

[Report of the Medical Officer of Health for Paddington, Metropolitan Borough of].

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Metropolitan Borough of Paddington.

ANNUAL REPORT OF THE COUNCIL

FOR THE YEAR

1910.

APPENDIX.

REPORT

OF THE

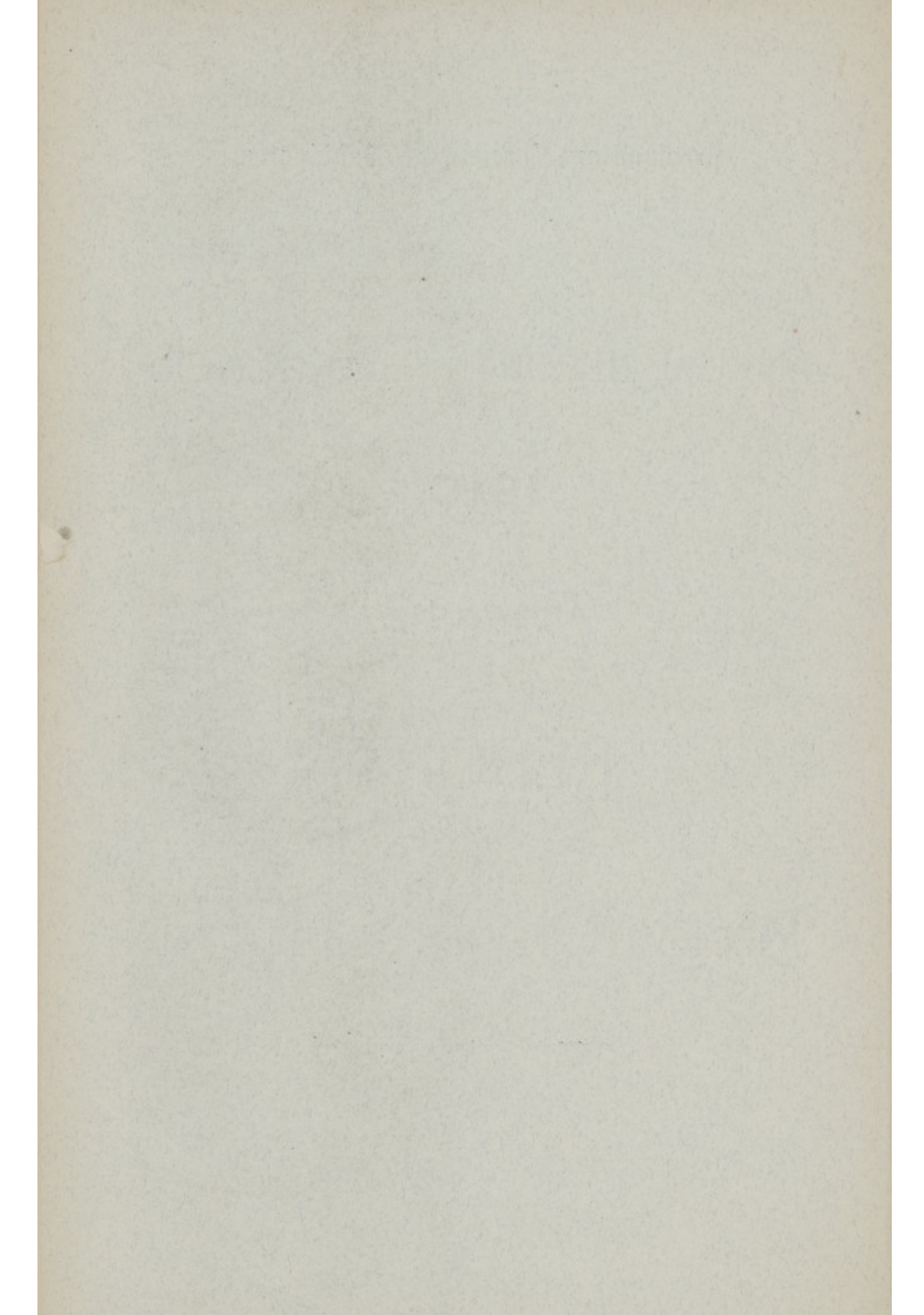
MEDICAL OFFICER OF HEALTH.

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Metropolitan Borough of Paddington.

REPORT

ON

THE VITAL STATISTICS

AND

SANITARY WORK

For the Year

1910.

BY

REGINALD DUDFIELD, M.A., M.B., D.P.H., F.S.S.,

Medical Officer of Health.

SALUS CIVIUM CIVITATIS OPES.

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TO HIS WORSHIP THE MAYOR, THE ALDERMEN AND THE COUNCILLORS OF THE
BOROUGH OF PADDINGTON.

MR. MAYOR, LADIES, AND GENTLEMEN,

I have the honour to submit for your consideration my report on the vital statistics of the Borough and the work of your Public Health Department during the past year, this being the fifteenth report which I have had the privilege of preparing. The Local Government Board requires the annual report to be issued during the month of June in each year, otherwise I should have preferred to have postponed its preparation until the results of the Census of this year had been issued. The Preliminary Report of the Census of April last was issued under date of 10th of this month, by which time this report had been set up and the greater part of it passed for the press.

By the method adopted in your Department, the population of the Borough at the middle of last year was estimated at 152,396 persons, 608 less than the total arrived at by the Registrar-General. The natural increment of the population during the nine and three-quarters years from April 1901, justified an estimate of something over 155,000 persons. The provisional total obtained at the recent Census (142,576) shows an actual decrease of 1,400 persons from the final total (143,976) of the Census of 1901. Assuming such decrease to have been uniformly distributed over the ten years 1901-11, the amended estimate of the population at the end of June, 1910, would be 142,611—9,785 less than the estimate used in this Report. Based on such amended estimate, the principal rates for the past year should be—

Corrected birth-rate, 21·18 (not, 19·83); morbidity-rate, 3·66 (not, 3·43); and nett death rate, 12·58 (not, 11·78).

It is evident, therefore, that the rates for the past decennium which are based on estimates of the population, will require to be re-calculated. For that reason, it would be waste of time and space to say anything here about those rates. Attention may be called, however, to the reduction in the total number of cases of infectious diseases which were reported to the Department during the past year. The increase in the number of cases of enteric fever is largely accounted for by the groups of cases described in the report (see page 18).

The infantile mortality being calculated on births actually taking place, and not on estimates of the population, the rates given in this report can be accepted as final and the best which existing arrangements for registration and transference of births and deaths will give. For the first time the corrected rate was below 100, the rate for the past year obtained from the Department's records having been 97 and that published by the Registrar-General, 96. The comparison of the rates (partially corrected only) given on page 43 of the report, clearly shows the great changes which have taken place in the infantile mortality. The preliminary figures given in Appendix B indicate that while there have been reductions in the mortality at all, or nearly all, the ages under one year mentioned in that Appendix, the reductions have been greater at ages above one month than in the younger ages. The fact that there was some increase in the mortality during the first day of life during the last quinquennium, when the reduction in the total infantile mortality was most marked, is worth careful inquiry, and I hope to submit a more complete report on the subject at a future date.

Evidence is adduced in the report that no inconsiderable proportion of the reduction in the infantile mortality has been due to causes other than the absence of epidemics of infantile (summer) diarrhoea during the last five years. That fact, taken in conjunction with the statistics given in Appendix B, favours the view that the special work undertaken in connection with health visiting has been not unsuccessful. The greater part of such work has been performed by the visitors of the Health Society as has been made manifest by the figures given in these reports. That Society has maintained a paid Visitor in addition to securing the co-operation of numerous voluntary workers (principally district visitors). The work of the Women Inspectors has of late years been mainly in connection with the (so called) minor infectious diseases reported by the schools, and the demands on their time for such work is likely to increase rather than diminish. But for the help of the Health Society it would have been necessary to increase the number of Women Inspectors, and even with such help the date is not far distant when some increase will have to be made, if certain branches of work now being done, are not to be abandoned.

Without early information of births the work referred to in the preceding paragraphs is impossible. It is, therefore, satisfactory to note the increased (and increasing) proportion of births reported under the Notification of Births Act, 1907.

At the present time births within the Metropolitan area have to be notified within thirty-six hours, and registered within forty-two days. Such requirements appear to me to be cumbersome and while the information received through notification is too early for immediate use, that received through registration, is usually too late. Amendment of the law is, I think, necessary and could be effected without detriment to "health visiting" by requiring the registration of births to be effected within *five* days—the period prescribed for the registration of deaths. Notification would then be unnecessary. If, however, it were desired to retain notification with an extension of the present prescribed limit of thirty-six hours, registration of the birth should be effected by the medical officer of health, the official to whom the notification is addressed—following the practice prevailing in many European countries. Both methods would impose a single obligation on the public, but the first mentioned is, to my mind, the better method of the two.

Although, by reason of the over-estimate of the population, the mortality from *consumption* (pulmonary tuberculosis) is understated in the report—the rate for last year should be 0·89 instead of 0·83—yet the fall in the number of deaths from 161 in 1909 to 127 last year represents a satisfactory decrease in the mortality from this manifestation of tuberculosis. In 1909 there were 72 deaths among 801 patients whose cases were reported during life, which (for the present purpose) may be described as a case fatality of 9 per cent. Last year the known cases of this disease totalled 1,259, and the deaths from *consumption* among them, 71 (case fatality 5·5 per cent.). The deaths among the reported cases were equal to 56 per cent. of the total number of deaths from this cause, whereas in the previous year they formed only 44 per cent., so that the proportions of fatal cases known and unknown in life in the two years were exactly reversed.

Some reference should be made to the voluntary work which has been undertaken in connection with this disease. The "Dispensary," the opening of which was recorded in the last report, has continued to discharge its functions without any decline in activity or signs of any diminution in public interest. Last year 813 new patients residing in Paddington attended the Dispensary, pulmonary tuberculosis being definitely diagnosed in 248 of them, while 265 other patients were found to be suffering from other forms of tubercu-

culosis (most of the latter having pulmonary symptoms). In the two years 1909 and 1910 1,513 persons residing in the Borough presented themselves for treatment, of whom 503 were found to present no signs of tuberculosis. Stating that same fact in another way, the proportion of tuberculosis patients was 71 per cent. in 1909 and 67 per cent. last year, the proportions of patients pronounced to be *consumptive* in each being 33·4 and 30·5 per cent. respectively. Among the 509 patients who have been treated for *consumption* during the two years, 57 deaths are known to have occurred, which would represent a case fatality of 11·2 per cent. The work of the Dispensary has been supplemented by the establishment of a special school for tuberculous children, which was opened at the beginning of the current year.

The home visiting of *consumptives* under the care of the Dispensary has been left to the staff of that Institution, the Women Inspectors visiting all other known cases. Such arrangement has relieved the Department of something like 75 per cent. of the visiting required by the notification of new cases during the last two years, but the new Order of the Local Government Board (that of March 22nd last) relating to the notification of institutional cases of the disease will add largely to the work of the Women Inspectors.

For some years past much attention has been given by your Department to the ailments—other than the dangerous infectious diseases—common to school children. Last year the work constituted an unusually large proportion of the labours of the Women Inspectors, and from observations made in supervising such work I am led to submit the following remarks on the existing arrangements for dealing with the medical aspect of school life.

If, as the proverb has it, "the child is father to the man," the importance of protecting health in childhood cannot be over estimated. To the schoolmaster falls the duty of educating the child's mind, to the sanitary authority should fall the task of protecting the child's health. As a unit of the population that task has been imposed on your Council; but as concerns the child individually, the Council has practically no jurisdiction, except the child be seized with "a dangerous infectious disease," such as scarlet fever. In the Metropolis, questions of the child's personal health—that is, of his future capacity for good work and capability to make use of the education he receives, are at present, outside the jurisdiction of the "Health Authority." Every effort is made by your Department to bridge the gap caused by the exclusion of the Health Authority from the public elementary schools, but if the best results are to be obtained, I am very strongly of opinion that all questions and matters relating to the health of school children should be entrusted to the local Health Authority. The argument commonly used in support of the present arrangement, is that the child's education should not be interfered with. But, how can a child assimilate instruction unless his health be good? and what advantage will his education be to him, if he attain manhood with a constitution enfeebled by neglected infantile disease? The child should be under the care of the "Health Authority" during his school life, as he is at other ages, and questions affecting his health should be given the first place, and not be secondary to his educational progress as they appear to be now.

The Staff of your Department remained unchanged during the year. Very few students applied to be taken on, a fact which was the more unfortunate as the work of the Women Inspectors was exceptionally heavy. All members of the Staff performed their duties in a most satisfactory manner.

In concluding this introduction to my report, I desire to tender my thanks to the Chairman and Members of the Public Health Committee for their unvarying con-

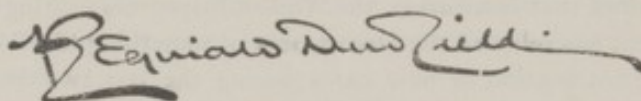
iv.

sideration and support. On this occasion my thanks are specially due to them and to the Council for the sympathy shown to me during my illness of last summer. Lastly, I have to acknowledge the co-operation and assistance I, as representing your Public Health Department, have received from my medical *confrères* practising in the Borough, and from the Voluntary Associations to whose work reference has already been made.

I have the honour to be,

Mr. Mayor, Ladies and Gentlemen,

Your most obedient servant,

A handwritten signature in dark ink, reading "Benjamin D. Field". The signature is written in a cursive style with a long, sweeping underline.

M.A., M.B., D.P.H., F.S.S.,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

PADDINGTON, W.

26th June, 1911.

REPORT.

THE BOROUGH.

The area of the Borough, 1,356 acres, includes 20 acres of waterways and (approximately) 175 of open spaces. At the census of 1901 the population numbered 143,976 persons (61,626 males, and 82,350 females) constituting 33,661 families, or "homes," living in 17,684 inhabited houses. Of the 33,661 homes, 21,815 contained less than five rooms, 26·67 per cent. of the individuals residing in such homes averaging more than two (2) persons per room. In 1891, 16·7 per cent. of the total population* were living under the like conditions, the proportion decreasing to 13·5 per cent. in 1901.

The Borough, which constitutes a single Registration District, "Paddington: 1," is sub-divided into three Registration Sub-Districts, and eight Wards.

The correspondence between the two sub-divisions is shown below:—

Registration Sub-Districts.					Wards.
North Paddington	...	...	...	...	Queen's Park.
					Harrow Road.
					Maida Vale.
Central Paddington	...	...	...	...	Westbourne.
					Church.
South Paddington	...	...	...	...	Lancaster Gate, West.
					Lancaster Gate, East.
					Hyde Park.

For some years past the statistics of the Borough have been collated exclusively with reference to the Wards.

POPULATION.

On an assumption that the growth of the population of the Borough between 1901 and 1910 continued at the rate which prevailed between 1891 and 1901, the population at the middle of 1910 was estimated at 152,396 persons, comprising 65,327 males, and 87,069 females. Such estimate represented an increase of 8,420 persons during the nine and a quarter years (April, 1901, to June, 1910) which had elapsed since the taking of the Census, while the natural increment (being the excess of births registered in the Borough over the corrected deaths of residents) during the same period amounted to 11,211 persons. After such an interval estimates of population are very untrustworthy, and the more so in metropolitan districts in view of the great changes which have taken place in the conditions of housing brought about by the introduction of motor traffic, and the great increase in railway facilities. Having regard, however, to the considerable difference between the estimated increase and the natural increment, the latter exceeding the former by more than 33 per cent., it is hoped that the forthcoming Census will not reveal any very serious discrepancy in the estimate. At the same time it is recognised that the rates given during the last few years will in all probability require to be recalculated, and that those included in this report must be accepted with reserve.

* At that date "Paddington" meant the old Parish, since then that portion of "Chelsea, Detached," now known as "Queen's Park Ward," has been added, and certain minor alterations have been made in the boundaries in other parts of the Parish.

The estimated numbers of the inhabitants of the Wards of the Borough are given below :—

ESTIMATED POPULATION.

1910.

			Males.	Females.	PERSONS.
Queen's Park	...	...	8,094	8,056	16,150
Harrow Road	...	...	14,482	16,077	30,559
Maida Vale	...	...	8,270	12,380	20,650
Westbourne	...	...	10,784	15,447	26,231
Church	...	...	13,615	15,013	28,628
Lancaster Gate, West	...	...	2,834	5,583	8,417
" " East	...	...	2,280	5,623	7,903
Hyde Park	...	...	4,968	8,890	13,858
BOROUGH	...	...	65,327	87,069	152,396*

* The Registrar-General's estimate was 153,004.

METEOROLOGY.

The principal meteorological elements for the year are given in Table 1, which is compiled from observations taken at the Royal Botanical Gardens and published each year in "The Times." Last year may be described as a colourless one from a meteorological point of view, being characterised by an absence of any sensational records. Impressions of an open winter and a cheerless summer are supported by the data contained in the Table. The highest temperature registered was only 82° and the total amount of sunshine (1,249·3 hours) the lowest recorded in the five years 1906-10.

TABLE 1.
METEOROLOGICAL ELEMENTS.

