagnosis, prefer to apply the more specific term of enteric fever. The only exception to this is in the case of the Malays, a large proportion of whose deaths from fevers continue to be returned under the unscientific headings of simple continued and remittent fever. There appears to be little doubt that, although the Malays have apparently one of the lowest death-rates from enteric, they in reality suffer more from this disease than any other race except the Europeans. The steadily increasing and now very high mortality from pneumonia is a serious matter, more especially as it is a difficult disease to deal with. Its increased prevalence is probably associated in some measure with the climatic conditions which have prevailed.

The mortality from phthis is has shown a noteworthy improvement during the last two years, which is

very encouraging in regard to the preventive measures which have been adopted during that period, and

which are detailed in sections 7 (a) and 11.

The infant mortality, which has been improving so steadily for a series of years, was higher than the record low rate of 1910, but was still 22 per 1,000 below the average. The defect in the registration of births referred to above has the effect of making the infant death-rate here appear higher than it probably is in reality.

There was a considerable increase in the number of infectious diseases notified and dealt with during 1911 compared with the previous year, which was in a large measure due to phthisis having been made a compulsorily notifiable disease, and to an improvement in the diagnosis and notification of enterio fever. were 19 cases of cholera and 36 of smallpox reported from the town during the year, the original infection of each disease having been imported, as usual, from India, via the Ragama camp in the case of the cholera and via Tondi in the case of the smallpox.

The housing problem in Colombo has become very acute, both as regards the insufficiency of accommodation and as regards the existence of unhealthy areas and unhealthy dwellings, and it is urgently necessary

that something should be done to improve matters, some account of which is given in section 11.

The question of the purity of the food supply in Colombo is one which has long been crying for better attention, and it is recommended that the Council should give this matter immediate consideration. food laws are much required, but even if there were such they could not be properly administered unless the

Council appointed a sufficient staff for the purpose.

The admittedly poor quality of the bread in Colombo is said to be due to the use of inferior flour, and the bakers assert that their customers will not pay the price which the use of Trieste flour renders necessary.

The question of improving the quality of the tinned foods imported into the Island requires attention,

and recommendations are made on this subject in section 12 (b).

There has been quite a remarkable improvement in the matter of milk adulteration during the last few years as the result of the action taken by the Public Health Department, the percentage of adulterated samples having dropped from 73 per cent. of the samples examined in 1907 to 17 per cent. of those examined in 1911.

The question of improving the quality of the town water by filtration before distribution has been under consideration for some time, and the installation of the Jewell system has been recommended.

The polluted state of the wells in Colombo, particularly the large public bathing wells, is a matter which, although important, cannot be properly dealt with until there is a sufficient supply of town water permanently available to justify closing these wells and substituting town water.

The state of the public markets remains highly unsatisfactory. The dairies have been improved, but are most difficult to maintain in a sanitary condition. The laundry trade is in a most unsatisfactory state.

Dr. Hirst, the first Municipal Bacteriologist, assumed duties on July 1, 1911.

Details in regard to the various subjects dealt with by this Department are given in the succeeding sections and in the statements annexed.

2.—Meteorology.

The mean temperature for the year was 80 8°, the average for 42 years being 80 7°. The total rainfall for the year was 58.26 inches, which is 24.06 inches below the average.

3.-POPULATION.

The decennial Census was taken on the night of March 10, 1911, when a population of 212,295 was disclosed, representing the remarkable increase of 36.20 per cent., of which, however, 7 per cent. was due to the inclusion of the eastward extension in 1910. The actual population of each race upon the night of the Census is shown in the statement No. 2 in Annexure B, the information in regard to which was kindly furnished by Mr. E. B. Denham, C.C.S., Superintendent of Census, whose report will be awaited with much interest. It is unnecessary to say more here than to mention that the mean estimated population for the year 1911 was 213,974, compared with the estimate of 202,311 made prior to the taking of the Census. One consequence of this great difference between the two estimates is that the laborious task of revising all the death-rates from every cause for each of the ten years since 1901 has had to be undertaken before this report could be written.

The extraordinary increase in the population has a most important bearing upon the health of the

The extraordinary increase in the population has a most important bearing upon the health of the town, as indicated in the section dealing with housing, but this is a point which cannot be fully considered until the report of the Superintendent of Census, with its attached data, has been published.

The total number of occupied houses at the time of the 1901 Census was 27,268, which had increased to 38,667 at the time of the recent Census, the largest increases being in St. Paul's, Maradana, and Kollupitiya Wards. It is possible that the system of enumeration of houses differed at the two periods, and that these figures are not really comparable. One point stands out clear however, and that is that the erection of new houses has not kept pace with the increase of the population, all classes of which are at present keenly feeling the insufficiency of house accommodation.

4.—BIRTHS.

During the year 1911 there were 5,280 births registered in Colombo, representing a ratio of 24.7 per 1,000 living, as against the average of 23.1 for the preceding ten years, an increase of 1.6 per 1,000. 623, or 11.8 per cent., of those births were attended by the Municipal midwives.

The birth-rates for each ward and in respect of each race are shown in Annexure B. That the births recorded in Colombo are far short of being a complete statement of the children born of Colombo parents would appear to be beyond all question, for not only is it well known that an ancient custom prevails amongst most of the indigenous races, whereby prospective mothers migrate prior to their confinement to the homes of their parents, which are in many instances situated outside the town; but a comparison of the birth-rates of the several races in Colombo with those of the same races in the Island generally shows that the Colombo rates, as recorded, cannot possibly be accepted as a true measure of the fertility of the Colombo population. The direct effect of the migration referred to is to make the infant death-rate appear much larger than it really is, because a large proportion of these children are brought to Colombo after the mother has sufficiently recovered, and help to swell the unregistered (in Colombo) part of the infant population, and to contribute towards the infant death-rate, which is reckoned upon the population of the infants registered in Colombo only.

5.—DEATHS.

During the year 1911 there were 7,234 deaths (inclusive of deaths of non-residents) registered in Colombo, representing a ratio of 33.8 per 1,000 living, as against the average of 33.0 during the preceding ten years, an increase of 0.8 per 1,000. 631 of these were deaths of non-residents of Colombo who died in the hospitals, the death-rate (exclusive of non-residents) being only 30.9 per 1,000. Further corrected for age and sex constitution the death-rate was 35.5 per 1,000.

(a) Deaths by Races,

The Malays had the highest death-rate during the year, viz., 40·1 per 1,000, next come the Sinhalese (37·1), then the Tamils (33·4), then Moors (29·2), then Europeans (28·3), then Burghers (27·3), and lastly the "Others," who had the unusually low death-rate for them of 27·3 per 1,000. The rates of the Europeans, Tamils, and "Others" are, however, much affected by fluctuations, and are not therefore very reliable. Comparing these rates with the average of the preceding ten years, it is found that the mortality amongst "Others" was 7.6 per 1,000 below their average, amongst Europeans it was 1.3 below their average, and amongst Moors it was 0.5 below their average. The rates of all the other races were above their average.

It is necessary to bear in mind, when considering these death-rates, that some of them are seriously affected by the deaths in hospitals of non-residents of Colombo. Thus, if we deduct the hospital deaths, affected by the deaths in hospitals of non-residents of Colombo. Thus, if we deduct the hospital deaths, the European crude death-rate is reduced from 28·3 to 22·7, the Burgher rate from 27·3 to 26·7, the Sinhalese rate from 37·1 to 31·4, the Tamil rate from 33·4 to 32·6, the Moor rate from 29·2 to 28·8, the Malay rate from 40·1 to 40·0, and the "Others" rate from 27·3 to 25·6. There is thus a great difference between some of the races in the extent to which their rates are affected by the deaths in hospitals of non-residents of the town, the increase in the mortality on this account being as much as 5·7 per 1,000 in the case of the Sinhalese, 5·6 in the case of Europeans, 1·7 in the case of "Others," but only 0·8 for Tamils, 0·6 for Burghers, 0·4 for Moors, and 0·1 for Malays. The reason of this difference is no doubt that whereas a proportionately large number of sick Europeans and "Others" are received into the hospitals from ships, and in the case of Europeans from up-country also, very few of the indigenous races enter the hospitals from these sources. In the case of the Sinhalese, there is a large population of these in the adjoining rural districts, many of whom come into Colombo to obtain hospital treatment. There are probably not many Moors, Malays, or Tamils come into Colombo to obtain hospital treatment. There are probably not many Moors, Malays, or Tamils in the adjoining rural districts, in addition to which both the Moors and Malays appear to have a strong aversion to going into hospital, especially so as regards their women. Before one can fairly compare the mortality amongst the different races, a further correction should be made, viz., for differences in the age and sex constitution of the several races in Colombo compared with that of the same races in the Island as a whole.

(b) Deaths in Wards.

The following are the crude death-rates in the various wards during 1911, the average for the previous

ten years being in each case shown within brackets.

St. Paul's 31·4 (24·9); New Bazaar 28·2 (28·5); San Sebastian 26·6 (23·7); Kotahena 25·1 (26·1); Maradana 23·0 (25·7); Slave Island 21·8 (27·4); Eastward Extension 18·2 (not known); Kollupitiya 15·2 (19·3); Pettah 12·4 (13·4); Fort 10·7 (12·2). It will be seen that with the exception of St. Paul's, which shows an increase of 6·5, and San Sebastian, which shows an increase of 2·9, all the wards had a lower deathers of the present rate during 1911 than their average for the preceding ten years, the improvement being most marked in Slave Island $(-5\cdot6)$; Kollupitiya $(-4\cdot1)$; Maradana $(-2\cdot7)$. The crude rates shown above do not include the deaths of ward residents which occurred in the hospitals. If all the deaths of these ward residents are

the deaths of ward residents which occurred in the hospitals. If all the deaths of these ward residents are transferred to their respective wards, it is found that there is a very material increase on some of their rates. The Pettah rate is thus increased by 16·1; St. Paul's by 5·6; Maradana by 4·5; New Bazaar by 3·7; Kollupitiya by 3·5; San Sebastian by 3·3; Slave Island by 2·3; Kotahena by 1·8; and Fort by 1·4.

By this means we get the following as the true ward death-rates, viz., St. Paul's 37·0; New Bazaar 32·0; San Sebastian 29·9; Pettah 28·5; Maradana 27·5; Kotahena 26·9; Slave Island 24·1; Eastward Extension 21·4; Kollupitiya 18·7; Fort 12·1. This correction places the wards of highest mortality in much the same order as does the infant mortality. It is of especial interest to note the comparatively low position of Slave Island which in past years has generally been one of the highest death-rated wards in the town.

Island which in past years has generally been one of the highest death-rated wards in the town.

6.-INFANT MORTALITY.

Deaths, 1,669; death-rate per 1,000 recorded births, 316; average rate for preceding ten years, 338;

decrease, 22 per 1,000.

The infant death-rate in Colombo is probably not so high as it appears for the following reason. It is reckoned as a proportion to the infant population as represented by the number of births registered in Colombo during the year. If, therefore, any of the births escape registration in Colombo during the year, the death-rate will be reckoned on a population smaller than the actual, and will consequently be made to appear higher than it really is. This is actually happening in Colombo, for it is known that it is the custom amongst the indigenous races for women to repair prior to their confinement to the house of their parents, and as many of the Colombo men are married to country women, many of the men themselves hailing from the country originally, it follows that a large number of children of Colombo parents are born and registered in these extra urban districts, their births being thus lost to Colombo; and as such of these children as survive are brought to Colombo, where their subsequent deaths are registered, the effect is to make the infant mortality appear higher than it really is. How far this custom affects the infant death-rate it is impossible, with any

certainty, to say; but, as the result of a rough estimation, I make it that the infant death-rate, instead of being about 300, is probably nearer 200 per 1,000 births.

The average infant death-rate for each race in 1911 and for each race during the four years 1908-1911, in respect of which records for the individual races are available, has been as follows :-

European, Burgher, Sinhalese, Tamil, Moor. Malay. " Others," .. 159 .. 200 .. 290 .. 436 .. 410 .. 304 182 .. 218 .. 286 .. 413 .. 423 .. 291 .. Average, 1908-1911 441

The persistently high infant death-rates amongst the Tamils, Moors, and "Others" demand attention, A large proportion of the Tamils, and many Moors, being poor, are compelled to live in unhealthy areas, such as exist in St. Paul's, New Bazaar, and San Sebastian Wards, their infants being thereby exposed to conditions which are invariably associated with a high rate of mortality. The mothers are, moreover, very ignorant and careless, and, especially in the case of Tamils, have to work instead of attending to their children. The great need in their case is that sanitary dwellings should be provided for them at a rental which they can afford to pay. This will certainly not be done so long as it is left to the property owners to carry out, for, the moment a better class house or tenement is erected, even in an insanitary area, the rent is raised, and the house is thereby placed beyond their means. In this connection reference is requested to the section dealing with the housing

It is generally admitted that the infant mortality is the best test of the sanitary condition of a district. and the statistics in Colombo fully bear this out as shown by the following statement, in which the infant

death-rate in each ward during 1911 and the average for the preceding ten years are given.

The consistently high rates in St. Paul's, New Bazaar, and San Sebastian are a true index of the unhealthy condition of the dwellings in these wards. The Pettah rates are very erratic, and are scarcely comparable with those of other wards owing to the smallness of the infant population upon which the rates are reckoned. Slave Island shows a conside able improvement, as does Kotahena. The infant death-rate in 1911 in the new Eastward Extension was a high one (374), and indicates that much improvement is required there.

Infant Mortality in Colombo Wards, expressed as a Rate per 1,000 Births

Ward,	Average. 1901-10. 1911.			1911.	Ward. Average, 1901-10.			1911.	Ward.	Average, 1901-10.	1911.	
Fort	6.00	211		300	Kotahena		366	 295	Kollupitiva .	. 258	249	
Pettah		407		279	New Bazaar		410	 382	Eastward Exten			
San Sebastian		387		372	Maradana		332	 370	sion .		374	
St. Paul's		440		509	Slave Island	72.00	368	325				

7 .- PULMONARY DISEASES.

Under this heading are included phthisis, pneumonia, and bronchitis. Deaths, 1,897; ratio, 8.24; average, 8.11; increase, 0.13 per 1,000.

Phthisis shows a decrease of 0.55 per 1,000, pneumonia an increase of 0.68, while bronchitis was the (a) Phthisis.

The improvement in the death-rate from phthisis which took place during 1910 was continued during 1911, the number of deaths recorded from this cause being 634, representing a ratio of 2.96 per 1,000, of which no less than 88 or 13.8 per cent. were deaths in hospitals of non-residents of Colombo. The crude death-rate from this cause since 1901 has been as follows:—

Mortality from Phthisis, 1901-1911. Year. 1901 Death-rate. Year. Death-rate. 1908 3.20 3.70 2.98 1909 1902 4.13 3.18 1910 1903 3.13 1904 3.51 .. 3.56 1905 Average .. 4.06 1906 1911 1907 3.79 2.96

It will be seen from the above that the mortality from this disease more or less steadily rose up till 1909, since when it has shown a noteworthy decrease. The race with the highest average rate during the ten years 1901-1910 was the "Others" (4·15); next come the Sinhalese (3·89); then the Malays (3·85); then the Moors (3·31); then Burghers (3·13); then Tamils (3·07); and lastly the Europeans (2·21). In this connection, it is of interest to state that 50 per cent. of the European deaths from this cause in 1911 were amongst non-residents of Colombo, 28 per cent. of the Tamil, 26 per cent. of the Sinhalese, 6 per cent. of "Others," I · 6 per cent. of the Moors, and none of either the Burgher or Malay. During the year 1911 the Malays had the highest death-rate of any race from this cause, notwithstanding the fact that none of them were outsiders. As in previous years, there was in 1911 an extraordinarily high death-rate from phthisis amongst Muhammadan women (Malays and Moors) compared with the rates amongst the males of these races, and, as has previously been pointed out, this is no doubt in a large measure attributable to their peculiarly insanitary custom, whereby they keep their women very much confined to their houses, which are often badly lighted and ventilated. In the case of the stricter Moors, the women are further deprived of the benefits of fresh air and sunlight by their insanitary custom of shutting themselves up in closed carriages, or wearing heavy veils or cloths over their heads when they go out. It is high time that the more intelligent of the Muhammadans turn their attention to this matter. What is required is that their women should have outdoor exercise, with plenty of fresh air and sunlight; they should be taught that phthisis is an infectious disease, and that they should not go and unnecessarily sit or sleep in the same room with a patient suffering from this disease, and that those so suffering should adopt precautions with a view to preventing the spread of the infection to others. A female health visitor with a special knowledge of phthisis could, I believe, do much good by teaching these people, amongst whom the feeling of family attachment is strongly developed.

The death amongst each race since 1901, and the rates for each sex in 1911, are shown in the statements

in Annexure B.

In view of the marked improvement in the mortality from phthisis which has occurred in the last two years, and the fact that the increasing prevalence of this disease in the Island generally has recently been the subject of a Government Commission, it may be of interest to state what are the preventive measures now recognized to be necessary, and how far they have been, or still require to be, adopted in Colombo.

Preventive Measures.—The measures which are now recognized to be necessary for the prevention of phthisis may be divided into the three following more or less distinct groups: (a) Direct preventive measures;

(b) indirect preventive measures; (c) relief and educational measures.
Direct Preventive Measures.—These include all those which have for their object the prevention of the spread of the virus of the disease from infected to non-infected persons, and comprise such measures as detection, notification, segregation, and disinfection.

Indirect Preventive Measures.-Under this heading come general sanitary measures which have for their object the prevention or removal of conditions which tend to act as predisposing causes of the disease, such as overcrowding, contamination of the atmosphere, defective lighting and ventilation, dampness, &c.; in other words, general sanitary measures. These measures will include such works as drainage, paving, dust prevention, cleansing, prevention of overcrowding, and improvement of unhealthy dwellings and unhealthy areas, including re-housing of the poorer classes displaced during the progress of improvement schemes.

Relief and Educational Measures.—Under this heading come the erection of sanatoria for the treatment of early and, therefore presumably, curable cases, providing suitable employment for those who, although infected, are still capable of doing selected work, organizing and distributing relief to the families of bread winners who are incapacitated for work by the disease, propagating knowledge in regard to the causes, methods of prevention, and cure of the disease by popular lectures, by teaching in schools, and by the distribution of literature on the subject.

Incidence of Control.—The carrying out of the direct and indirect measures ennumerated above is an obligation which rests with, and can only be properly discharged by, the authorities armed with legal powers,

and with sufficient staff and funds at their disposal.

The organizing and carrying out of relief and educational measures belongs more properly, at least in the earlier stage, to the sphere of action of the voluntary worker and philanthropist, and need not be further considered here.

Preventive Measures adopted in Colombo.—Although phthisis has for many years been a steadily increasing and, indeed, one of the principal causes of sickness and deaths in Colombo, it was not until early in 1906 that this was recognized, as the result of working out and tabulating the rates for a series of years from all the principal causes of deaths.

At that time, however, and for some time subsequently, the attention of the public, and consequently of the Council and its Public Health Department, was much occupied by enteric fever, which, although not nearly such a prevalent disease amongst the population as a whole as phthisis, is much more dramatic in its operations, and strikes, as a rule, the European population more severely than any other race here (vide remarks under enteric fever).

The prevention of phthisis in common with other causes of deaths was, however, not neglected, as this Department was constantly engaged in carrying out general sanitary measures, such as checking overcrowding, improving the lighting, ventilation, and drainage of dwellings, teaching the cult of the open window, cleansing

of premises, and such like, all of which act as indirect preventive measures.

It was not until July, 1909, that, as the result of a long asked for increase of staff, it became practicable to make a more direct attack upon this disease, by inquiring into, advising, and carrying out disinfection in connection with every death from phthisis reported in the Registrar-General's weekly returns. As it was found that a considerable delay was entailed between the date of death and the date of disinfection by having to wait for the weekly returns, the Registrar-General was asked to instruct his divisional registrars to report every death from phthisis direct to this office as soon as information thereof was received. This he kindly agreed to, with the result that the work was greatly accelerated. By these means 195 phthisis infected houses were dis-infected during the year 1909, the risk of infection being contracted in these houses being thereby prevented. The next advance was secured by the passing of Ordinance No. 6 of 1910, which made phthisis for the first time a compulsorily notifiable infectious disease, and notification of cases began to be received in August of that year. Thus 257 phthisis infected houses were disinfected in 1910, and 364 in the year under review, making a total structure of the case was as far as a total structure of the facts were recorded, and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as recorded and advise was given to the convents as the convents as the convents as the convents and the convents are recorded and the convents as the convents are recorded and the convents as the convents and the convents are recorded and the convents as the convents are recorded and the convents and the convents are recorded and the convents and the convents are recorded and the convents are recorded and the convents and the c possible inquired into, the facts were recorded, and advice was given to the occupants as regards prevention.

How far these measures have been directly responsible for the marked decrease in the mortality from

phthisis which occurred during 1910 and 1911 it is of course impossible to say, and the improvement may not be maintained in succeeding years; but it is at least highly satisfactory in view of the very limited powers and means which are at present at our disposal, and is a great encouragement to continue the struggle and to adopt still further measures against this disease which has obtained such a deep-rooted hold here.

In this connection it is necessary to point out that the Council have as yet neither the legal power to enforce segregation of cases, no matter how dangerously infectious they may be, nor, even if they had such power, have they a hospital in which they could isolate them. It is impossible, therefore, for the present to do more than strive to improve the methods now being carried out.

That there is much room for such improvement scarcely needs mention, for notification of cases by the medical practitioners is still exceedingly defective, there being far more deaths than cases notified. however, hoped, and indeed expected, that in respect of this disease, as was the case in respect of enteric fever, the practitioners will before long show the same willingness to co-operate with the sanitary authorities here

as has been experienced in other countries which have undertaken measures for the prevention of phthisis.

The detection of cases which are not under the care of a medical man—and it is certain that there are many such, especially in the earlier stages of the disease—will, it is hoped, be facilitated by the extension of the existing dispensary system; but especially by the establishment, as is proposed, of a special tuberculosis dispensary with a special staff whose whole time could be devoted to this work. As I have elsewhere pointed out, however, this tuberculosis dispensary must, for reasons previously explained, be made a part of the existing sanitary organization.

To conclude, as regards direct preventive measures, the next and most important advance must be the provision by the Council of a hospital for the segregation of advanced and dangerously infectious eases, and the granting by the Legislature of power to the sanitary authorities to compel the segregation of such cases. as dangerously infectious cases are allowed to remain at large in the town, there is no more hope of stamping out this disease than there would be in the case of, say, smallpox under similar conditions. It is however recognized that owing to the sometimes very chronic nature of this disease the power to enforce and maintain segregation would have to be used with discretion, and that provision will have to be made so as to ensure this.

Indirect Preventive Measures.—One has seen it stated that of all zymotic diseases phthisis has shown the least tendency to diminution from general sanitary measures. This is no doubt true as a general statement; but where, as in Colombo at present, practically every principle of sanitation is violated, particularly as regards the insanitary construction and disposition of dwellings, the irrepressible tendency towards overcrowding, the lack of proper means of drainage and disposal of waste, the almost entire absence of measures for the occlusion of damp in a climate with an average rainfall of 82.32 inches per annum, and the ignorance and indifference of the population as regards sanitary measures generally; under such cicumstances there can be no doubt that the problem of phthisis prevention in Colombo is intimately associated with, and to a considerable extent dependent upon, the carrying out of the indirect preventive measures enumerated above, and that no scheme for the prevention of this disease, which omits to provide for the carrying out of these measures, can be considered either complete or likely to be really effective. For this reason, I propose to give here a short account of what has been, and still requires to be, done in Colombo in respect of these indirect

Drainage.—Although, as is known, many miles of sewers have been laid, and the whole town will in time be thus served, very few premises have so far been drained (only 97 out of the estimated number of 8,000 to 10,000 available at the end of 1911), and consequently the sanitary condition of the town has not yet

appreciably benefited by this great work; indeed, on the contrary, it has in some respects suffered in consequence of the breaking up of the streets, the blocking of existing open side drains, and such like, all of which are, of course, unavoidable during the construction stage. Needless to say, the benefit of the sewers can be reaped by the town at large only after the connections have been made, and it is therefore most necessary that, as the City Sanitation Engineer has recently pointed out, if the work of connection is to be completed within a reasonable period, the present rate of progress must be very considerably augmented.

Paving and Damp-proofing.—There is no legal power to enforce paving of floors, backyards, or lanes, Paving and Dump-proofing.—There is no legal power to enforce paving of floors, backyards, or lanes, and progress in this direction has therefore been very difficult but, as the statement of structural improvements included in each annual report shows, a considerable number of dwellings, backyards, and passages have been paved at the instance of this Department. There is no legal power to require the provision of damp-proof courses, and scarcely a house in Colombo is so protected. Special powers are urgently required in those respects, and will it is expected be included in the proposed new by-laws.

Dust Prevention.—The practice of road oiling is now being carried out by the Works Department on a considerable scale, and has very materially reduced the dust nuisance. It is, however, not so effective or so lasting as paying, the initial cost of which, however, is heavy.

lasting as paving, the initial cost of which, however, is heavy.

Cleansing.—This subject falls under two heads, viz., (a) public, and (b) private cleansing.

Public cleansing includes scavenging and the conservancy of latrines. As regards the scavenging, it has been enormously improved since the contract system was abolished, and the work was taken over departmentally by the Works Department in 1905, the latest and a most important improvement in this connection. being the establishment of a Horsfall refuse destructor, with a view to replacing the old and highly insanitary method of tipping.

The conservancy of latrines was taken over on September 1, 1911, from the contractor, in view of the unsatisfactory manner in which the work was being performed by him, and already one sees signs of great improvement; but the bucket system can never, even with the most perfect management, be anything but highly objectionable and insanitary in a town of the size and with a population so careless in these matters

as exists in Colombo.

Private Cleansing.—The work of maintaining private premises in a cleanly condition is one in respect of which the householders are held responsible under the Ordinance, and one of the principal tasks of the Sanitary Inspectors consists in endeavouring to keep them up to the mark (vide records of work done and prosecutions annexed).

Careless and obstinate although many of the householders are, an enormous improvement has been effected in the state in which private premises are kept, as any one who was acquainted with the back compounds of Colombo, say ten years ago, and as they are to-day, must recognize. The records of the Works Engineer as regards the output of scavenging rubbish are the best evidence on this subject.

Overcrowding.—Midnight inspections, with a view to the detection and prevention of overcrowding, have for years been regularly carried out; but it is a hopeless task so long as there is the present insufficiency of house accommodation. The most that can be done is to get the worst instances abated, and this is as far as possible being done (vide also section dealing with housing).

Unhealthy Areas and Unhealthy Dwellings .- This subject, which has a most important bearing, not only upon the question of phthisis prevention, but upon the health of the population generally, is dealt with under a separate section, to which reference may be made.

(b) Pneumonia.

Deaths, 859; death-rate, 4·02 per 1,000; average for the preceding ten years, 3·34; increase, 0·68 per 1,000. This death-rate has only twice been exceeded during the decade 1901–1910, viz., in 1908 and 1909. Forty-six, or 17 per cent., of the deaths from pneumonia in 1911 were of non-residents of Colombo who died in the hospitals. This disease was the principal cause of deaths another the population of Colombo decades and the colombo decades of the colombo decades are the colombo decades. during 1911, being responsible for no less than 13.0 per cent. of the total deaths. It was the principal cause of deaths amongst every race except the Europeans. As regards the cause of this disease, all authorities are agreed that it is an infectious disease; but there is a divergence of opinion on the extent to which it is preven-tible. Parkes and Kentwood, for example, state that "so far as has been ascertained, neither meteorological nor insanitary conditions appear to exercise any marked influence in the epidemic prevalence of pneumonia. Osler states that in America it has shown a decided increase, and in some places, e.g., in Chicago, it has gradually replaced phthisis as the principal cause of death. He records the fact that in America it is more fatal amongst coloured than amongst the white people, an observation which equally applies to Ceylon. It is more common in cities, and individuals who are much exposed to hardship and cold are particularly liable to it, e.g., the Tamils and "Others," whilst debilitating causes of all sorts render individuals more susceptible, alcoholism

being a particularly predisposing factor.

Notter and Firth state that "insanitary conditions, especially filth, overcrowding, and want of ventilation act apparently as powerful, though not indispensable, predisposing causes." It is difficult to see what can be done to check the spread of this disease here beyond improving the general sanitary conditions of the town,

as indicated in the sections dealing with housing and phthisis prevention.

The death-rate amongst each race from this cause during 1911, and the average (shown within brackets) for the preceding ten years, has been as follows:—Europeans 1·00 (1·42); Burghers 3·24 (2·38); Sinhalese 3·42 (3·29); Tamils 5·76 (4·04); Moors 3·35 (2·95); Malays 3·68 (2·43); "Others" 5·82 (5·38).

(c) Bronchitis.

Deaths, 270; death-rate, 1.26 per 1,000; average for preceding ten years, 1.26; increase, nil. The death-rate for each race since 1901 is shown in the statement in Annexure B.

-Diarrheal Diseases.

Deaths, 959; death-rate, 4:57 per 1,000; average for preceding ten years, 5:98; decrease, 1:41 per 1,000. This group includes diarrhoea and enteritis (which are for all practical purposes synonymous) and

dysentery.