		Means at 9 a.m.			Extreme Temperatures.						Rain.		Sunshine.		
		Baro- meter re- duced to sea level	Thermometer.		Shade.				Max. in Sun. F.°	Min. on Grass. F.°	Depth of, Inches.	No. of Days.	Number of Hours.		Number of Days.
			Dry Bulb. F.°	Wet Bulb. F.°	Maximum. F.°		Minimum. F.°						H.	M.	
1910.	Totals	—	—	—	—	—	—	—	—	—	25·92	168	1,249	22	277
	Means	29·89	49·3	46·6	—	—	—	—	—	—	—	—	—	—	—
	Highest	—	—	—	82·0	June	—	—	120·0	—	—	—	—	—	—
	Lowest	—	—	—	—	—	19·5	Jan.	—	17·0	—	—	—	—	—
1909.	Totals	—	—	—	—	—	—	—	—	—	27·08	192	1,460	07	273
	Means	29·96	48·7	46·1	—	—	—	—	—	—	—	—	—	—	—
	Highest	—	—	—	85·5	Aug.	—	—	124·0	—	—	—	—	—	—
	Lowest	—	—	—	—	—	19·0	Mar.	—	14·0	—	—	—	—	—
1908.	Totals	—	—	—	—	—	—	—	—	—	24·49	173	1,461	48	285
	Means	30·01	50·4	46·5	—	—	—	—	—	—	—	—	—	—	—
	Highest	—	—	—	85·0	July	—	—	128·0	—	—	—	—	—	—
	Lowest	—	—	—	—	—	16·5	Dec.	—	11·0	—	—	—	—	—
1907.	Totals	—	—	—	—	—	—	—	—	—	23·86	177	1,304	07	280
	Means	29·96	49·5	46·2	—	—	—	—	—	—	—	—	—	—	—
	Highest	—	—	—	80·0	May	—	—	122·0	—	—	—	—	—	—
	Lowest	—	—	—	—	—	22·0	Jan.	—	17·0	—	—	—	—	—
1906.	Totals	—	—	—	—	—	—	—	—	—	24·42	145	1,580	12	292
	Means	29·99	51·1	47·6	—	—	—	—	—	—	—	—	—	—	—
	Highest	—	—	—	94·0	Sept.	—	—	128·0	—	—	—	—	—	—
	Lowest	—	—	—	—	—	20·0	Dec.	—	15·0	—	—	—	—	—

BIRTHS.

In the course of the 52 weeks which made up the statistical year 2,909 births were registered in the Borough, 1,462 of the children being boys and 1,447 girls, that total showing a slight increase (14 births) above the figure for the preceding year. The annual average number of births registered during the quinquennium 1905-09 was 3,091 and that for the preceding quinquennium, 3,326, the corresponding figure for the whole decennium being 3,208, figures which clearly show the shrinkage in the annual addition of new lives. Last year's uncorrected birth rate was 19·08 per 1,000 persons, the mean annual rates for the previous decennium and the two quinquennia contained therein, being 21·73, 22·85 and 20·60 respectively. (See also Table I, Appendix A).

Of the children whose births were registered during the year at least 101 were dead at the time the registration was effected, equal to 3·6 per cent. of the births registered as compared with 3·5 and 3·3 per cent. in 1909 and 1908 respectively. There were 48 multiple births, viz., 47 of twins (15 both males, 14 one of each sex and 18 both females) and one of triplets (all females). The triplets, five sets of twins and one child of a sixth set were dead at the registration of their births, making 14 deaths among 97 children born in multiple pregnancies, or 14·4 per cent.

The births in the Workhouse numbered 82, 16 of the children being born to non-resident parents. In addition 41 other children were born to non-resident parents in other parts of the Borough (nursing homes, etc.), making a total of 57 births to be deducted from the number registered in the Borough. From other parts of the Metropolis 170 births belonging to Paddington were reported, including 167 births in Queen Charlotte's Hospital,* one in the British Lying-in Hospital and two "elsewhere." The corrected total of births for the year thus becomes 3,022, 9 fewer than the corresponding total for 1909, and equal to a rate of 19·83 per 1,000 persons, or 0·18 less than that for the previous year.† The corrected total (3,022) comprised 1,455 boys and 1,419 girls. The corrected numbers of births belonging to each Ward are given in Table 2, while the corresponding figures for the years 1905-09 are to be found in Table II, Appendix A. Table 3 gives a comparison of births and birth-rates for the whole Metropolis and the Districts circumjacent to the Borough.

Illegitimate Births.—The 2,909 births registered in the Borough included 157 births of illegitimate children, of whom 63 were born in the Workhouse. Nine of the children (equal to 5·7 per cent.) were dead when their births were registered. Included among the 157 births were 25 of children not belonging to the Borough, while 16 such births were recorded outside the Borough, making a nett total of 148 (73 boys and 75 girls). Such births constituted 4·8 per cent. of all births, 0·2 per cent. more than in 1909. (See Table 2.) The highest proportion of illegitimate to all births was recorded in Lancaster Gate West, Ward (10·0 per cent.), and the lowest in Harrow Road Ward (3·4 per cent.).

NOTIFICATION OF BIRTHS.—The certificates received under the "Notification of Births Act, 1907" (adopted by the Council in 1908), numbered 2,793, but 86 of them were repeat notifications, leaving a nett total of 2,707. The certificates received from medical practitioners numbered 528 (or 18·9 per cent. of the total only), while those from parents (1,111) and midwives (1,007) constituted 39·7 and 36·0 per cent. respectively.

* The total entered in the Hospital Register as belonging to Paddington was 183, but 17 of the children were born to non-resident mothers admitted from a Rescue Home in the Borough, all the 17 children being illegitimate.

† The Registrar-General, in his "Annual Summary," gives the corrected total of births belonging to the Borough as 3,084, and the birth-rate, 20·2.

TABLE 2.

BIRTHS.

PADDINGTON.

Corrected as fully as possible.

Area.	Corrected Totals.		All Births.				Illegitimate Births.		
			Rates per 1,000 persons.		Rates per 1,000 females, aged 15-45 years.		Corrected Totals.	Percentage of all Births.	
	1910	1909.	1910.	1909.	1910.	1909.		1910.	1909.
BOROUGH.	5,022	3,031	19.83	20.01	61.65	62.19	148	4.8	4.6
Queen's Park ...	406	382	25.14	23.49	107.72	100.69	17	4.1	2.8
Harrow Road ...	717	741	23.46	24.50	88.09	91.90	25	3.4	1.8
Maida Vale ...	407	392	19.71	19.18	55.73	54.26	18	4.4	6.8
Westbourne ...	468	470	17.84	18.10	54.77	55.59	24	5.1	6.5
Church ...	720	743	25.15	26.19	94.15	98.12	47	6.5	4.5
Lancaster Gate, West	70	63	8.32	7.48	18.32	16.52	7	10.0	11.1
" East	58	48	7.34	6.07	14.38	11.91	3	5.1	2.0
Hyde Park ...	176	192	12.70	13.84	30.61	33.24	7	3.9	7.8

TABLE 3.

BIRTHS AND BIRTH-RATES.

District.	Registered Births.*		Rates per 1,000 persons.		Rates Per 1,000 females, aged 15-45 years.	
	1910.	1909.	1910.	1905-09.	1910.	1905-09.
PADDINGTON ...	2,908	28.95	19.00	20.55	58.83	63.63
London ...	116,227	117.547	23.87	25.79	87.21	94.22
Kensington ...	3,006	31.88	16.37	18.20	45.45	50.52
Westminster ...	2,364	25.18	14.13	15.75	42.93	47.85
Marylebone ...	2,556*	25.34	20.41	20.18	61.92	61.30
Hampstead ...	1,270	12.82	13.27	14.92	35.03	39.37
Willesden ...	3,808	40.39	22.93	27.57	82.52	99.24

* From the Quarterly Reports of the Registrar-General, but the total for Marylebone has been corrected for births in Queen Charlotte's Hospital not belonging to that Borough.

The Act requires the notification of miscarriages after a pregnancy of twenty-eight weeks, as well as of still-births at term. Seventy-two (72) children were reported as still-born during the past year, equal to 2·6 per cent. of all the births reported, as compared with 2·8 per cent. in 1909. The proportion of miscarriages is not known.

The legitimate births notified numbered 2,620 [68 (2·5 per cent.) being still-born], and the illegitimate, 72 [4 (5·5 per cent.) still-born]. The illegitimate births notified were equal to 2·6 per cent. of all births, as compared with 5·3 per cent. of registered births. From the Workhouse 104 certificates were received, 5 (4·8 per cent.) relating to still-births, and from nursing homes, 19 (all children being born alive). The births of 42 twins, and one set of triplets were notified last year, as compared with 30 twins and one quadruplet in 1909. Of the children born at multiple births reported last year only two (twins) were notified as still-born.

The number of notifications received each quarter rose from 641 in the first to 693 in the fourth, and the ratio of births registered after notification followed the same course. The improvement in notification is clearly shown in the appended figures which give the ratios (percentages) of births which were registered in each of the three Registration Sub-Districts and the whole Borough after notification.

PERCENTAGES OF BIRTHS REGISTERED DURING 1910, AFTER HAVING BEEN NOTIFIED.

Quarters.	Registration Sub-District.			Whole Borough.
	North.	Central.	South.	
1	83·7	69·1	65·1	76·0
2	83·7	78·6	78·2	81·0
3	90·4	82·4	81·8	89·4
4	93·9	91·4	87·1	92·1
Year	87·8	81·7	78·3	84·4
1909	79·1	71·6	49·0	73·2

The corresponding tabulation with respect to Wards has not been made, but comparing the numbers of births *belonging* to each Ward with the notifications received therefrom, it appears that the notifications exceeded the registrations in Westbourne (104·3) and Lancaster Gate, East, (101·8). The excess in the former Ward is explained by the presence of the Workhouse, but the reason for that in the latter cannot be given. In the other Wards, Harrow Road (96·8 per cent.) showed the highest, and Lancaster Gate, West, (78·0 per cent.) the lowest.

Prosecutions were ordered by the Council with respect to 41 failures to comply with the Act, the results of which will be found under LEGAL PROCEEDINGS.

SICKNESS.

There was a most satisfactory reduction in the number of cases of infectious disease reported during the year, the total cases decreasing from 942 in 1909 to 523 last year (Table 4). In 1908 they numbered 970. Fewer cases of each disease were reported with the exceptions of enteric (*typhoid*) fever—an increase of 11 cases—and puerperal fever—an increase of 6 cases. Too much importance should not be attached to the increase in the crude number of cases of the former disease, owing to the frequency of mistake in diagnosis. The true state of the case will become evident when the diseases themselves are dealt with. (See ENTERIC FEVER). The morbidity rates showed considerable decreases below the mean rates for the preceding quinquennium (Table 4) except in the cases of the two diseases

already mentioned. The changes were, however, much less marked than those between the rates for last and the preceding years. Thus, in the case of diphtheria last year's rate was 0·76, while that for the preceding year was 1·14, and the rates for scarlet fever in the two years were 1·69 and 4·15 respectively.

TABLE 4.

NOTIFICATIONS.

PADDINGTON.

Corrected for duplicate certificates only.

	Small-pox.	Diphtheria.	Membranous Croup.	Erysipelas	FEVERS,				TOTALS.
					Scarlet.	Enteric. (Typhoid)	Continued.	Puerperal	
Cases certified—									
1910...	—	116	—	100	258	40	—	9	523
1909...	—	173	2	106	629	29	—	3	942
Morbidity Rates*									
1910...	—	0·76	—	0·65	1·69	0·26	—	0·05	3·43
1905-09...	0·00	0·99	0·02	0·81	3·83	0·23	0·00	0·04	5·93

* Per 1,000 persons of all ages, except those from puerperal fever (per 1,000 females).

The sex-age distribution of the cases, as certified, is given in Table 5, as well as the morbidity rates (all ages) for each sex. With the exception of scarlet fever, more cases were reported among females than males, as regards numbers, and in the case of erysipelas relatively as regards rates. From a comparison of the mean rates the increase in prevalence of enteric fever last year was greater among females than males. The distribution of cases certified according to residences of the patients (Table 6) shows, with few exceptions, the same satisfactory reduction in prevalence of disease as did the figures in Table 4. All the morbidity rates for last year were notably below their respective mean rates.

For the purposes of comparing the prevalence of disease in the Borough, with that in the Metropolis and the districts circumjacent to the Borough, the numbers of cases mentioned in the Quarterly Reports of the Registrar-General have been used (Table 7), and hence the small differences between the local rates in that table and those in Table 4. Westminster was the only District in which smallpox was reported during the year (1 case). The highest rate from diphtheria was that of Marylebone (1·01) and the lowest, that of Hampstead (0·53), that of Paddington (0·78) being the next lowest. Willesden had the highest rate from scarlet fever (1·89) and Kensington, the lowest (1·43), while Willesden had the lowest rate from enteric fever (0·14), and Westminster the highest (0·29). Of the rates due to puerperal fever that of Willesden (0·07) was the highest, and that of Hampstead (0·02) the lowest, but all the rates were very near each other.

The diagram of the weekly morbidity rates from scarlet fever and diphtheria faces page 8. The weekly local rates are compared with those for the Metropolis, the rates recorded last year, and those recorded during the ten years 1900-09 being given in each case.

TABLE 5.
NOTIFICATIONS: PADDINGTON.

Ages. (Years.)	Smallpox.		Diphtheria.		Membranous Croup.		Erysipelas.		FEVERS.							
									Scarlet.		Enteric. (Typhoid.)		Continued.		Puerperal.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—	1	...	...	2	4	...	2	...	...	...	...	...	...
1—	5	3	...	...	...	1	6	3	...	...	...	...	...	...
2—	5	2	...	...	1	...	14	11	...	1	...	...	...	...
3—	5	7	...	...	1	...	15	10	1	...	...	...	...	...
4—	9	6	...	...	1	...	8	11	2	...	...	...	...	...
5—	23	23	...	...	1	4	69	63	5	3	...	...	...	...
13—	1	1	4	...	1	...	...	...	...
15—	5	11	...	...	5	9	12	15	3	7	...	...	...	2
25—	3	7	...	...	27	33	5	9	7	10	...	...	...	7
65—	1	...	...	3	7	...	...	...	...	...	...	...	...
All Ages.	55	61	...	...	41	59	130	128	18	22	...	...	...	9
Rates.*	0.84	0.70	...	...	0.62	0.67	1.98	1.47	0.27	0.25	...	...	...	0.10
1910	0.84	0.70	...	...	0.62	0.67	1.98	1.47	0.27	0.25	...	...	...	0.10
1905-09	...	0.01	0.86	0.93	0.03	0.00	0.85	0.78	4.18	3.55	0.25	0.21	...	0.00	...	0.07

* Rates per 1,000 persons, except puerperal fever (females).

TABLE 6.
NOTIFICATIONS: PADDINGTON.

Disease.		Queen's Park.	Harrow Road.	Maida Vale.	West- bourne.	Church.	Lancaster Gate, West. East.		Hyde Park
Smallpox	...	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)
Diphtheria	...	19 (21)	24 (41)	12 (22)	13 (27)	28 (45)	6 (2)	9 (6)	6 (9)
Membranous Croup	...	— (—)	— (2)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)
Erysipelas	...	13 (9)	27 (23)	12 (16)	20 (22)	19 (29)	1 (1)	3 (1)	5 (5)
Fevers	Scarlet	36 (61)	75 (166)	33 (45)	27 (107)	61 (171)	11 (19)	1 (12)	14 (48)
	Enteric	2 (3)	7 (2)	7 (5)	3 (2)	13 (10)	2 (—)	1 (2)	5 (5)
	Continued	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)
	Puerperal	— (—)	2 (—)	1 (—)	4 (1)	2 (2)	— (—)	— (—)	— (—)
Totals	...	70 (94)	135 (234)	65 (88)	67 (159)	123 (257)	20 (22)	14 (21)	30 (67)
Rates*, 1910	...	4.33	4.41	3.14	2.55	4.29	2.37	1.77	2.16
" 1905-09	...	6.71	7.87	5.33	5.20	7.40	3.14	3.09	3.66

* Per 1,000 persons.

TABLE 7.

MORBIDITY RATES.*

Borough, Metropolis, and Districts Circumjacent to the Borough.

Disease.	PADDINGTON.		London.		Kensing- ton.		Westmin- ster.		Maryle- bone.		Hamp- stead.		Willesden.	
	1910	Mean	1910	Mean	1910	Mean	1910	Mean	1910	Mean	1910	Mean	1910	Mean
Smallpox ...	—	0·00	0·00	0·00	—	—	0·00	0·00	—	0·00	—	0·00	—	—
Diphtheria† ...	0·78	1·03	1·13	1·60	0·87	1·06	0·89	1·03	1·01	0·98	0·53	0·84	1·00	1·66
Erysipelas ...	0·65	0·81	0·82	0·95	0·77	0·76	0·36	0·62	0·93	1·09	0·33	0·47	0·43	0·58
Fever {	Scarlet ...	1·70	3·81	2·16	4·39	1·43	2·42	1·48	2·92	1·66	3·08	1·50	3·11	1·89
	Enteric† ...	0·26	0·23	0·26	0·29	0·22	0·24	0·29	0·23	0·17	0·28	0·21	0·22	0·14
	Puerperal	0·06	0·40	0·06	0·05	0·05	0·04	0·03	0·03	0·03	0·04	0·02	0·04	0·07

Mean rates for Quinquennium 1905-09.

* Compiled from the Quarterly Reports of the Registrar-General. Rates per 1,000 persons, except those from puerperal fever (per 1,000 females).

† Including Membranous Croup.

‡ Including Continued Fever.

DEATHS.

The deaths registered in the Borough last year numbered 2,004 and were 150 fewer in number than in the preceding year (2,154) and 192 less than the annual average for the ten years 1900-09. In the first five years of that period (1900-09) the deaths registered locally averaged 2,265 and in the second, 2,128, although the *estimated* population steadily increased during the whole time. The crude death-rate* was 13·14 per 1,000 persons, as compared with corresponding rates of 14·22 in 1909, and 13·58 in 1908, and a mean rate of 14·87 for the decennium, the mean rates for the two quinquennia included therein being 15·56 and 14·18. (Table I, Appendix A). Comparing the crude rates recorded in each quarter of last year with the corresponding rates for the preceding quinquennium (*see below*), it appears that last year's rates for the first three quarters were each below the mean, and that in the fourth quarter there was a comparatively trifling increase.