As will be seen from the following statement, the death-rate from this group has showed a rapid drop since 1906 :-

Year.		Death-rate per 1,000.	Year.			Death-rate per 1,000.
1901	 	6.53	1908	**		5.40
1902	 	6.64	1909			4.78
1903	 	6.89	1910			4.19
1904	 - 1.	5.32				-
1905	 	6.89			Average	5.98
1906	 	7.85				
1907		5.11	1911		and are with	4.57

One of the most noteworthy points in regard to the mortality from this group is the great preference which practitioners have of late years shown for the term "enteritis" rather than that of "diarrhea." The two terms are for all practical purposes synonymous; but whereas ten or fifteen years ago nearly all these cases were returned as diarrhoea, they are now mostly being returned under the heading of "enteritis." During 1901, for example, out of a total of 681 deaths returned under those two headings, the proportions were diarrhoea 669 deaths, enteritis 12 deaths, whereas in 1911, out of a total of 696 deaths, the proportions were enteritis 520 deaths and diarrhea 176 deaths. The only way in which one can judge whether the mortality from these causes has increased or decreased is to combine all the deaths returned under these two heads, as has been done in the succeeding sections.

(a) Diarrhaa and Enteritis.

Deaths, 696; death-rate, 3.25 per 1,000; average for preceding ten years 3.91; decrease, 0.66 per 1,000. The death-rate since 1901 has been as follows :-

Mortality from Diarrhoea and Enteritis, 1901-1911.

Year.		Death-rate per 1,000.	Year.		Death-rate per 1,000.
1901		 4.38	1908	and the same	 3.75
1902	1 11	 4.34	1909		 3.18
1903		 4.14	1910		 2.99
1904		 3.48			
1905		 4.21		Average	 3.91
1906		 4.64			_
1907		 3:47	1911		 3.25

It will be seen from the above that although the mortality during 1911 was somewhat above that of the

It will be seen from the above that although the mortality during 1911 was somewhat above that of the previous year, it has, on the whole, greatly improved since 1906, up till which date the tendency was upwards.

The mortality amongst each race during 1911 and the average for the preceding ten years (within brackets) have been as follows:—Europeans 2.66 (2.25); Burghers 2.73 (3.24); Sinhalese 2.91 (4.23); Tamils 4.89 (4.89); Moors 2.18 (2.48); Malays 3.68 (3.41); "Others" 2.33 (3.20).

The persistently high death-rate from this cause amongst the Tamils is noteworthy. No doubt poverty and exposure to hardships of the large Tamil beggar population has a good deal to do with this, as in the case of pneumonia; the consumption of contaminated and unwholesome food is an important factor in the causation of this disease. of this disease.

The details of the mortality from this cause are given in Annexure B.

(b) Dysentery.

Deaths, 263; death-rate, 1°32; average, 2°07; decrease 0°75 per 1,000. The mortality from this cause, although slightly higher than in 1910, has greatly decreased since 1906, as the following statement shows:—

Mortality from Dysentery, 1901-1911.

Year.			Death-rate per 1,000.	Year.		Death-rate per 1,000.
1901			2.15	1908		 1.65
1902			2:30	1909		 1.60
1903	*		2.75	1910		 1.20
1904			1.84			
1905	17 1000		2.68		Average	 2.07
1906			3.21			-
1907		1000	1:64	1911		 1.32
						200

The death-rate in 1911 amongst the various races and the average (within brackets) for the preceding ten years have been as follows:—Europeans 2·33 (3·60); Burghers 0·52 (1·40); Sinhalese 0·85 (1·79); Tamils 2·03 (2·95); Moors 1·40 (1·75); Malays 0·55 (1·53); "Others" 0·83 (2·41).

The Europeans, as usual, were the heaviest sufferers from this disease, dysentery and enteric fever being the two diseases from which they suffer more than any other cause.

9.-Fevers.

Deaths, 490; death-rate, 2·29 per 1,000; average for preceding ten years, 2·46; decrease 0·17. Of the total deaths registered from fevers 58, or 11·8 per cent., were deaths of non-residents of Colombo which occurred in hospitals. In other cases reported from the town no doubt the infection was acquired outside, but developed in or was brought to and reported as from Colombo, just as no doubt in some cases persons infected in the town died in the country. The heading "fevers" includes enteric, simple continued, remittent, and intermittent fever.

The death-rate from this group since 1901 has been as follows:-

Mortality from Fevers, 1901-1911.

Year.		Death-rate per 1,000.	Year.		Death-rate per 1,000.
1901	 	2.90	1908		 2.72
1902	 	2.73	1909		 2.10
1903	 	3.00	1910		 1.69
1904	 	2.10			-
1905	 	2.01		Average	 2.46
1906	 	3.28			2000
1907	 	2.53	1911		 2.29
					100000

The statement above shows that although the mortality during 1911 from these causes was a good deal higher than the record low rate of 1910, there has been a marked improvement during the last ten years.

Intermittent fever (malaria), which used to appear in the returns as a cause of death, has completely disappeared, there having been no deaths ascribed to that cause during 1911. Remittent fever (malaria) has also to a large extent disappeared from the returns. This bears out what I have frequently remarked, that there appears to be very little primary malaria in Colombo. One sometimes hears it stated that "seven-day fever," of which there has recently been a great deal in Colombo, is a form of malaria, but there is no evidence at

present so far as I can gather in support of this.

There would appear to be little doubt that a great deal of the mortality ascribed indefinitely to "fever" in Colombo is nothing more nor less than enteric fever; but, on the other hand, as the experience at the enteric hospital has shown, many cases returned as enteric are not due to enteric at all, but to such diseases as pneumonia, seven-day fever, influenza, and such like. The examinations carried on so far by Dr. Bacteriologist, show that in 44 examinations of blood for B. Typhosus and B. Paratyphosus A 22 or 50 per cent. gave a negative reaction. As he remarks, "these numbers are too small to form the basis of very definite gave a negative reaction. This is a nia, seven-day fever, influenza, and such like. The examinations carried out so far by Dr. Hirst, the Municipal common experience in enteric hospitals in all parts of the world, and may be mainly attributed to the difficulty of accurately diagnosing enteric fever on clinical grounds in the early stages of the disease." In this connection I may mention an interesting and unusual case which occurred during the year, in which many of the symptoms pointed to its being a case of modified smallpox, but which ultimately developed into a genuine case of enteric fever.

The ward with the highest average fever-rate during the ten years 1901–1910 was Slave Island; but the ward with the highest rate in 1911 was St. Paul's; the ward with the lowest average was San Sebastian; but Maradana was lowest in 1911. These ward rates are, however, quite untrustworthy, owing to the large proportion of cases which go into, and are returned against, the hospitals, in which no less than 35°1 per cent, of all deaths from fevers occurred during 1911.

(a) Enteric Fever.

Cases reported, 1,149; deaths registered, 396; death-rate, 1°85 per 1,000; average death-rate for preceding ten years, 1°18; increase, 0°67; case-rate per 1,000 living, 5°70; case mortality, 38°9 per cent.

880 enteric infected houses were disinfected and 185 filthy compounds were cleansed, while 354 cases

with a mortality of 21.7 per cent, were treated in the enteric hospital.

The case mortality for the town quoted above, viz., 38.9 per cent., clearly indicates that many non-fatal cases must have escaped recognition and notification, for the true case mortality in Colombo is almost certainly not more, and is very probably less, than 12 per cent. The Europeans, who suffer from this disease more severely than any other race, and amongst whom diagnosis and notification of mild cases is no doubt more accurate and complete than in any other race, had a case mortality in 1911 of 12.9 per cent. Probably a large number of the unrecognized mild cases occur amongst children.

There can be no doubt that the enteric rates for most of the indigenous races, but especially for the

Malays, are far from correct.

An examination of the vital statistics leaves no doubt that enteric fever has been endemic in Colombo for many years; but that in the past, as even now in the case of the Malays, the true incidence and mortality from this disease have been obscured under other names, particularly those of simple continued fever, remittent fever, and intermittent fever. This is clearly indicated by the following statement, which requires no expert knowledge of statistics to understand, and shows that the apparent increase of enteric has been accompanied by an even greater decrease in the mortality ascribed to these other fevers, the explanation being that, as the knowledge of enteric and its many varieties has increased, diagnosis has improved, and is gradually wiping these other unspecific terms off the death returns:—

		1897.	1911.
All fevers, i.e., the total of (a), (b), (c), and (d)	3.75	 2.29
(a) Enterie		0.71	 1.85
(b) Simple continued fever		1.24	 0.21
(c) Remittent fever		1.68	 0.23
(d) Intermittent fever		0.10	 0.00

It will be observed that the total fever mortality is considerably lower now than it was in 1897.

The full details of the statistics in regard to enteric are given in Annexure B.

Owing to the infection being so widely implanted here, the possible sources are so numerous, and the channels whereby it may gain access are so obscure and devious, that it is impossible to state with any degree of certainty which are the most usual. There are, however, one or two so well known and so obvious that they may with certainty be specified.

(1) Direct Contact with an Infected Case. This would include contact, not only with those known to be suffering from the disease, but also with unrecognized cases, and with carriers. The latter two are the most

dangerous by reason of their true nature being concealed, the result being that no precautions are adopted.

Direct contact is probably a very fruitful source of infection in Colombo, especially amongst the poorer and more ignorant classes, who do not realize the risks they run, and are slow, even when warned, to adopt precautions. It is a source which is, however, not by any means confined to the poorer classes, several instances having occurred amongst the well-to-do and educated classes, in which there was more than a suspicion that infection had been acquired by direct contact with an infected relation or friend. No one should be allowed to leave the room of an enteric patient, whether at home or in the hospital, without washing and disinfecting their hands.

(2) Infection from Latrines.—Infection may be acquired in this manner either by direct contact with the infected matter in the latrine, or through the agency of flies which have visited the latrine for the purpose of laying eggs. The latter is, I believe, one of the most fruitful sources of infection in Colombo. It is a source which can only be effectively prevented by the abolition of the bucket latrine and the institution of the water-

carriage system instead.

The extraordinary indifference and carelessness of even educated householders in the matter of these latrines may be gathered from the fact that during a recent inspection of most of the houses in the Cinnamon gardens, although the house latrines were all right, in only 5 out of a total of 225 premises visited was it found that any sort of covering was used for the contents of the buckets in the servants' latrines, most of which, be it noted, are situated within a few paces of the back verandah and of the house kitchen. It is no wonder, under such circumstances, that when the fly season comes round enteric fever breaks out every now and then and spreads amongst these houses. When the danger of such neglect has been pointed out, it does not help matters to write replies arguing who is responsible and pointing out how unpleasant it is to have to visit the servants' latrine. The householder is responsible under the law, and in accordance with commonsense, for the sanitary condition of his own premises, and the more unpleasant a place his servants' latrine is to inspect the more need is there that he should do so, and see that proper steps are taken to improve it and to protect both his own and his neighbour's households. If he fails to do so, he must be viewed as a menace to public health.

It is of interest in this connection to note that out of 900 cases of enteric investigated last year, in no less

than 801, or 89 per cent., there were badly kept bucket latrines on the premises.

(3) Milk.—Contaminated milk is a probable source of infection in some cases, especially where, as in Colombo, the milk is known to be frequently adulterated. There has however, as shown in the section dealing with food, been an extraordinary improvement during the last few years in the matter of milk adulteration. It is a rather remarkable fact that bad as the milk supply of Colombo undoubtedly has been, and even now is, it is rarely that any evidence has been obtained which pointed definitely to milk as the source of infection. It was definitely stated in 574, or no less than 63.78 per cent., of 900 cases which occurred during 1911 that no milk at all was used by the patient prior to illness. The sub-inspectors were instructed to make the most careful inquiries on this point, and not to accept a negative answer without making sure by repeated questions that even an occasional use of milk had not been made. In 141 cases, or 15.67 per cent., tinned, i.e., sterilized, milk had been used.

Thus in no less than 715, or 79.45 per cent., of the total enteric cases investigated, it was definitely asserted that local milk had not been used by the patient. In 38 cases, or 4.22 per cent., milk was obtained only from a cow kept upon the premises. This leaves us with only 147, or 16.33 per cent., of cases in which cows' milk was obtained from outside the premises, 100, or 11 '11 per cent., of these being supplied by known dairies, and 47, or 5 22 per cent., from itinerant vendors who could not be traced. The evidence in regard to the 100 cases supplied by the known dairies affords no justification for laying the blame for infection upon them.

Epidemics caused by milk have, as a rule, certain definite characteristics, none of which have been met with here during recent years. The only conclusion one can draw from these facts is that, if the information supplied is correct, although milk is a possible source, especially if used unpasteurized or unboiled, it is not, as matters stand, a very common source of enteric in Colombo. On the other hand I feel sure, as the result of a good many years' experience here in the matter of collecting information, that the replies given to the subinspectors as to the use of milk are by no means reliable, and therefore one must keep an open mind in regard to the degree in which milk is a source of infection here, and must omit no precaution in this respect. It would be most unwise, for instance, to neglect either to pasteurize or boil milk which one had not actually seen drawn from the cow into vessels which one had seen sterilized, and by a milkman whom one had seen wash his hands immediately prior to the milking.

(4) Water.—Another possible source of infection is through contaminated water, e.g., foul wells and bathing places. How far infected water from wells and such like is a source of infection here it is impossible to say, but the town water has been shown by repeated examinations to be above suspicion (see remarks in

section 13).

(5) Dust.—Infected dust is a possible, but a probably extremely rare, source of infection.

(6) Indirect Contact.—This may be a source of infection by handling infected clothes, &c., but, crude although the dhobies' methods are, I do not think he probably often is responsible for the spread of enteric.

In conclusion, the chief sources of infection by enteric here are probably direct contact and badly kept bucket latrines. The former can best be met by segregating all cases in hospitals, the latrine source can only properly be dealt with by the abolition of the bucket system and the introduction of the water-carriage system, ending which householders must protect themselves and their neighbours by using coir dust in their latrines, fly-proofing their kitchens and latrines, boiling milk, covering up food, and such like.

As it will be many years at the present rate of progress before the water-carriage will have completely displaced the bucket system, it behaves those who are specially susceptible, e.g., newly arrived Europeans, to further protect themselves by being inoculated against enteric. In view of the remarkable results which have been obtained in India and elsewhere by this method, it strikes one as little short of folly not to take advantage It is such a trivial operation, less painful as a rule than vaccination. I think firms who are responsible for the importation of young Europeans should insist in every instance upon their being inoculated prior to leaving England. Such a policy would probably save a lot of inconvenience and money, not to speak of young lives, so many of which this disease has been responsible for cutting off in the past.

I have already recommended that the Council should adopt such a policy in regard to its own employes.

and I understand the suggestion has been favourably received.

(b) Simple Continued Fever.

Deaths, 45; death-rate, 0.21 per 1,000; average rate for preceding ten years, 0.58; decrease, 0.37; cases notified, 71. It is impossible to say what the true cause of the 45 deaths ascribed to simple continued fever was; some of them were probably enteric fever.

(c) Remittent Fever.

Deaths, 49; death-rate, 0.23 per 1,000; average rate for preceding ten years, 0.69; decrease, 0.23. A quarter of these deaths were in Slave Island, no fewer than 8 of them being amongst Malays. When it is considered that whereas the term "remittent fever" as commonly used implies malaria, and that Slave Island, where most of the Malays live, is distinctly a non-malarious district, it is a significant fact that the Malays should be the only race which continues to have a high mortality ascribed to this cause. There can be little doubt that these deaths were in reality due to causes other than malaria, many of them being probably due to enteric fever.

(d) Intermittent Fever.

This has entirely disappeared from the returns as a cause of death. The great reduction in the mortality ascribed to remittent fever, and the entire disappearance of intermittent fever from the returns, bears out what has been previously maintained, that except for small occasional outbreaks on the outskirts of the town, there is practically no primary malarial infection in Colombo.

(e) Seven-day Fever.

Although this is not a notifiable disease, inquiries show that there have of late been a good many cases in Colombo. It has no doubt been in existence here for many years, but has not been differentiated. The concensus of opinion of the medical practitioners is that it has no causal relation to the drainage works now in progress, and that therefore the use of the term "drainage fever," which is sometimes applied to it, is a misnomer. Its specific cause has not yet been ascertained; but there appears to be a growing suspicion that it may be spread by the bite of a mosquito. Whether this is so, or whether the virus is ingested, or gains access in some other way, has not yet been ascertained.

10.—Infectious Diseases Notification.

(a) General.

The notifiable infectious diseases are plague, cholera, smallpox, chickenpox, measles, scarlet fever. diphtheria, acute or choleraic diarrhœa, enteric fever, simple continued fever of seven days' duration or over, and, since January 1, 1910, phthisis.

The total number of these diseases reported during 1911 was 3,069, which is an increase of 785 compared with 1910.

The totals from 1906, the first year upon which an annual report was submitted, onwards have been as follows :-

	Inf	ectious	Dise	eases no	tifie	d, 1906	-191	11.				
Disease.		1906.		1907.		1908.		1909.		1910.		1911.
Plague		-		-		-		-		-		-
Cholera		4		28		30		-		- 1		19
Smallpox		40		49		438		85		69		36
Chickenpox		231		256		543	100	828		901		934
Measles		354	-	72		666		436		149		330
Scarlet fever		1		-		-		-		-	1	_
Diphtheria		10		13		7		8		18		12
Acute diarrhoea		12	4.00	13		85		11		11		19
Enteric		903		931		1,351		787		835		1,063
Simple continued fever		42		121		251		119		78		71
Phthisis		-		-		-		-	100	222		585
Total		1,597		1,483		3,371		2,274		2,284		3,069
		-				-						-

These figures are not inclusive of cases reported by the hospitals from the port and elsewhere outside the town. In 1910 the outside cases numbered 183, while in 1911 they numbered 260, of which latter 85 were enteric fever, 81 were chickenpox, 29 were smallpox, and 2 were cholera.

(b) Cholera.

Nineteen cases were reported from the town and two from the port; all proved fatal except two. In twelve of the cases a bacteriological examination was made with a positive result in each. The outbreak commenced at Ragama camp, and spread from there to the town, the first two cases which occurred in the town having been employed as sweepers at the camp. The town cases were spread over a period extending from May 26 until July 27. All the cases except one were males. The largest number of cases occurred at

the 20-25 age period.

Of the Colombo cases, 10 were Tamils, 7 Sinhalese, and 3 Moors. Eleven were of the cooly class, one

dhoby, one eigar seller, one fortune teller, two no occupation, and one female.

(c) Smallpox.

Sixty-five cases were reported, of which 36 were from the town, 20 from extra urban districts, and 9 from the port. There were 8 deaths in all, representing a case mortality of 12.3 per cent., which is a low case mortality, and indicates that the community is fairly well vaccinated. The first infection was, as usual, imported from India, the patient having arrived as a deck passenger via Tondi, which was at that time an open port, quarantine having been imposed in the case of only Tuticorin and Paumben. Upon the matter being brought to the notice of the port authorities, Tondi was also quarantined. Every year sees a repetition of this importa-tion of smallpox from India, and it will continue to be so as long as the disease is endemic in India and the ports of departure for Ceylon are left open. It is the deck passengers who bring the infection, as all indentured estate coolies are passed through the quarantine camp at Ragama.

Vaccination.—17,325 vaccinations were performed during the year, of which 8,310 were primary and 9,015 were secondary. As there were only 5,280 births registered during the year, the figures quoted above include a number of primary vaccinations of persons over one year of age; but a proportion of the discrepancy is no doubt due to the vaccination of children who, although born of Colombo parents, have been born in districts outside the town, from whence they have been brought into Colombo and been there vaccinated (see section 4).

section 4).

(d) Chickenpox.

There were 934 cases reported from the town, 71 from extra urban districts, and 10 from the port. One death was ascribed—probably erroneously—to this cause.

(e) Measles.

There were 330 eases reported from the town, 17 from extra urban districts, and 6 from the port. Four deaths were ascribed to this cause, representing a case mortality of 1 1 per cent., which is low.

(f) Diphtheria.

Twelve cases were reported from the town, there being 4 deaths, representing a case mortality of 33.3 per cent., which is very high, and probably indicates that a number of mild non-fatal cases escaped recognition and notification.

(g) Acute Diarrhoea.

Nineteen cases were reported from the town. The death returns do not discriminate between acute diarrhœa and simple diarrhœa.

11.-Housing.

(a) General.

The problem of housing in Colombo is one which, as the result of many years of legally uncontrolled and consequently indiscriminate and insanitary erection of buildings, has now become so pressing that, in the interests of public health, action can no longer be safely deferred. These remarks have reference not to the mere insufficiency of house accommodation, which is being keenly felt by all classes, but to the question of improving the existing and preventing the creation of new unhealthy areas and unhealthy dwellings, which latter has for years, and is now, going on so rapidly in Colombo, and is seriously affecting the health, especially of the poorer and more numerous section of the population. It is not, however, the health of only those residing within these unhealthy areas which is affected, for there being constant communication between the quarters of the poor and those of the well-to-do, through servants, tradesmen, &c., many of the diseases which are bred and fostered in the poorer quarters—e.g., enteric, phthisis, &c.—cannot be restrained within such limits, but make excursions from there into the dwellings of the well-to-do, whose death-rate is also thus maintained at a higher level that it is also thus maintained at a higher level than it otherwise should be.

For confirmation of this one has only to look at the death-rates of the various races in Colombo, where it will be seen that the Europeans and Burghers, types of two classes who more than any other live outside the unhealthy areas, have nevertheless had average death-rates during the recent decade of 29.6 and 26.3

per 1,000 respectively-rates which, though not so high as those of the poorer races, are higher than they ought to be, and higher than they no doubt would be if a large part of the poorer population were not living in comparatively close proximity to them in unhealthy areas. Action taken, therefore, with a view to protecting the poorer classes from the evil effects of living in unhealthy dwellings and unhealthy areas would also have an effect in relieving the whole population from a situation which has for many years been steadily, and during recent years has been rapidly, increasing in danger.

(b) Unhealthy Areas.

Although the unhealthy dwelling is the unit of the unhealthy area, and the two subjects are therefore intimately associated, it is usual to deal with them separately, especially in the matter of legislation.

To deal with an unhealthy dwelling, all that is required, in England for instance, is that a closing order

should be obtained from the court, and thereafter an order to improve or demolish the building as the circum-

stances of the case may require.

In dealing with an unhealthy area, on the other hand, as much larger interests are involved, a much more complicated procedure must be adopted. An elaborate scheme must be prepared, with plans, &c., for the improvement of the area. This may include the demolition of a whole area, the laying out of streets, the provision of open spaces, the rebuilding of houses on sanitary lines, the re-housing of the poorer classes so displaced, &c., all of which are subject to the strict observance of procedure in the matter of giving notice. considering objections raised, assessing compensation, &c. So complicated is the procedure, and so great is the task, that in most places—e.g., Glasgow, Bombay, Calcutta, &c.—it has been found to be beyond the scope of the ordinary authorities (i.e., the City Council), and to be necessary to create a special authority the City Improvement Trust, armed with special powers to enable them to raise funds, make by-laws, appoint staff, and frame and carry out improvement schemes.

In Bombay, for example, where such an Improvement Trust has been in existence for thirteen years,

the following is a brief summary of what had been done up to the end of the eleventh year.

Capital to the amount of Rs. 40,000,000 had been borrowed, of which Rs. 37,000,000 had been spent upon 36 improvement schemes, which included (a) the construction of 72 completed and 3 partly constructed roads aggregating 12·1 miles; (b) the construction of 30 completed and 14 partly constructed blocks of dwellings for the poorer classes, containing 3,843 rooms capable of accommodating 13,263 adults. Of these, 2,839 rooms capable of accommodating 9,040 adults had been completed at a capital cost of Rs. 239 per adult accommodated,

the average rent per room being Rs. 3:03.

In Colombo there are no laws for dealing with unhealthy areas, and consequently practically nothing has been done to improve matters in that respect. It is true that the widening of Churchyard lane (now Short's road) and of Panchikawatta (now part of Skinner's road) has effected a local improvement in these districts; but, as no provision was made for re-housing the poor people so displaced, as required by all modern improvement schemes, these people have merely been driven from one place to another, which in turn they have helped to overcrowd and render more unhealthy. The result cannot, therefore, be considered a gain to the town as a whole from a sanitary point of view. These road widenings have benefited traffic more than

sanitation, and were indeed carried out primarily in the interests of traffic.

Not only has practically nothing been done to improve the existing unhealthy areas (as distinct from unhealthy dwellings), but, owing to the lack of control over the erection of new buildings, the old unhealthy areas have been steadily increasing both in size and number, particularly during recent years, when something of the nature of a building boom has been in progress. The result of this is that the condition of the town has been steadily retrograding in this respect, and had it not been for the persistent efforts of the Council's departments to improve matters in other directions (as detailed elsewhere in this report), there can be no doubt that the evil effects would have been reflected in a steadily rising death-rate, which would consequently have been much higher than it now is. How long these other measures will be able to counteract the steadily growing evil effect of insanitary building it is impossible to say, but at the present rate of building it will probably not be for long. Even now the health of the town is, I consider, in a state of very unstable equilibrium, as

witness the frequently recurring tendency of the death-rate to rise.

It does no sort of good getting excited at such times and rushing forward emergency measures, which are always costly and rarely effective. The whole problem of housing must be carefully considered, ways and means must be devised, and a regular programme must be drawn up and followed out.

It is my belief that the only practical way to effect this is to follow in the footsteps of places like Bombay and Calcutta, and to create an Improvement Trust for the city. The longer action in this matter is deferred

the greater will be the cost to the ratepayers.

Before leaving this subject, it may be as well to give a short account of what has been attempted and the difficulties which have been met here. Before doing so, however, it is necessary to explain the grounds upon which the action of the Council's officers has been based, as the great amount of opposition which has been met shows that there is a great deal of ignorance and misunderstanding upon this point, with the result that men who have honestly been striving to improve matters have almost invariably met with opposition, and have frequently been subjected to most unjust criticism.

It is universally accepted as an axiom of sanitary science that dwellings, to be healthy, must have, amongst other conditions, a sufficiency of unobstructed air space and sunlight, sufficient drainage, and

protection from dampness, and must be maintained in a cleanly condition.

In order to secure these conditions, it is recognized by all authorities that buildings must be erected in accordance with certain principles, the chief of which are that every dwelling should have, both in front and in rear, and in the case of deep buildings at the side also, a sufficient area of unobstructed open space, for the

purposes of access, ventilation, drainage, and scavenging.

They must also be provided with a sufficient number of openings, in the shape of windows, doors, and ventilators, of an area sufficient to secure proper admission of light and air to every room intended for human

The question of what shall be considered legally sufficient in these respects has been decided on scientific grounds and as the result of experience, and although one finds slight variations in respect of what has been fixed by the laws of different countries there are certain minima in respect of which all agree, and a good example of which is to be found in the model by-laws issued by the Local Government Board for the guidance of sanitary authorities in England. It will be of interest to mention a few of the principal of these, bearing in mind the well-known fact that more is required in the tropics in the matter of air space than in England and other temperate climates.

(a) Every dwelling must have along the whole of its frontage an open space measuring at least 24 feet to the boundary of any land or premises immediately opposite, or to the opposite side of the street, and no street must under any circumstances be less than 24 feet wide, and if intended for carriage traffic, no street

must be less than 36 feet in width; in some districts the minimum width of street is 40 feet.

Compare this with Colombo, where there are many private streets intended and used for carriage traffic which are only 15 feet and even less in width, and right up to or within a few feet of which new buildings have been, and still are being, erected, e.g., the numerous lanes in Kollupitiya.

(b) Every dwelling must have along the whole of its rear, and belonging exclusively to the house, an open space of an aggregate extent of not less than 150 square feet, and which must measure in no case less than 10 feet from every part of the back wall of the house to the boundary of any land or premises immediately in the rear; if the house is 15 feet in height, the space must measure not less than 15 feet; if 25 feet in height, then not less than 20 feet; and if 35 feet or more in height, then not less than 25 feet,

More recent legislation requires that every new dwelling shall have, in addition to the back yard, a

seavenging lane at the rear, the land for which must be provided by the owners of the houses

Compare these conditions with what not only already exists, but is still being done in Colombo. Take one of the most recent, although not by any means the worst, examples of improper development, viz., School lane, Kollupitiya. In this lane, as in scores of other places in the town, we have got a newly-developed block of land where, not only has no space been left for a seavenging lane at the back, but no space has been left for even a back yard, the houses being built either right up to, or within a few feet of, the back boundary of the premises. The result is that instead of having between the backs of the two rows of buildings a clear open space comprising two rows of back yards and a scavenging lane, into which the sun could penetrate and down which the wind could sweep, we have got, in what was until recently an excellent residential site, with clean, dry, sandy soil, two rows of houses, the number of which is steadily increasing, with only a narrow and irregular slit of space between them, which, without doubt, will in time, as has been the experience in similar places elsewhere in the town, be converted into a slop-sodden, evil-smelling strip of ground right up against the house

An effort was made to put a stop to this insanitary building, but without success. The owners were warned by the Inspector of Private Buildings, in some cases before more than the trenches for the foundations had been cut, that they must leave a space of at least 7½ feet between the back wall of the house and the back boundary of the premises, and that if they neglected to do so the conformity certificate required by the Ordinance would be refused.

The reason for adopting 7½ feet, which is of course too little, was because this is the minimum distance required by the by-laws between ranges of huts, and because it is the only attempt at specification of distance contained in the by-laws, and it was thought that it might be possible to enforce it as regards higher buildings such as those in Kollupitiya lane. No heed whatever was paid to these warnings, and the houses were completed. The owners then applied (in some cases they even omitted this formality) for the conformity certificate required by the Ordinance, preparatory to putting tenants in, and upon the certificates being refused upon the grounds stated, they represented that they were being unjustly dealt with. The Chairman, after considering the matter in all its bearings, was advised that, although these houses had undoubtedly been built contrary to the sanitary principles enumerated above, he had no power to withhold the certificates owing to the defective state of the building laws, and the certificates were accordingly granted.