Quarters.	1	2	3	4
1910.	14·73	13·23	10·02	14·73
1905-09.	16·98	13·64	11·87	14·59
Differences	- 2·25	- 0·41	- 1·85	+ 0·14

The deaths registered in the Borough included 384 of persons who were non-residents, one more than the annual average for 1900-09, while 175 deaths of residents (average, 202) occurred beyond the Borough, giving a nett total of 1,795 deaths of residents during the year, 169 fewer than the nett total for 1909, and 220 less than the decennial average (2,015). Last year's nett death-rate was 11·77 per 1,000 persons, which was 1·19 less than that for 1909, and 1·87 less than the decennial mean. The mean nett rates for the two quinquennia were,

* "Crude death rate" is the term applied to the rate based on the deaths as registered in the Borough.

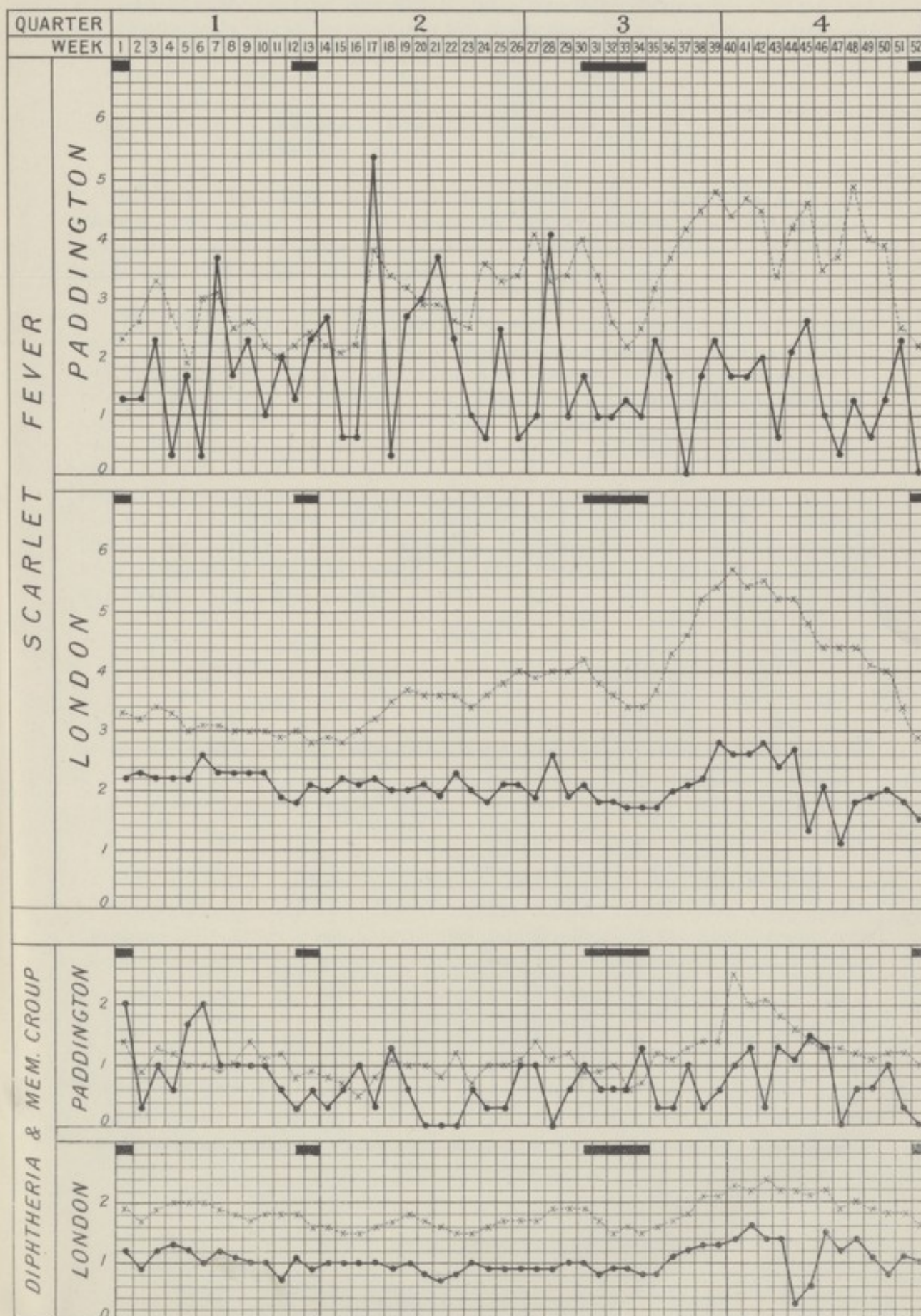
"Nett death rate" is the rate based on the corrected total of deaths, *i.e.*, after deducting those of non-residents dying within the Borough and adding those of residents dying outside the Borough.

"Corrected death rate" is the rate obtained after correcting the nett rate by the application of factors based on the differences between the sex-age composition of the local population and that of the district (England and Wales or London, as the case may be) selected as the "standard district."

NOTIFICATION CHART.

Rates per 1000 persons.

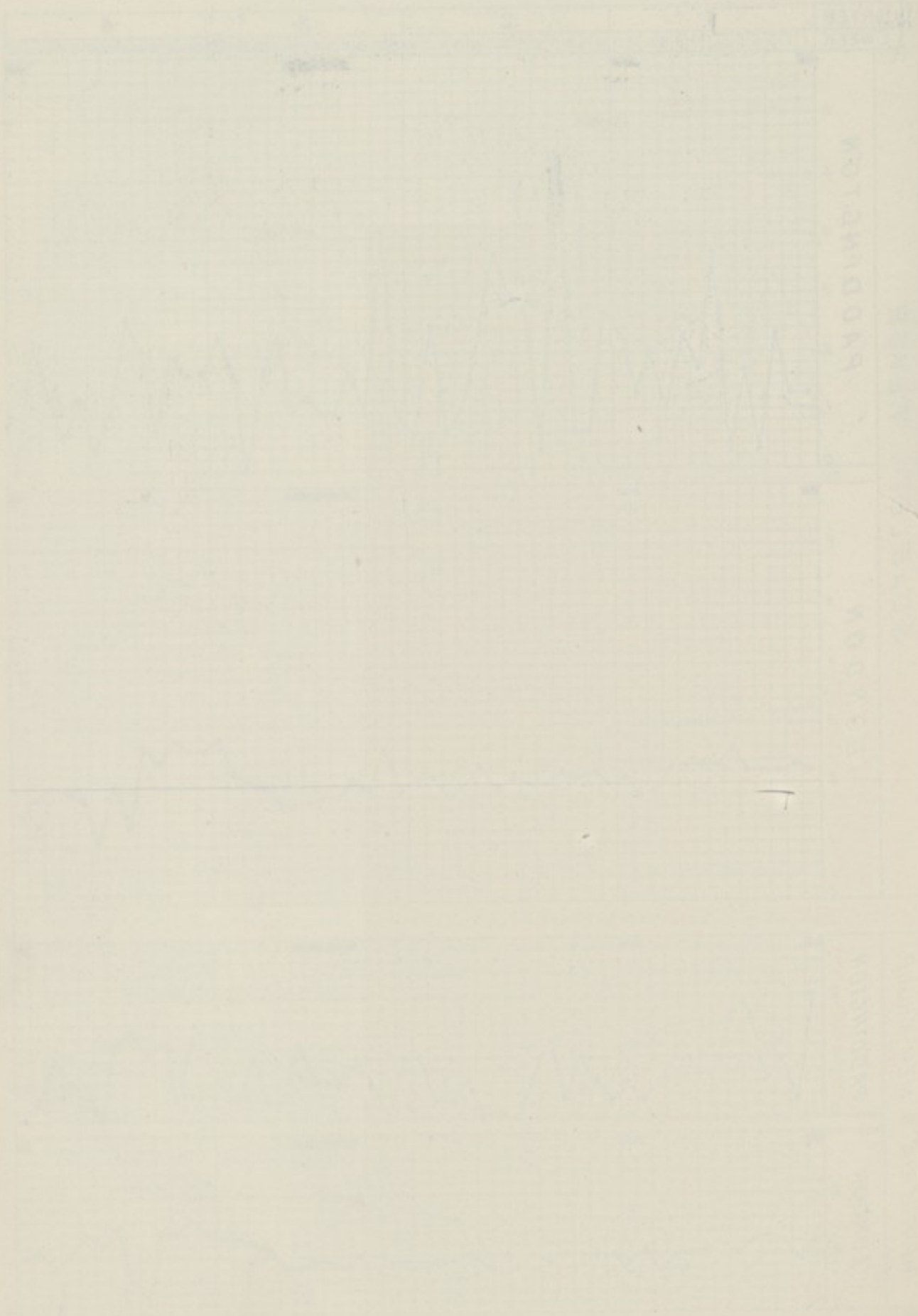
1910
 Average during 10 years ending 1909.
 Duration of School Holidays



TRANS. MONTHLY

STATIONARY

STATIONARY



1900-04, 14.39; 1905-09, 12.89. (Table I, Appendix A). A comparison of the nett rates for each quarter of the year shows that the fourth quarter was the only one in which the rate exceeded the mean, the excess being slightly greater than that observed in the crude rate, and the reduction in the rate for the second was also greater than that in the crude rate. (*See below*).

Quarters.	1	2	3	4
1910.	13.44	11.55	8.63	13.60
1905-09.	15.60	12.34	10.67	13.29
Differences	-2.16	-0.79	-2.04	+0.31

It will be shown later that the mortality from diarrhoea was much below the average during the third quarter, while there was some excess in the fourth. The notable decreases in the rates for the third quarter recorded during the last two years were undoubtedly due to the absence of any outbreak of that disease.

The nett total of 1,795 deaths included 868 of males and 927 of females, the nett rates being 13.28 and 10.64 respectively, both of which show reductions from the mean rates, viz.: 14.51 and 11.68 (Table 8). In that table will also be found the numbers (corrected) of deaths belonging to each Ward and the nett rates. The corrected numbers of deaths belonging to each Ward during 1901-10, are given in Table II, Appendix A. As regards the rates for "persons" the highest rate recorded last year was that of Church Ward (15.36; 17.31 in 1909), and the lowest that of Lancaster Gate, West (6.41; 8.66 in 1909). The Harrow Road rate was the only one in excess of the mean (rate, 12.83; mean, 12.58), the greatest reduction from the mean being shown by the Hyde Park rate (8.59 in 1910; mean, 11.08, a decrease of 22.5 per cent.). The only increases in the rates for the separate sexes were those in Harrow Road (male, 1910, 13.46; mean, 13.03; female, 1910, 12.25; mean, 12.20) and Lancaster Gate, East (female, 1910, 6.22; mean, 6.12).

TABLE 8.
DEATHS: NETT TOTALS AND MORTALITY RATES.

PADDINGTON.

District.	Deaths, All ages, all causes. 1910.			Mortality Rates.*					
				1910.			1905-09.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
BOROUGH	868	927	1,795	13.28	10.64	11.78	14.51	11.68	12.89
Wards.									
Queen's Park	97	101	198	11.98	12.53	12.06	13.48	12.79	13.14
Harrow Road	195	197	392	13.46	12.25	12.83	13.03	12.20	12.58
Maida Vale	115	130	245	13.90	10.50	11.86	15.84	11.39	13.17
Westbourne	144	149	293	13.35	9.64	11.17	14.29	11.84	12.85
Church	219	221	440	16.08	14.72	15.36	17.80	15.67	16.68
Lancaster Gate, West	20	34	54	7.05	6.08	6.41	9.97	7.19	8.13
Lancaster Gate, East	19	35	54	8.33	6.22	6.83	12.12	6.12	7.86
Hyde Park	59	60	119	11.87	6.74	8.59	13.65	9.64	11.08

* Per 1,000 individuals.

The usual rates for the sex-age groups of the population of the Borough have been calculated, and are presented in Table 9. It is felt, however, that not much reliance can be placed on the rates, and they are included in the report more for continuity's sake than for any deduction which can be drawn from them.

TABLE 9.

SEX-AGE NETT MORTALITY RATES*: PADDINGTON.

Sex.	Age.	Period.	Borough.	Wards,							
				Queen's Park.	Harrow Rd.	Maida Vale.	Westbourne.	Church.	Lancaster Gate		Hyde Park.
									West.	East.	
MALES.	0—	1910 ... 1905-09	103.79 128.13	99.47 132.77	92.76 104.76	98.90 136.82	100.41 111.91	135.77 162.32	37.03 81.34	37.03 96.13	89.88 134.88
	1—	1910 ... 1905-09	18.55 16.38	11.90 14.79	12.17 11.80	22.23 21.18	12.07 17.39	33.71 22.46	15.87 4.73	— 14.64	20.13 11.33
	5—	1910 ... 1905-09	2.96 2.10	2.32 2.16	4.43 2.12	2.83 1.23	1.78 2.94	3.73 1.98	3.05 3.02	— 2.00	— 1.50
	15—	1910 ... 1905-09	2.03 2.49	2.91 3.86	3.05 2.50	1.76 1.81	1.76 2.26	1.84 2.79	2.68 1.60	— 1.66	— 1.98
	25—	1910 ... 1905-09	10.18 12.01	8.57 11.94	10.03 10.47	11.60 12.79	10.64 12.89	11.08 14.70	7.47 7.97	9.79 10.82	9.32 10.34
	65—	1910 ... 1905-09	91.20 91.14	167.59 113.63	109.09 93.88	86.20 108.07	80.26 60.74	103.96 119.81	21.89 84.31	41.95 68.22	82.30 89.02
FEMALES.	0—	1910 ... 1905-09	86.26 102.95	100.55 85.83	71.60 76.79	93.02 121.97	104.60 115.16	101.74 141.92	22.22 35.47	44.44 53.16	51.28 100.97
	1—	1910 ... 1905-09	13.40 14.98	11.74 14.91	11.39 12.19	12.57 14.19	7.48 12.53	24.79 23.08	— 5.40	7.46 1.48	* 7.04 14.69
	5—	1910 ... 1905-09	2.89 2.38	2.88 1.22	2.18 2.09	2.58 1.44	1.62 2.78	4.86 3.30	2.50 3.47	2.89 2.86	2.56 3.05
	15—	1910 ... 1905-09	1.49 1.67	0.65 2.94	3.43 2.37	1.34 1.24	0.87 1.26	1.39 2.50	1.89 1.08	1.30 1.17	0.91 1.00
	25—	1910 ... 1905-09	7.47 8.10	9.40 10.42	8.08 8.24	8.61 8.15	7.51 8.31	9.49 10.85	4.80 5.22	4.20 4.24	4.52 6.38
	65—	1910 ... 1905-09	70.20 76.89	106.70 101.59	83.14 80.43	65.64 81.00	44.48 59.52	107.19 93.52	48.95 65.08	63.55 63.18	56.36 76.22

* Per 1,000 individuals in each group.

"—" no death.

For comparison between the nett rates of the Borough, the Metropolis, and the Districts circumjacent to the Borough, the figures published by the Registrar-General have been used. (See Table 10). At the present moment only the "All Causes" rates will be dealt with, those in the other columns being reserved for consideration when the diseases are under review. The highest rate (All Causes) recorded last year was that of Marylebone (12.78) which was 1.04 above that of the Borough, and the lowest, that of Hampstead (8.59) which

was 3.15 below the local rate. All the rates recorded last year were below the means, the decrease being greatest (16.5 per cent.) in Willesden, and least (8.8 per cent.) in Paddington. It should be noted, however, that the local mean rate was lower than any of the metropolitan rates, that of Hampstead excepted.

TABLE 10.
NETT MORTALITY RATES.*

District.	Period.	All Causes	Small-pox.	Measles	Scarlet Fever.	Diphtheria.	Whooping Cough.	Enteric Fever	Diar-rhoeal Dis.	Phthisis.	Other Tub. Dis.	Cancer.	Infantile Mortality.	
													Nett.	C'r'd§
PADDINGTON	{ 1910	11.74	...	0.45	0.04	0.06	0.21	0.03	0.28	0.84	0.28	1.08	101	96
	{ 1905-09	12.86	...	0.24	0.08	0.08	0.21	0.03	0.44	1.04	0.37	1.10	113	107
London ...	{ 1910	12.68	...	0.41	0.04	0.09	0.07	0.04	0.28	1.14	0.40	1.05	102	103
	{ 1905-09	14.48	0.00	0.38	0.11	0.13	0.28	0.04	0.56	1.37	0.51	1.03	118	120
Kensington	{ 1910	11.93	...	0.29	0.00	0.09	0.17	0.03	0.18	0.77	0.27	0.97	113	106
	{ 1905-09	13.51	...	0.28	0.06	0.10	0.22	0.04	0.44	1.07	0.43	1.02	132	126
Westminster	{ 1910	11.32	...	0.12	0.02	0.06	0.11	0.03	0.11	1.11	0.27	1.05	90	84
	{ 1905-09	13.00	0.00	0.14	0.07	0.08	0.11	0.03	0.25	1.36	0.37	1.04	111	103
Marylebone	{ 1910	12.78	...	0.22	0.05	0.07	0.34	0.05	0.17	1.09	0.19	1.24	98†	108
	{ 1905-09	14.79	...	0.24	0.10	0.08	0.18	0.02	0.34	1.39	0.31	1.17	111	109
Hampstead	{ 1910	8.59	...	0.16	0.02	0.05	0.11	0.03	0.08	0.58	0.23	0.94	62	60
	{ 1905-09	9.44	...	0.10	0.05	0.06	0.12	0.03	0.12	0.71	0.23	0.88	80	76
Willesden	{ 1910	9.11	...	0.18	...	0.07	0.17	0.01	0.19	0.70	0.35	0.93	82	?
	{ 1905-09	10.90	...	0.29	0.08	0.09	0.30	0.04	0.47	0.90	0.32	0.80	106	

Compiled in part from the Reports of the Registrar-General and in part from information supplied by the Medical Officers of Health.