Thus, the only result of this attempt to prevent the creation of what is in a minor degree a new insanitary area was that the officers concerned were subjected to the indignity of being charged with harassing the house owners, and this, notwithstanding the warnings which had been given by them, and the fact that the conditions which they had required fall far short of the minima required in even a temperate climate such as England,

where open space about dwellings is admittedly not so important as in the tropics.

Many more instances could be quoted showing the futility of attempting to carry out sanitary measures, especially in the matter of buildings, in the absence of proper legislation; but the above will suffice to indicate the manner in which the town is being spoiled, and in which the time of the Council's officers is being wasted, and the userent need which exists for the adoption of the time of the Council's officers is being wasted, and the urgent need which exists for the adoption of up-to-date laws governing the erection of new buildings.

Before leaving this subject, it may be of interest to mention that a usual plea in favour of permitting the erection in an unhealthy area of new buildings which do not conform to modern sanitary requirements is that, although not perhaps in accordance with modern requirements, they nevertheless provide a better class of dwelling than those previously in existence there, and that therefore the tenants will be benefited thereby. Although at first sight a plausible one, no more fallacious argument could be advanced, for the rents of these improved but still unhealthy dwellings are invariably set higher than in the case of the older and more insanitary ones, and the class of tenant who could afford to live in the older type cannot afford to do so in these newer ones. There may be such, but I know of no slum landlord in Colombo who has shown the slightest symptoms of philanthropy in the matter of providing his tenants with a better class house at the same rent as the older and more insanitary ones. The carrying out of structural improvements is invariably made the occasion for raising the rent, and although one cannot blame the landlords for this, which is only natural, one must object to these fallacious arguments being brought forward as a reason for permitting an increase in the size and number of the already far too extensive and numerous unhealthy areas within the town.

(c) Unhealthy Dwellings.

This question, as will be seen from the foregoing, is intimately associated with the question of unhealthy areas, which are merely aggregates of unhealthy dwellings. The method of procedure which has been adopted here has been as follows. The Sanitary Inspectors were instructed to report all dwellings which, by reason either of their situation or of their structure, were unhealthy. This is quite distinct from the question of being unhealthy by reason of want of cleansing, surface drainage, paving, &c., points which have now for years been dealt with by this Department. These reports, after having been duly considered, and the dwelling if necessary inspected, were, unless the alteration was such that it could be dealt with by this Department, forwarded to the Works Engineer for the preparation of plans by the staff of the Inspector of Private Buildings.

These plans having been submitted to this Department were then returned with notes as to the improvements These plans having been submitted to this Department were then returned with notes as to the improvements required. The Inspector of Private Buildings then took action to have these improvements effected, notices being served upon the owners to that end. In the event of the owners failing to comply with the notices, applications, signed by the Chairman, were made to the court, which then, if satisfied of the justice of the requirements, issued an order prohibiting the further use of the buildings as human dwellings until such time as the improvements were carried out. Disobedience of the orders of the court was dealt with by prosecutions.

The improvements so required have for the most part been of a very minor nature, such as putting in or enlarging doors, windows, and ventilators, raising the walls of low huts, demolishing obstructive verandahs and rooms, cutting back obstructive eaves, removing obstructive partitions, &c., and, as the result of most strenuous work by the Inspector of Private Buildings and his staff, a great deal of improvement has thus been effected. It was soon found, however, that the Inspector of Private Buildings was so under-staffed that he could not keep pace with the work transmitted from this Department, and the Works Engineer reported so to the Chairman and returned a large file of our reports undealt with. As, however, the Sanitary Inspectors were instructed to continue reporting all unhealthy dwellings, there is now a very large and steadily growing

accumulation of these undealt with reports in this office.

There is a vast amount of improvement work urgently requiring to be carried out in connection with unhealthy dwellings, and it is in my opinion most necessary that the staff of the Inspector of Private Buildings should be increased, so as to enable him to deal with it in a more expeditious manner. Although Mr. LaBrooy, the Inspector of Private Buildings, is not an officer of my Department, I have probably had more opportunities of observing his work in connection with buildings than any one else, and I should like to be permitted to express my admiration for his tireless energy and great patience in the face of almost overwhelming difficulties, the result of defective by-laws, and of sometimes very unjust criticism which is I believe to be the result of a misunderstanding or ignorance of the requirements of modern sanitation in the matter of human dwellings.

It is highly necessary that the requirements in these respects should be specified in the by-laws, which would then serve as a guide both to the public and to the inspectors, instead of, as too often happens at present, being used as a screen to protect the jerry-builder and slum owner from the consequences of his misdeeds, since an obvious breach of a well-known sanitary principle frequently escapes punishment on the grounds that the by-laws do not cover the point.

(d) House Accommodation.

The rapid growth of the population of Colombo during the recent decade, amounting to 36 per cent., The rapid growth of the population of Colombo during the recent decade, amounting to 36 per cent., has resulted in an insufficiency of house accommodation, which is being keenly felt by all classes. The comparatively sudden increase in the prosperity of the Island during recent years has, as might be expected, been particularly felt in Colombo. Firms whose business has suddenly increased have had rapidly to augment their staffs of assistants, clerks, and servants of all kinds. The increased demand for labour has in turn been responsible for an increase in the rate of wages. This again has attracted people to Colombo, not only from all parts of the Island, but also from India and elsewhere. Not only so, but during the last few years an extraordinary number of large public works have been undertaken in Colombo, which again have attracted large numbers of people to the town.

large numbers of people to the town.

The result of all this is a rather sudden and far from healthy congestion of population, in consequence of which house accommodation has become more and more scarce, and rents have gone up, the result being that every owner of a few feet of land has been tempted to run up a building in the hope of sharing in the increased prosperity. Many obstructive buildings have thus been erected, which, in the absence of proper building laws, the officers of the Council have been powerless to prevent, although they have done their best to do so. Another effect of this rapid increase of population is that it has encouraged what has now become an irrepressible tendency towards overcrowding, especially in the poorer quarters. All this development of property would, if it had been controlled by proper laws, have greatly improved the condition of the town, instead of which, as pointed out in the previous sections, it has been responsible for a steady, and even rapid, retrogression, the evil effects of which have been counteracted only by the success of the efforts of the Council's departments in other directions.

12.-FOOD.

(a) General.

1,083, or nearly 15 per cent., of the total deaths registered in Colombo during the year 1911 were ascribed to diarrhoa, enteritis, and dysentery-diseases which are known to be closely associated with the consumption of unwholesome and contaminated food, and yet Colombo, unlike other towns in the East, has no special staff for carrying on the important work of food inspection. The town is in exactly the same position in regard to this matter as it was ten or for that matter twenty years ago, all the food inspection having to be carried out by the Sanitary Inspectors, who have a multiplicity of other duties to perform, and can therefore only give a very limited and entirely insufficient amount of time to food inspection.

The appointment of at least one special food inspector has been urged time after time in these reports, but without any practical result, although two separate Committees have approved and the Council itself has once resolved upon such an appointment—only to annul it later on. However disheartening this may be. the question is of too great importance to the health of the community to be dropped, and I therefore once

more urge that the Council should reconsider it.

The details of the unwholesome food stuffs seized during 1911 are given in Annexure B.

(b) Tinned Food Stuffs.

The huge scale upon which tinned milk is used will be seen from the fact that during the twelve months extending from June, 1910, to July, 1911, 1,732,560 tins were imported into the Island. A certain amount of it is of inferior quality, and far short of fresh cow's milk in nutritiousness and digestibility. Some of it is made from skimmed milk, although that fact is not declared upon the label, and the directions for dilution are frequently such that, if carried out, a mixture will be produced which is far below the Colombo standard for pure milk. This is most unfair to the local milk dealer, who is punished every time he sells milk below the standard.

In my report for 1910 it was recommended that a by-law should be passed making it an offence to sell tinned milk with instructions for dilution on the label, which, if carried out, would reduce the milk to below the Colombo standard. This is only fair, and should I think be given effect to in the proposed new by-laws.

Not only milk, but also large quantities of butter, fish, beef, and mutton are also imported in tins, and I would repeat my recommendation that the date of filling at the factory should be clearly impressed upon each tin, failing which it should be liable to seizure.

(c) Bread.

The inferior quality of the Colombo bread is a frequent source of complaint, and several bakers were interviewed on the subject with a view of finding out if possible what the explanation was. The following were the facts elicited.

The quality of bread depends mainly upon two things, viz., the quality of the yeast and the quality of the flour. The best bread is made with toddy yeast, the price of which varies from Re. 1.50 per lb. during the months of January to April to 50 cents during the months May to December. It takes about 1 lb. of yeast to make 50 lb. of bread. Bread made with hops yeast and potatoes goes sour very quickly in the tropics. The quality of the bread is often affected by bakers adding various things to the yeast with a view to economy, but the best bread is made with pure toddy yeast, which must be fresh. The cheaper yeasts are more liquid, have a sour smell, and a dirty grayish appearance.

The best flour is Trieste flour, which costs Rs. 30 per bag; next comes Bombay superfine at Rs. 15; then Bombay flour at Rs. 13; and a still cheaper variety at Rs. 12. The better the flour is the whiter and better the bread is. Alum does not appear to be used here as an adulterant. Trieste flour is too expensive, and none of the bakers use it. It has been tried, but does not pay, as a one-lb. losf costs 28 cents, as compared with 14 cents, the price of a loaf made of Bombay superfine flour. It would not pay to use Trieste flour unless 600 lb. of bread per day were guaranteed. These are the facts supplied to me by one of the leading bakers.

(d) Milk.

The extraordinary improvement which has been effected, as the result of the action taken by this Department during the last few years in respect of the milk supply of the town, is shown by the fact that whereas in 1907, 73 per cent, of the samples examined were adulterated, only 17 per cent, were found adulterated in 1911. The 1911 figures are based upon the examination of 1,087 samples, which is the largest number ever dealt with.

This work of milk sampling has absorbed a great deal of the time of the Sanitary Inspectors, often to the exclusion of other work, but this has been fully justified, as the result given above shows. 184 prosecutions were entered during the year for the sale of adulterated milk.

(a) Town Water.

Although no pathogenic or even suspicious germs have ever been found in the Colombo water, which has always been pronounced good and wholesome by the City Analyst, a rather high bacterial count has at times been observed, and it contains too much suspended matter, which rapidly deposits upon and occludes the iron pipes. The Municipal Engineer and I were deputed by the Council to visit and report upon the Jewell system of filtration in Bangalore, and as a result of our inquiries we recommended that it should be adopted in connection with the Colombo water supply.

(b) Wells.

The dangerously polluted condition of the wells in Colombo is shown by the fact that out of 56 samples examined 52 were found to be dangerously polluted.

Twenty-two wells were closed during the year.

(c) Liquor.

The details in regard to samples are given in Annexure B. and the only further point which calls for remark is that copper continues to be found in arrack, sometimes in large quantities. The whole liquor question is at present the subject of a Government Commission.

14.—Public Markets.

(a) Buildings.

There is little improvement to record in this respect, the reconstruction of Dean's road market being still far from completion. A large central market, on the lines of the one at Bombay for example, is badly wanted.

(b) Administration.

A considerable advance has recently been effected in this respect by the appointment of assistant market-keepers and additional coolies as recommended in my report No. 39 of February 25, 1911. These men took up duties only on March 1 of this year.

15.—Slaughter-house.

The sanitary condition of the slaughter-house buildings, apart from minor defects in the matter of repairs, is fairly good; but the arrangements for the disposal of the drainage, which contains much blood, and creates a fly-breeding nuisance in the neighbourhood, remains the same. The extension of the sewers,

so as to receive the liquid waste from the sheds, is the only satisfactory solution of the difficulty.

The returns of animals slaughtered, &c., are given in Annexure B. They show an increase of 2,302 in the number of cattle slaughtered, but a decrease of 331 pigs and 20 sheep or goats. 728 animals were rejected on account of their being too old and wasted, which is a reduction of 143 compared with the 1910 figures. The Superintendent has been instructed to be more strict in this matter, as it was found that many animals were being passed which were much too thin to be put upon the meat market. The quality of the meat in Colombo is exceedingly poor, and it is only by rigorously rejecting old and wasted animals that it can be improved - a task which, however, the Superintendent appears to find some difficulty in carrying out as well as might be wished.

16.—REGISTERED TRADES.

(a) Dairies.

The condition of dairy premises in Colombo, although much improved in some respects, is far from satisfactory. The fact of the matter is that a dairy is a very difficult business to conduct properly. a considerable initial expenditure, and thereafter incessant supervision over the workmen by the owner or

The following are the points in respect of which they mostly fail. A cheap form of cement is used for the drains and floors, the result being that it soon cracks and holes form in which dirt collects. They do not provide either scalding apparatus for the vessels or cooling and straining apparatus for the milk, the result being that the milk leaves the dairy in a very filthy condition, and teeming with micro-organisms, which rapidly increase in this warm climate. Such a milk is very likely to cause indigestion and diarrhea, especially in infants and invalids. There are very few, if any, dairies in Colombo the milk from which will stand even the crude test of letting it settle, it will almost invariably show a deposit of filth visible to the naked eye, which means very gross pollution indeed. With very few exceptions, the management of the dairy is so casual and inefficient that but for, and in many cases in spite of, the warnings and prosecutions by the Sanitary Inspectors, it not only loses its original spick and span appearance, but becomes an actual source of nuisance. With the growth of the business, the number of the cattle is increased beyond that for which the sheds were built, and for which permission was granted on the registration certificate. The cleansing staff is not correspondingly increased, the result being that they are overworked, and the premises become ill-kept and evil smelling. The yard is fouled and obstructed by the tying of calves for which there is no room in the sheds, and the feeding tubs increase in number and obstruct the open yard, and slackness of supervision by the manager is everywhere observed. The fact is that with very few exceptions the owners or managers care very little about the sanitary condition of the premises so long as they can make money, and the amount of supervision which can be exercised by the Sanitary Inspectors is, in the absence of any real endeavour by the manager, insufficient to ensure that the dairy is kept at all times in a sanitary condition.

There are exceptions to the above, but they are few and far between. What is required is more supervision, and I find it hard to arrange for that with the present very limited staff. The appointment of even

one special dairies inspector would very materially improve matters, and I think this should be done.

The registration of 4 dairies was cancelled during the year 1911, and 5 new premises were registered, leaving 38 dairies on the register at the end of the year. The distribution of these in the town is shown in Annexure B.

(b) Bakeries.

There were 56 bakeries on the register at the end of 1910, 4 were discontinued, and 4 new ones were registered during 1911, leaving 56 on the register at the end of the year. Their distribution in the town is shown in Annexure B.

The following are the chief conditions required. The bakery should not be situated in an insanitary area, but this cannot be insisted upon so long as the bakery itself and its immediate surroundings are in order. It must not be in a position where foul smells from latrines and such like can reach it. Where the sewers are

available, a latrine must be provided for the workmen; but where the sewers are not available, the latrine must

be at some distance, and disconnected from the bakery.

The bakery must be well lighted and ventilated, particular attention being paid to the ventilation. It must also be protected as far as possible against undue heat, as otherwise the workers perspire too freely when at work. To secure this the oven is where possible disconnected from the kneading room by an unroofed yard or space, only an open sided roofed air passage for the workers being allowed between the oven and the kneading room.

The floor and the walls to a height of 5 feet must be cemented, the rest of the walls being limewashed. A tap, with a basin, soap, and clean towels must be provided for the workmen, who must wear clean white aprons covering the whole of the front of their bodies. The kneading tables must be kept in good repair, free from gaps between the boards, and must be kept scrupulously clean. No unnecessary articles must be

kept in the kneading room. Spitting is strictly prohibited in the kneading room or on the passages.

Unless not more than one day's supply of flour is kept upon the premises, there must be a separate flour store, with cemented floor and a bench upon which to keep the flour sacks. This store must be properly ventilated. The bread baskets must be kept clean.

These requirements are, upon the whole, well carried out, the bakers being much better as a class to deal with than the dairymen. The most usual faults are that the workmen tend to discard the apron and work in their dirty clothes; but they have greatly improved in this respect, as the result of prosecutions being entered every time they are detected. Another fault is that the boards of the tables in time become worn and separate at the joints, leaving a gap where dough and dirt accumulate. The remedy is to remove and refix, or to put a new top to the table. The worst kept bakeries have always been those where an eating-house is run in conjunction with the bakery, and this is now being put a stop to, complete structural disconnection between the bakery and the eating-house being insisted upon.

Thirty-two prosecutions were entered during the year for having unclean workmen in the bakery.

Sixteen prosecutions were entered for having unclean bakeries.

(c) Laundries.

There were 235 laundries on the register at the end of 1910; 25 were discontinued and 63 new ones

were registered during 1911, leaving 273 on the register at the end of the year.

The laundry trade in Colombo is most unsatisfactory. There is not a single laundry in Colombo which can be considered satisfactory. Where pipe water is used, as in the case of the Racquet Court laundries, the dhobies are too sparing with the clean water, batch after batch of dirty clothes being washed in the same water, until it resembles soup rather than water. It is true that the clothes are, as a rule, ultimately passed through clean water, but it is doubtful whether the filth is thus properly removed. The clothes frequently look clean enough and white enough; but they have seldom the proper clean smell, which is the test of properly washed clothes. The clothes which could stand such a process, and most of the things sent to the dhoby here could do so, are neither boiled nor even washed in hot water.

Even worse than the washing arrangements are the clothes dressing arrangements, the requirements in respect of which are as follows. Separate accommodation must be provided for keeping clean and dirty linen respectively, and neither of the rooms so set aside must be used for domestic purposes. This, although a very elementary requirement, is exceedingly difficult to enforce, especially in the case of the poorer class dhobies who constitute the great majority of the dhobies in Colombo. They declare that this involves taking a larger house, the rent of which they cannot afford to pay, and there is a good deal of truth in this. The result is that a good many of the laundries are vermin infested, and it is I believe a not uncommon experience to get clothes back with bugs upon them. These vermin, which are known to be carriers of certain diseases, may be derived either from the dirty linen of some of the other customers, or from the dhoby himself, who not unfrequently uses his ironing table or the floor of the laundry as a bed. With a view to as far as possible reducing the breeding places of vermin, and to facilitate cleansing, every dhoby is required to cement the floor and the walls to a height of 5 feet, a requirement which has been long and obstinately opposed, but is now being everywhere complied with. The chief difficulty in the way of improving matters here lies in the fact that, not only are a very large number of the dhobies very poor, and therefore unable to take a large house and to equip it properly as a laundry, but a large proportion of the customers are poor, and cannot afford to pay the rates which an up-to-date laundry would probably have to charge in order to be a success financially. The amount of clothes washing which has to be done in the tropics is greatly in excess of what is required in temperate climates, and

washing which has to be done in the tropics is greatly in excess of what is required in temperate climates, and therefore the rates must be lower here, unless people are able to afford a heavier dhobies' bill. Low rates, on the other hand, will probably not make it possible to run a laundry on up-to-date lines.

There thus seems to be no solution of this problem, except what I suggested some years ago, viz., to have two standards, one for the ordinary dhoby, and the other for first class dhobies. Here, however, success is dependent upon the customers, for unless they are prepared to make it worth the dhobies' while to comply with the higher standard, no dhoby will embark upon the undertaking. A dhoby once told me that if he were guaranteed a sufficient number of customers he would undertake to establish an up-to-date laundry, but he added that a laundry on Western lines had been tried before in Colombo and failed through lack of support. he added that a laundry on Western lines had been tried before in Colombo and failed through lack of support. Needless to say, if any guarantee of this sort is to be furnished, it must be by the customers themselves. I see no hope of seeing really up-to-date laundry methods being adopted here, except as the result of private enterprise backed up by the residents of the town. In the meantime we can only go on as we are doing, trying to improve the existing crude methods.

(d) Eating-houses.

A large proportion of the working classes, and many of the clerks, take their midday meal in eatinghouses, the number of which is consequently large, there being 287 upon the register at the end of 1911. These eating-houses demand a great deal of sanitary supervision, otherwise they tend to rapidly degenerate, as the customers are for the most part indifferent to the conditions under which their food is prepared and served, and it is consequently not worth the while of the eating-house keeper to trouble on their account about the niceties. There are, however, a number of better class houses, the number of which I am glad to say is increasing, where a considerable effort has been made to render them attractive to those with more fastidious tastes. It is largely a matter of experience or education. A person who has dined in a bright clean house will be more likely to notice and to resent eating in a badly kept one, and consequently the larger the number of good houses there are the greater will be the number of those persons who, having experienced the better conditions, will avoid the badly kept houses. Some of the eating-houses are kept in quite a creditable condition.

(e) Offensive and Dangerous Trades.

Under this heading come manure depôts, soap manufactories, hide stores, dyeing houses, cotton stores, straw depôts, timber depôts, and aerated water factories. The supervision over the dangerous trades enumerated above, with the exception of the aerated water factories, might more properly be under the Superintendent of the Fire Brigade than the Medical Officer of Health.

The numbers registered are given in Annexure B.

17.—Cemeteries.

The appointment in 1910 of an assistant cemetery-keeper, instead of a sexton, and of a head gardener, with an increase in the number of coolies, has resulted in smoother working at the Kanatta cemetery, which has been considerably improved in appearance. The whole of the cemetery has now been surveyed and a new plan prepared, upon which the ground is marked out in systematic blocks, plots, and paths. The work of marking in the existing graves, the older ones of which are not in accordance with any systematic method of alignment, is now engaging the attention of the assistant keeper, who was specially selected for his knowledge of survey work. All new graves are being dug in accordance with the new plan, except in a few instances, where this is impossible owing to the irregular disposition of old graves. The head gardener has planted a considerable number of shrubs and flowering trees, especially flamboyants, which should in time greatly improve the appearance of the cemetery. The introduction of a water service has greatly facilitated the keeping of plants in condition. An estimate has been prepared with a view to the paving of the footpaths, which it is hoped will be carried out as funds permit. It has been found necessary to select a new piece of ground for the burial of paupers, as the old part was becoming overcrowded. The construction of a lych gate is now in progress. Cooly lines have been erected, and are now in use.

18,-WORK STATEMENTS.

(a) Sanitary Inspectors.

The experience of every year demonstrates the necessity for employing a Chief Sanitary Inspector, as is done in other towns. Nowhere is this want more felt than in the conduct of prosecutions in the Municipal Court, where many cases are lost purely as the result of unskilful handling by the inspector. This is no more than is to be expected, where, instead of having one trained man to examine, arrange, and present the evidence in every case, each one of the thirteen inspectors has to work up and conduct his own cases. If all the prosecutions were conducted by one Chief Inspector, he would in time become an expert in Municipal law and procedure. tions were conducted by one Chief Inspector, he would in time become an expert in Municipal law and procedure, and the Council would probably be saved a considerable amount of money, which they now have to spend in lawyers' fees, while the public would be saved from what are sometimes made to appear as unnecessary and harassing prosecutions, for a prosecution which is entered, and, as the result merely of unskilful handling ends in acquittal, does a great deal more harm than good, and fosters in the minds of those who have been so prosecuted the feeling that they have been unjustly dealt with in being prosecuted at all. Not only so, but they go away and repeat what their acquittal has probably led them to believe is a non-punishable offence, only to be again brought up and probably convicted. This brings me to a point which has long been a source of anxiety to me. One frequently hears it said that the spectors as a class are given to abusing their powers by entering false or frivolous charges, and by emitting to take action where they qualit to do so their powers by entering false or frivolous charges, and by omitting to take action where they ought to do sothe alleged motive being unlawful personal gain. One sometimes wonders whether it ever occurs to the makers of this charge that they are doing a most unfair thing. They are attacking a body of men who, just because none of them are personally attacked, are unable to retaliate, or even to defend themselves. If any man has evidence that any one of the inspectors has on any single occasion acted as suggested, why does he not come forward and make his charge and give us an opportunity of either confirming it or disproving it? No; he knows that if he did so and failed to prove his case, he would be exposed to an action for libel, so he adopts the unfair method of making vague general charges and insinuations against the inspectors as a class. The fact that the definite personal charge may be difficult to prove is no excuse for besmirching the whole body of inspectors. It in no way helps us to put a stop to such a practice even if it does exist. Such definite personal charges have been made, and in every instance they have been refuted as the result of an inquiry. There have been instances where such a charge has been made, but has been found upon inquiry to have been made at the instance of a second party, who, when the inquiry began, bolted, and the evidence obtained pointed to its having been he (the accuser) and not the inspector who was levying blackmail, and he was using the inspector's name, and so far unproved bad reputation, as a cloak for his misdeeds. There have been other instances where the and so far unproved bad reputation, as a cloak for his misdeeds. There have been other instances where the charge, although made against a particular inspector, and signed apparently with the accuser's name, was found upon inquiry to be pseudonymous. It will I think be conceded that should such a practice exist no one could be more anxious to put a stop to it than the head of the department concerned, but it is most unfair to make general charges which can neither be proved, nor disproved, and which consequently, while they cast odium upon the innocent as well as the guilty, do no good at all, but have on the contrary a most depressing and discouraging effect both upon the men concerned and upon their superiors in office.

There can be no doubt that the appointment of a trained Chief Sanitary Inspector, whose character should be above suspicion, and who should sift all the evidence put forward by the Sanitary Inspectors, and conduct their prosecutions, would go a long way to improve matters, and I strongly recommend the appointment of such an officer for this and other reasons. It would be useless to promote one of the existing staff, for, justly or unjustly, they could not, as matters stand, hold the confidence of the people. What is required is a man with a good moral character, a strict disciplinarian, one trained in sanitary work, and with no local ties or connections which might influence him, or be alleged to influence him, in the discharge of his duties, and who

has not either rightly or wrongly been the subject of suspicion as to his methods of procedure

Turning now to the work done by the Sanitary Inspectors during 1911, the details are given in Aunexure B, the chief points being as follows: 48,792 inspections were carried out during the year, which is 1,694 fewer than in 1910, the reduction being due to the inspectors having been appointed Supervisors of Census, which occupied a great deal of their time; the number of notices served was 3,101, which is greater by 517 than in 1910; 22 wells and 45 cesspits were closed, 787 houses were disinfected (exclusive of disinfection by subinspectors); 4,912 prosecutions were entered, 4,111 convictions were obtained, 205 were discharged or withdrawn, 641 were pending at the end of the year, and fines aggregating Rs. 35,763° 85 were imposed, representing an average fine of Rs. 8° 69 per conviction. The details of prosecution are given in Annexure B.

As regards structural improvements effected, there were 1,143 windows and sky lights and 618 ventilators

constructed; 109 insanitary tenements were demolished, mostly in Kollupitiya North Ward; 44 insanitary tenements were altered and improved; the floors of 71 rooms and 42 passages and compounds were paved; obstructive plank partitions were demolished in 38 dwellings; in addition to a number of other improvements, the details of which are given in Annexure B.

(b) Sub-Inspectors.

The work of the sub-inspectors comprises inquiring into and taking action in respect of enteric fever and phthisis. During the year 1911 they supervised the disinfection of 880 fever infected houses and 364 phthisis infected houses, making a total of 1,244 houses disinfected, which, together with the 787 disinfected by the Sanitary Inspectors, makes a total of 2,031 houses disinfected during the year.

(c) Enteric Cleansing Gang.

This gang consists of an overseer and four coolies, whose duty it is to cleanse and disinfect compounds and latrines which are either enteric infected or are so filthy that the ordinary procedure of serving notice upon the occupant cannot be awaited. 447 enteric infected latrines, &c., were so disinfected, and 185 filthy compounds were cleansed during the year.

(d) Ambulance.

The ambulance work was, as hitherto, carried out by the Fire Brigade, to the Superintendent of which I take this opportunity of expressing my thanks for the excellent manner in which the work has been carried out,

(e) Disinfecting Station.

This is in charge of an overseer, whose duty it is to receive, pass through the equifex steam disinfector, and despatch infected articles of clothing, &c.

185 loads, comprising 5,379 articles, were thus passed through the disinfector during the year.

(f) Insect Pest Prevention Gang.

This gang consists of an overseer and two coolies, whose duty it is to search out and deal with the breeding places of mosquitoes and flies. Naturally such a small gang can only touch the merest fringe of this work which requires to be done in Colombo; but they are useful for dealing with complaints from householders in regard to mosquitoes. During the year 1911, 2,038 premises were visited, in 1,176 of which mosquitoes were found breeding, and their breeding places were destroyed, the occupants being instructed how to prevent a recurrence, and warned that if they failed to do so they would be prosecuted; 90 notices to abate insect breeding were served; 494 pools, &c., were oiled, the quantity of oil used during the year being 1721 gallons.

This most useful work of insect pest prevention is one which to be really effective requires to be taken up upon a vastly larger scale; but the lack of funds for other important purposes leaves little hope at present of the success of a recommendation in this respect. It is a matter, however, which must be dealt with before

long, and I propose to do so later.

19.-Municipal Free Dispensary, Slave Island.

This, the first of a proposed series of Municipal free dispensaries adopted by the Council, was opened in

Church street, Slave Island, in February, 1910.

The staff, which originally consisted of one medical officer, one dispenser, one female health visitor, one midwife, and one orderly, was increased by the appointment of an additional female health visitor on March 1, 1911.

The object of this dispensary is to supply skilled medical attendance to those who are too poor to afford the lowest fees accepted by private practitioners; to search out in their homes cases of sickness which are not under the care of a medical man; to advise in the matter of the care and feeding of infants, and in matters of domestic hygiene generally, with special reference to the prevention of phthisis; to supervise the work of the Municipal midwife in the district.

The Municipal midwife system was established prior to the establishment of the dispensary; but the Slave Island midwife has been attached to the dispensary, and is under the control of the medical officer, who

checks her work, and where necessary deals with difficult cases.

The following are the chief points dealt with in the Medical Officer's reports:-

During 1911 7,966 patients were treated, as compared with 6,179 in 1910. This represents 16,707 visits to the dispensary, as against 12,462 in the preceding year. The daily average attendance was 50.83, as against 40.16 in 1910. The number of visits paid by the health visitors was 20,337; instructions re infant care and feeding were left in 1,784 houses; 262 dispensary tickets were issued, 261 of which were used; 136 visits were paid by the health visitors to labour cases with a view to checking the work of the midwife.

The Medical Officer paid 98 visits to the houses of patients unable to attend at the dispensary; he paid 45 visits at the request of the health visitors; he visited 58 of the 79 cases attended by the midwife, and gave

surgical or medical aid in 3 of these cases.

There is a considerable decrease in the number of cases treated on tickets issued by the health visitors, which is atributed to the fact that the dispensary is now so well known that patients in most cases do not wait

for the visitors to come round.

The Medical Officer reports that there is a widely prevalent custom amongst Sinhalese, Tamils, Moors, and Malays, whereby the new-born infant is given castor oil and sugar, or cow ghee and sugar, during the first three days, and he attributes many cases of digestive disturbance to this practice. He further points out that this custom has an injurious effect, inasmuch as the children are not put to the breast during these three days, the secretion of milk being thereby much interfered with. This is a matter requiring education, and steps are being taken to that end. He further reports that no case of puerperal septicæmia occurred amongst the midwife's cases; but 17 such cases were treated, which were due to the mismanagement by unqualified midwives. Returns showing the cases treated and the work done are annexed.

20.-MUNICIPAL MIDWIVES.

615 cases, representing 623 births, were attended by the six Municipal midwives during 1911, there having been 8 multiple births. This is slightly less than in 1910. There were 29 still-births and 19 deaths within four days, representing a death-rate (exclusive of still-births) of 2.89 per cent., which is slightly in excess of the 1910 rate. The midwife with the lowest death-rate amongst her cases was Agida Perera of Kotahena district, with only 1 death, representing a rate of 0.68 per cent. amongst 146 births. The numbers of male and female children born were 325 and 298 respectively. Burghers show a large excess of female, and Moors a large excess of male infants; other races show a fairly equal distribution of sexes. Details are given in Annexure B.

21.—MUNICIPAL ENTERIC HOSPITAL.

This hospital was opened with 48 beds on January 15, 1909, with a staff of 1 part-time Medical Officer, 1 apothecary, 2 nurses, and 10 attendants and servants. The staff of nurses has had at times to be increased

during periods of unusual prevalence of the disease.

The Medical Officer reports that the buildings have been kept in good repair; but complains that the accommodation for the staff is insufficient, a remark with which I agree. Proposals will be submitted upon this point later. During the year 1911, 354 cases were admitted for treatment, there being 77 deaths, representing a case mortality of 21.7 per cent., as compared with 351 cases and 52 deaths representing a case mortality of 14.8 per cent. in 1910.

The sources from which the cases were derived were as follows:-

Sent in by Municipal Officers				74
Transfers from General Hospital		3		173
Transfers from Lady Havelock Hospi	tal			56
Transfers from Lying-in Home				1
Voluntary admissions				50
		THE RESERVE OF LABOR.	10 115	-
		T	otal	354

A few (about six) minor operations were performed, and five post-mortems were held during the year.

The Medical Officer draws attention to the large number of cases sent in as enteric from other hospitals, which are found to be due to causes other than enteric. This is, however, a usual experience in enteric hospitals all over the world, and is due to the great difficulty of diagnosing this disease, especially in the earlier stages, the usual remedy being a more frequent use of Widal's blood test.

The following statement shows the case mortality amongst the cases derived from the various sources

since the hospital was opened in 1909 :-

Case Mortality, Enteric Hospital, 1909-1911.

Percentage of Deaths.

By whom sent.	1909.	1910.	1911.	Rough Average.
Municipal Officers	 18:29	 8.23	 18.9	 15.4
General Hospital	 14.81	 14.25	 20.2	 16.4
Female hospitals	 27.27	 27.77	 29.8	 28 · 28
Voluntary from town	 15.38	 20.00	 24.0	 19.79
Average	 17.80	14.81	21.7	18.10

The persistently high mortality amongst the cases sent in from Lady Havelock Hospital is very striking. Possibly women are more backward than men at seeking hospital treatment, and consequently delay seeking admission until all hope of recovery by home treatment has vanished, thereby greatly reducing their chances of recovering at all. It is a point which would appear to be worthy of some investigation by the authorities of the hospitals concerned.

22.—MUNICIPAL BACTERIOLOGICAL LABORATORY.

Dr. L. Fabian Hirst took up duties as the first bacteriologist appointed by the Council on July 1, 1911.

His report is annexed.

By November 14 the construction and equipment of the laboratory at Maligakanda was sufficiently advanced to enable him to undertake a certain amount of work in connection with enteric fever. samples, 36 were examined for B. Typhosus, 17 giving a positive, 4 an incomplete, and 15 a negative reaction; while of 8 samples examined for B. Paratyphosus A, 1 gave a doubtful positive and 7 a negative reaction. Dr. Hirst draws attention to the large proportion of negative results, which, as he states, is a common experience in enteric hospitals in all parts of the world.

It is hoped that before long the equipment of the laboratory will be so far completed that Dr. Hirst will be able to undertake, not only examinations of blood, sputum, &c., on behalf of the Public Health Department, but also samples sent in by the medical practitioners in the town. He will also undertake the carrying out of

inoculation against enteric fever, the examination of food stuffs, beverages, water, sewage, &c.

There is a plethora of bacteriological work awaiting him as soon as he is ready to undertake it.

23.—STAFF.

The various appointments, resignations, and changes which occurred amongst the staff during the year are shown in Annexure B. A noticeable feature is the frequent resignations of the apothecaries at the enteric hospital, the reason usually given being the inadequacy of the house accommodation provided. A special communication dealing with this matter will be submitted shortly.

The staff worked well throughout the year.

Colombo, March 30, 1912.

W. MARSHALL PHILIP, Medical Officer of Health.

Annexure A.

REPORT OF THE MUNICIPAL BACTERIOLOGIST.

I TOOK up my duties as Bacteriologist on July 1, 1911. Pending the building of the temporary Bacteriological Laboratory I worked in the Municipal Office on the records of infectious diseases, and of the food and water supply of Colombo, and arranged the details of the construction and equipment of this temporary laboratory. On November 7 the building of the laboratory was completed. I had brought out with me from England some of the more essential appliances for the equipment of the laboratory, and a stock of chemicals and glassware sufficient to last a few months. The fitting up of the laboratory with these appliances, the training of the attendants, and the preparation of the requisite stocks of culture media and reagents was immediately begun.

By November 14 I was in a position to undertake a certain amount of routine work. Reports were forwarded to the Medical Officer of Health and the Medical Officer of the enteric hospital on the examination of the blood of patients from the enteric hospital and from cases of suspected enteric in various parts of Colombo. Examination was chiefly made for the detection of the presence of agglutinins in the blood against the B. Typhosus cases which gave a negative reaction to B. Typhosus and were suffering from a typhoid-like disease was also tested against a strain of B. Paratyphosus A (Schotmuller) obtained from the Lister Institute of

Of the cases tested against B. Typhosus, 17 gave a positive reaction, 15 a negative, and 4 incomplete. Of the cases tested against B. Paratyphosus A, I gave a doubtful positive reaction and 7 negative reaction.

These numbers are too small to form the basis of very definite conclusions, but it is interesting to note the large proportion of cases giving a negative reaction. This is a common experience in enteric hospitals in all parts of the world, and may be mainly attributed to the difficulty of accurately diagnosing enteric fever on clinical grounds in the early stages of the disease. In a few cases the negative reactions may be attributed to the late formation of agglutinins in the blood. They may not appear before the third week of the disease, or even later in rare instances. In other cases the sample of blood may have been sent too early; many of the cases, however, were tested a second time, invariably with the same result.

The incomplete reactions comprise those cases which gave a more or less complete positive reaction in a dilution of 1-20 of the patient's blood serum, but practically no reaction in higher dilutions. All specimens of blood were tested in three dilutions, 1-20, 1-50, 1-100. Such a reaction might indicate the commencement of the formation of agglutinins in the patient's scrum. Some agglutination may usually be detected on the fifth day with a suitable culture of B. Typhosus. In this case a second sample taken a few days later would show a good reaction; in other cases an incomplete reaction may be explained by a previous attack of enterior fever or by recent inoculation of the patient against this disease. In India a typhoid-like disease, due to the B. Paratyphosus A, seems to be comparatively common. I have met with a few such cases in England. The few observations I have been able to make in Colombo seem to indicate that the disease is not very common been few observations I have been able to make in Colombo seem to indicate that the disease is not very common here.

Annexure B.

STATISTICS.

No. 1.

			N	0. 1.					
(a) Average Monthly Mean Temperature at Colombo (Fort). 42-43 Years.			(b) Monthly Me at Colombo	ean Temper (Fort) duri 911.	ature	(c) Average Monthly Mean Pressure at Colombo (Fort). 42-43 Years.			
		. 0			0			Inches.	
January		79.1	January		78.6	January		29.874	
February		80.2	February		80.0	February	- 3507	29 - 875	
March		82.1	March		82.5	March		29.854	
April		82.7	April		83.2	April	11	29 - 838	
May		82.3	May		82.3	May		29.806	
June		81.0	June		81.4	June		29.812	
July		80.5	July		80 . 8	July		29.804	
August		80 . 7	August		81.1	August		29.828	
September		80.7	September		81.0	September		29.845	
October		80.0	October		79.4	October		29.848	
November		79 - 7	November		79.5	November		29.856	
December		79-1	December		79.8	December		29.842	
Year		80 . 7	Year		80.8	Year		29.840	
(d) Monthly M Colombo (For			(e) Average Mo at Colombo (I			(f) Monthly Ra (Fort) du	infall at Couring 1911.		
		Inches.			Inches.			Inches.	
January		29.861	January		3.47	January		5-47	
February		29 - 909	February		1.97	February		0.45	
March		29.873	March		4.33	March		2.39	
April		29.842	April		9 - 93	April		1.97	
May		29.811	May		10.93	May		6.46	
June		29.843	June		7.48	June		4.08	
July		29.866	July		4.48	July		1.21	
August		29.847	August		3.50	August		1 . 30	
September		29.858	September		4.67	September	- 44	4.12	
October		29.894	October		14.48	October		10.22	
November		29.859	November		11.81	November		13.63	
December		29.865	December		5.27	December		6.96	
Year		29 - 861	Year		82 - 32	Year		58 - 26	

No. 2.—Population of Races according to the Census of 1901 and 1911.

Race.	1901.	1911.	Increase.		Percentage. Increase.
All Races	 155,869	 212,295	 56,426		36.2
Europeans	 2,657	 3,001	 344		13.0
Burghers	 11,861	 13,485	 1,624	20	13.7
Sinhalese	 68,772	 94,085	 25,313		36.8
Tamils	 34,640	 51,975	 17,335		. 50.0
Moors	 28,898	 38,169	 9,271		32.1
Malays	 4,493	 5,364	 871		19.4
Others	 4,548	 6,216	 1,668		36.7

Eastward extension represents 7 per cent. of the increase.

No. 3.-Population of Races (Mean Population), 1901 and 1911.

Race.		1901.	1911. Estimate prior to taking of Census	1911. Estimate after the Census.		the Mean opulations 1901 and 1911.	Increase. Per Cent.
All Races		157,097	 202,311	 213,974		56,877	 36.20
Europeans		. 2,678	 3,296	 3,013		335	 12.51
Burghers		. 11,955	 14,980	 13,635		1,680	 14.05
Sinhalese	1000	. 69,313	 92,447	 94,760		25,447	 36.71
Tamils		. 34,913	 44,395	 52,593		17,680	 50.65
Moors		. 29,126	 35,836	 38,507		9,381	 32.21
Malays	Set Se	. 4,528	 5,568	 5,451		923	 20.38
Others		. 4,584	 5,789	 6,015	-	1,431	 31.22

N.B.—The 1911 estimates include the Eastward extension, which represents 7 per cent. of the increase.

No. 4.—Area and Estimated Population of Wards, 1901 and 1911.

	Total Am	Nett	19	01.	19	11.	Increase during the Decade,		
Ward.	Total Area.	Area.	Estimated Popula- tion.	Density per Acre of available Area.	Estimated Popula- tion.	Density per Acre of available Area.	Increase in the Popula- tion.	Increase in the Density.	
	Acres.	Acres.							
Fort and Galle Face	 220	112	2,303	20.6	3,540	31:6	1,237	11.	
Pettah	 92	67	7,620	113.7	8,036	119.9	416	6.	
San Sebastian	 116	108	9,422	87.2	11,637	107.7	2,215	20	
St. Paul's	 143	135	20,420	151.3	24,929	184 - 7	4,509	33.	
Kotahena	 1,649	1,056	33,618	31.8	40,875	38.7	7,257	6.	
New Bazaar	 289	226	17,608	77.9	22,484	99.5	4,876	21	
Maradana	 1,297	1,025	30,620	29 · 9	44,075	43.0	13,455	13	
Slave Island	 313	304	17,061	56-1	22,157	72.9	5,096	16	
Kollupitiya	 1,928	1,655	18,425	11-1	25,240	15.3	6,815	4-	
Eastward Extension	 1,593	1,593	-	-	11,001	6.9	11,001	-	
The Lake	 416	-	-	-	-	-	-	-	
Colombo Town	 8,056	6,281	157,097	33.5	213,974	34.1	56,877	1	

No. 5.—Colombo and Ceylon Birth-rates, 1901-1911.

		Birth	h-rate pe Populati	er 1,000 ion.
Year.		Colombo.		Ceylon.
1901		 20.6		37.5
1902	 	 22.9		38.5
1903	 	 21.5		40.0
1904	 	 21.6		38.5
1905		 22.5		38.7
1906	E	 26-4		35.7
1907	 	 23.4		32.8
1908	 	 24.5		40.1
1909	 	 23.7		36.7
1910	 	 23 · 1		-
	Average, 1901-1910	 23 · 1		-
1911	 	 24.7		_
		-		100

No. 6.-Racial Birth-rates.

				-rate per Population	
Race.		Ave	erage, 1901-	1910.	1911.
All Races		 	23.1		24.7
Europeans		 	29.0		22.0
Burghers		 	32.7		35.5
Sinhalese		 	29.3		31.9
Tamils	 *	 	12.0		12.8
Moors		 	19.3		19.5
Malays		 	29.6		38-6
Others		 	12.6		11.8

No. 7.-Ward Birth-rates.

				rate per Population	
Ward.		Ave	rage, 1901-1		1911.
Colombo Town			23.1		24.7
Fort and Galle Face			3.9		2.8
Pettah			6.7		5.4
San Sebastian			19.7		21.5
St. Paul's			17.2		16.2
Kotahena			20.5	2.0	24.0
New Bazaar			22.9	**	24.9
Maradana			21.7		21.8
Slave Island	**		23.3		17.9
Kollupitiya			17.4	**	16.3
Eastward Extension					100

No. 8.—Colombo and Ceylon Death-rates, 1901-1911.

					rate per pulation	
Year.				Colombo.		Ceylon.
1901				34.7		27.6
1902		•		33.3		27-5
1903				34.4		25-9
1904				30.2		24.9
1905				33.9		27.7
1906				39.1		34.3
1907				31.4		30.1
1908	10		1999	35.2		29.4
1909				32.0		30.3
1910				28.8		-
						-
		Average, 190	1-1910	33.0		-
				00.0		-
1911 Crud				33.8	**	
	cted for tions	non-residents dyi	ng in insti-	30.9		-

No. 9.—Colombo Racial Death-rates (all Causes).

Death-rate per 1,000 Population.

Race.	Average, 1901-1910.	1911. Crude Rate.	for	Rate cor Deaths of ents in Ho	Non-	(Crude) during 1911.	ASO
Europeans	 29.6	 28.3		22.7		- 1.3	
Burghers	 26.3	 27.3		26.7		+ 1.0	
Sinhalese	 35.6	 37.1		31.4		+ 1.5	
Tamils	 32.7	 33.4		32.6		+ 0.7	
Moors	 29.7	 29.2		28.8		- 0.5	
Malays	 35.2	 40.1		40.0		+ 4.9	
Others	 34.9	 27.3		25.6		- 7.6	
All Races	 33.0	 33.8		30.9		+ 0.8	

No. 10.—Colombo Ward Death-rates (all Causes).

		De	ath-rate per	1,0	000 Populatio	on.		-	ease or
Ward.	Average. 1901–1910.		1911. Crude Rate.	0	911. Rate corrected for Deaths in Hospitals of on-residents.		Increase or crease on the Crude Rate.	Ward for D	alt of ting the Rates eaths in pitals.
Fort and Galle Face .	 12.2		10.7 .		12.1 .		-1.5	+	1.4
Dettal	 13.4		12.4 .		28.5 .		-1.0	+	16.1
San Sebastian	 23.7		26.6		29.9 .		+ 2.9	. +	3.3
201 20 31	 24.9		31.4 .		37.0 .		+ 6.5	. +	5.6
Katabana	 26-1		25.1 .		26.9 .		-1.0	. +	1.8
Now Person	 28.5		28.3		32.0 .		-0.2	. +	3.7
Maradana	 25.7		23.0		27.5 .	+	- 2.7	. +	4.5
Slave Island	 27.4		21.8		24.1 .		-5.6	. +	2.3
Kollupitiya	 19.3		15.2		18.7 .		-4.1	. +	3.2
Eastward Extension	 -		18.2		21.4 .				-
Colombo Town*	 33.0		33.8		30.9 .		+ 0.8		-

^{* 31·3} per cent. of the total deaths occurred in the hospitals, and as the home addresses of 10·9 per cent. of the deceased were not ascertained, their deaths could not be transferred to their proper registration districts. This explains the fact that the mean rate for the town is in excess of the mean of the ward rates.

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			Homicide.	8 11	1 1 1 900-					
п			Accident.	128	00 00-1-00000000	130				
			old Age.	275	184 1125 88 2121 8					
1		1868.	Infantile Convul- sions and Tetanus.	199	94411 198 20 20 20 20 20 20 20 20 20 20 20 20 20					
:		Principal Causes	Districts and Dysentery.	510	119 119 119 119 119 119 119 119 119 119					
1		meip	Pneumonia and Bronchitia,	1175	8126 8126 126 126 127 127 127 127 127 127 127 146					
Tear		Pri	Phthisia.	722 1	1 8 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8					
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			Mensies.	8	- 0 1 1					
o an			Cholera. Smallpox.	50						
Omio	Deaths.		Others.	218164	81889918898780	. 5	1	1,000 Births registered.	316	300 279 372 372 374 374 163
	De		Malays.	218	239014490121131	Infant Mortality.		Proportion to	0	000000454050
10 II M		y.	Moore,	1123	1100 1100 1100 1100 1100 1100 1100 110	Mon	36	Children under A le rest of Ap	1,669	205 205 289 289 289 214 357 1164 1164 1173 67
the rown		Nationality	Temils.	1,764	0.0 4 4 5 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			Corrected for Deaths in Hospitals	30.8	1 2 3 3 5 3 5 3 5 3 5 5 5 5 5 5 5 5 5 5 5
Ior each ward in the		Na	Sinhalese.	3,510	201 100 100 100 100 100 100 100 100 100		-	Orude Rate.	33.8	10101000000000000000000000000000000000
			Burghers.	85 370	1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tion.	Deaths	-	00	40-01-0000
eaci			Europeans.	7 85	25 11 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pullat	a	1916.	28	1133323323
us tor		hs.	Females.	3,137		000 Po		Average, 1901	33.0	21 21 21 21 21 21 21 21 21 21 21 21 21 2
or Dearns		Total Deaths.	Malos.	4,097	2000 2000 2000 2000 2000 2000 2000 200	Rate per 1,000 Population		.1161	24.7	8459000000000000000000000000000000000000
Frincipal Causes o		Tot	Persons.	7,234	88 99 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rate	Births.	.0191	23.1	4 4 0 5 1 5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
3			Others.	11	M-1-0-20- 6		Bir	0101	1 2	91-999999-
deibi			Malays.	210		100	1	Average, 1901 to 1910.	23	111111111111111111111111111111111111111
		ty.	Moors.	8 751	88 88 88 88 88 88 88 88 88 88 88 88 88	-	-		:	1111111111111
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18708	Births.		Burghers	482	122 1147 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10		ż	MBO	sion Res
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and the		hs.	Formelos.					and the second		Fort and Galle Face Pettah San Sebastian St. Paul's Kotahena New Bazaar Maradana Slave Island Kolupitiya Eastward Extension Hospitals (Town Residents) Hospitals (Outside Residents)
eaths		Total Births.	Malos.	2,721	25 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					Fort and (Pettah San Sebasi St. Paul's Kotahena New Baza Maredana Slave Islan Kollupitiy Eastward Hospitals (Hospitals Hospitals Hospitals
and D		To	Persons.	5,280	10 403 403 979 965 560 566 566 179 179					
-Brins and Deaths and their Rates with the	pe ye	or to	Population (inc) to Mildele of the Mildele of the M	213,974	3,540 8,036 11,633 24,929 40,875 22,484 44,075 22,157 22,157 11,001					
No. 11.				:	111111111111					
No				100	nts)					
				Tow	e side	-				
			· j	COLOMBO TOWN	Fort and Galle Face San Sebastian St. Paul's Kotabana New Bazaar Maradana Slave Island Kollupitiya. Eastward Extension Hospitals (Town Residents). Hospitals (Untraced) Hospitals (Outside Residents)					
			Ward.	OLO	lian ian ian ian ian ian ian ian ian ian					
				0	nnd (bast all's suns azas ana (slan itiys ard als (als (-				
					Fort and Gall Pettah San Sebastian San Sebastian Sar. Paul's Kotahena New Bazaar Maradana Slave Island Kollupitiya. Eastward Exl Hospitals (To Hospitals (To Hospitals (Ou					
4	1-1	2		1	HHHERENE SEE	1				

No. 12.—Deaths of Males and Females at different Age Periods for each Race in the Colombo Municipality during the Year 1911.

Age at Death.	T. Contraction	Parobenus.	Descriptor	Durgues	Sinhalasa	CHILIMANON	Tamile		Money	MOORE.	Malava	a Common	Others		All Races.	
	M.	Y.	м.	F.	M.	Y.	M.	у.	м.	F.	M.	у.	M.	y.	м.	F.
Under 1 year of age (see particulars on statement)	6	6	54	51	451	413	144	136	176	142	37	24	21	8	889	780
Under Five Years— 1 year and under 2 2 years and under 3 3 years and under 4 4 years and under 5		1 -	15 10 4 1	18 8 5 3	114 60 37 20	101 73 57 27	39 23 9 8	26 16 8 6	36 20 10 6	38 29 11 2	8 2 1 1	7 3 5	2 - 1 1		215 115 62 37	130
Over Five Years— 5 years and under 10 10 years and under 15 15 years and under 20 20 years and under 25 25 years and under 35 35 years and under 45 45 years and under 55 55 years and under 65 65 years and under 75	- 2 7 12 16 8 4	3 1	3 3 4 12 16 13 18 15	6 10 4 10 13 12 5 9	62 - 40 - 85 117 248 182 144 129 71	89 49 62 111 226 115 94 74		52 104 69	20 19 28 43 56 48 27 36 25	18 12 27 34 53 20 19 20 24	7 1 2 4 6 9 5 6 7 8	4 4 14 5 11 9 5	1 1 11 20 34 15 14 7	30 43 9 3	113 90 224 319 611 464 322 261 161	138 95 128 216 416 228 172 136 123
75 years and under 85 85 years and over	- 2		8	11 7	63	58 52	24	20	25 25	37 37	8 7	6 4	4 2	-	134	135
Total Persons	63	-	189	-	1857		1,7	_	1,1	523 23	111	107	136	_	7,2	-

No. 13.—Births and Deaths and their Rates for each Race in the Town of Colombo during the Year 1911, showing the Rates for the Previous Year and the Average for the Previous Ten Years.

	chusive) at the Year.		Births.		1 3	Dea	ths.		Birth-	rate per	r Mille	Death-rate per Mille per Annum.			
Race.	Population (inclusive of the Military) at the Middle of the Year.	Average, 1901 to 1910.	1910.	1911.	Average, 1901 to 1910.	1910.	1911, inclusive of Deaths of Non-residents.	1911, exclusive of Deaths of Non-residents.	Average, 1901 to 1910.	1910.	1911.	Average, 1901 to 1910.	1910.	1911, inclusive of Deaths of Non-residents.	1911, exclusive of Deaths of Non-residents.
All Races	213,974	4,107	4,819	5,280	5,871	5,750	7,234	6,603	23 · 1	23 · 1	24.7	33-0	28.8	33.8	30-8
Europeans Burghers Sinhalese Tamils Moors Malays Others	3,013 13,635 94,760 52,593 38,507 5,451 6,015	409 2,268 503 636 145	618 728 170	66 482 3,022 678 751 210 71	83 329 2,757 1,369 982 172 179	78 316 2,738 1,336 967 162 153	370 3,510 1,764 1,123 218	362 2,970 1,721 1,111 217	32·7 29·3 12·0 19·3 29·6	35·2 29·0 12·1 19·4 31·8	35·5 31·9 12·8 19·5 38·6	26·3 35·6 32·7 29·7 35·2	26·2 23·5 29·5 26·2 25·8 30·3 26·0	27·3 37·1 33·4 29·2 40·1	31·4 32·6 28·8 40·6

No. 14.—Mortality from Groups of Diseases, 1910 and 1911, and the Average for 1901 to 1910. All Races.

		Total I	Deaths.		Rate per 1,000 Population.							
Cause of Deaths.	Average, 1901 to 1910.	1910.	1911, inclusive of Outside Deaths.	1911, exclusive of Outside Deaths.	Average, 1901 to 1910.	1910.	1911, inclusive of Outside Deaths (Crude).	1911, exclusive of Outside Deaths (Corrected).	Increase or Decrease on the Crude Rate.	Increase or Decrease on the Corrected Rate.		
All Causes	 5,871	5,750	7,234	6,603	33.00	28.76	33-81	30.86	+ .81	-2.14		
Zymotic diseases Parasitic diseases Dietetic diseases Constitutional diseases Developmental diseases Local diseases Violence Ill-defined diseases	 1,565 199 30 760 351 2,390 106 470	993 213 63 790 372 2,747 129 443	1,291 259 71 969 403 3,546 163 532	1,125 212 70 845 398 3,303 143 507	1·12 ·17 4·27 1·97	4·77 1·02 0·30 3·79 1·88 13·17 0·61 2·12	1·21 ·33 4·53 1·89	5·26 ·99 ·33 3·95 1·86 15·43 ·67 2·37	$\begin{array}{r} -2 \cdot 77 \\ + \cdot 09 \\ + \cdot 16 \\ + \cdot 26 \\ - \cdot 08 \\ + 3 \cdot 14 \\ + \cdot 16 \\ - \cdot 15 \end{array}$	-3:54 -:13 +:16 -:32 -:11 +2:00 +:07 -:27		

No. 15.—Principal Causes of Deaths, 1901–1911, All Races, All Ages.

0 10 11	R	ate per	1,000 Po	pulatio	n.
Cause of Deaths.	Average 1901 to 19		1911.		Increase or Decrease.
Diarrhœa and enteritis	 3.91		3.25		-0.66
Phthisis	 3.51		2.96		-0.55
Pneumonia	 3.34		4.02		+0.68
Infantile convulsions	 2.70		2.29		-0.41
Dysentery	 2.07		1.32		-0.75
Bronchitis	 1.26		1.26		0.00
Tetanus	 1.19		0.79	4.	-0.40
Enteric and suspected enteric	 1.18		1.85		+0.67
Remittent fever	 0.69		0.23		-0.46
Simple and ill-defined fever	 0.58		0.21		-0.37
Anchylostomiasis	 0.44		0.22		-0.22
Intermittent fever	 0.01		0.00		-0.01

No. 16 .- Mortality from Groups of Diseases, 1901 to 1911. Rate per 1,000 Population.

Year.		Pulmonary.	Diarrhoeal.	Fevers.
1901		 8.48	 6.53	 2.90
1902		 7.15	 6.64	 2.73
1903		 7.40	 6.89	 3.00
1904		 7.40	 5.32	 2.10
1905		 8.10	 6.89	 2.01
1906		 9.08	 7.85	 3.28
1907		 8.04	 5.11	 2.53
1908		 9.12	 5.40	 2.72
1909		 9.32	 4.78	 2.10
1910		 7.19	 4.19	 1.69
		-	-	-
Avera	ge, 1901 to 1910	 8-11	 5.98	 2.46
			-	
1911		 8.24	 4.57	 2.29
			-	-
Increa	ase or Decrease	 + 0.13	-1.41	- 0.17
			-	

No. 17.—Principal Causes of Deaths, 1911, expressed as a Percentage of Total Deaths in each Race.

Cause of Death.	A	Il Races	. Eu	ropeans		Burghers.	Si	inhalese.	Tamils.	Moors.	Malays.	(Others.
Phthisis		9.6		5.9		8.8		10.2	 8.1	 10.8	 8.8		10.4
Pneumonia		13.0		4.4		12.2		10.9	 17.7	 11.6	 9.2		22.7
Bronchitis		4.1		1.5		5.3		3.8	 2.8	 6.1			3.9
All pulmonary		26.7		11.8		26.3		24 · 9	28.6	28.5	24.0		37.0
Diarrhœa and enter	ritis	10.5		11.8		10.2		9.3	 15.0	 7.6	 9.2		9.1
Dysentery		4.0		10.3				2.7	 0.0	 	 		3.3
All diarrhœal		14.5		22.1		12.1		12.0	21.2	12.5	10.6		12 · 4
Enteric and suspec	eted												
enteric		6.0		10.3		9.4		7.2	 3.9	 5.1	 2.8	**	6.5
Simple and ill-defi	ned								-				0.0
fever		0.7		1.5	*.			0.8		 0.3	 1.4		0.0
Remittent fever		0.7		1.5		0.6		0.2	 0.7	 0.9			1.3
Intermittent fever		0.0		0.0				0.0	 0.0	 0.0	 0.0		0.0
All fevers		7.4		13.3		10.0		8.5	5.3	6.3	7.9		7.8

No. 18 (a) Causes of Deaths which occurred in the Colombo Municipality during the Year 1911.