* Rates per 1,000 persons of all ages except Infantile Mortality, per 1,000 births registered.

† Corrected from figures supplied by the Medical Officer of Health of Marylebone.

§ From Annual Supplement of the Registrar-General.

TABLE 11.
CORRECTED MORTALITY RATES: ALL CAUSES.

District				Standard Rate.	Corrected Rate, 1910.	Excess (+) Defect (-)	Corrected Mean Rate, 1905-09.	Increase (+) Decrease (-)
BOROUGH ...				17.10	12.58	-4.52	13.76	-1.18
Wards.	Queen's Park ...	...	...	16.43	13.35	-3.08	14.54	-1.19
	Harrow Road ...	...	...	19.02	12.27	-6.75	12.03	+0.24
	Maida Vale ...	...	...	16.62	12.98	-3.64	14.42	-1.44
	Westbourne ...	...	...	18.96	10.72	-8.24	12.32	-1.60
	Church ...	...	...	17.03	16.37	-0.66	17.81	-1.44
	Lancaster Gate, West ...	...	...	15.01	7.77	-7.24	9.85	-2.08
	" East ...	...	...	14.76	8.42	-6.34	9.68	-1.26
Hyde Park ...				16.18	9.66	-6.52	12.45	-2.79
London ...				17.31	13.33	-3.98	15.22	-1.89
Paddington ...				17.10	12.53	-4.57	13.73	-1.20
Kensington ...				16.88	12.86	-4.02	14.56	-1.70
Westminster ...				16.22	12.70	-3.52	14.57	-1.87
Marylebone ...				17.08	13.61	-3.47	15.76	-2.15
Hampstead ...				16.13	9.69	-6.44	10.64	-0.95
Willesden ...				16.98	9.77	-7.21	11.69	-1.92

Both in the Wards of the Borough and (more so) in the outside areas selected for purposes of comparison, the death-rates are much affected by variations in the sex-age compositions of the populations. To eliminate such disturbances, the corrected rates given in Table 11 have been calculated. The rates for the three southern Wards of the Borough compare favourably with those for Hampstead and Willesden.

SMALLPOX.

For the fourth year in succession the Borough remained free from this disease, no case having been reported since 1906. In the Metropolis seven cases were notified during the year, but it is not known how many of them were erroneously diagnosed. That total was one-third of that for 1909 (21 cases), but showed an increase of three above the total for 1908 (four cases). According to the returns issued by the Local Government Board there were 101 cases of this disease notified in the 255 sanitary districts (with a population at the last census of upwards of 15 millions) sending weekly returns of notifications to the Board. The run of the figures given below suggest that there is some danger of the disease entering on a phase of renewed activity within the next year or so.

SMALLPOX.

Cases reported: not corrected for errors of diagnosis.

	Metropolis.					Extra-Metropolitan Districts.				
	Quarters—1.	2.	3.	4.	Year.	1.	2.	3.	4.	Year.
1901	...	7	272	1,416	1,702	80	75	54	318	527
1902	...	4,475	2,928	352	43	7,798	1,843	2,171	981	1,529
1903	...	38	162	121	96	417	2,118	3,210	1,424	691
1904	...	181	251	42	23	497	1,345	1,519	1,098	1,283
1905	...	34	36	6	1	77	1,093	602	310	271
1906	...	14	16	1	—	31	545	275	100	70
1907	...	2	3	1	3	9	69	32	16	2
1908	...	2	—	1	1	4	4	5	5	7
1909	...	6	—	1	14	21	37	12	2	16
1910	...	3	2	2	—	7	47	27	15	12

Such surmise lends additional interest to the Vaccination Returns for the past few years. According to the information furnished by the Vaccination Officer 2,242 children out of 2,920 born during 1909 were successfully vaccinated during that year, the last for which a final return is available. During the first half of last year, 1,089 out of 1,499 children born during that period were vaccinated. It will be seen from the appended tabular statement that 84·2 per cent. of the children born during 1909 could be accounted for as either dead or (officially) protected against smallpox, and 15·7 per cent. were not so accounted for, those figures showing a slight increase in the first category and a slight decrease in the other.

VACCINATION RETURNS: PADDINGTON.

	Births.	Successfully Vaccinated.	Insusceptible of Vaccination.	Died Unvaccinated.	Per cent. of Births. Cols. 2, 3, & 4.	Vaccination Postponed.	Certificates under the Act.	Remainder.*	Per cent. of Births. Cols. 6, 7, & 8.
Cols.	1	2	3	4	5	6	7	8	9
1901	3,364	2,676	5	313	89·0	23	34	313	11·0
1902	3,262	2,629	12	291	89·8	35	19	276	10·1
1903	3,315	2,621	10	296	88·2	48	32	308	11·7
1904	3,311	2,578	8	307	87·4	52	22	344	12·6
1905	3,188	2,495	11	261	86·8	61	40	320	13·2
1906	3,174	2,545	9	224	87·5	36	41	319	12·5
1907	3,093	2,349	7	255	86·4	28	97	356	15·6
1908	3,098	2,346	8	244	83·8	28	201	271	16·1
1909	2,920	2,242	11	207	84·2	27	243	190	15·7
1910†	1,499	1,089	3	101	79·5	40	162	104	20·4

* Including "gone away," "false addresses," "appraisals to other districts" &c. † Provisional return only.

At the same time it must be recognised that children returned as "insusceptible" of vaccination, although officially recognised as beyond the scope of the Vaccination Acts, cannot be regarded as protected against smallpox, and in any estimate of the proportion of unprotected children, they must be reckoned among the unvaccinated. During the five years 1905-09 14,282 children survived the first year of their lives, of whom 2,304 (or 16.1 per cent.) were left unprotected against smallpox. During 1906-10 the deaths at ages between one and five years numbered 796, so that there remain upwards of 1,500 children under five years of age who, exposed to the risk of taking the disease in its worst form, constitute a menace to the whole Borough. No estimate can be formed of the total number of unvaccinated persons residing in the Borough, which takes a high position in the ranks of vaccinated communities, but the children already referred to are sufficient to cause a fairly extensive outbreak of smallpox once the disease gets a footing in the Borough.

The percentages of children successfully vaccinated in each of the three last years for which complete returns are available (*viz.*, 1907, 1908 and 1909) are 75.94, 75.72 and 76.78 respectively. Against the small increase observed in the last year must be set off the increase in the proportion of "conscientious objectors," the percentages of children exempted by certificates increasing from 3.13 in 1907 to 6.48 in 1908 and 8.32 in 1909. Doubtless the occurrence of a few cases of smallpox will greatly alter the present state of unprotectedness, but it requires no words to condemn the folly of running an absolutely unnecessary risk before securing the protection which vaccination affords.

DIPHTHERIA.

The cases of this disease recorded last year numbered 116,* as compared with 175 in the previous year, and 146 in 1908. The total for 1909 included 2 cases of membranous croup, and that for 1908, 4 cases; but last year no case was reported under that designation. Last year's total was lower than that of any year since 1901, except 1905 (96 cases). The morbidity rate (0.76) was 25 per cent. below the mean rate (1.01). In Lancaster Gate, West, Ward alone, were more cases reported last year than in 1909 (Table 6).

According to the Registrar-General's figures (Table 7) the morbidity in the Borough was 0.78 per 1,000, 0.25 less than the mean rate (1.03). In Hampstead alone was the rate for last year (0.53) less than that for the Borough, while the mean rates for Marylebone (0.98) and Hampstead (0.84) were below that for the Borough (1.03).

Table 12 gives a comparison of the numbers of cases reported in each quarter of the past and the preceding five years. The cases reported in the first quarter (40) were two in excess of the average (38), those in the remaining three less than the averages.

The 116 reported cases included 13 subsequently certified to have been erroneously diagnosed (equal to 11.2 per cent.), the average for the quinquennium being 13.3. Of the remaining 103 cases, in 11 the infection appeared to have been contracted outside the Borough, including one case which occurred in hospital during the treatment of another disease.

One patient was reported to have a second attack during the year, the particulars being:—

F. M., f. æt 8, 1st attack, 12 vii., '08; 2nd attack 25 x., '10.

The diagnosis was confirmed on both occasions.

* The certificates of diphtheria received actually numbered 121, but in 5 cases it was found subsequently that the disease was scarlet fever, and the cases were transferred to that heading.

TABLE 12.

NOTIFICATIONS : QUARTERLY FIGURES.

District.	Year.	Diphtheria (including Mem- branous Croup).				Scarlet Fever.				Enteric Fever (including Continued Fever).				Puerperal Fever			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
BOROUGH	1910	40	20	26	30	65	79	63	51	6	9	11	14	1	—	3	5
	1905-09	38	28	40	46	115	138	150	173	7	6	9	13	2	1	1	3
Queen's Park	1910	5	3	4	7	9	13	10	4	—	—	2	—	—	—	—	—
	1905-09	4	2	3	5	12	18	20	28	1	0	1	1	0	—	0	1
Harrow Road	1910	8	5	6	5	17	17	27	14	—	5	1	1	1	—	1	—
	1905-09	11	6	11	14	35	39	39	45	1	1	2	1	0	0	0	0
Maida Vale	1910	6	2	2	2	7	11	5	10	—	2	4	1	—	—	1	—
	1905-09	5	4	7	5	12	17	15	18	1	1	2	4	0	0	—	0
Westbourne.	1910	5	5	2	1	7	9	3	8	1	1	—	1	—	—	1	3
	1905-09	5	7	6	6	18	18	25	23	1	1	1	1	—	0	0	0
Church	1910	12	2	8	6	15	22	12	12	2	1	2	8	—	—	—	2
	1905-09	8	5	10	9	23	27	38	42	2	1	2	3	0	0	1	1
Lancaster Gate, West	1910	1	—	2	3	6	2	2	1	—	—	1	1	—	—	—	—
	1905-09	1	1	0	1	6	4	3	5	0	0	0	1	—	—	—	—
Lancaster Gate, East	1910	3	2	—	3	—	—	1	—	—	—	1	—	—	—	—	—
	1905-09	2	1	1	1	2	4	3	4	0	0	0	0	—	—	—	—
Hyde Park	1910	—	1	2	3	4	5	3	2	3	—	—	2	—	—	—	—
	1905-09	1	1	1	3	7	11	6	8	1	1	1	1	0	—	—	—

Average given at nearest whole number; hence—

0—an average between 0 and 0·5.

1— " " 0·5 and 1·5.

From each of two houses two cases were reported, the only instances of multiple infection during the year, but in one of the houses the second case was erroneously diagnosed. There was, therefore, only one secondary case (0·8 per cent.) during the year. In 1909 the secondary cases constituted 10·5 per cent. of all reported cases; and in 1908, 10·3 per cent. The house distribution of multiple cases, without correction for errors, during the last five years, is given below.

DIPHTHERIA.

(Including Membranous Croup).

No. of Houses with 2 cases	...	1910.	1909.	1908.	1907.	1906.
3	...	2	10	8	13	13
4	...	—	1	3	3	1
5	...	—	1	1	—	—
6	...	—	—	—	—	1

One hundred and eight patients (93·1 per cent. of the total number) were removed to hospital, including the cases erroneously diagnosed (Table 13). The percentage of patients receiving hospital treatment showed an increase of nearly 6 per cent. above the average for the five years 1905-09 (Table 14). The fatality of the disease was 6·7 per cent. last year, 2·7 less than the mean (Table 14), the whole of the decrease being among the patients treated in hospital.

TABLE 13.

Ward.	Diphtheria (including Membranous Croup.)				Scarlet Fever.				Enteric Fever (including Continued Fever.)			
	Cases.		Deaths.		Cases.		Deaths.		Cases.		Deaths.	
	Total Reported.	Removed to Hospital.	At Home.	In Hospital.	Total Reported.	Removed to Hospital.	At Home.	In Hospital.	Total Reported.	Removed to Hospital.	At Home.	In Hospital.
Queen's Park ...	19 (1)	19 (1)	—	1	36 (3)	34 (3)	—	2	2	2	—	—
Harrow Road ...	24 (4)	23 (4)	—	1	75 (5)	72 (5)	—	3	7 (3)	5 (3)	1	—
Maida Vale ...	12 (1)	12 (1)	—	—	33 (9)	33 (9)	—	—	7	5	—	—
Westbourne ...	13 (2)	13 (2)	—	1	27 (2)	26 (1)	—	—	3	2	1	—
Church ...	28 (4)	27 (4)	—	3 (1)	61 (9)	56 (7)	—	3	13 (2)	12 (2)	1	1
Lancaster Gate, West	5 (1)	4 (1)	1	—	11	11	—	—	2 (1)	1 (1)	—	—
East	9	7	—	1	1	1	—	—	1 (1)	1 (1)	—	—
Hyde Park ...	6	3	—	—	14 (1)	14 (1)	—	—	5	4	—	—

NOTE.—The figures in parentheses represent the errors of diagnosis.

TABLE 14.

	Diphtheria.		Scarlet Fever.		Enteric Fever.	
	1910.	Mean. 1905-09.	1910.	Mean. 1905-09.	1910.	Mean. 1905-09.
Removed to Hospital* ...	93·1	87·3	95·7	92·4	80·0	72·8
Fatality †						
At Home ...	12·5	11·7	—	0·9	37·5	26·0
In Hospital ...	6·3	9·0	3·1	2·3	4·0	10·4
Total ...	6·7	9·4	3·0	2·1	12·1	15·2
Mortality ‡	0·06	0·08	0·04	0·08	0·03	0·03

* Per cent. of all cases reported.

† Per cent. of attacks, after corrections for errors of diagnosis, based on deaths of patients reported during the year.

‡ Per 1,000 persons of all ages—Rates based on total numbers of deaths recorded.

The deaths from diphtheria numbered 9, but that total included one death of a patient reported with the disease during 1909, and a fatal case not reported during life (post mortem diagnosis). The mortality last year was 0·06 per 1,000 persons, or 0·02 less than the quinquennial mean rate (Table 14). Of the districts mentioned in Table 10, Hampstead is the only one with a lower nett mortality (0·05), but after correction (Table 15), lower rates than that for the Borough (0·08) are obtained for Hampstead (0·07) and Willesden (0·06).

In August last the Local Government Board made an Order sanctioning the supply of diphtheria antitoxin and of medical assistance in connection therewith for the poorer inhabitants of the Borough. In a covering letter the Board stated very definitely that the use of antitoxin was not to replace the admission of patients to hospital, but was intended to secure the early administration of the serum. It was also proposed that the serum should be used as a prophylactic for persons who had been in contact with patients suffering from diphtheria

A report was submitted to the Public Health Committee setting out the machinery necessary to give effect to the Order, but the Committee resolved to take no action for the present.

Of the value of the serum as a curative agent there is no room for doubt. As to its use as a prophylactic there is, however, considerable difference of opinion. Evidence has been recently adduced of the dangers arising from such use.* Persons subject to asthma appear to be quite unfit for prophylactic doses. A curious condition of hypersensitiveness has been observed in persons who, after a prophylactic dose, contract the disease, and a subsequent curative dose of the serum may prove to be ineffective and dangerous.

SCARLET FEVER.

Last year 260 persons were reported to have this disease, but in two cases the diagnosis was subsequently amended to one of enteric fever, and the cases were accordingly transferred to that heading, leaving 258 cases for consideration here.

Up to the end of 1909 the smallest (uncorrected) number of cases recorded in any year since 1901 was 277 (the total for 1905), from which figure the cases increased to 715 in 1906, 579 in 1907, 681 in 1908 and 629 in 1909. Last year's total shows, therefore, a great decrease (practically 59 per cent.) from that of the previous year. It is also the smallest total for the ten years 1901-10. The morbidity rate for last year (1.69) was less than half the mean rate (3.83) for the five years 1905-09 (Table 4). It will be seen from the figures given in Table 7 that the disease was markedly less prevalent in the Metropolis and in the districts circumjacent to the Borough. The local rate for the past year (1.70) was higher than those of the circumjacent districts, except Willesden, (1.89) but a good deal less than that for the whole Metropolis (2.16).

The uncorrected numbers of cases reported from each of the Wards of the Borough during the past two years are compared in Table 6. The figures for Queen's Park, Maida Vale and Lancaster Gate, West, Wards show the smallest changes. The numbers recorded in each quarter of the year are given in Table 12. The largest number of cases (79) was recorded in the second quarter, and the smallest (51) in the fourth, the usual autumnal increase in the disease being replaced by a distinct fall. The chart (facing page 8) clearly shows the variation in the prevalence curve of the disease during the year from the normal.

The 258 cases reported last year included 29 subsequently found to have been erroneously diagnosed, while of the 229 genuine cases, 14 were believed to have been due to infection contracted outside the Borough, including 3 cases contracted in out-lying institutions, and 15 to the return home of patients from hospital ("return cases"). The errors of diagnosis constituted 11.2 per cent. of the total reported, as compared with 6.3 in 1909 and an average of 5.2 per cent. during the five years 1905-9.

Two patients were reported during the year with second attacks of the disease, the diagnosis being confirmed on both occasions in each case. The particulars of the cases were—

W. J. C., m., æt 3, first attack 10.xi.'08, second 14.v.'10.
W. K., f., æt 7, first attack 28.i.'07, second 10.vi.'10.

The 258 notifications came from 240 houses, the secondary notifications (54) forming 20.9 per cent. of the whole, the corresponding proportion for the previous year having been 20.2. The house distribution of the notifications during the past six years, is given on the opposite page.

* See PUBLIC HEALTH, vol. xxiv., p. 132 (January, 1911).