No. 19 (a) Caus	Jo	11-0	14194	100	1994	- Jak		Vard.					-			- 11		ionali	ity.	1	
	dusive	Face.		2.0				1	18		sion.	- 1	spital	ls.						1	
Causes of Deaths.	Colombo Town. Total Deaths exclusive Non-residents.	Fort and Galle F	Pettah.	San Sebastian.	St. Paul's.	Kotabena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.*	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
All Causes	6603	38	99	309	781	1023	635	1019	484	385	200	839	631	791	68	362	2970	1721	1111	217	154
I. Specific, febrile, or zymotic diseases II. Parasitic diseases III. Dietetic diseases IV. Constitutional diseases V. Developmental diseases VI. Local diseases VII. Violence VIII. Ill-defined and not specified diseases I. Specific, febrile, or zymotic:	1125 212 70 845 398 3303 143	7 - 1 16 9 4	20 — 10 5 57 3	54 3 1 47 18 159 —	179 15 1 99 31 405 3	171 53 22 123 105 417 19	18 1 101 25	93 34 3 149 50 630 20	83 21 4 35 36 211 4	73 14 -41 22 194 4	20 7 3 23 17 93 19	179 27 15 116 6 431 28	166 47 1 124 5 243 20	142 20 20 100 82 349 32 46	21 - 8 3 31 2	65 7 3 52 21 180 6	123 31 404 214 1391 72	47 27 177 66 967 36	185 25 5 157 71 549 19	32 5 3 26 21 100 3	2
1. Miasmatic diseases	458 83 2 29	2 2 2 - 1	11 5 3 - - 1	23 19 3 - 5 4	79 76 8 	89 62 9 —	36 51 4 1 3 9	42 25 13 - 2 11	30 36 14 — — 3	24 39 6 - 4	3 11 2 - 2 2	111 49 6 - 8 5	52 72 1 - 8 18	22 83 13 1 6 17	8 11 1 - 1	40 18 3 - 2 2	168 22	86 157 32 2 5 24	64 85 13 8 15	11 8 9 - - 4	11 11 3 - 1
II. Parasitic diseases III. Dietetic diseases IV. Constitutional diseases V. Developmental diseases VI. Local diseases:—	70 845	-1	- 10 5		15 1 99 31	22 123		34 3 149 50	21 4 35 36		7 3 23 17	27 15 116 6	47 1 124 5	20 20 100 82	_ - 8 3	7 3 52 21	31 404	47 27 177 66	25 5 157 71	5 3 26 21	
Diseases of nervous system Diseases of organs of special sense Diseases of circulatory system Diseases of respiratory system	923	1 4	16 - 2 31	13	18	13		1 50	9 88	- 22	-	32	20 - 29 51	30 — 17 93	7	17	100	190	175 - 28 206	31 - 11 36	17 - 2 43
5. Diseases of digestive system 6. Diseases of lymphatic system and ductles	704		7	7	38		31		16					169				365 276	85		17
glands 7. Diseases of urinary system 8. Diseases of reproductive system— (a) Organs of generation	0		-	14	1	1	1	14	5	1	_	27	26	15		6	49	52	27	3	3
9. Diseases of organs of locomotion 10. Diseases of integumentary system	3	-		- -	- 1	14	-	12	9	3 - 4	7 - 1	15	10	2 10	-	- 1	1 17	21 2 17	- 5	2 -	
VII. Violence :— 1. Accident or negligence. 2. Homicide 3. Suicide 4. Execution	11	-	3 =	1111	3 =	15 -4 -	1 - 1 -	17 1 2 -	-2 -2 -	3 1 -	3 - 16	25 2 1 —	19 1	28 3 1	-1 -1 -	-5 -1 -	52 5 4 11	29 1 2 4	17 -2 -	2 - 1	3 1 - 1
VIII. Ill-defined and not specified causes	WAN.	4	4	27	48	113	43	40	90	37	18	37	25	46	3	28	245	95	100	27	9
Miasmatic Diseases. Smallpox Chickenpox Measles Whooping cough Mumps Diphtheria Typhus Cerebro-spinal fever Simple and ill-defined fever Enteric fever and suspected enteric Beri-Beri Influenza Other epidemic diseases	1 4 4 - 4 - 1 45 396 †1	111111111111111111111111111111111111111			- - - - - - - - 3 71 1 3 -	- - - 3 - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -					4 1 - 3 - 103 - -	4 52 	1 		1 	-2 3 -1 -1 25 214 -4 -	-1 1 	1 	2 3 6	

^{*} The figures in this column have not been included in the total for Colombo Town. The distribution in the wards of the deaths of town residents in hospital is shown in statement No. 18 (6), but is included in "Total Deaths" column given above.

† An imported case.

				Cau	tses (of De	_			ıtd.				-						٠	_
	Jo e		1	1	-	-	V	Vard.	- 1			**			-		Nati	onali	ty.		-
Causes of Deaths.	Colombo Town. Total Deaths exclusive of Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotabena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.*	Unknown.	Europeans.	Burghers.	Sinhaleso.	Tamils.	Moors.	Malays.	Others.
Diarrheal Diseases. Cholera Diarrhea Dysentery	19 176 263	-	_ 3 2	- 12	1 22 53	1 35 26	1 23 27	2 14 9	15	1 20 18	- 9 2	10 5 34	1 18 53	2 23 58	1 3 7	- 11 7	6 82 80	8 42 107	3 28 54	5	1 5 5
Malarial Diseases. Remittent fever		-	- 1	2	- 6 6	5 -4	_2 _2	-	12	4 - 2	-1	5 1	6	-	_1 _	- 1	14 - 8	12 20	-	-	2 -1
Zoogenous Diseases. Hydrophobia	-	1 11		1 1 1	1 1 1	111			1 11	111	1 11		1 4 1	=	11 1		= -	-1	11 1	11 1	
Venereal Diseases. Syphilis Gonorrhœa, stricture of urethra .		11		_5	3	-2	3	2		11	2	8	7 1	5		2	14	4	-8	11	-
Septic Diseases. Phagedsena Erysipelas Pyæmia, septicæmia Puerperal fever	35	-		- 1 3 -	- 8 5	-47	- 1 6 2	- 2 2 7	_ _ _ _ 3	_ _ 1 3	- - 1	- 1 2 2	1 14 3	7	-1 =	- 1	- 6 9 19	16	8		=1
Parasitic Diseases. Thrush Worms (animal) Dochmius duodenalis	. 159	-	=	_3	1 10 4						- 6 1		- 5 42	- 3 17	111	- ₇	4 106 13		2 22 1	5	2 3
Dietetic Diseases. Starvation, want of breast milk . Scurvy . Chronic alcoholism . Delirium tremens .	=		===	= =	= 1	- - -	=	= = =	=	1111	_ _ _	15 _ _		20 	1111	- - -	31	27 _ _ _		_ _ _	=
Constitutional Diseases. Rheumatism Rickets Cancer Tabes mesenterica	25	=	=,	200	-	-	1 7 1	7 3			- 1 5	-1 -8 -	3 - 16 1	-	- - -	- 3 7 1	6		6 4 1	Ξ	1 =
Tubercular meningitis Phthisis Other forms of tuberculosis scroful Purpura hæmorrhagic diathesis Anemia, chlorosis, leucocy-thæmi				34	88	84 2 - 7		-4 1	21	30 1 - 2	13 —	13 90	6 88 2 - 2 5	74	-4	32 1 - 2		140		-	16
Elephantiasis Parangi Other and undefined constitutions		3				-1		- 1		===		2		- - 3	I III,	= 1	- - 3	1 - 2		1	1111
Developmental Diseases. Premature birth	. 111	- 1	=		3	26 2	=	18 2	=	9	_5	2	2 -	44	2	9	85 2 —		8 1 —	=	=
Imperforate anus Cleft palate Other congenital defects	 		= = =	= 17		= - 77	_ _ _ _ 25	30	_ _ _ _ 	_ _ _ _ 13	_ _ _ _			_ _ _ 	==-		1 126	55	- - 62	_ _ _ 17	= 1
Softening of brain Apoplexy	: -			_ 	_ 					- 5 1	1	-1-	1 1 -	- 1	-1	- 22	10	6		111	=,
Convulsions Infantile convulsions Laryngismus stridulus	49	9 -		3 2	9	5 18 1	12	20	10	-8	-5		11111	- 5	111011	6 9 16	1 42	5 17 85	10	-1	
111		9 -	-	13	48	58	32		-		=	5 1 3	_2 		= -	_5	72 1 2	49	35		-6 -1

The figures in this column have not been included in the total for Colombo Town. The distribution in the wards of the deaths of town residents in hospital is shown in statement No. 18 (b), but is included in "Total Deaths" column given above.

	j ₀			-	14000	01.1		Ward.	100	Onece		-	-	-			No	tiona	litar		-
	ive	6		F						1	d	He	spite	le			110	LIOILIK	my.		-
Causes of Deaths.	Colombo Town, Total Deaths exclusive of Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.*	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Other undefined diseases of brain Other undefined diseases of nervous system	71 2	1-1	-	3	3	4	1 -	11 —	3	17	1 -	12	14	15	- 1	9	34	17	8	3	
Organs of Special Sense. Conjunctivitis and other diseases of the eye	- 1	_ _1	111	111	-11	111	111	=1		111	111			111	- ₁	1	111	111	111	111	111
Circulatory System. Pericarditis Morbus cordis (disease of heart) Valve disease of heart Hypertrophy of heart Angina pectoris syncope Aneurism Embolism thrombosis Phlebitis Varicose veins Other and undefined diseases of heart or circulatory system	6 75 5 6 10 2 2 4	- ₂ - ₂ - ₁ - ₁	- ₁	1 4 - 1 3 - - -	-6 1 -1 -1 -	-6 -1 1 	-3 -1 	- 15 1 - 1 - 1 - -	-8 = 1 = =	- 15 - 2 2 2 - - -	1111111	4 4 1 1 - - 1 2	1 8 - 1 1 - 4	1 9 2 - 1 1	- ₅ -1 -1	8 - 1	1 34 4 3 4 2 2 1	-4 2 -	-9 -1 1 -1 -1	-5	1111111111
Respiratory System. Laryngitis Croup Bronchitis Asthma Pneumonia Pleurisy Other and undefined diseases of respiratory system	95 270 23 859 13			- 20 - 45 -	- 33 1 138 1 2	54 111 162 —	- 39 1 87 -	33 - 32 2 126 -	- 51 6 30 -	2 - 19 - 23 1	- - 6 - 15 -		14 - - 2 46 - 3	- 3 1 82 5	- - 1 -3 -	- 19 - 44 1	- 114 10 324 6	23 	68 7 129 —	10 - 13 3 20 -	- - 6 1 35 1
Digestive System. Stomatitis Dentition Quinsy Sore throat Dyspepsia Hæmatemesis Malæma Diseases of stomach Enteritis Ulceration of intestines Ilcus obstruction of intestines Stricture or strangulation of intestines	- 6 - 1 - 6 - 12 520 117		= = = 1		- - - - - 10			3 - - 5 - - 154 - 3		1 — — — — — — — — — — — — — — — — — — —	-2 -1 - - - 1 12 - -		1 - 1 - 1 53 - 1				6 -1 -3 -6 193 -8	- - - 2 - 216 1	1 1 5		
Intussusception of intestine Hernia Fistula Peritonitis Ascitee Gallstones Cirrhosis of liver Other diseases of liver Other and undefined diseases of digestive system	10 - 23 19			_ _ _ _ _ _	-5 -6 2 -4 2 6	1 - 1 5 - 4 2	-2 -2 1 -2 1 -2 1	-1 -2 1 -1 -1 1 6	- 1 - 2 1 - 1 -	- 1 -4 - - 1				-1 -7 -3 8			1 - 16 2 - 6 7	-4 -15 1 -14 9			
Diseases of Lymphatic System and Ductless Glands. Diseases of lymphatic system Diseases of spleen	_ 1	-	=	=				-	-	-			2	-1			1 -	11.	-	1	
Discases of Urinary System. Nephritis Bright's disease Uraemia Suppression of urine Calculus (stone) Hæmaturia Diseases of bladder Other and undefined diseases of urinary system	84 44 6 - - 1 8			6 5 1 - - - - 2	15 10 — — — 1	5 2 2 - - - - 1	12 6 - - - -	6 7 - - -	2 2 - - - -	1 3 1 - - - -	1 6 - - - - -	24 2 1 - - -	17 5 1 — — 2	12 1 1 - -	-2 1	22 2	24 21 3 - - -	39 9 - - - 1	15 8 3 — — —	21	2 1

^{*} The figures in this column have not been included in the total for Colombo Town. The distribution in the wards of the deaths of town residents in hospital is shown in statement No. 18 (b), but is included in "Total Deaths" column given above.

All the same of th			-	Cau	ses o	f De			-cor	atd.	1		0.6						300		
	re of						,	Ward									Nat	ional	ity.		
Causes of Deaths.	Colombo Town. Total Deaths exclusive of Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.*	Unknown.	Europeans.	Burghers.	Sinhalese,	Tamils.	Moors.	Malays.	Others.
Diseases of Organs of Generation.																					
Ovarian diseases	= -	111111	111111	111111			-1	111111	111111			1 2 - - - 2	=	- ₂	111111	- ₁ = = =	-4-1	1 1 - - - 2	= = 1	111111	-1 - - 1
Discases of Parturition. Abortion or miscarriage Puerperal mania Puerperal convulsions Placenta prævia, flooding Phlegmasia dolens Other and undefined accidents o	- 9 8 - 8	=	=======================================	_ _ _ _ _ _ _ 6	1 = = - 6	_ 1 2 -	-	- 1 1 -	_ _ _ 4	1 -1 -			- - - 2 - 8	1 - 2 -	= = = 1		29 -4 7 -29	= ,	- 4 1 -		= = = 1
Diseases of Organs of Locomotion. Cios, necrosis Arthritis, ostitis, and periostitis . Other and undefined diseases of organs of locomotion	- :		111		111	111		11 1				-1		-2			- ₁	- ₂		= -	
Diseases of Integumentary System. Carbuncle Phlegmon, cellulitis Lupus Ulcer, bed sore Eczema Pemphigus Other and undefined diseases integumentary system	13	=	1111111	T THEFT	=======================================	- - - 1 - -			1111111			12 -12 -	-5	3		= -1	3 8 - 5 - 1	-	- - 3 1 -		1111111
Gunshot wounds		8 - 4 - 5 -	3 - - - - - - - - - - - - -	11111111		111	3 1		3 3	111-1-1-		- 10 10 10 10 10 10 10 10 10 10 10 10 10	- 5			111111	11 - 11 - 20 - 20		-4-9		= 1 = 1
Homicide. Murder, manslaughter		7 -	-	-	-	-	-	1	-		-	,	-	1	-	-	1	1	-	-	1
Cut, stab Poison Drowning Hanging Otherwise		1 — 2 — 3 — 3 — 2 —	111111	111111	111111	1111111	3 -	===		111111	111111	11 11		111 111		11111					111111
Execution.	. 1	6 -	-	-	-	-	-	-	-	-	1	6 —	-	-	-	-	1	1	4 -	-	1
Debility Sudden deaths (causes unasce tained) Abscess	45 r-	7 - 7 - 5	-	1 8	3 4	3 1 10 2 = 1 -	5 7 3 —	7 4 3	1 8	8 3	2 1 2 1 1 - 2 -	1 -3	1 5		11111	2 2	-	8 88	1 - 1	1 = 1 3 -	

^{*} The figures in this column have not been included in the total for Colombo Town. The distribution in the wards of the deaths of town residents in hospital is shown in statement No. 18 (b), but is included in "Total Deaths" column given above.

No. 18 (b) Causes of Deaths of Town Residents which occurred in the Colombo Hospitals during the Year 1911.

No. 15 (b) Causes of De	8		2 (1)			243	113	War	d.			120			1		Nat	tional	ity.		-
	usive	9	1			1 3					ion.	Ho	spita	ls.							
Causes of Deaths.	Colombo Town. Total Deaths exclusive Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
All Causes	839	5	129	39	140	75	84	196	49	87	35	-	-	-	18	48	358	320	51	7	37
I. Specific, febrile, or zymotic diseases II. Parasitic diseases III. Dietetic diseases IV. Constitutional diseases V. Developmental diseases VI. Local diseases VII. Violence VIII. Ill-defined and not specified diseases	179 27 15 116 6 431 28	1 - 4	21 6 3 15 -71 5	8 -1 2 -24 2	87 - 6	10 1 37 4 5	3 16 1 37 2	11	1 -	27 3 4 11 1 35 5	1	1111111	11111111	11111111	-3 -9 -1	-7 -17 1	8 53 4 152 15	17 10 35 1 205 9		-	9 2 -5 -20 1
I. 1. Miasmatic diseases 2. Diarrhoeal diseases 3. Malarial diseases 4. Zoogenous diseases 5. Venereal diseases 6. Septic diseases II. Parasitic diseases III. Dietetic diseases IV. Constitutional diseases V. Developmental diseases	49 6 - 8 5 27 15 116	1111111	11 10 - - - - 6 3 15	5 1 - 1 - 1 - 1 - 2	7 1 1 1 6 3	3 1 - 1 1 2	-7 -1 -3 -	28 10 3 - 2 1 3 3 31 1		9 1 - 1 1 3 4	- - - 2 1	111111	1111111111	HIIIIIIII	3 1 1 - - - 3	= = = = = = = = = = = = = = = = = = = =	65 222 2 4 3 8 5 53 4	20 2 - 1 2 17 10 35	- 2 - 11		5 3 1 - - - 2 - 5
Diseases of— VI. 1. Nervous system 2. Organs of special sense 3. Circulatory system 4. Respiratory system 5. Digestive system 6. Lymphatic system and ductless glands 7. Urinary system 8. Reproductive system— (a) Organs of generation (b) Parturition 9. Organs of locomotion 10. Integumentary system	32 132 170 1 — 27	2 1 - -	2 3 22 35 - 3 - - - - - - - - - - - - - - - -	6 12 - 2 - 1	1 4 27 38 - 8 - 4 1 4	-5 14 9 -3 1 3	- 9 14 - 5	36	-2 12 7 -1 -1	3	3 4 - 1	-	111111111111111111111111111111111111111	11111 11 11111	-1 -2 -5 	3	19	8 55 105	- 2 10 7 - 2		1 - 12 6 - 1
VII. 1. Accident or negligence. 2. Homicide 3. Suicide 4. Execution	2	-	- - -			==	=	4 2 1		=			1111	1111	1111		15		111		
VIII. 1. Ill-defined and not speci fied causes		_	8		2 6	2	3	11	-	1	1	-	-	-	1	1	20		1	3 -	-
Miasmatic Diseases. Smallpox Chickenpox Measles Whooping cough Mumps Diphtheria Typhus Cerebro-spinal fever Simple and ill-defined fever Enteric fever Suspected enteric fever Influenza Other epidemic diseases			111111111111111111111111111111111111111			111111111111111111111111111111111111111	13	=							111111111111111111111111111111111111111	- - - - - - - - - - - - - - - - - - -	==	- I	111111111111111111111111111111111111111	3	
Diarrhaul Diseases. Cholera Diarrhau Dysentery		5 -	- 2	-	-	-	2 4	- 10	=	1	1 -		-	=	=	=	1		-	1 -	_1 _2
Malarial Diseases. Remittent fever		5 =	=	==	=	-	=	11.	=	-11	=				-	=	11.	2 -		111	
Zoogenous Diseases. Hydrophobia Glanders Cowpox and other effects of vaccination	i	11 15	1111	= -		-	= -		11 1		1111	11 1		= -		11 1			FILE	111	111
Venereal Diseases. Syphilis Gonorrhœa, stricture of urethra		s -	=	-	1 -	1 -	1 _	-	2 -	-	1 =	=	=	=	=	-	1	-	-	2 -	

AND DESCRIPTION OF THE PARTY OF	4					1947	1	Ward					8-11				Nat	ional	ity.		_
	ive of	6										Ho	ospita	ıls.							1
Causes of Deaths.	Colombo Town. Total Deaths exclusive Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Septic Diseases. Phagedæna	- 1 2 2	===	1111	= 1			1111	==1	1111	= 1	1111	1111	1111	11111	1111	1111			1111		1111
Parasitic Diseases. Thrush	- 6 21	=	- 1 5	=	6	- 1	- 1 2	- 1 2	=		- ₂				111	=	_ 5 3		==		=_2
Dietetic Diseases. Starvation, want of breast milk Scurvy Chronic alchoholism Delirium tremens		1111	- 3 - - -		- - -	1111	1111	3 -	1111	4	==	1111	[][]	1111	1111	1111	5 -	10	1111	1111	1111
Constitutional Diseases. Rheumatism Rickets Cancer Tabes messenterica Tubercular meningitis Phthisis Other forms of tuberculosis scrofula Purpura, hæmorrhagic diathesis Anæmia, chlorosis, leucocy-thæmia Diabetes mellitus Leprosy Elephantiasis Parangi Other and undefined constitutional diseases		111111111111111111111111111111111111111	- - - 3 11 - - -				1 - 2 12							111111111111		- - 1 - 5 - - - - -	1 -1 -6 431 -1111 -1 -1 -1 -1 -1 -	-4 -4 26 			
Developmental Diseases. Premature birth	_ 2		11111111	1111111							11111111	11111111		11111111			2		11111111		
Nervous System. Inflammation of the brain or its membranes Softening of brain Apoplexy Paralysis Epilepsy Convulsions Infantile convulsions Laryngismus stridulus Collapse Tetanus Mania Paraplegia disease of the spinal	- 1 - 3 2 1 - 2 - 5 1	1111111	111111111111		1111111111		-		=======================================	-1 -1 -1 -1 -1 -1		HIHITI	111111111111111111111111111111111111111	HIHHHH			- - - 2 - - 3 1			1111111111	пинини
Other undefined diseases of brain. Other undefined diseases of nervous system Organs of Special Sense. Conjunctivitis and other diseases of	1	-		= -	-1	1 2		1 2	_2	1			111	111	1	- -	7	1 2	1		
the eye Otitis and other diseases of the ear Epistaxis and other diseases of nose Circulatory System.	=	111	=			1111	=	-11		=	=	111	111	=		111	-11	111	111		
Pericarditis Morbus cordis (disease of heart) Valve disease of heart Hypertrophy of heart Anginapectoris, syncope Aneurism Embolism, thrombosis Phlebitis Varicose veins Other and undefined diseases of heart or circulatory system	- 1	-	= = = = = = = = = = = = = = = = = = = =	111111111		111111	HIIIIIII			1	-1 = = =		111111111	111111111		111111111	1 2 1 1 = 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 - - - 1 - 3		111111111	111111111

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Causes of Deaths.	Colombo Town. Total Deaths exclusive Non-residents.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena,	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents.	Outside.	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Respiratory System.						-	-						1				-				
Laryngitis				=	-	_	=	-	-	=	-	_	=	=	=	=	=	=	=	=	=
Bronchitis		=	_1	=	4	-,	-	5	-		-	=	=	=	-	1	2	3	4		-
Pneumonia	115		21	6				26		5				-	=	2	45		6		12
Other and undefined diseases of					1	2				1	-		-	=	-		3	2	-		-
respiratory system	1	-		-	-		1	-	-		-	-	-	-	-	-	1	-	-	-	-
Digestive System. Stomatitis	-	-	_	_	_	_		_	_	_			_			_		4			
Dentition Quinsy	-	-	=	_	_	-	=	-	=	=	=	_	-	-	-	-	-	=	-	-	-
Sore throat	-	-	=	-	-	-	-	_	=	_		-	-	=	_		-	-		=	_
Dyspepsia Hæmatemesis	I	_	=		=	=	=	_			_			=	=	=	-	-	=	=	=
Malæma	- 3	=	=	-	-		-	-	_	- 2	-		=	-			-2	-,	-	-	-
Enteritis	139	1	30	12	35	6	12	27	6	6	4	-	-	-	4	1	30	93	7	1	3
Ileus obstruction of intestines	3			_		1	-	2		-			=	_			2	-	=	=	1
Stricture or strangulation of intes- tine	-	-1	_	_	_	-	-	-	-		_	-	-	_	_	_	-	_		_	_
Intussusception of intestine	- 2	=		=	-,		-	-		-1	-	=	-	=	E		=	-			-
Fistula	- 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-
Ascites	-11	=	_2		_2		_	-	-	_2	-	-				_2	-5	-4			
Gallstones	- 6	=	-3			-1	-1	-	-	-1	=	=	=	=	=	=	-1	- 5		-	=
Other diseases of liver Other and undefined diseases of	3	-	-	-	-	1	-	-	-	2	-	-	-	-	=	-	2	1	-	-	
digestive system	3	-	-	-	-	-	1	2	-	-	-	-	-	-	1	-	1	-	_	-	
Diseases of Lymphatic System and Ductless Glands.												1					1				
Diseases of the lymphatic system Diseases of spleen	=	=	=	=	=	=	=	-	=	=	=	=	-	=	=	=	=	=	=	-	-
Diseases of Urinary System. Nephritis	24	_	3	,	_	-		0	i			25									
Bright's disease	2	-	-	-1	7	_3	-5	_2	1	-	-	=		_		_2	5	15	_1	_	
Uraemia Suppression of urine	_ 1	=		_1		=	_	-	-	-	=	=1		_	=		=		_1		_
Calculus (stone)		=	=	_	=	=	-	-	=	=		-	=	-	=	=	-		-	-	-
Diseases of bladder Other and undefined diseases of	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-
urinary system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-0
Diseases of Organs of Generation.									-							100	10	-		1	
Ovarian diseases	1 2	=	_	-	=	=	-1	-2	=	-	-	=		=	Z	=	-2	_1			
Disorders of menstruction Perineal abscess	=	=	=	=	=	=	=	=	-	=	=	=	200	=		=	=	=		-	
Pelvic abscess	-	-	-	-	-	-	-	-1	-	-	-	-		-	-	-	-	-	-	-	7
&c	2	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1	-1	1 .		
Diseases of Parturition.	Teal !								10	2				1			-				
Abortion or miscarriage Puerperal mania	_	=	=	-	=	=					=	_		=1	_	_		= :			
Puerperal convulsions Placenta prævia, flooding	- 1	=	=	=	=	-	-		-		1		_		1000	-	-1	-			
Phlegmasia dolens Other and undefined accidents of	-	-	-	-	-	-	-	5	-			-		-	-	-	-	-			
child-birth	14	-	-	1	4	3	1	4	-	1	-	_	-	-	-	2	7	4	1 -		-
Diseases of Organs of Locomotion.	1				4	-		1		1	1	1	-	1	-	13			11	6	
Cies, necrosis	- 1	_	_	=	-1	=		=	= 1								-	1			
Other and undefined diseases of organs of locomotion	_	_	_																		
Diseases of Integumentary System.											1						1	13			
Carbunele	1	1001	-	-	-	-	-	-	1	_	_	-	-	-1	1	_	_	4	4	-1-	- 4
Phlegmon, cellulitis	-	100		=	_1	=	_3	1			333				=	=	3	1	1 :		
Ulcer, bed sore Eczema	200	_	-6	=	3	-	1	1		1 -	-			-1	-	-	1	9	2 -		-
Pemphigus Other and undefined diseases of	-		-	-	-	-	-	-	-	-	-		NO. 1		-		-		-		-
integumentary system	- 1	4	-	-		_	_	_	- 1	_ .	_				_	_	-	31-	-1-	_ _	- 3

	jo o			113			1	Ward	i.	J. Co.		177					Na	tiona	lity.		
Causes of Deaths.	Colombo Town. Total Deaths exclusive of Non-residents.	Fort and Galle Face.	Pettah,	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Town Residents. H	Outside, Outside	Unknown.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Accident or Negligence. Fractures, contusions Gunshot wounds	- 6 2	=	-1 -1 -3	2	1111111	1 - 2 - 1		1 - - 1 - 2	111111			1111111	1111111	1111111	1111111		2 - 4 1 - 5	- 1 1		1111111	1
Homicide. Murder, manslaughter Suicide. Gunshot wounds	= 1	1 111111	1 111111	1 111111	HIIII I	1111111	111111	_ _ _ _ _	1 111111	1 111111	1 111111	1 111111	. 1 111111	1 111111	1 111111	1 11111	_ _ _ _ _ _		- 111111	1 111111	
Execution. Hanging I'll-defined and not specified causes. General dropsy Debility Sudden deaths (causes unascertained) Abscess Tumour Hæmorrhage Other ill-defined and not specified causes	- 36 - 1	1 111111	- - - - - - -	- 2	- - - - - -	5		- - - - - - -		- - - - - -			- 11 1111 1		- - - - -			- - - - - -	- - 3 - -	- 11 1111	I THE HELL

		Н	ospita	ıls.	-				N	ations	lity				
Cat	uses of Deaths.	Il Causes	S Outside.		Europeans.		Burghers.	Sinhalese.		Tamils.		Woodrs.	Malays.		Others.
I. Specific, febri	le, or zymotic disc	08868	166 47		8		3	145 46		6		3	=		_1
III. Dietetie disea			1		_			1		-			-		-
IV. Constitutions			124		2		1	110		5		3	-		3
V. Development			5		-					-					-
VI. Local disease	8		243		7		4	193		28		5	1		5
VII. Violence	A A		20		-					1		1	-		1
VIII. Ill-defined as I. 1. Miasma	32 32	iseases	25		-	**				2	**		7		-
	4 37		56		9	2.2	2	4.00		-			100		-
	diseases		19	**			1	7.2		1	10			**	-
	us diseases	100				10	_ ::				• •		TEN S		_
	l diseases		8		-	11		-		1		_	1110		
6. Septie d			18		2			4.4		1		1	_		_
II. Parasitie di	senses		47		_			7.00		1			-		_
III. Dietetic dis			1		-			1		-					-
IV. Constitution			124		2		1	110		5		3	-		3
V. Developmen	tal diseases		5		-			5		-					-
Diseases of-															
VI. 1. Nervou	system		20		-			15		5		- 44			-
	of special sense		-		-			-		-			-		-
	ory system		29		2					3			1		-
	tory system				1		1			6			1	++	2
	re system				3		1	67		12		3	-		2
	tic system and di		20.00		-	**		0.00		1			-		-
	system uctive system—		26		1	**	2	22		1	. +		7		-
	rgans of generatio	in	6		-			- 6	100	121			-		_
	arturition		10		-			**		-			-		_
	locomotion		-		-					_			-		-
10. Integumes	ntary system		11				The same of the sa	0	100	-		1	-		1

		Car	Hospitals.							Nationality.								
	a real			uns.			ź		ö									
	Causes of Deat	ns.		Outside.		Europeans.		Burghers.		Sinhalese		Tamils.		Moors.		Malays.		Others.
VII. 1. Acci	dent or negliger	nce		19		E		B		16				7		N		0
2. Hon	nicide			1		-		-		1		-		-		-		=
4. Exe	cution lefined and not	enonified carrees		25		=	::	=		- 23		=,		=,	::	=		
									**	20		-	**	18				
Smallpox	Miasmatic Dise	ases.		4		-		_		4		-		-		_		-
Chickenpox Measles				=		=		-		=		=		=		=		=
Whooping coug	h			_				_				=		-	::	-		-
Mumps Diphtheria			::			_	::	_		_		=	::		::		::	=
Typhus				-		-		-		-		-		-				-
Cerebro-spinal f Simple and ill-d	lefined fever		11	_		=	::		10	_		=	::	=	::		::	=
Enteric fever Suspected enter				52		4		2		46		=		=		=		
Influenza		::		_	.,	_		_		-		-		=	::	-		-
Other epidemie	diseases	**	**	-	**	-		-	**	-		-		-	**	-		-
	Diarrhwal Dise			-												17-7		
Cholera Diarrhœa		::		18		-		=	::	15		1		-2	::			
Dysentery				53		1		-		50		2		-		-		-
	Malarial Disea	ses.								100								
Remittent fever Ague		::	11	-6		=		_1	::	4	::	-	**	=	**	=	**	_1
Malarial cachex	ia			6		-		-		5		1		-		-		-
	Zoogenous Disec	uses.																
				-		-				-		-		-		-		-
Glanders Cowpox and oth	er effects of vac	eination	::		**	_	**	_	**			-	::	=	::	=	**	=
Syphilis	Venereal Diseas			7		-		-		6		1		-		-		-
Gonorrhosa, stri	icture of urethr	a	**	1		-		-	**	1		-		-		-	**	-
The seal seas	Septic Disease																	
Phagedena Erysipelas	::			1	**	_	**	_	::	1	::		**	=	::	=		
Pyæmia and sep Puerperal fever				14		2		=		10	::	1	::	1		=		=
Puerperat tever		***				-	**				**		**		**		**	
Thrush	Parasitic Disea	uses.		_				_		-		-		_		_		-
Worms (animal)					-		-				-,		-		-		-
Dochmius duod				42				-		41		1			.,		**	
P4	Dietetic Diseas			-														
Starvation, war Scurvy		k		_1		-	::	=	::	_1		=	::					=
Chronic alcohol Delirium tremes		::	**	-		=	**	_	::	_		-	**	=	::	=	::	=
Rheumatism	onstitutional Di	scuses.		3		1		-		2		_		-		_		-
Rickets Cancer	2	**		16		=	2	=	::	15		=		-1	::	=		=
Tabes messente	rica			1		-		-		1		-		-		-		-
Tubercular men Phthisis	ingitis			-		-2	::	=	**	79		4	::	-2	::	=	::	2
Other forms of Purpura, hæmo				2		-		=		_2		=		=		=	**	-
Ansemia, chloro	sis, leucocy-tha	emia		2		-		-		2	22	-		=	::	-		-
Diabetes melitu Leprosy	18		**	_5				_	**	_5		_	::	=	::	=	**	=
Elephantiasis Parangi						-		-		-		-		=		=		-
Other and unde	efined constituti	ional diseases	-	1		-		=	::		::	1		-		=		_
D	evelopmental Di	seases.																
Premature birth				2		-		-		2		-		-		-		-
Atelectasis Cyanosis				=	::			_				_	::	=		=	**	
Spina bifida				-		-		-		-		-		-		-		-
			**	1		-	**	_		_1		_		=		=	::	
Other congenita	al defects			1		-		=				-		=		=		-
Old also									-							10	**	
Inflammation of	Nervous Syste of the brain or it			1				4.25		4				-				1 1
Softening of br	ain	***	::			-		=		-1	::	1	::	=	::	-		-
Apoplexy		**		-		- 1000		-		-		****		-		-		-

Causes of Deaths, &c.—contd. Hospitals, Nationality.																		
Trospitale. Automatey.																		
Com	ses of Deaths.					sus.		ŧ		9								
Cau	ses of Deaths.			Outside.		Europeans		Burghers		Sinhalese.		ils.		É		sys.		É
				Out		Sur		Burn		Sinh		Tamils		Moore		Malays.		Others
Paralysis				1		_		_		1		-		-		-		_
Epilepsy Convulsions				=		=		-		=		=		=		=		-
Infantile convu				-			::	_		-		-		-	::			
Laryngismus st Collapse	ridulus	::	**	-	::	_	**				::	=	••	=	**	_	**	=
Tetanus				2		-		-		2		-		-		-		-
Mania Paraplegia dise	ase of the spina	l chord		=		_	**		**			=	**		**	_	**	
Other undefined	diseases of bre	in		14		-		-		10		4		=		-		-
									**									
	rgans of Special																	
Conjunctivitis a Otitis and other				=		_		_		_		_		=		_		
Epistaxis and o	ther diseases of	nose		-				-		-		-		-		-		-
-	Circulatory Sys	tem.		-						-								
Pericarditis Morbus cordis (disease of heart)		8		-			**	7		=	**	=	::	-1		=
Valve disease of	f heart			-,		-		-		-,		-		-		-		-
Hypertrophy of Anginapectoris,	syncope			1				-	::	-	::	1		=	::	_		
Aneurism Embolism, thro		**		-		-	::	-		- 9		- 9		-		-		
Phlebitis				-		-		-		-		-		-		-		-
Varicose veins Other and und		of heart or cir	cula-			-	**	-	**	-		-		-		-		-
tory system				14		2	24.4	-		12		-		-		-		
	Respiratory Sys	tem.																
Laryngitis Croup	::			_		=	22	=		=		=	**	-		-	**	_
Bronchitis				-		-		-		-		-		-		-		-
Asthma Pneumonia		::		46		_		1		36	::	-6	::	-1	::	_	**	2
Pleurisy Other and unde	fined discourse of	f respiratory on	atom.	-3		-,		-		-		=		=		-		-
Other and unde			Oveni							-								
Stomatitis	Digestive Syste	cm.		1		-		1		1		_		_		_		-
Dentition				-		-		-		-		-		-		-		-
Quinsy Sore throat		::		_			::-	=		=		=	::			_	::	=
Dyspepsia Hæmatemesis	::		**	_1		=		=	::	_1		=		=		=	**	=
Malæma	**			-		-		_		-		-		_		_		_
Disease of stom Enteritis	ach			53		=			**	41	::	10	**	-1	**	_	::	1
Ulceration of in Ileus obstructio				-,		-,		-		=		=				-		
Stricture or stre	angulation of in	testine		-		-		_		_		_		_		_	::	_
Intussusception Hernia	of intestine		**	-3	::			_	::	3	::	=	::		::	=	::	_
Fistula				-		-		-		-		-		-		-		
Peritonitis Ascites				_10		-			::	-8		=	::	_		_		_1
Gallstones Cirrhosis of live				13		=		=		10		-,	::	-2	**	=	::	_
Other diseases of	of liver	ii at a s		3		1		-		1		î		-		-		-
Other and under				2		-		1	**	1		-	**	-		-	**	-
Diseases of	Lymphatic Syste Glands.	em and Ductless																
Diseases of the		m		2		_				1		1		_		_		-
Diseases of sple	en			-		-		-				-		-				-
	uses of Urinary	System.		34		114				1982		-						
Nephritis Bright's disease		**	**	17	::	1		_		15	::	_1				_	::	=
Uramia				-		-		1				-		-		-		-
Suppression of a Calculus (stone)				_	::	=	::	=				_		=			::	=
The second secon			**	-2		=		-1	::	-1		_		_	::	_		_
Other and unde			n	-		-		-				-		-		-		-
Diseas	es of Organs of (Generation.																
Ovarian disease	8					=		-				-		-		-		-
Diseases of uter Disorders of me	nstruation			_		=		=		-		_		_		_	::	_
Perenial abscess Pelvic abscess		::		_		-		-		_		-	**	-	::	-	.:	_
Diseases of teste				1		-		-		1		-				-		-
I	Diseases of Parts	crition.																
Abortion or mis				-		-		-		-		-		-		-		-
Puerperal manie		**			1.		**		**		••							

Causes of Deaths, &c.—contd.

				ospital		c.—con	a.	Nati	onality.			
Causes of Deat	hs.			Outside,	Europeans.	Burghers.	Sinhalose.		Famils.	Moors.	Malays.	Others.
Puerperal convulsions Placenta prævia, flooding Phlegmasia dolens Other and undefined accid-	ents of		th			:: =	:: -	8		= ::	===	= =
Diseases of Organic Cies, necrosis Arthritis ostitis, periostitis Other and undefined disease				= :	: =	:: <u>=</u>	:: =		= ::	≣ ::	=:	=
Diseases of Integue Carbuncle Phlegmon, celulitis				000000	: =	:: =	:: _	2	= ::	::	=:	=
Lupus Ulcer, bed sore Eczema Pemphigus Other and undefined dis	eases of		imentar		=	:: <u>=</u>	:: =	2	= ::	= ::	=:	: =
Accident or . Fractures, contusions		ce.		. 1				4		- ::		: -
Gunshot wounds Cut, stab Burn, scald Poison Drowning				5 1		::::	:: -	3	_ :: _ ::	= :: = ::		
Snake-bite Otherwise	cide.			. 6	: =	:: =	:: -	6	= ::	= ::	= :	
Murder, manslaughter Suic Gunshot wounds Cut, stab				:=	:: =	:: =	:: =	- ::	= ::	= ::	= :	: =
Poison Drowning Hanging Otherwise	:			==	= ::=	:: <u>=</u>			= ::	= ::	= :	=
Hanging Execu												
General dropsy Debility Sudden deaths (causes una Abscess		ned)		. 4	Ξ ::	::::	:: -	15	= ::	= ::	= :	===
Tumour Hæmorrhage Other ill-defined and not	specified		:	: -2 : -2	:: =	:: <u>=</u>	:: -	2	= ::	Ξ::	= :	=
No. 19			tality by		ds, 190	1 to 191	0. Ra	te per l	- 0	irths.		
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.	Eastward Extension,
1901 1902 1903 1904 1905 1906 1907 1908	389 360 410 353 361 302 304 355 310	273 154 666 76 100 353 286	364 426 630 419 481 328 298 467 350	480 429 384 408 461 418 367 333 326	462 509 481 482 559 337 431 412 350	508 417 518 382 381 310 289 346 354	431 422 468 452 461 357 395 467 377	285 207 417 172 147 210 204 215 161	339 310 361 336 353 287 296 426 305	426 399 432 454 458 311 325 340 359	211 271 333 232 251 276 251 340 254	11111111
1910 Average, 1901 to 1910	295	267	349 407	356	433	282 366	323 410	193 204	327	343	217	-
1911 Increase or Decrease	316 — 22	300 + 89	279 —128	372 — 15	509 + 69	295 — 71	382 — 28	163 — 41	370 + 38	325	249 — 9	374

MUNICIPALITY OF COLOMBO.

No. 20.—Quarterly Infant Mortality, 1901 to 1911, expressed as a Rate per 1,000 Births.

		1st (Quarte	r.			2nd	Quarte	er.	.00		ard	Quarte	er.			4th	Quarte	r.	
Year.	Quarter's Berths.	12 Months' Births.	Quarter's Deaths.	Quarterly Rate.	Animal Rate.	Quarter's Births.	12 Months' Births.	Quarter's Deaths.	Quarterly Rate.	Annual Rate.	Quarter's Births.	12 Months' Births.	Quarter's Deaths.	Quarterly Rate.	Annual Rate.	Quarter's Births.	12 Months' Births.	Quarter's Deaths.	Quarterly Rate.	Annual Rate.
901 902 903 904 905 907 908 910 1901-1910	833 934 979 940 1,091 1,426 1,124 1,269 1,217 1,268 1,108 1,583	3,264 3,335 3,726 3,513 3,821 4,251 4,424 4,425 4,550 4,640 3,995 5,134	307 300 371 334 306 308 319 400 360 360	368 321 378 355 280 216 284 315 296 284 304 232	376 359 398 380 320 289 288 361 317 310	772 799 880 917 891 1,109 965 1,154 1,058 1,064 960 1,185	3,248 3,362 3,807 3,550 3,795 4,469 4,280 4,614 4,618 4,021 5,273	270 355 312 348 339 278 379	406 338 403 340 391 306 288 328 328 331 285 338 305	386 333 373 363 367 304 260 328 317 258 323 274	745 883 815 897 1,029 1,022 1,028 1,033 1,090 943 1,207	3,235 3,500 3,739 3,632 3,783 4,480 4,273 4,620 4,675 4,675 4,041 5,390	343 345 326 297 353 337 370 345 363	369 388 423 363 336 343 328 360 334 333 356 356	340 392 369 359 314 306 315, 320 309 311 332 319	884 1,065 878 916 1,049 1,162 1,169 1,151 1,271 1,415 1,096 1,305	3,681 3,552 3,670 3,916 4,726 4,280 4,602 4,589	486 364 399	386 423 353 441 368 313	41 34 35 34 35 35 35

No. 21.—Infant Mortality, 1911 (Principal Causes), expressed as a Rate per 1,000 Births of each Race.

Cause.	All	Races	. 1	European	8.	Burghers.	Sinhalese.	Tamils.		Moors.	Malays.		Others.
All Causes		316		182		218	 286	 413		423	 291	.,	408
Premature birth		23		30		19	 29	 15	2.	10	 19		14
Atrophy and debility	7	48		15		35	 33	 86		73	 72		56
Bronchitis		19		15		. 21	 14	 28		35	 5		28
Pneumonia		32		-		. 33	 29	 38		39	 33		14
Diarrhoea		20		61		. 29	 18	 18		21	 14		56
Convulsions		91		30		33	 84	 119		133	 95		127
Tetanus		27		-		. 6	 21	 59		41	 5		42
All other Causes		56		30		42	 58	 50		71	 48		71

No. 22.—Infant Mortality, 1911, Deaths at different Age Periods and from several Causes.

								Age	W/				(Gray					Ra	ce.			
Cause of Death.			Age i	n We	elos-				A	ge in	Moe	ths.			peans.	ers.	lese.		,	-		Races.
		1	2	3	4	Total.	2	3	4	5	6	7-9	10-12	Total.	European	Burghers.	Sinhalese	Tamils.	Moors.	Malays.	Others.	All Re
L.—Developmental diseases :														1								
(1) Premature birth (2) Atalectasis	22	105	7	5	1	118	2	-			-	1	-,	3	2		87			4	1	121
(3) Atrophy and debility	**	96	15	18	14	143	31	19	- 9	11	10	17	11	108	1	17	101	58	55	15	-	251
(4) Others		3			-	3	-	-			-	-	-	-			3			-		2
 Diseases of respiratory system :— (1) Laryngitis 				_									_			_	_		_			
(2) Croup	11		=									=	-					=				=
(3) Bronchitis		-	- 4		2	6	12	10			16			94	1	10		19		1	2	100
(4) Pneumonia (5) Others	-	2	2		6	10	11	14	12	19	17	47	37	157		16	88		29	_7		
III.—Diseases of digestive system :-														1000			1					2
(1) Diarrhoral		-	1	2	2	5	15	11	7	10	20		19	103	- 4	14	55	12	16	3	4	108
(2) Dentition (3) Others	2.5	100	-	- 5	-	20	21	17	-	7	11	27	11	103	-1	10	70	12	24	-	-	-
IV Diseases of nervous system :-	**	-			0	-	-				**	-		199		10		12	-		-	123
(1) Convulsions		117	65	31	42	255	58	-44	25	19	16			228	2	16	255	81	100	20	9	481
(2) Laryngismus stridulus (3) Tetanus		109	26	-		140				-			=	-		-	63		31	-	-	-
(4) Others	20	100	20	_5		140	=					-	=	-		-	-03	40	21	_	_ "	141
V Tuberculous diseases :			1333												-							
(1) Tabes messenterica	2.0						-		-				- 0	-			-	-	-	-	-	-
(2) Tubercular meningitis (3) Others	- 13							=	-					-			=	-	_		-	
VI.—Accidents:—																						
(1) Injury	**		-					-	-		-	1	-	1	-	-	-				1	1
(2) Umbilical hæmorrhage (3) Suffocation	**	-				-			=				=	=			-					-
(4) Other violence					1	1			-		_				-		î					1
VII.—Infectious diseases :-			100												100			100				
(1) Smallpox (2) Chickenpox	**																					
(3) Measles	13										_											
(4) Whooping cough	**	-	-	-			-	-	-	-	-	3		-3	-	1	2	-	-	-	-	3
(5) Mumps (6) Diphtheria	**						=			-			=			=	-		=			-
(7) Cerebro-spinal fever	-									-		-		-			-					-
(8) Scarlet fever		-	-	8		-			-	-		-	-	-	-	-	-	-	-	-	-	-
VIII.—Syphilis IX.—All other causes	**	2 0	9	-	- 7	19	23	.5	4	1 8		24	18	115	-	2 7	13 81	15	23	-	- 0	22
And the Grant Cardica	-	2	3		-	40	23	18	7	0	17	24	10	210	-	7	91	-	20	0	-	134
Total	2.0	445	128	73	88	734	175	138	89	82	107	202	142	935	12	105	864	280	318	61	29	1669
Percentage of Total Infant Deaths		26-7	7.2	4-9	5-2	44-0	10-5	8.9	5-2	4-9	6-4	12-1	8-5	56-0	0-7	6.2	51.7	16-8	19-1	3.7	1.7	100-0
Touris Treating		Link	100	Die T	2 3	1000	1	-	-			100	7.0				-	1	200	100	-	1000

No. 23.—Pulmonary Diseases, 1901 to 1911. Death-rate of each Race per 1,000 Population.

Year.		Al	Il Races.	E	uropean	s.	Burghers.	1	Sinhalese.		Tamils.		Moors.		Malays.	(Others.
			8-48		6.74		7.98		9.21		8.15		7.43		6.84		10.91
1901			7.15		2.59		5.07		7-17		8.00		7.23		6.07		8.94
1902	**				3.29		W- 0H		7.89		7.22		7.17		5-76		11 . 23
1903			7.40				0.88	+ +			6.31		7.71		9-24	1100	9.75
1904			7-40		5.08	* *		**	7.77	* *		: .					11.51
1905			8.10		3.22		5.80		8.62		7.51		8.18	23.20	9.07	* *	
1906			9.08		4.26		7.50		9.29		9.71		8.26		8.10		13.76
	***		8.04		1.75		5.60		8.26		8.05		8.05		10.14		12.11
1907			9.12		4.52				9.90		8.17		8.91		9-19		13.33
1908				* *			m. 00		9.47		10.04		9.21		10.39		8.86
1909			9.32	**	3.09					4 4		* *	7.28		6.92	000	6.47
1910			7.19		5.05		6.24		7.01		7.98		1.20		0 02		
Averag	e, 1901–1910		8.11		3.87		0.40		8.43	• •	8.14		7-95		8.11		10.56
1911			8.24		2.66		7.00		7.82		9.34		8.23		9.56		9.48
Increas	se or Decrease	+	-0.13	-	-1.21		+0.49		-0.61		+1.20		+0.28		+1.45	-	-1.08
			-				-		-		-		-		-		

No. 24.—Pulmonary Diseases, 1901 to 1911. All Races, Death-rate per 1,000 Population.

Year.			Phthisis.		Pneumonia.		Bronchitis.	T	otal Pulmonary.
1901			3.20		3.67		1.61		8.48
			2.98		2.86		1.31		7.15
1902		* *		**	2.96		1.26		7.40
1903		**	3.18	**		**	1.36	**	7.40
1904			3.51		2.53				
1905			3.26		3.24		1.30		8.10
1906			4.06		3.65		1.37		9.08
1907			3.79		3.22		1.03		8.04
1908			3.70		4.15		1.27		9.12
1909			4.13		4.09		1.10		9.32
			3.13		3.05		1.01		7.19
1910					0 00		2000		A
Avera	ge, 1901 to 1910		3.21		3.34		1.26		8.11
1911			2.96		4.02		1.26		8 · 24
Incres	ase or Decrease		-0.55		+0.68		-		+0.13
			-		-		-		1000

No. 25.—Pulmonary Diseases, 1911. Death-rate of each Sex per 1,000 Population. (Calculated on the Census Population, 1911.)

Door		Pulmo Males.	Group.		Males.	hthis	is. Temales.	Pne Males.	nia. Females.	Bro Males.	tis. emales.
Races. All Races		7·53 3·56	 9.64	**	2:45	-	3.87	 4·16 1·78	 3.92	 ·92 ·59	 1.85
Europeans Burghers Sinhalese	::	7·21 6·98	 6.88		3.00		1·76 3·78	 2·55 3·27	 3.95	 1.66	 1.17
Tamils Moors		8.69	 11·73 11·23		2·17 2·28		4·18 4·65	 3.11	 3.86	 1.24	 1·98 2·72 3·96
Malays Others		7·05 10·90	 12.66 7.80		2.78		3.90	 4.58	 2.77	 1.06	 3.80

No. 26.—Mortality from Phthisis, 1901 to 1911. Rate of each Race per 1,000 Population.

Year.	210. 20. 20	All Races.		uropeans.		Burghers.	Sinhalese.		Tamils.		Moors.	1	Malays.		thers.
1901		 3.20		3.75 .		3.53	 3.76				2.50		3.09		3.93
1902		 2.98		1.11 .		2.66					2.53		3.04		2.34
1903		 3.18		2.93 .		2.55					3.31		2.99		3.86
1904		 3.51		2.54 .		4.07					3.45	**	4.95		4.56
1905		 3.26		2.51 .		2.74	4.07		1-05		3 · 29		4.05	**	5.04
1906		 4.06		2.49 .		3.75	4.00		0.15		3.47		5.77		6.25
1907		 3.79				3.00	4.00	* *	0.03		3.46		4.11		4.63
1908		 3.70				3.13	4.04	* *	0.00		4.40		4.62		4.34.
1909	.,				*	3.34	0.00		0.00		3.33		2.24		2.89
1910	44	 3.13		1.68 .		2.00	. 0 21		-				_		-
Avera	ge, 1901–1910	 3.51		2.21 .		3.13	. 3.89		3.07		3.31		3.85	**	4.15
1911		2.96		1.33		2:36	. 3.20		2.65		3.12		3.49		2.66
Incres	ase or Decrease	 -0.55	34	-0.88		-0.77	-0.69		-0.42	-	-0.19	1	-0.36	1	-1.49

				3	IUNIC	IPA	LITY	01	F COL	OM	IBO.						73
	N- 07 M-	atali	tur forces	. D.		in 1	1001 +- 1	101	1 Dat		anah P	200	nor 1 00	00 T	Populatio		
	No. 27.—Mo											aco					202
Year.		AU		E	100000000000000000000000000000000000000		Burghers.		Sinhalese		Tamils.		Moors.		Malays.	-	Others.
1901			3.67		2.62		2.52		3.84		4.45		2.74		2.43		6.33
1902			2.86		1.11		1.58		2.51		3.96		2.77		1.95	**	5.54
1903			2.96		0.36		2.14		3.05		3.65		2.21		2.13	* *	5.41
1904			2.53		2.18		1.79		2.51		2.65		2.40		1.89		5.49
1905		220	3.24	**	0.71		2.10		3.37		3.88		2.68		1.65		5.36
1906		**	3.65		1.77		2.63		3.52		4.62		3.23		1.21		6.20
1907	**		3.22		0.70		2.13		3.04		3.90		3.15		2.98		4.92
1908			4.15		1.39		3.29		4.28		4.20		3.89		3.91	4.3	7.22
1909	31		4.09		0.68		3.26		4.03		5.12		3.59		3.46		4.16
1910			3.05		2.35		2.68		2.79		3.91		2.75		2.81	4.4	3.24
			-		-		-				-		-		-		-
Avera	ge, 1901-1910		3:34	20	1.42		2.38		3.29		4.04		2.95		2.43	**	5.38
1911			4.02		1.00		3.24		3.42		5.76		3.35		3.68		5.82
Increa	ase or Decrease	+	0.68	-	-0.42		+0.86	33	+0.13		+1.72		+0.40	130	+1.25	9	+0.44
					1777										1		-
							-	-	-								
	No. 28.—Mo	rtali	ty from	n Br	conchiti	s. 19	901 to 1	911	. Rate	of	each Ra	ice i	per 1.00	0 P	opulation	n.	
Year.	7						Burghers.		Sinhalese		Tamils.		Moors.		Malays.		Others.
1901			1.61		0.37		1.93		1.61		1.25		2.19		1.32		0.65
1902			1.31		0.37		0.83		1.32				1.93		1:08		1.06
1903			1.26		_		0.98		1.28		3 30		1.65		0.64		1.24
1904			1.36		0.36		0.89		1.35		2.04		1.86		3.36		0.40
1905		**	1.30		0 30		0.96	**	1.18		0 80	:	2.21		2.47		1.59
1906			1.37	**			1.12		1.33		1.04		1.73		2.84		2.52
1907	***		1.03		_		0.47		1.00		0.00		1.43		1.39		0.94
	***		1.27		0.34		1.02		1.39		0.00	**	1:56	**	1.17		1.48
1908					- 100		1.02		1.10		1.06		1.22		2.31		
1909	1.5		1.10		1.00	**	0.00		0.95		0.98		1.20		1.87		0.36
1910	2.8		1.01		1.02		0.96 .		0.99	-	0.98		1.20		1.91	**	
			-		-		-		-				-		1		-

Increase or Decrease			-	+0.09		+0.40		-0.05		-0.10		+0.07		+0.56	111-	-0.03
						-	-	-								
No. 29.—All	Die	rrheal :	Dise	eases, 19	01	to 1911.		Mortality	of	each R	ace	per 1,00	0 P	opulatio	n.	
Year.	A	Il Races.	E	uropeans.		Burghers.		Sinhalese.		Tamils.		Moors.		Malays.	(Others.
1901		6.53		3.25		3:77		5:45		7.44		4.73		5.31		5.89
1902		6.64		7.42		4.98		6.15		10.11		4.50		3.91		7.24
1903		6.89		9.17		5.59		7.17		8.45		4.94		6.40		5.62
1904		5.32		6.17		4.97		5.63		5.14		4.48		7.14		6.30
1905		6.89		5.38		6.04		7.33		8.10		5.01		5.77		6.74
1906		7.85		7.46		5:59		7.69		10.98		5.45		5.46		7.56
1907		5.11		5.62		3.31		4.47		8.09		3.84		2.58		0.44
1908		5.40		5.92		4.62		6.32		5.91		2.90		3.71		6.66
1909		4.78		3.78		3.65		4.94		6.50		2.93		4.42		3.79
1910		4.19				3.12				5.74		3.12		3.36		2.72
Average, 1901-1910		5.98				4.64				7.84		4.23		4.94		5.61
1911		4.57		4.99		3.25	20	3.76		6.92		3.58		4.23	333	3.16
Increase or Decrease		-1.41	1	-0.86		-1:39		-2.26		-0.92		-0.65		-0.71	-	-2.45

Average, 1901-1910 . 1.26 . 0.24 . 1.00 . 1.25 . 1.03 . 1.69 . 1.83 . 1.03

.. 1.26 .. 0.33 .. 1.40 .. 1.20 .. 0.93 .. 1.76 .. 2.39 .. 1.00

o. 30.—Dia Year.	rrhœal	Diseases,	1901	to 1911. A Diarrhœa ar Enteritis.	nd	Death-rate per Dysentery.	1,000	Population. Total. Diarrheal.
1901				4.38		2.15		6.53
1902				4.34	11	2.30		6.64
1903				4.14		2.75		6.89
1904				3.48		1.84		5.32
1905			100	4.21		2.68		6.89
1906				4.64		3.21		7.85
1907				3.47		1.64		5.11
1908				3.75		1.65		5.40
1909				3.18	-	1.60		4.78
1910				2.99		1.20		4.19
						-		
Average,	1901 t	o 1910		3.91		2.07		5.98
								-
1911	**			3.25		1.32		4.57
Increase	or Dec	rease	1000	-0.66		-0.75		-1.41
						100		1

1911 .. -

No. 31.—Diarrhoea and Enteritis, 1901 to 1911. Death-rate of each Race per 1,000 Population.