Houses from which 2 notifications were received	1910.	1909.	1908.	1907.	1906.	1905.
2	23	62	57	63	77	31
3	9	26	30	21	23	6
4	3	3	13	7	7	3
5	1	1	5	2	4	—
6	—	—	1	2	2	—
7	—	—	2	2	1	—

After elimination of the errors of diagnosis, the distribution of the multiple cases, as regards houses and families, was as given below, the corresponding figures for the previous year being shown in *italic type* :—

	No. of Cases	2	3	4	5
In houses, 1910	...	21	7	2	1
" " 1909	...	<i>59</i>	<i>22</i>	<i>3</i>	<i>1</i>
In families, 1910	...	22	6	1	1
" " 1909	...	<i>51</i>	<i>14</i>	<i>4</i>	—

In nine instances the multiple cases were due to "return cases," and in three houses the disease spread to a second family. From five houses (families) two cases were reported on the same day, from two, three and from one, four. Three cases were reported on the same day from a canal boat, in addition to the number given above.

Of the 258 cases notified, 247 were removed to hospital, including 26 cases erroneously diagnosed. The cases removed constituted 95·7 per cent. of the whole, as compared with 96·1 per cent. in 1909 and an average of 92·4 per cent. during the five years 1905-09. (Table 14).

The fatality last year, after correcting for errors of diagnosis, was 3·0 per cent., 0·8 per cent. higher than it was in the previous year and 0·9 above the average for the five years 1905-9. All the deaths recorded last year occurred in hospital. The nett mortality which was 0·9 per 1,000 persons in 1909, fell to 0·04 last year, and was just half the mean rate for the period 1905-09. In Marylebone alone was the nett mortality from this disease above that recorded in the Borough (Table 10) and the same remark applies to the corrected rates (Table 15). There was no death from scarlet fever in Willesden last year.

TABLE 15.
CORRECTED MORTALITY RATES.*

District.	Diphtheria.			Scarlet Fever.			Enteric Fever.		
	Standard Rate.	Corrected Rate.		Standard Rate.	Corrected Rate.		Standard Rate.	Corrected Rate.	
		1910.	Mean. 1905-09.		1910.	Mean. 1905-09.		1910.	Mean. 1905-09.
PADDINGTON ...	0·392	0·08	<i>0·10</i>	0·133	0·05	<i>0·10</i>	0·143	0·03	<i>0·02</i>
London ...	0·501	0·09	<i>0·13</i>	0·169	0·04	<i>0·11</i>	0·142	0·04	<i>0·04</i>
Kensington ...	0·364	0·12	<i>0·13</i>	0·124	0·01	<i>0·08</i>	0·140	0·03	<i>0·04</i>
Westminster ...	0·316	0·09	<i>0·12</i>	0·109	0·03	<i>0·11</i>	0·152	0·03	<i>0·02</i>
Marylebone ...	0·367	0·09	<i>0·11</i>	0·125	0·07	<i>0·13</i>	0·144	0·05	<i>0·02</i>
Hampstead ...	0·359	0·07	<i>0·08</i>	0·122	0·03	<i>0·07</i>	0·143	0·03	<i>0·03</i>
Willesden ...	0·558	0·06	<i>0·08</i>	0·188	—	<i>0·07</i>	0·142	0·01	<i>0·03</i>

* See footnote, p. 8.

ENTERIC FEVER.*

Forty (40) notifications of this disease were received last year, the highest number since 1905, when 46 cases were reported. In each of the years 1906 and 1907, 35 cases were notified, in 1908, 32, and in 1909, 29, no corrections being made for errors of diagnosis. The morbidity rate was 0·26 per 1,000 persons last year, or 0·03 above the mean rate for the five preceding years (Table 4). The local rate for the year was exceeded by that of Westminster only, which was 0·29 (Table 7). In comparison with the preceding year more cases were reported last year in all the Wards of the Borough, except Queen's Park and Lancaster Gate, East (Table 6). The cases notified in each quarter of last year, except the first, were in excess of the averages (Table 12).

The total of 40 notified cases included 7 of erroneous diagnosis, equal to 17·5 per cent., as compared with 17·2 per cent. in 1909, and an average of 14·7 during the five years 1905-09. Of the remaining 33 cases, imported infection was noted in 11 instances. The consumption of shellfish was believed to be the causal factor in the following instances:—Oysters, 4 cases (including 2 imported); cockles, and cockles and whelks, one case each. Three patients were in the habit of taking some of their meals out of the Borough, but nothing could be learned pointing to the consumption of any foodstuff suspected of being infected.

Three groups of cases presented features of special interest, one owing to the causation of the disease (the consumption of shellfish), and the others to the evidence of the personal spread of infection.

I.—A family named N—, came to Paddington from Portsmouth on March 31st of last year. On May 11th, E.N. (m. æt 7) was reported ill with enteric fever. The date of the onset of the disease could not be definitely ascertained, but it appeared practically certain, from the history which was obtained—bearing in mind the lengthy incubation of the disease—that the boy was infected whilst at Portsmouth.

On May 22nd, E. N. (m. æt 8), brother of the above patient, was taken ill with abdominal symptoms. He had appeared to be in usual health until some 3 or 4 days previously. His illness was not thought to be serious, but he died suddenly during the night of the 22nd. An inquest was ordered, and at the post mortem examination all the evidences of enteric fever (of some duration) were found, including perforation of the bowel, and enlargement of the spleen. The *bacillus typhosus* was afterwards isolated from the latter organ.

On May 25th, J. N. (f. æt 12), sister of the above, was reported ill with the same disease, which was reputed to date from the 23rd of that month, but more probably from the 12th or 13th. She was removed to hospital and made a good recovery, as also did the younger E. N.

Enquiries were addressed to the Medical Officer of Health of Portsmouth, who reported that it was known there that the N. children frequently collected and ate raw cockles from Langstone Harbour. He added, "the cockles from certain parts of Langstone are not fit to eat, and are undoubtedly polluted with sewage." Subsequently, in reply to a request for specimens of the cockles, he wrote: "The cockles from various neighbourhoods round about have already been examined bacteriologically, and found grossly polluted, as indeed "it is difficult to imagine how anything else could be the case."

II.—On September 19th (Mrs.) S. A. (f. æt 22) was reported ill with enteric fever, her illness having apparently, commenced on the 11th. She was removed to isolation on the 19th, having been nursed between the 11th and 19th by Mrs. J. M., a relative living in the same street, who took Mrs. S. A.'s child to her home.

On November 3rd C. M. (m. æt 5) was reported to have the disease, which commenced about the 26th of the previous month, and on November 5th J. M. (f. æt 6) was also reported with the disease, her attack dating from the 29th of the previous month. Finally, Mrs. J. M. was taken ill about 6th November, and removed to hospital on the 14th. Mrs. S. A.'s child was not affected.

III.—J. McD. (m. æt 3) was taken ill with symptoms which were not thought to be those of enteric fever, on October 23rd. He was nursed at home until November 7th, when he was removed to hospital, and 14 days later his case was reported as one of that disease. Whilst J. McD. was seriously ill, his mother (B. McD.) visited him daily at the hospital. She was taken ill on December 2nd, and kept her bed from the 7th, her case being diagnosed as one of enteric fever on the 8th, on which day she was removed to hospital. On the 8th another child (B. McD., f. æt 2) was taken ill. She was admitted to hospital on the 9th, and her case was reported on the 23rd.

* For statistical purposes "continued fever" is deemed to be the same as enteric, any special cases notified under the former name being referred to in the text. No case was reported as continued fever either in 1909 or 1910.

Thirty-two (32) patients received institutional treatment, including 7 whose illness had been wrongly diagnosed. The cases removed formed 80·2 per cent. of the total reported, as compared with 72·4 in 1909, and 72·8 in the five years 1905-09. There were 4 fatal cases, three at the patients' homes, and one in hospital; the total fatality being equal to 12·1 per cent., as compared with an average of 15·2. The fatality among patients kept at home was 37·5 per cent. 8·5 per cent. above the average, and more than nine times the fatality observed during the year among patients removed to hospital (Table 14).

The nett mortality was at the rate of 0·03 per 1,000 persons, equal to the mean rate for the quinquennium 1905-09. In Willesden alone was last year's rate (0·01) below that recorded in the Borough (Table 10).

Carrier Cases.—Recovery from an attack of enteric fever does not always secure a complete elimination of the *bacillus typhosus* from the patient's system, and he may continue to excrete that organism for an almost indefinite period either continuously or spasmodically. Such persons are designated "typhoid carriers," a term which cannot be justified by scientific etymology, but has apparently attained a firm footing in medical terminology. Such persons may present no indication of abnormal health, and the excretion of the bacillus may be quite unknown until the occurrence of cases of the disease among persons with whom they are brought into contact leads to a systematic bacteriological examination of the fæces and urine. Horton-Smith was the first to draw attention to this possible factor in the spread of the disease, in his Gulstonian Lectures of 1900, but the German profession first took the matter up seriously. The first bacteriological station devoted to the search for "carriers" was opened in 1903 at Trier. In this country several small outbreaks have been traced to "carriers" within the past two years.

At the close of 1909 the Local Government Board made arrangements for the fæces and urine of patients discharged during 1910 from the Hospitals of the Metropolitan Asylums Board to be systematically examined bacteriologically. Six specimens of each kind were to be obtained from each patient, the first, one month after discharge from hospital, and the remainder at intervals of one month. Only five patients were discharged during the year to the Borough, one so late in the year that the investigation was not completed at the end of the year. In none of the other four instances could the full number of specimens be obtained, refusals being given to applications for the second, third and fourth specimens (one case each) while the fourth patient left the district just before the fifth specimen was due, and could not be traced. The specimens received and forwarded to the Lister Institute numbered 22 in all, 11 of each kind. The results of the bacteriological examinations were uniformly negative.

SEPTIC DISEASES.

Under this head attention will be directed to puerperal fever and erysipelas, diseases which are notified, and to the group of "other septic diseases" which are known only through the registration of death.

PUERPERAL FEVER.—Nine cases were reported last year, three times as many as in the previous year, and the largest number since 1906, when 12 cases were reported. The morbidity rate was 0·05 per 1,000 persons last year, as compared with a mean rate of 0·04 (Table 4). Last year's rate, according to the figures in the Registrar-General's Reports, was 0·06 (Table 7) which rate was exceeded by that of Willesden (0·07) only.

If reference be made to Table 12 it will be seen that the increase in prevalence occurred in the second half of the year, and was confined to Westbourne and Church

Wards. On the other hand, in comparison with the numbers recorded in 1909, the increased incidence fell on Harrow Road and Westbourne Wards. (Table 6).

This disease being peculiar to women during the childbearing period of life, taken as lying between the ages of 15 and 45 years, and the numbers of such women varying greatly in the populations of different areas, a better idea of the prevalence of the disease would be obtained by examining the rates calculated on that section of the population, but exact knowledge of the numbers of such women is, except at the date of each census wanting. Hence it has been deemed preferable to take the numbers of births registered in the year as the basis for calculating rates for comparison between the different districts. The results of such calculations are given in Table 16. The morbidity per 100 births was 0·30 last year, or 0·09 above the mean rate for the five years 1905-09. That rate was higher than the rate recorded in any of the districts except Willesden (rate, 0·31; mean, 0·24).

TABLE 16.

CHILD BED MORBIDITY AND MORTALITY.

District.	Year.	Puerperal Fever.		Mortality per 1,000.					
				Puerperal Fever.		Accidents & Diseases of Parturition.		Total in Childbed.	
		Morbidity per 100 Births.	Fatality per 100 Cases.	Births.	Women, Aged 15-45 yrs.	Births.	Women, Aged 15-45 yrs.	Births.	Women, Aged 15-45 yrs.
PADDINGTON ... {	1910	0·30	22·2	0·68	0·03	3·43	0·18	4·11	0·21
	1905-09	0·21	41·1	0·77	0·04	3·03	0·18	3·80	0·22
London ... {	1910	0·25	54·9	1·37	0·10	1·18	0·10	2·55	0·20
	1905-09	0·22	61·6	1·36	0·09	1·44	0·12	2·80	0·21
Kensington ... {	1910	0·13	40·0	1·33	0·05	2·66	0·11	3·99	0·16
	1905-09	0·22	73·9	1·26	0·04	2·06	0·08	3·32	0·12
Westminster ... {	1910	0·12	50·0	1·26	0·06	2·96	0·12	4·22	0·18
	1905-09	0·25	59·1	1·39	0·05	2·14	0·09	3·53	0·14
Marylebone {	1910	0·07	50·0	0·72	0·03	5·08	0·30	5·80	0·33
	1905-09	0·21	52·2	1·01	0·06	2·62	0·15	3·63	0·21
Hampstead {	1910	—	—	—	—	0·78	0·03	0·78	0·03
	1905-09	0·26	42·0	1·35	0·04	3·78	0·15	5·13	0·19
Willesden ... {	1910	0·31	41·6	1·31	0·11	2·62	0·21	3·93	0·32
	1905-09	0·24	52·3	1·35	0·12	2·18	0·21	3·53	0·33

The deaths recorded last year numbered 2, equal to a fatality of 22·2 per 100 cases, a little more than half the average for the preceding quinquennium (41·1), and notably below the fatalities recorded in the other districts, Hampstead excepted, where no case of the disease was recorded last year.

Mortality in Childbed.—In addition to 2 deaths from puerperal fever, there were 10 deaths from "Accidents and Diseases of Parturition," the total of 12 deaths in childbed being equal to a fatality of 4.11 per 1,000 children born, which rate was 0.31 above the mean rate for the five years 1905-09 (Table 16). The local rate was less than either of the rates observed in Westminster (4.22), or Marylebone (5.80), but higher than any of the other rates given in the Table referred to.*

ERYSIPELAS.—The cases of erysipelas numbered 100 last year, 6 fewer than in 1909, and the morbidity rate (0.65) was 0.16 below the quinquennial mean rate (0.81). Usually the prevalence of this disease is greater among males than females, but last year the position was reversed (Table 5). The greater part of the diminution in the morbidity rate was among males.

Two cases were reported during the year from each of two houses, the dates of the secondary cases in each instance pointing to direct personal infection from the first. Of the 100 cases, 10 were treated in institutions (including 6 in Poor Law Infirmary).

Other Septic Diseases.—Under this heading are included deaths from erysipelas and certain other septic diseases which are not notified. The complete list of deaths recorded last year under this heading is as follows:—

	M.	F.		M.	F.
Erysipelas ...	1	2	Cancrum Oris ...	—	1
Pyæmia ...	2	1	Cellulitis ...	1	3
Infective endocarditis	2	2	Phlegmon, Carbuncle	1	—

The mortality last year was 0.10 per 1,000 persons, as compared with 0.07 in the preceding year, and a mean rate of 0.09 for the five years 1905-09.

CEREBRO-SPINAL FEVER.

The diseases included under this term are cerebro-spinal fever, cerebro-spinal and posterior basic meningitis. Seven cases were notified during the year, but it is doubtful whether more than two of them fall within the intention of the Order for notification. All the patients were females, their ages distribution supporting the doubt already expressed. Five of the patients died. The notes of the cases are as follow:—

1. F., ætat 8 mos., ill from Oct. 26, '09; removed to hosp. and died Jan. 31, '10.
Cause of death—"Posterior basic meningitis of long standing."
2. F., ætat 18, notified Feb. 24; removed to hosp. Mar. 3; died Mar. 14.
Cause of death—"Tubercular meningitis."
3. F., ætat 11 mos., notified May 3; removed to hosp. April 22; recovered.
Bacteriology—Intracellular diplococcus, Gram negative.
4. F., ætat 20, notified June 13; removed to hosp. May 23; recovered.
Bacteriology—Intracellular diplococcus, Gram neg., not growing on "Nasgar."
5. F., ætat 46, notified July 21; treated at home; died July 11.
Cause of death—"Cerebro-spinal meningitis" (by exclusion, no post mortem).
6. F., ætat 12, notified Aug. 29; removed to hosp. Aug. 22; died Aug. 29.
Cause of death—"Cerebro-spinal fever."
Bacteriology—Staphylococcus infection.
7. F., ætat 3, notified Nov. 28; treated at home; died Dec. 1.
Cause of death—"Cerebro-spinal meningitis."

Vermineous conditions were reported in connection with cases 3 and 4, both of which ended in recovery, and were the only two in which bacteriological examination yielded results pointing to true cerebro-spinal fever.

* Mortality rates per 1,000 females, aged 15-45 years, are also given in Table 16, but no comment is made thereon, as the estimates of the numbers of women are too untrustworthy.

ANIMAL DISEASES.

Included under this heading are glanders, hydrophobia and anthrax, all diseases which are acquired from animals, and not passed from man to man.

Glanders.—No cases were reported among man during the year. Under the London (Notification of Glanders) Order, 1907, ten outbreaks of the disease among horses were reported last year, as compared with eleven in the previous year. Each outbreak reported is made the subject of inquiry with a view to ascertaining the state of health of the men in contact with the horses. The Department has no jurisdiction as regards the animals.

Anthrax.—One case (a male, aged 43 years) was reported during the year, but the case appeared to have been notified under a misapprehension. Formerly, "anthrax" was used as synonymous with "carbuncle," the true nature of the case in question.

One horse was reported to have died of anthrax. The horse fell dead in the street, and the disease was discovered when the carcass was cut up at the knackers' yard.

TUBERCULOUS DISEASES.

The deaths certified as due to tuberculosis in all its forms numbered 170 last year, showing a considerable decrease from any of the totals recorded during the preceding five years. In 1905 such deaths numbered 192, in 1906 216, in 1907 219, in 1908 190, and in 1909 204. The deaths from the five forms of tuberculosis detailed in these reports are given in Table 17. The total mortality rate was 1·11 per 1,000 persons, 0·25 less than the mean rate for the five years 1905-09 (1·36), but while the rate for females fell from 0·97 to 0·86 (a reduction of 11·4 per cent.) that for males fell from 1·88 to 1·46 (a reduction of 22·4 per cent.)

TABLE 17.
TUBERCULOSIS.

Variety of Disease.	Deaths.			Nett Mortality Rates.					
	1910.			1910.			1905-09.		
	Males.	Females.	Persons.	M.	F.	P.	M.	F.	P.
Pulmonary ...	73	54	127	1·12	0·62	0·83	1·45	0·68	1·01
Cerebral ...	9	7	16	0·14	0·08	0·10	0·17	0·11	0·14
Abdominal ...	2	6	8	0·03	0·06	0·05	0·05	0·04	0·05
General ...	4	4	8	0·06	0·04	0·05	0·10	0·06	0·08
Other forms ...	7	4	11	0·10	0·04	0·07	0·07	0·04	0·06
ALL FORMS	95	75	170	1·46	0·86	1·11	1·88	0·97	1·36

The deaths from pulmonary tuberculosis (127) were equal to a mortality of 0·83 or 0·18 less than the quinquennial mean rate (1·01). The rate for males showed a reduction of 22·8 per cent., and that for females, one of 8·9 per cent. The mortality from the remaining four other forms (0·27) was 0·06 less than the mean (0·33), the rate for males showing a greater reduction (0·06) than that for females (0·03).

It will be seen from Table 10 that the local nett rate from phthisis (0·84) was exceeded by the rates recorded in the Metropolis as a whole (1·14), Westminster (1·11), and Marylebone (1·09), and that the local rate from other tuberculous diseases (0·28) by those recorded in the Metropolis (0·40) and Willesden (0·35). The corrected rates (Table 19) are to the same effect.

The nett rates for the Borough and its Wards are given in Table 18. Reductions in the rates from phthisis for last year, exceeding one-half, were observed in Queen's Park, Church, and Lancaster Gate, East, Wards. There was a considerable increase in the rate recorded in Harrow Road (1.18; mean 0.91), the remaining rates being very nearly equal to the respective mean rates. The corrected rates for the three first named Wards (Table 19) compare very strikingly with the standard and mean (corrected) rates. It is not possible at this stage to offer any explanation for the changes here recorded. Some suspicion rests on the value of the rates themselves, but judgment must be suspended until the forthcoming census results are available. From the other tuberculous diseases increased mortality rates were recorded in Harrow Road and Hyde Park Wards.

TABLE 18.
TUBERCULOSIS: NETT MORTALITY RATES.

DISTRICT.	PULMONARY PHTHISIS.			OTHER TUBERCULOUS DISEASES.		
	Deaths, 1910.	Mortality.		Deaths, 1910.	Mortality.	
		1910.	1905-09.		1910.	1905-09.
BOROUGH	127	0.83	1.02	43	0.28	0.34
Wards.						
Queen's Park ...	11	0.67	1.35	4	0.24	0.53
Harrow Road ...	36	1.18	0.91	13	0.42	0.38
Maida Vale ...	20	0.99	0.92	4	0.19	0.34
Westbourne ...	27	1.03	1.09	7	0.27	0.28
Church ...	21	0.73	1.49	11	0.38	0.51
Lancaster Gate, West	3	0.36	0.33	1	0.12	0.07
Lancaster Gate, East	1	0.13	0.38	—	—	0.07
Hyde Park ...	8	0.58	0.60	3	0.22	0.17

TABLE 19.
CORRECTED MORTALITIES.
(London experience).

DISTRICT.	Persons per acre (1901).	Percentage of total population (Census 1901).		PULMONARY PHTHISIS.			CANCER.		
		"Over- crowded."	Living in homes of less than 5 rooms.	Standard Rate.	Corrected Rate.		Standard Rate.	Corrected Rate.	
					1910.	1905-09.		1910.	1905-09.
PADDINGTON	106	13.6	50.9	1.80	0.80	0.98	0.98	0.97	0.99
Wards.									
Queen's Park ...	152	9.1	51.7	1.73	0.67	1.35	0.83	1.08	1.02
Harrow Road ...	182	11.5	75.5	1.77	1.15	0.80	0.88	1.06	1.04
Maida Vale ...	68	12.6	43.4	1.82	0.94	0.88	1.01	1.50	1.23
Westbourne ...	104	13.4	46.3	1.80	0.99	1.04	1.17	0.82	0.80
Church ...	131	32.8	61.3	1.68	0.75	1.54	0.87	0.63	1.09
Lancaster Gate, West	70	2.6	15.2	1.84	0.34	0.31	1.02	1.02	0.90
Lancaster Gate, East	56	2.1	16.2	1.84	0.12	0.35	1.02	1.07	0.94
Hyde Park ...	108	5.2	25.3	1.88	0.53	0.55	1.07	0.70	0.79
London	61	16.0	54.0	1.74	1.14	1.37	0.87	1.05	1.03
Kensington ...	77	14.8	41.7	1.78	0.75	1.03	1.02	0.83	0.87
Westminster ...	73	13.0	45.7	1.95	0.99	1.21	0.96	0.85	0.94
Marylebone ...	90	21.1	55.6	1.85	0.91	1.30	0.99	1.10	1.03
Hampstead ...	36	6.4	29.6	1.75	0.51	0.70	0.92	0.89	0.83
Willesden ...	21	11.6	50.7	1.65	0.73	0.95	0.71	1.14	0.94

A comparison of the age-group mortality rates for males (*See below*) shows that the whole of the reduction below the mean rate recorded last year was limited to the ages 15 to 20 and 25 to 65 years (the best and most useful period of life.) Between the ages of 20 to 25 and at ages of 65 years and upwards the rates increased. Of the corresponding rates among females, increases were recorded at ages under 20 and 35 to 45.

PULMONARY TUBERCULOSIS.

			Ages	0—	15—	20—	25—	35—	45—	55—	65—	75—
Males.	1910	...	...	0.16	0.33	1.22	1.24	1.59	2.51	1.47	3.81	1.53
	1905-09	...	...	0.16	0.61	1.10	1.48	2.95	3.30	2.73	2.21	0.31
Females.	1910	...	...	0.21	0.24	0.47	0.66	1.15	1.03	1.04	0.61	—
	1905-09	...	...	0.19	0.22	0.51	0.75	1.06	1.25	1.16	1.18	0.59

As regards the age mortality rates from other tuberculous diseases, the most satisfactory feature is the reduction in the rates at ages under 5 years, which occurred in both sexes.

OTHER FORMS OF TUBERCULOSIS.

			Ages	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—
Males.	1910	...	...	3.16	1.33	0.67	0.17	—	0.13	0.08	—	0.31	0.24	—
	1905-09	...	...	5.05	1.91	0.45	0.14	0.10	0.03	0.15	0.16	0.13	0.25	0.16
Females	1910	...	...	3.31	0.56	0.65	0.16	0.12	0.09	0.11	0.08	—	0.34	0.21
	1905-09	...	...	3.53	1.34	0.43	0.34	0.10	0.10	0.08	0.10	0.11	0.14	0.22

Of the 127 deaths certified as due to pulmonary tuberculosis (*consumption*) during the year,* 57 occurred in institutions, viz.:—35 in Poor Law Institutions, 8 in "Homes for the Dying," 7 in General Hospitals, 3 (each) in Special Hospitals and Lunatic Asylums, and 1 at a Sanatorium. The deaths in institutions constituted 44.8 per cent. of the total, rather less than in the previous year (45.9), the proportion of deaths of males being 46.6, and that of females, 42.6, the corresponding figures for 1909 being, 47.4 and 43.5 respectively. The proportions of institutional deaths to total deaths of residents of the individual Wards varied from 0 in the two Lancaster Gates, to 81.1 per cent. in Queen's Park. The other proportions (per cent.) were—Harrow Road, 47.2; Maida Vale, 40.0; Westbourne, 33.3; Church, 52.4; and Hyde Park, 25.0.

As a result of enquiries addressed to the Medical Superintendents of the various Institutions, the following particulars relating to the deaths therein are submitted:—

Poor Law.—Approximate durations of the disease could be given for 27 out of the 35 deaths, which, when summarised, gave 10 deaths after less than one year's illness; 7, after 1—2 years; 4 after 2—3; 1 after 4—5; 2 (each) after 6—7 and 7—8; and 1 after 40.

The length of institutional treatment immediately prior to death ranged from one day to "many years," the information given being summarised below:—

Less than one week	...	2	Less than one year	...	30
1—4 weeks	...	8	1—2 years	...	2
1—3 months	...	8	2—3 "	...	2
3—6 "	...	7	" years "	...	1
6—9 "	...	3			
9—12 "	...	2			

When a case lasts more than (say) three years, it is very difficult to be certain of the history of the illness. More interest, therefore, attaches to the information relating to institutional treatment, especially from a public health point of view, in the shorter (and more

acute) attacks. Particulars of the length of treatment of the patients whose illnesses were stated to have been less than three years have been taken out in more detail, and the results are given below :—

Duration of Disease (years).	Duration of Isolation (months).					
	0—	1—	3—	6—	9—	12+
0—	3	4	2	1	—	—
1—	3	1	1	2	—	—
2—3	2	—	1	—	—	1

Lunatic Asylums.—None of the three persons dying in asylums presented any symptoms of consumption on admission, the disease making itself manifest in all three cases only a short time before death. One of the deceased persons had been in the asylum seven years, another three, and the third two.

"Homes."—The information received with regard to these cases can be given most intelligibly in the form of individual case histories, as below :—

	Admitted.	Died.	History on Admission.
m. 26 ...	24, x. '10 ...	5, xi. '10 ...	Ill 6 years. Notified, July, 1910.
m. 18 ...	24, i. '10 ...	3, iii. '10 ...	Ill 10 months; had been to sanatorium.
m. 59 ...	2, viii. '10 ...	19, viii. '10 ...	"Cough some years"; Phthisis recognised 6 months. Notified, July, 1910.
f. 32 ...	20, x. '09 ...	23, iv. '10 ...	Ill one year; previously in Brompton Hospital and Bournemouth Sanatorium.
f. 45 ...	7, iii. '10 ...	23, viii. '10 ...	Ill 12 years; hæmoptysis 5 years ago, and again 2 years ago. In various hospitals and sanatoria.
f. 42 ...	28, ix. '09 ...	20, vii. '10 ...	Pleurisy 18 months ago; Phthisis recognised 3 months.
f. 20 ...	12, v. '10 ...	1, vi. '10 ...	Disease in larynx 7 months. Notified 1909.
m. 25 ...	18, xi. '10 ...	19, xi. '10 ...	Admitted to Infirmary, April 30th, 1910; history of 18 months illness. Discharged, August 31st.
m. 43 ...	(?) 1, x. '10 ...	6, x. '10 ...	Ill 3 years; first notified (Poor Law), Jan., 1910. In Infirmary, 26, i. '10—4, ii. '10 and 18, vii.—30, ix., then to Sanatorium, where he died.

Notification.—The adoption of voluntary notification has never been advocated, but between 1903 and the end of 1908, 356 cases were brought to the notice of the Department by various agencies. During the last two years compulsory notification of cases receiving treatment from the Poor Law Medical Service has been in operation, and the Medical Officer of the Paddington Dispensary for the Prevention of Tuberculosis has periodically reported the numbers of patients attending the Dispensary. The records of the cases known to the Department prior to 1910, are given in the appended summary :—

	Total cases reported.	Known to have died during year							Reported recovered.	Original Report not confirmed.	Lost sight of, removed, &c.	Living (known) at end of 1909.
		1903.	1904.	1905.	1906.	1907.	1908.	1909.				
1903	4	2	—	2	...	...	...	...	—	—	—	—
1904	20	...	5	1	1	1	1	—	—	—	9	2
1905	18	...	...	10	3	1	—	1	—	—	3	—
1906	57	...	...	...	17	5	7	1	—	2	12	13
1907	84	...	...	...	...	14	12	6	—	8	18	26
1908	173	...	...	...	...	...	25	11	3	31	15	88
1909	629	...	...	...	...	...	...	65	—	4	44	516

At the close of 1909 645 "survivors" were known to the Department.* During the year 4 patients who had been temporarily lost sight of were traced and re-entered. The records of the "survivors" during the past year are given in Table 20. It will be seen that the number of persons surviving at the beginning of the year was reduced to 606, of whom 282 had been medically certified as "consumptives," and 324 were "suspects."†

TABLE 20.

CONSUMPTION.

Cases reported prior to 1910.

Year when First Reported.	Known Survivors end of 1909.	During 1910.					TOTALS.	Known Survivors, 1911.			
		Old cases traced and re-entered.	Reported recovered. (Arrested.)	Lost sight of (removals.)	Original report not confirmed. (Errors.)	Known to have died during year. (Consumption.)		Medically certified. "Definite."	Not medically certified. "Suspects."	Attending Dispensary.	
										"Definite."	"Suspect."
1904	2	—	—	—	—	—	2	1	1	—	—
1905	—	—	—	—	—	—	—	—	—	—	—
1906	13	1	—	—	—	4	13	9	4	2	—
1907	26	—	—	—	—	—	26	13	13	8	—
1908	88	2	—	1	3	7	79	31	48	20	4
1909	516	1	—	4	2	25	486	228	258	183	232
Totals	645	4*		5	5†	33	606	282	324	213	236

* Not included in table of new cases.

† Including 4 patients dying during year, whose deaths were certified as due to causes other than pulmonary tuberculosis.

During the year 226 certificates were received from the Poor Law Officers, 118 being first certificates and the remainder repeat notifications. Ninety-five (95) of the certificates were received from the District Medical Officers—72 being "first" and 23 "repeats"; 149 from the Medical Superintendent of the Infirmary, 97 on admission of the patients (40 "first" and 57 "repeat") and 32 on discharge (6 "first" and 26 "repeat"); and one each ("repeat") from the Master of the Workhouse, and the Relieving Officers (change of address). It is remarkable that only one change of address should have been reported by the Relieving Officers. The cases to which the 226 certificates referred, numbered 133, and the total number of cases reported through all agencies 678 (Table 21), all but 26 being reported on medical certificate, 403 of the cases ranking as "definite" and 275 as "suspect."

* In the report for 1909 the number of survivors at the end of the year was given as 657, but during the past year it was found that 12 of those persons had either died or removed to unknown addresses before the end of 1909. A new system of recording the cases was set up last year, by which it is hoped to follow up cases after report with more certainty. Owing, however, to wrong descriptions of the patients, changes of address and to deaths of patients being certified as due to causes other than consumption, the task of following up cases is attended with much difficulty.

† The qualification "suspect" is applied to patients reported by the Medical Staff of the Dispensary to be suspected to have the disease, and to patients brought to the knowledge of the Department by lay agencies, that is without medical certificates, "definite" to those medically certified as *consumptives*. Unfortunately the majority of such "suspects" are subsequently transferred to the "definite" side of the register.

TABLE 21.
ANALYSIS OF NEW CASES.
1910.

	Dispensary.		Poor Law	Other Medical Sources.	Lay Reports.	TOTALS.
	"Definite." D	"Suspect." S				
Total Cases Certified ...	252	249	133	18	26	678
<i>Deduct</i>						
Survivors—1909 ...	19	2	25	2	1	49*
Dispensary—D ...	...	...	12	—	3	15
—S ...	...	...	3	—	—	3
Poor Law ...	...	...	...	1	—	1
New Cases Certified ...	233	247	93	15	22	610
New cases dying during year ...	13	2	21	2	4	42
Including deaths from						
Phthisis ...	13	—	19	2	4	38
Other causes ...	—	2	2	—	—	4
Lost sight of (removals)	1	—	4	2	—	7
Diagnosis reviewed ...	—	—	2	—	—	2
Reported cured (<i>arrested</i>)	—	—	1	—	—	1
Survivors, 1911 ...	219	245	65	11	18	558

* Excluding the four cases specially noted in the preceding table.

TABLE 22.
NEW CASES REPORTED AND DEATHS AMONG SAME.
1910.

	Ages (years).																						All ages.		
	0—		1—		5—		10—		15—		25—		35—		45—		55—		65—		75—		Males.	Females	Persons
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
<i>Cases—</i>																									
Dispensary	—	—	2	4	19	16	12	17	16	30	13	36	10	38	4	10	1	3	—	2	—	—	77	156	233
Poor Law	—	—	2	3	—	2	2	—	6	3	9	10	9	12	13	5	8	3	4	1	1	—	54	39	93
Other Med'c'l	—	—	—	—	—	—	—	—	—	1	8	3	1	—	1	—	—	—	—	—	—	—	11*	4	15
TOTALS ...	—	—	4	7	19	18	14	17	22	34	30	49	20	50	18	15	9	6	4	3	1	—	142	199	341
<i>Deaths—</i>																									
Phthisis ...	—	—	—	—	—	—	—	5	1	3	1	6	4	4	4	2	1	3	—	—	—	—	23	11	34
Other causes	—	—	—	—	1	—	—	1	—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	3	4
<i>Cases—</i>																									
Dispensary	—	—	11	9	34	39	28	27	7	25	7	22	5	18	3	4	1	3	1	2	—	1	97	150	247
Lay Reports	—	—	1	—	3	2	4	—	1	4	2	1	—	—	—	1	1	—	—	—	—	—	12	10†	22
TOTALS ...	—	—	12	9	37	41	32	27	8	29	9	23	5	18	3	5	2	3	1	2	—	1	109	160	269
<i>Deaths—</i>																									
Phthisis ...	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	1	—	—	—	—	—	—	2	2	4
Other causes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* One age not stated.

† Two ages not stated.

TABLE 23.

OCCUPATIONS OF CONSUMPTIVE PERSONS.

1910.