Year.	A	Il Races.	E	uropeans.	E	Burghers.	8	Sinhalese.		Tamils.	Moors.	2	falays.	(Others.
1901		4.38		1.50 .		2.77		3.87		7.85	 2.57		3.54		3.71
1902		4.34		3.71 .		3.82		4.26		6.76	 2.13		3.04		3.83
1903		4.14		3.30		3.70		4.62		5.06	 2.34		3.84		3.33
1904		3.48		1.45		3.10		3.92		3.13	 2.97		5.04		3.66
1905		4.21		1.79		4.03		4.84		4.79	 2.43		3.71		3.77
1906		4.64		2.13		4.08		4.86		5.94	 3.02		4.05		3.68
1907		3.47		2.81		1.97		3.23		5.40	 2.71		0.99		0.22
1908		3.75		1.74		2.87		4.77	**		 1.99		2.54		3.33
1909		3.18		0.68		2.25		3.57		3.96	 1.91		3.46		2.71
1910		2.99		5.69		2.83		3.12		3.73	 1.95	***	2.43		1.23
Average, 1901-1910		3.91		2.25		3.24		4.23		4.89	 2.48		3.41		3.20
1911		3.25		2.66		2.73		2.91		4.89	 2.18		3.68		2.33
Increase or Decrease		-0.66		+0.41		-0.21		-1.32		-	-0.30		+0.27	1	-0.87

No. 32.—Mortality from Dysentery, 1901-1911. Rate of each Race per 1,000 Population.

Year.		A	ll Races.	E	uropeans	4	Burghers.	Sinhalese	Tamils.	Moors.	1	Malays.	(others.
1901			2.15		3.75		1.00	 1.58	 3.59 .	2.16		1.77		2.18
1902			2:30		3 - 71		1.16	 1.89	 3.35 .	2.37		0.87		3.41
1903			2.75		5.87		. 1.89	 2.55	 3.39 .	2.60		2.56		2.29
1904			1.84		4.72		. 1.87	 1.71	 2.01 .	1.51		2.10	800	2.64
1905			2.68		3.59		2.01	 2.49	 3.31 .	2.58		2.06		2.97
1906			3.21		5.33		1.51		 5.04 .			1:41		3.88
1907			1.64		2.81		1.34	 1.24	 2.69 .			1.59	100	0.22
1908			1.65		4.18		. 1.80		 2.04 .	0.91		1.17		3 - 33-
1909			1.60		3 · 10		. 1.40	 1.37	 2.54 .	1.02		0.96		1.08
1910			1.20		1.01		0.29	 0.94	 2.01 .	1.17		0.93		1 · 19
Avera	ge, 1901–1910		2.07		3.60		1 · 40	 1 . 79	 2.95 .	1.75		1.53		2.41
1911			1.32		2 · 33		0.52	 0.85	 2.03 .	1.40		0.55		0.83
Incres	ase or Decreas	e	-0.75	-	-1.27		-0.88	-0.94	-0.92	-0.35		-0.98	1	-1.58

No. 33.—Fevers, 1901–1911. All Races Death-rate per 1,000 Population.

Year.				ted I	imple ar ll-define Fever.	d B	Remittent Fever.	I	ntermitte Fever.	nt	All Fevers.
1901			0.60		1.43		0.84		0.03		2.90
1902			0.56		1.14		1.03		-		2.73
1903			0.59		1.30		1.10		0.01		3.00
1904			0.54		0.57		0-97		0.02		2.10
1905			0.78		0.28		0.94		0.05		2.01
1906			1.50		0.80	-	0.97		0.05		3.28
1907			1.66		0.26		0.60		0.05		2.53
1908			2.29		0.17		0.26		-		2.72
1909		33	1.65	-	0.19		0.25		0.01		2.10
1910			1.32		0.14		0.23		-		1.69
A	verage, 1901-1910		1.18		0.58		0.69		0.01		2.46
1911			1.85		0.21		0.23		-		
In	acrease or Decrease		+0.67	9 -	-0.37		-0.46		-0.01		-0.17
							-		-		

No. 34,-All	Fevers,	1901-1911.	Death-rate of ea	sch Race per	1,000 Population.
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Year.	A	Il Races	Europeans.	Burghers	Sinhalese.	Tamils.		Moors.	3	falays.	- (Others.
1901		2.90	 5.25 .	. 2.11	 2.69	 3.04		2.72		5.53		4.34
1902		2.73	 4.45 .	. 2.15	 2.80	 2.43		2.42		5.64		3.60
1903		3.00	 2.55 .	. 2-30	 3.65	 2.13		2.59		5.32		2.07
1904		2.10	 2.90 .	. 1.54	 2.55	 1.32		2.27		4.62		4.86
1905		2.01	 2.13 .	. 1.68	 2.35	 1.61		1.65		2.88		2.37
1906		3.28	 7.11 .	. 3.33	 4.26	 1.93	1.	1.97	**	4-44		4.84
1907		2.53	 4.22 .	. 2.52	 3.01	 1.47		2.15		3.96		4.72
1908		2.72	 8.70 .	. 3.27	 3.55	 1.42		1.69		3.50		2.40
1909		2.10	 1.72 .	. 2.02	 2.63	 1.60 .		1.70		1.72		1.98
1910		1.69	 4.38 .		 2.00	 0.98		1.17		2.98		2.38
Average, 1901-1910		2.46	4.38 .	. 2.32	 2.90	 1.72		1.89		3.97		3.25
1911		2.29	2.99 .	. 2.66	 2:67	 1.77		1.81		3 · 12		1.99
Increase or Decreas	e	-0.17	-1.39	+0.34	-0.23	+0.05		-0.08	-	-0.85	-	-1.26

No. 35.—All Fevers, 1901 to 1911. Death-rate of each Ward per 1,000 Population.

Year.	Colombo Town.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollapitiya.	Eastward Extension.	Hospitals.*
1902 1903 1904 1905 1906 1907 1908	. 2.96 . 2.73 . 3.06 . 2.16 . 2.0 . 3.29 . 2.55 . 2.73 . 2.16	3 2·89 0 0·39 1·51 0·36 1·74 3 — 2 0·63 0 0·30	1·57 1·69 0·51 1·16 0·77 1·15 0·38 0·75	1·24 1·52 1·39 0·87 2·39 2·34 1·56 1·43	2·54 1·98 1·06 2·21 1·77 1·74 1·37 1·38	3·33 2·89 3·58 3·79 1·70 2·45 2·33 1·45 1·68 1·77	1·76 2·27 2·75 1·79 2·00 2·41 1·91 1·54 1·14	1·91 1·57 0·93	5·15 4·56 4·72 2·11 2·05 3·70 2·25 2·73 1·75 1·34	2·63 1·07 2·78 0·96	111111111	12·6' 10·80 14·44 16·30 19·80 22·30 32·60 34·00 24·60
Average, 1901-1910 .	2 · 40					2.44	1.92		2.89	1.70		35.1
Increase or Decrease.	0.1	-0.04	+0.54	+1.13	+1.37	-0.36	-0.34	-0.66	-0.99	-0.59	-	-

^{*} The figures in this column represent the percentage of total deaths from all fevers.

No. 36.—Fevers, 1903-1911. Cases notified.

Year.		Er	ateric Fever.	Sim	ple Contin	ued	All Fevers.
1903		 	262				262
1904		 	303				303
1905		 	454		25		479
1906		 	948		42		990
1907		 	946		121		1,067
1908		 	1,370		251		1,621
1909		 	794		119		913
1910	**	 	876		79		955
Avera	ge, 1903–1910	 	744		80		824
1911		 	1,149		71		1,220

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

No. 37.—Fevers, 1911. Cases notified by Races.

Race	D.	En	teric Fev	er.	Continued Fever.	Α	ll Fevers.		o-rate per 1,000 opulation.
All Races	š		1,149		71		1,220		5.70
Europeans			54		1		55		18:34
Burghers			174		17		191		14.07
Sinhalese			600		38		638	1	6.74
Tamils			153		7		160		3.03
Moors			108		2	35.8	110		2.85
Malays			23		3		26		4.78
Others			37		3		40		6.65

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

No. 38.—Fevers, 1911. Cases notified by Wards.

		A.		B.		C.		D.		E.	701310	F.
· Ward.		Enteri Fever		Continue Fever.	d	Total of A and B.		Case-rate of A per 1,000 Population.	C	ase-rate of per 1,000 opulation.		from Fevers.
Fort		 5		-		5		1.40		1.40		1.12
Pettah		 31				31		3.88		3.88		1.63
San Sebastian		 49		3		52		4 · 21		4-47		2.15
St. Paul's		 132		6		138		5 - 30		5.54		3.05
Kotahena		 155		15		170		3.79		4-16		2.08
New Bazaar		 96		4		100		4-27		4-44		1.58
Maradana		 206		9		215		4.65		4.86		0.97
Slave Island		 110		5		115		4.96		5.19		1.90
Kollupitiya		 133		23		156		5.26		6.17		1.11
Eastward Exte	nsion	 21		4		25		1.90		2.27		0.36
				-						- 01		0.00
	Colombo Town	 938		69	0.4	1,007	2.	4.38		5.04		2.29
Port		 14		-	**	14		-		-	33	
Outside Limits		 72	++	-		72		-		-		10000
Untraced		 125		2		127		-		The same		
	The Control of the Co	Service .		-				-		-		-
	Grand Total	 1,149		71		1,220		1		-		
		-		-		0.0		100		1		-

	No. 39.—E	Interic I	Feve	r, 1901	-19	11. De	ath	rate of	eacl	h Race p	er l	1,000 Pe	pu	lation.		
Year.		ll Races		uropean		Burgher		Sinhales		Tamils.		Moors.		Malays.	O	thers.
1901		0.60		4.50		0.58		0.66		0.37		0.30		0.22		1.52
1902		0.56		3.71		1.16		0.62		0.27		0.13		0.51		1.70
1903		0.59		1.46		1.07		0.96		0.07		0.13		0.42		0.41
1904		0.54		2.54		1.06		0.67		0.12		0.95				5.03
1905		0.78		1.43		0.96		1.12		0.59		0.40	++	1.03		0.89
1906		1.50		5.69		2.23		2.14		0.61		0.21		1.21	**	1-94
1907		1.66		3.87		1.90		2.20		0.68		1.34		1.19		2.84
1908		2.29		8.01		3.05		3.08		1.10		1.33			**	5.03
1909		1.65		1.38		1.71		2.20		1.06		1:41		0.96		0.80
1910		1.32		3.71		2.01		1.62		0.68		0.90		1.12		2.04
Average, 19	01-1910	1.18		3.64	**	1.28		1.56		0.54		0.68		0.93		1.67
1911		1.85	32	2.33		2.51		0.00				1.48		1.10		1.66
Increase or I	Decrease	+0.67		1.31		+0.93		+0.70		+0.75		+0.80		+0.17		-0.01

No. 40.—Enteric Fever, 1901-1911. Death-rate of each Ward per 1,000 Population.

	Yeat.		Colombo.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastern Extension.	Hospitals.*
1901			0.60	1.29	0.26	0.63	0.14	0.26	0.39	0.19	0.35	0.16	_	50-5
1902			0.56	2.06		0.10	0.24	0.46	0.27	0.28	0.22		_	42.9
1903			0.59	_	_	-	0.14	0.20	0.10	0.42	0.27	0.30	-	62-3
1904			0.54	0.37	-	0.19	-	0.33	0.15	0.37	0.32	0.14	-	56-5
1905			0.78	_	0.25		0.18	0.68	0.30	0.47	0.68		-	37 - 5
1906			1.50	1.04		0.57	0.26	1.24	0.25	1.00	0.61	0.97	-	49-4
1907			1.66	-	0.25	1.21	0.95	1.53	0.73	1.90	0.80		-	32.3
1908			2.29	0.32	0.38	1.19	1.27	1.04	1.62	1.59	1.56		- 1	37-4
1909			1.65	-	0.50	1.34	1.21	1.07	1.44	1.11	0.80			38-1
1910			1.32	0.60	1.07	0.87	1.27	1.33	0.86	0.77	0.64	1.22	-	31 - 5
Averag	ge, 1901 to	1910	1.18	0.60	0.27	0.66	0.58	0.83	0.63	0.85	0.63	0.80	-	-
1911			1.85	0.56	1.38	1.89	2.85	1.94	1 · 47	0.68	0.58	0.36	0.27	39 - 1
Increa	se or Decre	ease	+0.67	-0.04	+1-11	+1.23	+2.27	+1-11	+0.84	-0.17	-0.05	-0.44	_	-

^{*} The figures in this column represent the percentage of total deaths from enteric fever.

No 41.—Enteric Cases reported during 1911. (Inclusive of Port and Outside Cases.)

								***	,	100000								
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	38	74	83	104	133	111	54	32	40	20		698	11149	5.37	110	38-9	
11.	Females	36	63		52	73	52	37	16			15	451	1149	9.31	448	39.8	2.00
	Males Females	1	_1	1 2		9 3	13	9	_3	6 3		=	43	54	18.00	11	20.3	3.6
(1	Males	4	13	15		22	15	4	4	1	3		97	174	12.82	36	20-6	2.6
1	Females Males	22	13 43		7 51	14 48	7 54	6 23				1 3		1	1	-	1000	100
	Females	24	39	42	32	38	33	23	10	15	4	8	268		6.33	260	43-3	2.7
	Males Females	5 2	6 7					5 3	3	6		1 2	112	153	2.89	68	44-4	1.2
Manne (Males Females	4		700	11	12	3	7	3	5	-	3	68		2.80	57	52-8	1.4
Malana	Males	1	1	1		5	1	1	i		-	-	13	00	4 - 23		26-1	11-1
5	Females Males	1	_2	2	2	1 0	1 7	-	-	_ 1	E	=	10	1		1 3	130	1
	Females	i	1	-	1	-	-	_	-	-	-	1	4	1 267	6.15	10	27.	1.6
Year.	42.—Simp	All F	laces.		ever,		urghe	THE .	Sinh	alese.	To	mils.		Moors.		lalays		Other
1901			43		0.37		0.58		1:	22		.25		1.26		1.87	**	2.1
1903			30		0.36	**	0.74					98		0.81		3.84		0.6
1904			57		-		0.24		0.			28		0.50		3.31		0.8
1905			28		0.35		0.24			25	(27		0.27		1.03		0.3
1906			.80		1.42		0.75					0.61		0.41		1-41		0.
1907	10000		26	**	-		0.23			-	2000	0.20	**	0.20		1.79		0.
1908			17		-		0.0					0.04		0.05	100	0.97		-
1909			19		=		0.3	-		200		0.11		0.08		0.19	::	0.
1910			**				0 3			10				0 10		91	1	-
Average, 19	01-1910	. 0	-58		0.28		0.40		0.	65		0.46		0.45	1	.96	100	0.
1911	Page.	0	-21		0.33		72		0.	26	(0.25		0.07	(0.55		-
		MAN IN THE	1000		2000		_	-	7397	1000	3			1000	10 2			_

Race.	No. 43.—Sim	ple Continued Fev	ver, 1911.	Cases repor		se-rate per 1,000 Population.
All Races				71	**	0.33
Europeans				1		0.33
Burghers				17		1.25
Sinhalese				38		0.40
Tamils	144			7		0.13
Moors				2		0.05
Malays				3		0.55
Others				3		0.49
-						

-0.39

Increase or Decrease . . -0.37 +0.05 -0.46

-0.51 -0.38 -1.41 -0.64

							10000		THE REAL PROPERTY.								
	No. 44.	Res	nittent F	ev	er, 1901	to	1911.	Dea	th-rate	of e	ach Rac	e pe	er 1,000	Pop	ulation		
Year.			All Races		Europear	18.	Burgher	rs.	Sinhales	е.	Tamils.		Moors.	1	Malays.	(Others
1901 .			0.84		0.75		0.36		0.62		1.31		1.16		0.44		0.43
1902 .			1.03		0.37		0.41		1.04		1.18		1.16		1.08		0.63
1903 .			1.10		0.73		0.49		0.99		1.08		1.65		1.06		1.04
1904 .			0.97		0.36		0.24		1.17		0.84		0.82		1.68		1 - 62
1905 .			0.94		0.35		0.48		0.97		1.05		0.98		0.82		0.99
1906 .			0.97		-		0.31		1.09		0.71		1.05		1.82		2.13
1907 .			0.60		0.35		0.39		0.59		0.59		0.61		0.79		1 - 32
1908 .			0.26		0.69		0.15		0.19		0.28		0.31		0.58		0.37
1909 .			0.25		0.34		-		0.23		0.31		0.19		0.57		0.72
1910 .			0.23		0.67		-		0.25		0.19		0.08		1.49		0.17
Average	, 1901–1910				4.40		0.27		0.68		0.71		0.76		1.06		0.87
1911 .			0.23		0.33		0.15		0.15		0.23		0.26		1.47		0.35
Increase	or Decrease		-0.46		-0.13		-0.12		-0.53		-0.48		-0.50	-	+0.41	-	-0.54
			1 2000		-		-				-		_		_		-

No. 45.—Infectious Diseases, 1911. Cases reported during each Month. (Exclusive of Port and Outside Cases.)

Disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the Year.	Case-rate per 1,000 Popu- lation.	Case Mortality per Cent. (inclusive of Port and Outside Cases and Deaths).
Plague	 67 13 2 93 5 58	2 120 30 1 56 4 42 255	73 6 47	31 1 - 73 3 46	5 32	34	18 -4 114 5 26	19 1 141 7 35	104 12 74	22 1 1 107 8 50	-	28 19 1 4 64 1 58	19 36 934 330 12 19 1,063 71 585	0·168 4·365 1·542 0·056 0·089 4·968 0·332	12·3 ·1 1·1 33·3 —* 39·0

^{*} Acute diarrhœa is not differentiated in the returns for diarrhœa.
† Phthisis has been excluded in the calculation of this rate, as it shows a larger number of deaths than cases reported.

No. 46.—Infectious Diseases, 1911.	Cases reported from	Port and Outside	Limits.
Disease.	Port.	Outside.	Total.

Disease.		Port.	Outside.	Total.
Cholera		2	 	 2
Smallpox		9	 20	 29
Chickenpox	 1977	10	 71	 81
Measles		6	 17	 23
Diphtheria		 -	 -	 -
Enteric fever		 14	 71	 85
Continued fever		 -	 -	 -
Phthisis		 -	 40	 40
	Total	 41	219	260
		1000		-

Year.	140. 4	,cnoic	Cases reported.	porte	Case-rate per 1,000 Population.	Case	et and Outsides not include n Case-rate.
1903			1		0.006		_
1904			1		0.006		3
1905			-		-		
1906			1		0.005		3
1907			29		0.158	2.	2
1908			30		0.160		1
1909					-		-
1910			1	**	0.005		- 8
Average,	1903-1910		8		0.043		2
1911			19		0.089		2
Increase	or Decrease		+11		+0.046		-
			-				-

No.	IS Mon	tality	from	Cholera.	1001	1011
INO. 9	8010	tanty	rom	Choiera.	1901-	-1911

Year.			Deaths.	1200	Rate per 1,000 Population.
1901			 -	***	-
1902			 2		0.011
1903			 -		-
1904			 1		0.005
1905			 -		-
1906			 2		0.010
1907		***	 19		0.104
1908			 22		0.117
1909			 		-
1910			 -		-
Average, 19	01-1910		 5		0.023
1911			 19		0.089
Increase			 14		0.066
			-		-

No. 49.—Smallpox Cases reported, 1903–1911.

Year.		Cases notified from Town.	P	ses notified ort and Ou not included Case-rate	tside l in	Case-rate per 1,000 Population.
1903		 7		6		0.040
1904		 1		3		0.005
1905		 45		9		0.259
1906		 40		26		0.224
1907		 49		10		0.267
1908		 438		7		2.330
1909		 78		25		0.405
1910		 69		18		0.331
Average, 19	03-1910	 91		13		0.498
1911		 36		29		0.168
Decrease		 55		+16		0.330

No EO	Manhalitan	Emman 1	Constitutor	1901-1911.
NO. 30	-MIOPERHIEV	III	Smallbox.	1301-1311.

Year.			Deaths.		th-rate per 1,000 Population.
1901			 29		0.185
1902			 27		0.169
1903			 1		0.005
1904			 1		0.005
1905			 17		0.098
1906			 11		0.062
1907			 8		0.042
1908			 88		0.489
1909			 27		0.140
1910			 20		0.096
Average, 190	1-1910	I	 23		0.128
1911			 4		0.019
			-		

No. 51.—Vaccinations performed during 1911.

Ward		Prima	Primary Vaccinations.			Re-vaccinations.		
Fort, Pettah,	and San	Sebastian	1,251		1,874		3,125	
St. Paul's			1,284		1,638		2,922	
Kotahena			913		839		1,752	
New Bazaar			923		1,690		2,613	
Maradana			1,509		1,091		2,600	
Slave Island			794		878		1,672	
Kollupitiya			783		230		1,013	
Itinerating (Co	olombo)		853		775		1,628	
		Total	8,310		9,015		17,325	

No. 52.—Chickenpox, 1903-1911.

Year.			Cases reported.	Case-rate per 000 Populatio	Deaths.
1903			230	 1.391	 1
1904		1	274	 1.615	 -
1905			398	 2.287	 2
1906			231	 1.294	
1907			259	 1.414	 2
1908			543	 2.889	 -
1909			828	 4.294	 -
1910			901	 4.320	 -
Average, 1903 to	1910		458	 2.508	 1
1911			934	 4.365	 1
Increase			476	1.857	-
				-	-

No. 53.—Measles, 1903-1911.

Year.		Cases reported.		Case-rate per 000 Population		Deaths.
1903		 119		0.720		-
1904		 278	4.4	1.639	**	5
1905		 397		2.281		16
1906		 354		1.983		4
1907		 74		0.404		-
1908		 666		3.544		7
1909		 436		2.261		11
1910		 149		0.714		4
Average, 1903 to	1910	 309		1.693		6
1911		 330		1.542		4

No. 54.—Diphtheria, 1903-1911.

Year.		Cases reported.	ase-rate per 00 Populatio	n.	Deaths
1903		 -	 -		-
1904		 6	 0.035		4
1905		 2	 0.012		-
1906	1.00	 10	0.056		1
1907		 13	 0.077		4
1908		 7	 0.037		4
1909		 8	 0.041		2
1910		 18	 0.086		4
Average, 1903 to	1910	 8	 0.044		2
1911		 12	 0.056		4

No. 55.—Acute Diarrhœa and Cholera Cases, 1907-1911 (exclusive of Cases from the Port).

Month.	Di	Acut arrho	1907. e C		a. D	Acute	1908 ea.		a. I	Acut	1909 e ma.		ra. Di		1910. ea. C	holer	a. Di	4	911. ea. Ch	olera
January		3		22		3		1		1		-		-		-		2		-
February		-		3		2		1		1		-		-		-		-		-
March		1		1		6		1		-		-		-		-	220	-		-
April		1		-		12		3		1.		-		-		-		-		-
May		-		-		10		1		2		-		3		-		1	++	5
June		-	4.4	2	4.4	16		-		1		-		1		-		5		11
July		3		-		9		3				-		1		1		4		3
August		2		-		1		3		-		-		1			**	-		-
September		2		-		-		1		3		-		-		-		-		-
October		-		-		4		-		-		-		2	0.0	-		1		-
November		-		1		16		12		1		-		-		-		2		-
December		1		-		6		4		1		-		3		-		4		33
Total each dise	ase	13	_	29		85	_	30		11	~	=		11	~	1		19	~	19
Tota	1		42				115	5			11				12				38	

No. 56.—Unwholesome Food Stuffs seized, 1911.

		Cwt.	qr.	. lb.	1			Cwt	. qr	. lb.
Fresh fish	 	0	0	201	Sponge cakes			0.	0	7
Dry fish	 	6	3	012	Other sweets			0	2	0
Beef	 	0	0	24	Cheese			0		11
Salt beef	 	1	3	12	Ghee			0	0	12
Salt fish	 	0	0	4	. Mangoes			0	1	0
Potatoes	 	1	2	151						
Onions	 	3	0	5						
Wheat flour	 	7	0	0	30 wood apples		bottle			
Condensed milk	 	0	0	22	158 mangoes	4	bottle	es of	am	1
Cakes	 	7	0	0	9 papaw and soursops					

No. 57.—Food Stuffs condemned at Customs Premises.

427 bags of rice	28 bags of coffee
9 bags of dry fish	31 cwt. cured fish
400 bags of potatoes	24 gallons ghee
68 hags of wheat	

No. 58.—Analysis made by the City Analyst during 1911.

Nature of sent to A			Sar	umber o aples sen Analyst.	Numbe		Number passed.		mber awaiting Report at and of Year.
Town water	4.			159	 2*	100	157		-
Well water				66	 52		4		10
Soda water				33	 26	-	6		1
Milk†				1,100	 182		905		12
Bread				32	 -		32		-
Flour				29	 -		29		_
Sugar				24	 -		24		
Sweets				7	 -		7		-
Ground coffee				3	 -		3		_
Ghee				2	 		-		2
Arrack				1	 1				
Lake water				28	 -		-		-
		Total		1,484	263		1,167		25
* Due to	dirty sa	mple bots	tles.		-	+ One	sample spe	oilt.	-

No. 59.—Bacteriological Examination of Town Water, 1911, by Director, Bacteriological Institute.

	4/4	First Quarter.		Second Quarter.	Third Quarter.	(Fourth Quarter.
Number of bacteria per c.c. water (agar plate) Number of bacteria per c.c.	of of	340		352	 550		384
water (gelatine plate)		. 360	**	416	 872		496
Bacillus coli Bacillus enteritidis sporogenes				-	 -		-
Typhosus							
Cholera vibrio		-		-	 -		-
Streptococci Germs liquifying gelatine		-					

No. 60.—Slaughter-house Returns, 1911.

Dematagoda Slaughter-house.

Animals slaughtered.

Quart	ter.		Cattle.	SI	neep and Go.	ats.	Pigs.
First Quarter .		-	5,206		18,017		467
Second Quarter .			5,888		20,332		481
Third Quarter .			6,045		20,877		395
Fourth Quarter .			6,130		20,217		432
	Total		23,269		79,443		1,775

Return of Cattle Rejected.

	Ind	ian.	Cey	lon.	Nature of Disease.							
	Black.	Buffalo.	Black,	Buffalo.	Wasted.	Sores and Abscess.	Skin Disease.	Hoof Disease,	Injured.	In Young.	Fever.	Total.
First Quarter Second Quarter Third Quarter Fourth Quarter	 22 101 157 73	1 8 32 3	25 23 30 41	25 72 62 72	65 200 278 185	4 3 2 3	_ _ _	_1 		- - 1	- ₁	73 204 281 189
Total	 353	44	119	231	728	12	1	1		4	1	747

Return of Goat and Sheep Rejected.

	Werester to	0) 0	Other Device A	the P	mojocaca.		
Indian	 First Quarter. 39		Second Quarter. 7		Third Quarter.	 Fourth Quarter.	 Total.
Cause-							
Hoof-and-mouth	 39		10000			 -	 39
Emaciated	 _		2	100	-	 	 2
In young	 				1	 	 1
Fevers	 		2		-	 	 2
Dying	 -		2		3	 3	 8
Dead	 -		. 1		-	 	 1

No. 61.—Carcases, Livers, &c., condemned, and Animals found Dead.

Number of Carcases condemned and Caus Cattle—		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	1	Cotal.
Cysticercus Sarcosystis		$\frac{3}{24\frac{1}{2}}$	 $\frac{9}{38\frac{1}{4}}$	 5½ 29½	 $\frac{9}{21\frac{1}{4}}$		$\frac{26\frac{1}{2}}{113\frac{1}{2}}$
Tota	1	271	471	35	301		140

Number of Carcases condemned and Cause.		First Quarter.		Second Quarter.		Third Quarter.		ourth uarter.		Total.
Pigs—						Plant of the last				20
Cysticercus		2	30	-	1000	1		-	2.50	3
Discoloured				1	10.0			-		1
Septic poisoning		-	27	-				1		1
Total		2		1		1		1		5
Animals found dead*—		-		-		_				-
Cattle		1		3		-		3		7
Sheep and goats		5		13		14		5		37
Pig8		-		-		-		2		2
Total		6		16		14		10		46
Number of livers condemn	red.	-								-
Cattle		113		169		169		152		603
Sheep and goats		-		-		1		1	**	2
Total		113		169		170		153		605
Cause—		-		-		-				-
Congestion		1		-		3	100	2	***	6
Hydatis		111		163		166		147		587
Cysticercus		1		2		-		-		3
Flukes		-		4		1		4		9
Total		113		169		170		153		605

* For causes of deaths see Statement below.

No. 62.—Causes of Deaths of	of Animals found Dead.
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2101 021	Or Re cert	OR OF STREET					
Sheep and Goats.		Number.					Number.
Anthrax		2	Cattle.				
Inflammation of the kidneys		1	Congestion of lung				3
Congestion of intestines		4	Exhaustion				2
Inflammation of the lungs		10	Injured				1
Congestion of the liver	114	7	Strangulation				1
Rupture of spleen		4					
Gastritis		4					-
Retention of the placenta		3			Total		7
Rinderpest		1					
Fatty degeneration of heart		1	Pigs.				
Total		37	Injured	++1		3.	2
		-					_

No. 63	.—Registrati	on of Dairies, 1911.