Occupations.	Survivors 1909.*		Dispensary				Poor Law.		Other Medical.		Lay Reports.		TOTALS.		Died		Removed, &c.		Survivors, 1910.			
	(649)		"Definite"		"Suspect"		(93)		(15)		(22)		(1,259)		(79)		(16)		"Definite"		"Suspect"	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>Indoor</i>																						
Domestic duties	—	132	—	75	—	48	—	14	—	3	—	4	—	276	—	14	—	4	—	162	—	96
Housewives ...	—	132	—	75	—	48	—	14	—	3	—	4	—	276	—	14	—	4	—	162	—	96
Servants ...	2	29	1	10	—	17	—	3	1	—	—	2	4	61	1	3	—	1	3	35	—	22
Charwomen ...	—	16	—	5	—	2	—	1	—	—	—	—	—	24	—	3	—	—	—	9	—	12
Laundry workers ...	—	10	—	5	—	1	—	1	—	—	—	—	—	17	—	1	—	—	—	10	—	6
Clerks ...	7	1	3	1	1	—	1	—	—	—	1	—	13	2	3	1	—	—	5	1	5	—
Shop assistants, Keep'rs	9	5	7	2	—	3	1	—	1	—	1	—	19	10	8	—	—	—	6	3	5	7
Dressmakers, Tailors	2	15	3	13	—	5	1	4	1	—	—	—	7	37	1	4	—	—	5	24	1	9
Bootmakers ...	1	—	2	—	—	—	1	—	—	—	—	—	4	—	1	—	—	—	2	—	1	—
Skilled Artizans ...	17	—	8	—	2	—	6	—	—	—	1	—	34	—	5	—	—	—	21	—	8	—
Bottle washers and	—	—	—	—	—	—	2	—	—	—	—	—	2	—	1	—	—	—	1	—	—	—
Labellers ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Waitress, Barman, &c.	—	—	—	1	1	—	—	—	—	1	—	—	1	2	—	—	—	—	—	2	1	—
Caretaker ...	—	1	—	2	1	—	—	—	—	—	—	—	1	3	—	—	—	—	—	3	1	—
<i>Outdoor</i>																						
Building Trades ...	5	—	4	—	—	—	1	—	—	—	—	—	10	—	1	—	—	—	4	—	5	—
Painters ...	9	—	1	—	3	—	1	—	1	—	—	—	15	—	2	—	—	—	6	—	7	—
Labourers ...	16	—	4	—	4	—	1	—	—	—	—	—	25	—	4	—	—	—	11	—	10	—
Road traffic ...	5	—	3	—	1	—	4	—	—	—	—	—	13	—	3	—	—	—	8	—	2	—
Carmen ...	11	—	—	—	1	—	1	—	2	—	—	—	15	—	2	—	1	—	7	—	5	—
Stable workers ...	5	—	—	—	—	—	4	—	—	—	—	—	9	—	2	—	—	—	4	—	3	—
Railway traffic ...	11	—	—	—	1	—	1	—	—	—	—	—	13	—	4	—	—	—	8	—	1	—
Postmen ...	2	—	2	—	1	—	—	—	—	—	—	—	5	—	—	—	—	—	3	—	2	—
Gardeners ...	2	—	—	—	—	—	1	—	—	—	—	—	3	—	—	—	—	—	3	—	—	—
Street Merchants ...	6	1	—	—	—	—	2	—	—	—	—	—	8	1	—	—	—	—	6	1	2	—
Lighterman ...	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—
Road workers ...	3	—	—	—	—	—	—	—	—	—	—	—	3	—	1	—	—	—	—	—	2	—
<i>Miscellaneous</i>																						
School life ...	121	122	31	34	61	64	2	2	—	—	8	2	223	224	—	2	—	1	80	67	143	154
Church officers ...	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—
Stage, Music ...	1	1	1	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	2	1	—	—
Sick attendants ...	1	—	—	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1
Soldiers ...	1	—	—	—	—	—	—	—	1	—	—	—	2	—	—	—	1	—	—	—	1	—
Butchers, Fishmongers	2	—	—	—	1	—	1	—	—	—	—	—	4	—	—	—	—	—	3	—	1	—
Dairy Trade ...	1	—	1	—	1	—	—	—	—	—	—	—	3	—	—	—	—	—	1	—	2	—
Veterinary Surgeon	—	—	—	—	—	—	—	—	1	—	—	—	1	—	1	—	—	—	—	—	—	—
Woodyard workers...	2	3	—	—	—	—	—	—	—	—	—	—	2	3	—	1	—	—	1	—	1	2
Shop porters, Mess'ng's	4	—	1	—	2	—	4	—	1	—	1	—	13	—	3	—	—	—	7	—	3	—
Odd jobs ...	12	—	1	—	1	2	—	1	—	1	—	—	17	1	—	—	—	—	7	1	10	—
No occupation, or occupation not stated	24	30	4	6	17	6	18	14	1	—	—	2	64	58	2	5	7	1	26	22	29	30
TOTALS ...	282	367	77	156	101	146	54	39	11	4	12	10	537	722	45	34	9	7	230	342	253	339

* Including four cases revived.

The new cases reported numbered 610, 480 of the patients being in attendance at the Dispensary, 93 under the care of the Poor Law Medical Service, and 15 under that of private practitioners. The sexes and ages of the new patients are given in Table 22, and their occupations in Table 23.

The deaths of patients reported for the first time last year, numbered 42, 33 of them being certified as due to consumption, and 4 to other causes.*

In connection with 79 cases reaching a fatal issue during the year, 169 reports and certificates had been received during three years (1908-10), including 113 from the Poor Law Service relating to 50 of the cases. The frequency of "repeat" reports is indicated by the appended figures.

No. of Reports received.	Total 79 cases.	Poor Law 50 cases.	No. of Reports received.	Total 79 cases.	Poor Law 50 cases.
1	39	20	6	1	1
2	18	18	7	1	1
3	12	5	8	1	—
4	3	1	10	1	1
5	3	3			

The total number of cases known to the Department during the year was 1,259, a total very nearly equal to ten times the number of deaths (127), which was the estimate forecasted in the Annual Report for 1909. That that estimate will probably require revision is made fairly evident from the numbers already given and is confirmed by a consideration of the fact that of the 127 persons certified as dying of consumption last year, 56 were unknown to the Department prior to the registration of their deaths. As there were 71 deaths among 673 "definite" cases of the disease, it is reasonable to assume that the 56 deaths represented another 500-550 unknown "definite" cases, a calculation which takes no account of "suspect" cases.

CANCER.

The deaths from the malignant new growths included under this popular title numbered 165 last year, as compared with 156 in 1909 and 185 in 1908. The nett mortality was at the rate of 1.08 per 1,000 persons, 0.05 above the rate for the preceding year (1.03), but 0.03 less than the mean rate (1.11) for the five years 1905-09. A comparison of the mean rates for the two quinquennia 1891-95 and 1906-10 (0.86 and 1.12) shows an apparent increase in the mortality during the latter period of nearly 30 per cent. The change is described as an "apparent" increase because corrections are necessary, but have not been made, for the variations in the ages and sex-proportions of the populations during the twenty years covered by the figures. Last year's deaths comprised 69 of males (equal to a rate of 1.05 per 1,000 males; mean rate, 0.99) and 96 females (rate, 1.10; mean, 1.18).

The nett rate in Marylebone (1.24) was the only one in excess of that in the Borough (Table 10), but of the corrected rates (Table 19) those in Marylebone (1.10) and Willesden (1.14) exceeded that in the Borough (0.97). Last year's nett rates exceeded the mean rates in London, Marylebone, Hampstead, and Willesden.

The nett mortality rates for the past year ranged from 0.63 in Church Ward to 1.74 in Maida Vale, Church and Hyde Park being the only two Wards with rates below their

* The fact of the death of a person originally reported as *consumptive* being certified as due to a cause other than *consumption* does not necessarily mean that the deceased was not consumptive.

CANCER.

TABLE 24.

CANCER.
1910.

Seat of Disease.	Carcinoma.		Cancer.		Epithelioma.		Scirrhous.		Sarcoma		Malignant Disease.		Other Forms.		All Forms.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
I. Nervous System.																
(a) Brain ...	...	...	...	...	...	...	...	...	...	3	...	...	1(a) ...	...	1	3
II. Organs of Special Sense	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
III. Respiratory System.																
(a) Larynx ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...
(b) Lungs ...	...	1	1	...	...	...	...	...	1	1	...	...	...	...	2	2
IV. Circulatory System.																
V. Digestive System.																
(a) Mouth.																
(i) Tongue ...	1	...	1	...	3	...	...	...	...	...	...	...	...	...	5	...
(ii) Sec. Glands	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
(b) Throat.																
(i) Pharynx ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
(ii) Oesophagus	4	...	...	...	...	...	...	...	...	...	1	1	...	...	5	1
(c) Intestines.																
(i) Stomach ...	8	7	1	2	...	...	1	...	...	...	1	...	...	...	10	10
(ii) Intestine ...	8	7	1	1	...	...	...	...	...	...	2	1	...	...	11	9
(iii) Rectum ...	8	9	2	...	...	...	...	...	...	...	...	...	...	...	10	9
(d) Organs.																
(i) Liver ...	6	8	...	5	...	...	...	...	...	...	...	...	...	...	6	13
(ii) Pancreas...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	1	2
(e) Peritoneum ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
VI. Lymphatic System.																
(a) Head & Neck.																
(i) Thyroid Gland	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
(ii) Cervical lymphatics	...	...	...	1	...	...	...	...	...	...	...	...	1(b) ...	...	1	1
VII. Urinary System.																
(b) Bladder ...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1
(c) Prostate gland	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2	...
VIII. Generative System.																
(a) Testicle, Ovary	...	1	...	1	...	...	...	...	...	...	...	...	1(d) ...	...	...	3
(b) Uterus ...	...	14	...	1	...	...	...	...	...	...	1	...	...	...	...	16
(c) External Genitals ...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	2
(d) Breast ...	...	10	...	6	...	...	3	1	...	...	...	...	...	...	1	19
IX. Osseous System.																
(a) Head and Neck	...	...	1	...	...	...	...	3	...	...	...	...	...	...	4	...
(b) Extremities.																
(ii) Lower ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
X. Cutaneous System.																
(a) Head and Neck	...	...	...	...	1	...	...	...	...	...	...	...	1(c)...	...	2	...
XI. Not sufficiently described	...	...	...	...	1	...	...	...	1	2	...	...	...	...	3	2
Totals ...	39	59	10	18	5	1	...	4	6	8	6	5	3	1	69	96
Ages at Death.	0— ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	10— ...	...	...	...	...	...	...	...	1	2	...	...	...	...	1	2
	15— ...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
	20— ...	...	1	...	...	...	...	...	1	...	...	...	...	...	1	1
	25— ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
	35— ...	...	1	2	...	2	...	1	1	2	...	...	1	...	3	7
	45— ...	...	11	19	1	7	2	...	1	...	2	1	1	1	16	30
	55— ...	...	10	10	4	7	3	1	...	1	...	1	2	...	19	21
	65— ...	...	13	17	2	2	...	...	1	1	1	3	1	...	19	22
	75— ...	...	4	10	3	...	...	...	1	...	...	1	1	...	9	12

(a) Glioma.

(b) Endothelioma.

(c) Rodent ulcer.

(d) Malignant cystoma.

respective mean rates. In the former Ward the rate recorded last year was the lowest on record for that Ward since separate rates were determined (*i.e.*, since 1901).

Cancer.

	Queen's Park.	Harrow Road.	Maida Vale.	Westbourne.	Church.	Lancaster East	Gate West.	Hyde Park.
Deaths, 1910 ...	17	33	36	29	18	10	10	12
Mortality, 1910 ...	1.03	1.08	1.74	1.10	0.63	1.19	1.26	0.86
„ Mean, 1905-09	0.97	1.06	1.44	1.07	1.10	1.06	1.10	0.97

The changes in the age-group mortalities are sufficiently indicated in the following figures:—

Cancer.

		Ages:	25—	35—	45—	55—	65—	75—	85—
MALES.	1910 ...	—	—	0.34	2.51	4.66	10.34	15.92	—
	1905-09 ...	—	0.13	0.46	2.42	4.63	8.72	11.92	11.63
FEMALES.	1910 ...	—	0.05	0.57	3.44	3.64	6.71	8.33	10.15
	1905-09 ...	—	0.21	0.95	2.36	4.74	7.64	9.99	8.24

In Table 24 are set out the numbers of deaths from each form of malignant new growth distributed firstly as to sex of the deceased and the seat of the disease, and secondly as to sex and age of the deceased persons.

MEASLES.

In reporting on the prevalence and fatality of this disease during 1909, it was remarked that “the progressive decline in fatality from 1903 to 1906, since followed by a progressive increase, suggests that the disease has entered a phase of increasing severity, an occurrence which has been noted in almost all diseases which are epidemic in character.” The experience of 1910 lends confirmation to that forecast.

During the past year 2,098 cases were brought to the notice of the Department day by day, that total being, however, reduced to 2,085 when the revision of the reports of the Staff was made at the end of the year. There were, in addition, 77 cases of German measles (*rötheln*) known to the Department. The cases reported in all quarters, except the third, were considerably in excess of the averages. (*See below*).

CASES REPORTED.

Quarters		1.	2.	3.	4.	Year	
						Uncorrected.	Corrected.
1904	...	723	94	18	23	858	896
1905	...	227	895	292	288	1,702	1,714
1906	...	105	204	199	89	597	592
1907	...	109	303	276	548	1,236	1,284
1908	...	413	301	32	74	820	779
1909	...	133	366	76	127	702	709
1910	...	571	1066	72	389	2098	2085

The house distribution of multiple attacks affords evidence of a higher infectivity in the disease. Excluding one institution where 43 cases occurred, the 2,042 remaining cases occurred in 1,084 houses, giving an average of 1.9 cases per house, as compared with 1.8 in 1909 and 1.6 in 1908. The secondary cases were equal to 46.8 per cent. of the 2,042 cases, the corresponding proportions in 1909 and 1908 having been 44.9 and 40.9 per cent.

respectively. The house distribution of multiple attacks in each of the seven years 1904-1910 is given below.

		1904.	1905.	1906.	1907.	1908.	1909.	1910.
Houses with 2 cases	...	166	257	100	194	130	104	290
" 3 "	...	59	143	48	97	55	55	164
" 4 "	...	25	43	15	30	15	21	55
" 5 "	...	5	16	4	19	6	9	22
" 6 "	...	3	4	—	7	—	—	7
" 7 "	...	1	—	1	2	—	1	6
" 8 "	...	—	—	—	1	—	—	1
" 9 "	...	—	—	—	—	1	—	1

The Ward distribution (See Table 26) cannot be accepted without some consideration as to the completeness with which cases are reported from the various Wards. The main channel through which cases are reported to the Department being the Public Elementary Schools, it is believed that the numbers of cases recorded in Queen's Park, Harrow Road, and Church Wards are very close approximations to the actual numbers of cases, but that in the other Wards where a greater proportion of children attend private schools, the truth is understated.* The incidence of the disease was unequal on the different parts of the Borough, and was not in the form of a general epidemic. The morbidity rates for the three Wards named were 19.5, 17.2, and 16.4 respectively, suggesting that the incidence of the disease was greatest on the northern parts of the Borough. In each of those Wards the rates were in excess of that for the Borough as a whole (13.6 per 1,000). More cases have been reported from the two Lancaster Gate Wards in previous years. (Table 26.)

The deaths last year numbered 75, as compared with 36 in each of the two preceding years. Doubtless there were other deaths attributable to the disease, and for that reason enquiries were made on several occasions during the worst of the outbreak with reference to deaths certified to have been due to bronchitis or broncho-pneumonia. In five cases the previous attack of the disease was found to have occurred although not mentioned in the death certificate. Such cases have not been included in the total given above.

The 75 deaths comprised 38 of males and 37 of females, and the fatality rates were 3.6 per cent. for persons, 3.5 for males and 3.6 for females. All those rates were below the corresponding figures for the preceding two years. (See below.)

		Fatality per 100 cases.						
		1904.	1905.	1906.	1907.	1908.	1909.	1910.
Males	...	5.2	2.9	3.4	3.3	5.3	5.3	3.5
Females	...	3.5	4.2	2.0	2.5	4.1	4.8	3.6
Persons	...	4.3	3.6	2.7	2.8	4.6	5.0	3.6

Referring to Table 25 it will be seen that there were notable decreases in the fatality rates for infants under one year of age, and for those aged 1-2 years. The highest fatality rate (Table 26) in any Ward was that of Church (7.4), those for the two Lancaster Gate Wards being next. Such high fatalities as 5.5 and 5.8 in those two Wards may be

* Suggestions to make measles notifiable are met with the argument that the majority of cases of the disease receive no medical treatment. The experience of the Department does not support that argument. Last year approximately two-thirds of the invaded households sought medical advice. In any case notification by the medical profession would be of value as it is the rule in families sending their children to the private schools to secure advice for their children when attacked by the disease. Notification would, therefore, fill up the gap left by the reports from the Public Elementary Schools and would also be valuable during school holidays—even if such notification were incomplete.

described as inherently improbable and support the opinion that the disease was very incompletely reported from those Wards. Further confirmation of that opinion is afforded by the experience of previous years as set out in the table last mentioned.

TABLE 25.

MEASLES.

		0—		1—		2—		3—		4—		5—		13—		15—	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1910—Cases	...	54	50	121	129	128	119	129	125	179	174	419	430	3	14	2	9
Deaths	...	2	6	19	17	12	4	1	1	2	3	1	6	—	—	—	1
Fatality per 100 cases																	
1910	...	3.6	12.0	15.4	13.1	9.3	3.3	0.7	0.8	1.1	1.7	0.2	1.3	—	—	—	11.1
1909	...	31.8	16.6	21.4	18.8	2.4	7.2	2.1	—	—	1.6	—	—	—	—	—	—
1908	...	15.3	16.6	26.1	19.0	2.3	—	2.0	5.4	3.2	—	—	0.5	—	—	—	8.0
1907	...	17.3	15.1	8.7	4.7	6.5	5.7	1.1	—	0.9	0.7	0.4	1.1	—	—	—	—
1906	...	17.6	7.1	19.4	10.2	—	2.9	—	—	—	—	—	—	—	—	—	—
1905	...	13.5	16.9	9.3	15.1	5.8	2.6	—	4.1	1.8	0.6	0.3	0.5	—	—	—	—
1904	...	26.9	20.9	13.6	3.8	1.7	3.8	3.1	4.7	1.2	1.2	2.2	1.2	—	—	—	5.5

TABLE 26.