Ward.	Number or legister at e previous Y	nd	Number discontinued during 1911.	New Registrations during 1911.	Total on Register at end of 1911.
Fort	 -		_	 -	 _
Pettah	 -		-	 -	 -
San Sebastian	 1000		-	 -	 -
St. Paul's	 7		-	 1	 8
Kotahena North	 		-	 -	
Kotahena South	 2		-	 -	 2
New Bazaar	 2		-	 -	 2
Maradana North	 4		- 150	 -	 4
Maradana South	 3		-	 1	 4
Slave Island	 2		1	 1	 2
Kollupitiya North	 4		-	 	 4
Kollupitiya South	 10		3	 1	 8
Eastward Extension	 3		-	 1	 4
Total	 37*		4	5	38

*The total of 38 given in the report for 1910 is an error, the discontinuation during that year of one dairy in Kotahena North having by an oversight been omitted.

37 41		the same at the same		bearing 1	1011
NO 84	- Keo	istration	or isa	COTTON.	1911.

Ward.	Number Register a of previous	t end	Number discontinued during 1911.		New Registrations during 1911.	Total on Register at end of 1911.
Fort	 4		-		2	6
Pettah	 5		1			4
San Sebastian	 3		-		1	4
St. Paul's	 5		. 1			4
Kotahena North	 4	300	-			4
Kotahena South	 7		-			7
New Bazaar	 3			2.0		3
Maradana North	 5		1		1	5
Maradana South	 4		-			4
Slave Island	 9		1			8
Kollupitiya North	 3		-			3
Kollupitiya South	 1					1
Eastward Extension	 3		00.73			3
Total	 56		4		4	56

No. 65.—Registration of Laundries, 1911.

Ward.	Re	Number of gister at e revious Y	nd	Number discontinued during 1911.		New Registrations during 1911.	Total on Register at end of 1911.
Fort		-		_	100	_	
Pettah		21	1	5	-	8	 24
San Sebastian		6		-		1	 7
St. Paul's		-		-		_	 _
Kotahena North		11		1		3	 13
Kotahena South		15		-		4	 19
New Bazaar		17		2		6	 21
Maradana North		31		14		13	 30
Maradana South		44				3	 47
Slave Island		33		-		-	 33
Kollupitiya North		46		3		10	 53
Kollupitiya South		6		_		11	17
Eastward Extension		5		-		4	 9
Total		235		25		63	273
		-		-		10-	-

No. 66.—Registration of Eating-houses, 1911.

Ward.	Re	Number on gister at er revious Ye	nd	Number discontinued during 1911.	New gistration d during	Total on Register at end of 1911.
Fort		38		1	 - 4	 41
Pettah		52		4	 12	 60
San Sebastian		- 9		_	 2	 11
St. Paul's		27		4	 2	 25
Kotahena North		13		2	 -	 11
Kotahena South		2			 	 2
New Bazaar		14		3	 2	 13
Maradana North		9		-	 6	 15
Maradana South		19		5	 8	 22
Slave Island		60		-	 1	 61
Kollupitiya North		10		3	 1	 8
Kollupitiya South		12		-	 3	 15
Eastward Extension		3		-	 -	 3
Total		268		22	41	287

No. 67.—License issued for the carrying on of Offensive and Dangerous Trades, 1911.

Timber depôts	 	 	52
Straw depôts	 2.	 	27
Dyeing houses	 	 	18
Cotton stores	 	 	18
Manure depôts	 	 	22
Firewood depôts	 	 	106
Soap manufactories	 	 	4

No. 68,-Registration of Aerated Water Factories, 1911.

	Reg	Number of ister at en evious Ye	d of	Number Discontinue during 1911	d	w Registratio effected during 1911.	ns	Total at end of 1911.
Fort				-		_		_
Pettah		2				-		2
San Sebastian		1		-		-		1
St. Paul's						_		-
Kotahena North		-		-		-		
Kotahena South				-		-		-
New Bazaar		1		1		-	**	-
Maradana North		1		-		-		1
Maradana South				-		1		1
Slave Island		7				1		8
Kollupitiya North		2		1		-		1
Kollupitiya South				-				-
Eastward Extension		-		-		-		-
		_		-		-		-
Total		14		2		2		14
		-				-		-

No. 69.—Work done by Ward Inspectors during 1911.

Nature of Work.	Fort.	Pettah.	San Sebastian.	St. Paal's.	Kotahena North.	Kotabena South.	New Bazaar.	Maradana North.	Maradana South.	Slave Island.	Kollupitiya North.	Kollapitiya South.	Eastward Extension.	Total
Number of inspections	3,531	5,215	3,055	5,160	4,433	3,263	3,636	4,103	2,168	3,522	4,290	2,261	4,155	48,792
Number in which sanitary defects were found Number of notices served	486 354		895 358	629 268	584 139	618 324			457 79	529 137			1,055	8,985
Number of notices volun- tarily complied with Number of premises where	141	73	81	153	97	163	155	142	61	106	195	101	98	1,566
defects were rectified after warning Number of wells closed Number of cesspits closed		-	= 490	= 146	352 2	635 4 5	268 2 1	331 6 1	118 1 2	= 275 =	521 -	170 6 1	738 1 31	4,503 22 45
Number of houses disin- fected Number of prosecutions Number of convictions	9 564 464	437	67 341 280	87 433 354	23 232 210	50 356 290	527	521	388	86 262 219	392	284	175	787 4,912 4,111
Number discharged or otherwise dealt with Number pending at end of	17	19	30	15	10	19	20	19	7	21	10	16	2	206
quarter Number of premises lime-	83	62	54	64	12	47	86	63	55	38	40	25	12	641
washed by the Municipal cleansing gang	9	-	-		-	8	9	-	-	1	6	1	-	34
Number of type plan latrines erected	1	-	-31	6	11	-	13	1	20	18	8	-	40	118
	Rs. e.					Rs. c.				Rs. e.				Re. c.
Amount of fines	5,766 0	2,951 50	1,673 50	2,380 0	1,203 35	2,973 50	3,477 50	3,790 0	2,245 50	2,145 50	3,600 0	2,851 50	1,206 0	35763 85

No. 70.—Structural Improvements by Ward Inspectors during the Year 1911.

	Nature of Improvement.	Inspector de Silva, Fort.	Inspector Karuna- tilleke, Pettah.	Inspector Jayasinghe. San Sebastian.	InspectorAbeysekera, St. Paul's.	Inspector Sorasinghe, Kotahena North.	Inspector Blacker, Kotahena South.	Inspector Dabera, New Bazaar.	Inspector Samahin, Maradana North.	Inspector Stouter, Maradana South.	Inspector Ambrose, Slave Island.	Inspector LaBrooy Kollupitiya North.	Inspector Horan, Kollupitiya South.	Inspector Akbar, Eastward Extension.	All Inspectors, Colombo Town.
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23.	Windows and skylights Ventilators Latrines Children's latrines Masenry receptacles for coir dust Cementing floor of closets New drains Old drains improved Paving of passages and compounds Insanitary tenements improved Insanitary tenements demolished Insanitary rooms demolished Insanitary rooms demolished Insanitary rooms demolished Obstructive staircase demolished Obstructive roof demolished Obstructive roof demolished Obstructive eaves cut back Eating-house improved with water service Insanitary cattle shed demolished Cementing floor of cattle sheds Dovetailde ceiling provided in kneading room of bakery Improvements to bakery by cementing	12	18 - - 8	744 155 — 77 33 133 11 — 13 11 11 11 — 11 — 11	7 21 5 20 2	31 — 9 — — — — — — — — — — — — — — — — —	260 45 10 4 18 1 1 - 1	144 2222 17 4 18 - - 12 8 11 - - 18 - - 3 - - - - - - - - - - - - - - - -	6 - 1 4 4 4 1	2 41 14 	38 16 19 - 2 - 4 - 19	157 54 — — — — — 3	24 18 12 - - 2 - 3 - 1 - - - - - - - -	23 48	1,143 618 175 14 18 11 43 25 42 44 109 2 38 71 34 1 1 12 12 2 3
24.	walls Improvements to hides depôt by cement	-	3	-	-	-	-	1	-	-	-	-	-	-	. 4
25.	ing walls Improvement to poultry mart by cement	-	1	-	-	-	-	-	-	-	-	-	-	-	1
26.	ing walls Improvements to laundry by cementing walls	-	2 1	-	-	-	3	-	-	Total	1 1	-	-	- 1	2 16

No. 71.—Samples taken for Analysis by each Inspector during 1911.

Nature of Sa	rople.	Inspector Serasinghe.	Inspector Blacker.	Inspector Samahin.	Inspector de Silva.	Inspector Karunatilleke.	Inspector Stouter.	Inspector Horan.	Inspector Ambrose.	Inspector Dabera.	Inspector Davidson.	Inspector Jayasinghe.	Inspector Abayasekara.	Inspector LaBrooy.	Inspector Akbar.	All Inspectors.
Town water Well water Soda water Milk Bread Flour Sugar Sweets Ground coffee Ghee Arrack Lake water		 12 1 100 - - - - - -	11 17 70 — — — —	12 8 4 72 3 3 3 - - - - 28	12 1 -91 1 2 	12 -4 130 2 2 2 - - -	12 2 5 42 7 7 7 7 2 —	12 14 - 91 - - - - -	12 13 79 — — — — —	13 3 1 82 4 5 5 - -	7 15 2 2 2 2 3 3 -	5 2 3 43 — — — — — — — — — — — — — — — — —	12 - - 1111 9 6 1 - - -	15 14 3 97 — — —	12 4 -77 4 4 4 	159 666 33 1,100 32 29 24 7 3 2 1 28
	Total	 113	98	133	107	152	84	117	104	113	34	56	139	129	105	1,484

No. 72.—Details of Prosecutions by Ward Inspectors during 1911.

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.	Eastward Extension.	Total.
v .											100				7
Nuisances.		200	210		011		-			1000					
Filthy premises	2.2	302	218		344	113	196	344	337	183	150	272	168	126	2,890
Neglect to keep sanitary bin		74	-	4		-	-	-	-	-	-	-	-	-	78
Neglect to cleanse and limewash		54	-	1	2	-	15	8	11	-	-	-	-	-	91
Neglect to pay limewashing bills		6		-		1	5	2	-	-	-	1		-	15
Food.															
Food exposed to dust and flies	-509	32	53	44	1	18	12	40	42	56	19	3	26	9	355
Sale of unwholesome food			15	16		3	9	6	-	8	10	14		0	80
Sale of unwholesome food			10	40		1		0		0	3			1	90
Eating-house,															
Unregistered eating-house	-	17	19	3	1	1	_	5	4	1	3	1	-		55
Filthy eating-house	000	_	_	_	_	1	_	3	5	_	1	3			13
Eating-house within 30 feet of closet	139		8	1											8
Neglect to cement eating-house	30		_			1	1000		a	1					7
Plank walls in eating-house		1	_		_		_		-			_	_		í
							165								
Dairies and Milk.															
Unregistered dairy		1	-	-	-	8	1	-	11	-	-	-	-		21
Filthy dairy		-	-	-	-	-		1	-	-	-	-	3	-	4
Neglect to notify change of dairy premise	18	-	1	-	-	-	-		-	-	-	-		-	1
Neglect to submit list of customers of da	iry	-	-	-	-	-	-	-	-	-1	-	-	1		1
Sale of adulterated milk		40	24	4	9	11	21	13	13	2	8	19	13	7	184
- Sale of milk without a card		5	5	1	-	5	7	7	9	-	6	3	2	4	54
Sale of milk where cream had been extrac	ted	-		-	-			1	1	_	1	-	_	-	3
Unregistered milk vendor		-		-	-	-		4	-	_	1	-			5
Refusing to allow a sample of milk to be tal	ken -	-		-	-	1	-	-	-	-		-		-	1
Cattle Sheds.															
Unlicensed cattle sheds		1	100				001		1	7587				-	100
Filthy cattle shed	**	_			_	4				=					5
															-
Bakeries,	113										-			-	
Unlicensed bakery	200	-!	-	1	1	1	-	1	2	-		3	4	-	13
Filthy bakery		2	-	-	2	1	3	5	1					2	16
Unclean workmen in bakery		3	-	-	1	1	4	6	4	3	6	2	-	2	32
Kneaders without aprons		-	-		1	-	_	_	_				_		1

No. 72.—Details of Prosecutions by Ward Inspectors during 1911—contd.

Nature of Offence.	Fort.	Pettah.	San Sebastian.	St. Paul's.	Kotahena North.	Kotahena South.	New Bazaar.	Maradana North	Maradana South	Slave Island.	Kellupitiya Norta	Kollupitiya South.	Extension.	Total.
Markets.	48													
Obstruction of passages in public market		45	11	-	-				6	-	-	-	-	62
Throwing rubbish on passages in public									6		_	_		6
markets	9		64	4	13	4	18	5	79	41	11	27	2	277
Unnecessary articles in stalls	-	2	8	-			-	-	5	-	-		-	15
Keeping stalls close to the public road	-	-	1	-	1	-	-	-	8	-	-			10
Neglect to sweep floor of stalls	-	-		-	-		-	-	4	1	-		1	4 3
Unlicensed stalls		-	1		-	_		2	1					3
Misbehaving in market		_	-1		î		2		_					4
Chinesisca nen ventar					- 1		3							
Laundries.					-			1			1000	1	1	00
Unregistered laundry	-	5	-	=	2	4	15		1	-	22		3	90
Filthy laundry		-	1			-	3		330	1	1	-		1
Washing clothes in prohibited site												1 3		2 - 3
Offensive and Dangerous Trades.											1	100		
Unregistered cotton depôt	-	-	-	1	-	-	-	1	-	-	-	-	-	2
Unregistered firewood depôt	-	-	2	1	-	-	-	-	2	-	-	1	-	6
Unregistered manure depôt	-	1	-	-	-			1	-	100		-		i
Unregistered straw depôt		-		1		1	1	200						2
Unregistered timber depôt	12			-			_	3	_	1		1	-	16
Omoganorou opinin urvair.											100	100	100	
Throwing rubbish on roadside	-	39	6			8	-	-	10	1	-	-	-	106
Abuse of roadside	-	-	-	3		6	1	-	-	-	-	-	-	10
Filthy drain	-	-	-	-	32	48	27	17	-8	10	29	-	8	210
Nuisance caused by horse, cattle, poultry, &c Foul cesspit			11	11 6		3		3			-	-	8	22
Open and exposed privies		-		_	1	_	_	_	-	-	-	-	-	1
Failure to provide privy accommodation .	-	-	-	_	1	1	-	-	-	-	-	-	-	2
Neglect to fill well		-	-	-	1	-	2	1	-	-	1 3	6	-	11
Sinking wells without permission .	-	-	-	-	-	-	-	-	1	-	1 . 5		-	4
Infestions Discours												1	12.0	
Infectious Diseases. Neglect to report infectious diseases.	1000	1	4	2	4	5	8	9	-	1	-	-	2	36
Concealing a case of smallpox		-	-	-	-	-	-	-	-	1	-	-	-	1
Assisting in removing an enteric patient .		-	-	-	-	-	-	1	-	-	-	-	-	1
								100				100	100	
Bathing Places. Filthy bathing places							1	1	-	-	-	1	-	2
Fifthy bathing places						1	3	-		-	1-	1	-	13
Neglect to paint tubs in bathing places .		-	-	-	1	-	-	1	-	-	-	-	-	1
		1	100	1 5	1	1		1			1	140	1000	5
Resistance to a public officer .		-	-	-	-	2		1	1	1	1	1	1	1
Neglect to repair wall	-	-	-	-	1			1	1		13		100	i
Removal of a corpse without permit Overcrowding			-	1			-	1	-	-	1	5	-	6
Using obscene language		144	-	-	-	-	-	-	1	-	-	-	-	1
Neglect to report death of a bull .		-	-	-	-	-	-	1	-	-	-	-	-	1
					1	3		1		1-	-	Acres 6	-	alest and the same of
Total .			7 321	433	3 232	400	-			-	2 39	2 28	1 175	4,892

No. 73 -Work done by Sub-Inspectors during 1911

Ward.			Fevers.	В	louses disinfe Phthisis.	cted.	Total.
Fort			 5		-		5
Pettah			 20		2		22
San Sebastian	***		 44		20		64
St. Paul's			 92		53		145
Kotahena North			 82		25		107
Kotahena South			 83		35	1.	118
New Bazaar			 94		51		145
Maradana North			 142		102		244
Maradana South			 71	4.	25		96
Slave Island			 101		33		134
Kollupitiya North			 74		8		82
Kollupitiya South			 72		10		82
		Total	 880		364		1,244

No. 74.—Enteric Cleansing Gang, Work done by Overseer during 1911.

Ward.			Pre	iumber of mises where there were Cases of Enteric.	Filt	Total.		
Fort				2		11		13
Pettah				21	1000	5		26
San Sebastian				32		9		41
St. Paul's				81		24	**	105
Kotahena North				23		7		30
Kotahena South				10		3		13
New Bazaar				78		26		106
Maradana North				92		44		136
Maradana South				35		40		75
Slave Island				71		11		82
Kollupitiya North				2		5		7
Kollupitiya South				-	2.	-		
Eastward Extension	1			-		-		5-1
		Total		447		185		632

No. 75.—Work done at the Disinfecting Station. Number of Pieces and Loads disinfected during 1911,

Month.			umber of Loads.	Number of Pieces,
January		 	14	 250
February		 	14	 376
March		 	15	 254
April		 	12	 205
May		 	12	 256
June		 	17	 508
July .		 	17	 926
August		 	14	 623
September		 	13	 282
October		 	26	 769
November		 	17	 545
December		 	14	 385
		Total	185	5,379

No. 76.—Insect Pest Prevention Gang, Work done by Overseer during 1911.

Ward.	Number of Premises visited.			Number of mises whe squito La found.	Number of Notices served.	Po	Number ols, Swa fullies, & oiled.	Quantity of Oil expended. Gallons		
Fort .		31		10		3		23		101
Pettah		44		15		-		5		12
San Sebastian		79		27		10	14	19	1	91
St. Paul's		93		46		4	-	31		131
Kotahena North		53		23		2		15		75
Kotahena South		52		16		6	2.0	12		2
New Bazaar		137		54		12		40		101
Maradana North		782		402		# 28		126		391
Maradana South		487		416		10		155		40%
Slave Island		73		30		5		15		61
Kollupitiya North		9		5				4		3
Kollupitiya South		12		9		-		7		7
Eastward Extension		186		123		10		42		201
Total .		2,038		1,176		90		494		1723

No. 77, Statement A.—Annual Return of Sick treated at the Municipal Free Dispensary, Slave Island, from January 1 to December 31, 1911.

		month outside	may a on	and common on a round				
General Diseases :		Nu	mber.	Parasitic Diseases :-			Nu	mber.
Meningitis			1	Ascaris lumbricoides				866
Enteric fever			68	Anchilestoma duodens	de			20
Influenza			825	Tænia solium			**	-
Measles			13	Oidum albicans	* *			12
Chickenpox			3	Ascaris scabici				107
Dysentery			207	Constitutional Diseases :				
Chronic dysentery			26	Debility	2.			146
Whooping cough			4	Rheumatism				369
Erysipelas			22	Rheumatic affections	**			302
Toxania of pregnancy			2	Obesity				11
Parangi			3	Senility	160			2
Mumps			1	Diabetes mellitus				11
Malarial Diseases :				Diseases of the Nervous Sy	stem :-	-		
Malarial intermittent			402	Neurasthenia				12
Malarial cachexia			153	Convulsions				4
Puerperal septicæmia			17	Epilepsy				4
Anæmia (cause unknow	m)		10	Hysteria	4.4			6

Annual Return of Sick treated at the Municipal Free Dispensary-contd.

Diseases of Nervous System			nber.	Urinary System—contd.		Nu	mber.
			26	Chronic Bright's disease			13
Migraine Facial neuralgia			7	Cystitis			7
Hemiplegia			2	Inconsistance of urine			-
Spastic paraplegia			2	Generative System :			
Facial paralysis			1	Balanitis			1
Tabes dorsalis			2	Phinosis			2
Syringomyelia			2	Paraphymosis			-
Pott's disease			-	Orchitis			15
Peripheral neuritis	3747-		3	Retention of urine			1
Acute anterior poliomy	elitis		1	Urethritis			8
Monoplegia	** //			Epididymitis		**	2 4
Organs of Special Sense :				Hydrocele	The sand	**	1
Eye:			-	Phlebitis of right spern		1	5
Ophthalmia neonator Catarrh ophthalmia		::	32	Vaginitis Leucorrhœa			20
Blepharitis			4	Amenorrhœa			27
Stye			5	Dysmenorthoa			29
Foreign body			4	Menorrhagia			23
Ear:				Meterrhagia		100	8
Earache			22	Threatened abortion			5
Otitis media			22	Abortion	**		19
Acute catarrh			18	Prolapsus of uterus			3
Foreign body			3	Integumentary System :			
Nose:				Acne rosacea		**	2
Polypus			2	Lichen tropicus			20
Eristaxis			4	Seborrhœa -			2
Ozæna			13	Urticaria		2.07	12
Foreign body			2	Dermatitis herpetiform			
Circulatory System :				Tænia versiclor Erythema bullosa			11
Pericarditis			1	Pruritus			70
Aortic regurgitation			2	Eczema			159
Mitral stenosis			6	Ringworm			39
Mitral regurgitation			4	Impetigo contagiosa			6
Hæmorrhoids	**	**	8	Herpes zoster			2
Varicose veins (leg) Angina pectoris	**		2	Abrasion			2
			-	Incised wound	7.		25 65
Respiratory System:			074	Contused wound			41
Acute bronchitis Chronic bronchitis		**	674	Punctured wound Lacerated wound		-	6
Asthma			217	Contusion			90
Lobular pneumonia			30	Sinus			6
Lobar pneumonia			22	Onychia		16.	30
Phthisis			27	Furuncles			108
Digestive System :				Leucoderma			2
Stomatitis			29	Carbunele			2
Gum boil			25	Burn			17
Toothache			85	Fistula in ano			1
Pyorrhœa alveolaris			18	Gangrene Syeosis barbæ		1000	1
Acute pharyngitis		**	26	Ulcer	-		498
Chronie pharyngitis			9	Abscess		-	103
Tonsillitis	**		167	Mastoid abscess			1
Gastritis Dyspepsia	**		93	Cellulitis			20
Chronic enteritis			317	Organs of Locomotion :-			
Constipation			335	Periostitis		1	8
Colie			43	Fractures			3
Hepatitis			4	Dislocations:			
Jaundice			1	(a) Maxillary joint			3
Cirrhosis of liver		**	2	(b) Shoulder			1
Psilosis		1.5	3	Tumours :			
Prolapsus of rectum			7	Nævus		**	1
Lymphatic System :			133	Ranular		:	1
Lymphangitis			18	Cerebral tumour			1
Adenitis	**		60	Cancer			3
Elephantiasis of scrotus			2 5	Goitre Uterine fibroid			- 1
Elephantiasis of leg		* **	0		**	5.	1200
Urinary System :-			3	Abdomenial Diseases :— . Intestinal obstruction			2
Albumenuria Acute Bright's disease	-		13	Inguinal hernize			î
nous Digits disease	**			anguaran notation			10000

No. 78, Statement B.—Statement showing Details of Work done by the Health Visitor, Mrs. R. H. Pereira, from January 1 to December 31, 1911.

1.	Number of visits paid to houses	 10,230
2.	Number of dispensary tickets issued	 137
3.	Number of cases in which Medical Officer was requested to visit	 33
4.	Number of houses where instructions re infant feeding given	 736
5.	Number of visits paid to labour cases	 103

No. 79, Statement C.—Statement showing Details of Work done by the Health Visitor, Mrs. A. Cruse, from March 1 to December 31, 1911.

	paron in Grand, rions sancter a to apolitimes but, source		
1.	Number of visits paid to houses		10,107
2.	Number of dispensary tickets issued		125
3.	Number of cases in which Medical Officer was requested to visit		12
4.	Number of houses where instructions re infant feeding given		1,048
5.	Number of visits paid to labour cases		33
	No. 80, Statement D.		
	No. 80, Statement D.		
A.	Visits paid by the Medical Officer to those unable to attend at	the	
	dispensary		98
В.	Visits paid to those reported by the Health Visitor as unable to at	tend	45
C.	Labour cases in which medical or surgical aid rendered		3
D.	Visits paid to cases attended to by the Municipal midwife		58
E.	Cases sent in by Health Visitors by tickets		261

No. 81.—Number of Cases conducted by Municipal Midwives during the Year 1911.

Name of Midwife.	Division.		First Quarte	Secon	Third	Fourt		Total.
A. Wickremasinghe Agida Perera Nonno Hamy M. P. Muruger A. M. Wickramaratne Sarah Dias	 St. Paul's Kotahena San Sebastian St. Paul's Slave Island New Bazaar	: :::::::::::::::::::::::::::::::::::::	24 42 26 35 22 30 179	 25 39 13 23 21 24 —————————————————————————————————	 29 29 26 19 12 21 136	 17 34 40 22 22 22 20 ———————————————————————	::	95 144 105 99 77 95 615

No. 82.—Births and Infant Deaths.—Still-births and Deaths within Four Days.

				1	Births.	Tall		Deaths.		Sti	ill-birth	r cent.	r cent.	
	Race.			Persons.		Females.	Persons.	Males.	Females.	Persons.	Males,	Females.	Death-rate per cer (inclusive of Still-births).	Death-rate per cer (exclusive of Still-births),
All Races				623	325	298	18	9	9	29	17	12	7.55	2.89
Burghers Sinhalese Tamils Moors Malays	::			49 273 162 99 35	19 136 88 61 18	30 137 74 38 17	11	1 7 7	- 4 4 1	3 11 10 4	1 6 6 3	2 5 4 1	8·16 5·86 13·26 5·05 2·86	1·83 6·79 1·01
Others				5	3	9	-	-	-	-	-	-	-	-

No. 83.—Statistics of Cases conducted by Municipal Midwives during the Year 1911.

						13							All	Race	08.	Mortality.			
Ward and Name of Midwife.	Burghers.		Sinhalose.		Tamils.		Moors.		Malays.		Others.		Persons.	Malos.	Females.	Deaths.	Still-births.	Death-rate per cent. (inclusive of Still-births).	Death-rate per cent, (exclusive of Still-births).
	M.	F.	M.	F.	м.	F.	м.	¥.	M.	y.	M.	F.							
st. Paul's, A. Wickrema-																			
singhe	10	2 13	12	27 60	14	20	14	3	-	1	-	_	95	42	53 81	3	1	4.21	3 - 1
Kotahena, Agida Perera San Sebastian, Nonno		13	46	60	5	7	2	-	2	1	-	-	146	65	81	1	6	4.79	0.6
Hamy	1	3	29	17	10	8	19	15	1	2	_	_	105	60	45	6	7	12.38	5.7
t. Paul's, M. P. Muruger lave Island, A. M. Wick-			4	5	46	29	13	6	-	-	-	-	103	63	40	5	7	11-65	4.
ramaratne	2 4	5 7	20	12	10	4	_		13	8	3	2	79	48	31	1	7	10.13	1.:
New Bazaar, Sarah Dias	4	7	25	16	3	6	13	14	2	5	-	-	79 95	47	48	2	1	3.16	2.
Total of each Sex	19	30	136	137	88	74	61	38	18	17	, 3	2	****	00-	000	10	29	7.55	2.
Grand Total	4	9	2	73	10	32	9	9	3.	5		5	*623	325	298	18	20	1.00	-

No. 84.—Municipal Enteric Hospital. Statistics of Patients treated and the Deaths occurred during the Year 1911.

		1	Admissions	s.	Deaths.								
Race.	Sent in by Municipal Inspectors.	Sent in from General Hospital.	Sent in from other Hospitals.	Voluntary Seeking Admission.	Total.	Sent in by Municipal Inspectors.	Sent in from General Hospital.	Sent in from other Hospitals.	Voluntary Admission.	Total.			
Burghers Sinhalese Famils and Malabars Moors Malays All Races Total	M. F. 8 5 23 18 7 3 7 - 3 - 48 26	M. F. 9 77 73 322 44 3 5 — — — — — — — — — — — — — — — — — — —	M. F. 1 3 12 38 1 2 14 43	= =	127 109 53 8 12 — 3 —	M. F. 2 1 5 2 2 - 1 - 1 - 11 3	5 2 2 - 	M. F. - 1 4 11 - 1 4 13	м. г. 	M. F. 27 2 7 7 3 — 1 — 43 3 77			

No. 85.—Municipal Enteric Hospital. Case Mortality per Cent.

	Burghers.	Sinhalese.	Tamils and Malabars.	Moors.	Malays.	A	Il Races.
Sent in by Municipal Inspectors Sent in from General Hospital Sent in from other hospitals	4- 4	 51 · 2 20 · 0 30 · 0	 20·0 14·9 33·3	14·3 40·0	 33.3		18·9 20·2 29·8
Voluntary seeking admission	_	 30.0	 	_	 _		24.0
Total	19.1	23.3	16.4	25.0	33.0		21.7

No. 86.—Staff Changes, 1911.

Inspectors.—Inspector H. W. Davidson resigned on August 17, 1911.
Sub-Inspector I. C. Jayasinhe promoted Inspector on September 1, 1911.
Supervisor C. Vanderput succeeded as Sub-Inspector on November 1, 1911.

Slave Island Dispensary.—Mrs. A. Cruse appointed Health Visitor on March 1, 1911.
G. P. Wijeyesekara appointed Dispenser on April 1, 1911, vice Charles Weeraratne resigned.

Enteric Hospital.—Dr. S. O. Dharmaratne was transferred and Dr. C. A. Pereira appointed in November. William S. Maas appointed Apothecary on July 25, 1911, vice P. A. Schokman resigned. Exchange of duties by G. P. Wijeyesekara and William S. Mass in August.

M. A. Raj appointed Apothecary on November 1, 1911, vice G. P. Wijeyesekara resigned. Miss R. Ferdinands appointed nurse on December 1, 1911.

Bacteriological Laboratory.—J. Albert Perera and N. D. de Costa appointed attendants on October 1, 1911.