MEASLES.

Locality.			1904.	1905.	1906.	1907.	1908.	1909.	1910.
Queen's Park	...	C.	288	244	134	184	148	50	316
		D.	15	3	1	2	8	2	6
		F.	5.2	1.2	0.7	1.0	5.4	4.0	1.9
Harrow Road	...	C.	231	461	127	332	152	160	528
		D.	10	20	4	8	6	7	10
		F.	4.3	4.3	3.1	2.4	3.2	4.3	1.9
Maida Vale	...	C.	69	185	40	203	63	97	296
		D.	6	5	3	5	1	5	6
		F.	8.7	2.7	7.5	1.4	1.5	5.1	2.0
Westbourne	...	C.	79	187	136	133	73	155	271
		D.	1	7	4	4	9	5	10
		F.	1.2	3.7	2.2	3.0	12.3	3.2	3.7
Church	...	C.	129	434	72	374	160	186	472
		D.	5	25	4	15	9	17	35
		F.	3.8	5.7	5.5	4.0	5.6	9.1	7.4
Lancaster Gate, West	...	C.	54	27	41	16	29	38	18
		D.	1	—	—	—	1	—	1
		F.	1.8	—	—	—	3.4	—	5.5
Lancaster Gate, East	...	C.	27	65	14	9	48	11	34
		D.	1	1	—	—	—	—	2
		F.	3.7	1.5	—	—	—	—	5.8
Hyde Park	...	C.	19	111	28	33	106	12	150
		D.	—	2	—	3	2	—	5
		F.	—	1.8	—	9.0	1.8	—	3.3
BOROUGH	...	C.	896	1714	592	1284	779	709	2085
		D.	39	63	16	40	36	36	75
		F.	4.3	3.6	2.7	3.1	4.5	5.0	3.6

C.—Cases. D.—Deaths. F.—Fatality per 100 cases.

An increase in the fatality of the disease was expected to take place during the year. The reduction which did occur may have been due to either (or both) of two causes, one being a lessened virulence, of which no proof can be adduced except the record of fatality, and the other the time of year at which the outbreak occurred. From the figures given below it will be seen that there were rather more cases (8.5 per cent.) in the second and third quarters of the year than in the first and fourth. As has been stated in former reports a lower fatality is experienced with such a time distribution, the only exception recorded so far being the fatality of 1909, but in that year the second and (early part of the) third quarters were more wintry than the first.

SEASONAL DISTRIBUTION.

				1st and 4th Quarters.	2nd and 3rd Quarters.	Total Fatality (Year).
1904	...	...	...	86.8	12.9	4.3
1905	...	...	...	30.2	69.6	3.6
1906	...	...	...	31.9	67.4	2.7
1907	...	...	...	53.1	46.8	3.1
1908	...	...	...	59.3	40.6	4.6
1909	...	...	...	36.9	62.9	5.0
1910	...	...	...	45.7	54.2	3.6

Of the 75 persons whose deaths were certified as due to measles 10 died in institutions and nothing is known of the duration of their attacks. From the information collected by the Department it appears that the average interval between onset and death for the remaining 65 persons was 14.6 days. The numbers dying at each age were relatively small and hence "errors of sampling" are likely to be large, but the following figures may be of interest, even if no special value can be allowed to the averages obtained.

Ages (years.)	No. of deaths.	Males.		Average (days.)	Females.		Average (days.)
		Total days of sickness.			No. of deaths.	Total days of sickness.	
0—	2	11		10.5	4	46	11.5
1	16	207		20.7	15	201	13.4
2	11	251		22.8	3	26	8.6
3	1	5		5.0	1	20	20.0
4	2	20		10.0	3	59	19.6
5	—	—		—	4	49	12.2
6	—	—		—	1	22	22.0
7	—	—		—	1	9	9.0
33	—	—		—	1	14	14.0
Total	32	494		15.4	33	446	13.5

The above figures suggest that the average duration is longer for males than for females and that it tends to increase with the age of the patient. The latter surmise is confirmed by the fact that the above figures give averages (for the two sexes combined) of 12.5 days for ages under 2 years, and 17 (16.9 more exactly) for ages over 2 years.

Of the 65 cases included in the above tabulation, 32 came to the knowledge of the Department at early dates after onset, and 33 at late, four when the patients were practically moribund and the others after death. The average duration of the cases in the first group (32 cases) was 13.06 days, and in the latter (33 cases) 16.06 days, the average duration of the cases which were under the supervision of the Department being no

less than three days shorter. Such unexpected difference is, however, largely explained by the following statement of the ages of the deceased persons in each group.

	Ages	0—	1	2	3	4	5	6	7	33	Totals.
Reported early	Males	1	6	4	—	1	—	—	—	—	12
	Females	4	11	1	—	1	1	—	1	1	20
Reported late	Males	1	10	7	1	1	—	—	—	—	20
	Females	—	4	2	1	2	3	1	—	—	13

The "early" group not only contained an excessive proportion of females, who appear to be subject to earlier death, but was also characterised by a fairly considerably larger proportion of children under 2 years of age, such children constituting nearly 70 per cent. of the "early" group as compared with 45 per cent. in the "late."

It is usually stated that one-fourth of the deaths occur within 6 days of onset of the illness. In the whole group of 65 deaths here dealt with only 4 deaths (6·1 per cent. as compared with 25 per cent.) occurred within six days, and one-fourth of the cases had not terminated at the end of the eighth day.

The 75 deaths certified as due to measles during the past year were equal to a mortality of 0·49 per 1,000 persons of all ages, a rate higher than any observed since 1902, and practically double the mean rate for the five years 1905-9 (0·25). Below are set out the deaths and death-rates for each of the twenty years 1891-1910.

Deaths and Mortality (per 1,000 persons of all ages.)

	D.	M.		D.	M.		D.	M.		D.	M.
1891	7	0·05	1896	123	0·86	1901	9	0·06	1906	16	0·11
1892	89	0·65	1897	2	0·01	1902	82	0·55	1907	37	0·24
1893	35	0·25	1898	112	0·79	1903	39	0·26	1908	36	0·23
1894	76	0·54	1899	8	0·05	1904	39	0·26	1909	36	0·23
1895	19	0·13	1900	53	0·36	1905	63	0·42	1910	75	0·49

D.—Deaths.

M.—Mortality per 1,000 persons.

The mean rates should be considered in conjunction with the maximum and minimum rates recorded in each period. There was an increase in the mean rate for the second quinquennial period, and decreases in those of the third and fourth. The extent of the "swing of the pendulum" of prevalence in each period is shown in the following summary:

Period.	Mean rate.	Maximum.	Minimum.
1891-1895	0·32	0·65	0·05
1896-1900	0·41	0·86	0·01
1901-1905	0·31	0·55	0·06
1906-1910	0·26	0·49	0·11
1891-1900	0·37	0·86	0·01
1901-1910	0·28	0·55	0·06

Those figures afford evidence of a change in the habits of the disease during the latter portion of the period under review, evidence which is strengthened by an examination of the figures for the individual years. Broadly speaking the change dates from 1903, since which year the earlier experience of alternate years of high and low mortality—with wide ranges in the rates—has been replaced by a more uniform prevalence year after year, the years of maximal prevalence not attaining to the levels noted in earlier years. Can any reason be assigned for the change? It happens that 1903 was the year in which the Department commenced to deal systematically with the disease, searching out and visiting the cases, giving such advice which was thought might be useful, and securing disinfection of premises

and goods. With a disease liable to frequent epidemic outburst, it is always risky to be too confident about the results apparently following active intervention. Moreover, seven years' experience is hardly sufficient for the purpose of drawing conclusions as to the value of such work, but it may be permissible to submit the following comparison of the mortality from this disease during the seven years before and after the present system of supervision was inaugurated, as some evidence that such supervision has not been altogether unavailing.

	Mean rate.	Maximum.	Minimum.
1897-1902	0.30	0.79	0.71
1904-1910	0.28	0.49	0.11

The reduction of the mean rate* may not be thought to be of any significance, but taken in conjunction with the reduction in the "swing of the pendulum," it does, it is submitted, point to some benefit having accrued. It must not be forgotten that when the present system was initiated, the Department was to a certain extent working in the dark, and even now it is felt that much has to be learned before the best results can be secured.†

The usual comparisons of nett rates in the Borough, and the circumjacent districts are given in Table 10, and those of the corrected rates in Table 27. They are included for the sake of continuity rather than for the value of the information which they convey. The nett mortality rates for the Wards of the Borough are given in Table 28.

TABLE 27.

CORRECTED RATES.

Locality.	MEASLES.			WHOOPIING COUGH.		
	Standard Rate.	Corrected Rates.		Standard Rate.	Corrected Rates.	
		1910.	1905-09.		1910.	1905-09.
PADDINGTON	0.43	0.58	0.31	0.39	0.27	0.27
London... ..	0.58	0.41	0.38	0.50	0.07	0.28
Kensington	0.47	0.36	0.37	0.35	0.24	0.32
Westminster	0.36	0.19	0.19	0.31	0.18	0.18
Marylebone	0.42	0.30	0.32	0.36	0.47	0.24
Hampstead	0.40	0.23	0.15	0.34	0.16	0.16
Willesden	0.66	0.16	0.29	0.57	0.15	0.26

* If 1903 be counted as a year when supervision was being exercised (which was not exactly the case, as the machinery was incomplete and lacking in experience), the difference in the mean rates is more favourable to the argument submitted. For the eight years 1903-10, the mean rate was 0.28, while that for the eight years preceding 1903 was 0.35.

† What has been written above is to be regarded as tentative only. Before a definite opinion can be formed as to the utility of the measures adopted, much statistical work is necessary to compare the experience of this with that of other Boroughs. Some material has already been collected for this purpose, but certain necessary data will not be available until the results of the approaching census have been published.

TABLE 28.

NETT RATES.

Locality.	MEASLES.		WHOOPIING COUGH.	
	1910.	1905-9.	1910.	1905-09.
BOROUGH	0.49	0.25	0.23	0.21
Queen's Park	0.36	0.19	0.18	0.27
Harrow Road	0.33	0.30	0.36	0.29
Maida Vale	0.29	0.18	0.39	0.21
Westbourne	0.38	0.11	0.04	0.17
Church	1.22	0.50	0.35	0.28
Lancaster Gate, West	0.12	0.02	—	0.04
Lancaster Gate, East...	0.25	0.02	—	—
Hyde Park	0.36	0.10	0.14	0.11

WHOOPIING COUGH.

It was expected that comparatively few cases of this disease would be reported during the year 1910, the general run of the figures up to end of 1909 (*given below*) leading to a conclusion that 1910 would be a non-epidemic year. The uncorrected total of cases reported last year was, however, only 36 less than in 1909, and, as the quarterly totals show, the disease was considerably above the anticipated level of prevalence throughout the past year. Moreover, it must be remembered that a strong suspicion exists that this disease is not reported so fully as is measles.

Quarters					Year.	
	1.	2.	3.	4.	Uncorrected.	Corrected.
1904 ...	23	27	45	98	...	196
1905 ...	241	255	38	36	...	540
1906 ...	57	65	26	26	...	171
1907 ...	189	305	73	48	...	589
1908 ...	34	65	37	35	...	170
1909 ...	234	243	72	26	...	561
1910 ...	137	182	95	134	...	518

The 518 (corrected total) cases were reported from 300 houses, giving an average of 1.7 cases per house, the same as in 1909, and slightly above the average (1.6) for 1908. The frequency of multiple cases during the past seven years is shown below. There were 218 secondary cases, equal to 42.0 per cent. of the total cases, the same proportion as in the previous year, and 1.5 per cent. more than in 1908.

	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Houses with 2 cases	29	93	31	99	22	98	95
" 3 "	12	44	17	49	16	41	38
" 4 "	5	13	4	12	5	12	11
" 5 "	6	3	1	4	—	2	1
" 6 "	2	—	—	1	—	1	2
" 7 "	—	1	—	—	—	—	—
" 8 "	—	—	—	—	—	1	—

There were 35 deaths ascribed to this cause, one fewer than in the previous year, equal to a fatality of 6·7 per cent., as compared with 6·4 in 1909. The deaths of males (22) were more numerous than in 1909 (17), those of females (13) less so (19). The fatality among males last year (9·4) has been exceeded once only, viz., in 1905 when it was 9·6, while that among females (4·6) was, with the exception of the rate for 1908 (4·3), the lowest observed.

WHOOPIING COUGH.

Fatality per 100 cases.

	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Males	8·0	9·6	8·3	9·2	8·8	6·4	9·4
Females	8·3	10·2	6·9	7·8	4·3	6·3	4·6
Persons	8·1	9·9	7·6	8·4	6·5	6·4	6·7

The sex-age fatalities (Table 29) show considerable increases in rates among males under two years, all other rates being (generally) lower. As regards Ward distribution (Table 30) it is felt that not much reliance can be placed on the returns from the three southern Wards. In the other Wards higher fatalities were recorded during the past year in Queen's Park, Harrow Road, Maida Vale and Church. The connection between time distribution and fatality is not so well shown in the case of this disease as in that of Measles. (*See below*).

Year.				1st and 4th Quarters.	2nd and 3rd Quarters.	Fatality. per 100 cases.
1904	...	...	...	62·6	37·2	8·1
1905	...	...	...	48·5	51·3	9·2
1906	...	...	...	47·6	52·2	7·6
1907	...	...	...	38·5	61·3	8·4
1908	...	...	...	40·2	59·6	6·4
1909	...	...	...	46·0	53·9	6·4
1910	...	...	...	49·4	50·5	6·7

The mortality last year was 0·23 per 1,000 persons, the same as in 1909, and 0·02 above the quinquennial mean rate (0·21). The figures for the 20 years 1891-1910 given below are interesting in themselves and in comparison with those given on page 35.

	D.	M.		D.	M.		D.	M.		D.	M.
1891	...	81	0·59	1896	...	63	0·44	1901	...	51	0·35
1892	...	44	0·32	1897	...	55	0·39	1902	...	22	0·14
1893	...	74	0·53	1898	...	50	0·35	1903	...	53	0·36
1894	...	53	0·38	1899	...	53	0·37	1904	...	16	0·11
1895	...	35	0·25	1900	...	38	0·26	1905	...	50	0·33
								1906	...	13	0·09
								1907	...	50	0·33
								1908	...	11	0·07
								1909	...	36	0·23
								1910	...	35	0·23

D.—Deaths.

M.—Mortality per 1,000 persons.

The quinquennial and decennial mean rates show a continuous decrease, as also do the maxima and minima (with one exception).

	Mean rate.	Maximum.	Minimum.
1891-1895	0·41	0·59	0·25
1896-1900	0·36	0·44	0·26
1901-1905	0·26	0·35	0·11
1906-1910	0·19	0·23	0·07
1891-1900	0·39	0·59	0·25
1901-1910	0·22	0·35	0·07

Supervision over this disease was undertaken at the same date as was that over measles, viz., in 1903. The mortality from whooping cough does not show, so far, any change

TABLE 29.

WHOOPIING COUGH.

			0—		1—		2—		3—		4—		5—		13—		15—	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1910																		
Cases	...	...	27	36	23	19	24	35	30	23	43	46	87	122	—	2	—	1
Deaths	...	...	10	7	10	2	1	1	—	—	—	2	1	1	—	—	—	—
Fatality per 100 cases—																		
1910	...	...	37.0	19.4	43.4	10.5	4.1	2.8	—	—	—	4.3	1.1	0.8	—	—	—	—
1909	...	...	26.2	25.0	25.0	8.2	11.6	3.5	—	13.3	2.2	2.2	1.7	1.5	—	—	—	—
1908	...	...	28.5	42.8	30.0	—	10.0	—	16.6	8.3	—	—	—	—	—	—	—	—
1907	...	...	36.0	36.6	29.4	20.6	8.3	7.4	8.1	9.0	—	1.6	—	1.4	—	—	—	—
1906	...	...	18.1	9.0	28.5	40.0	7.7	8.3	—	—	—	—	—	—	—	—	—	—
1905	...	...	44.4	46.1	15.1	42.8	13.3	5.1	6.2	—	—	1.7	—	2.9	—	—	—	—
1904	...	...	8.3	—	21.0	8.3	16.2	11.8	6.6	7.1	—	—	—	—	—	—	—	—

TABLE 30:

WHOOPIING COUGH.

Locality.			1904.	1905.	1906.	1907.	1908.	1909.	1910.
Queen's Park	...	C.	8	126	31	112	41	113	98
		D.	2	10	1	9	1	2	3
		F.	25.0	7.1	3.2	8.0	2.4	1.7	3.1
Harrow Road	...	C.	58	165	27	224	38	153	203
		D.	3	12	3	17	4	7	11
		F.	5.1	7.2	11.1	7.5	10.5	4.5	5.4
Maida Vale	...	C.	4	48	22	65	16	51	66
		D.	1	8	1	7	1	5	8
		F.	25.0	16.6	4.5	10.7	6.2	9.8	12.1
Westbourne	...	C.	45	39	17	76	13	58	36
		D.	6	5	2	9	—	6	1
		F.	13.3	12.8	11.8	11.8	—	10.3	2.8
Church	...	C.	65	99	56	75	40	152	78
		D.	3	8	4	7	5	16	10
		F.	4.6	8.0	7.1	9.3	12.5	10.5	12.8
Lancaster Gate, West	...	C.	7	—	—	13	2	7	6
		D.	—	1	—	1	—	—	—
		F.	—	?	—	7.6	—	—	—
Lancaster Gate, East	...	C.	4	17	—	1	9	3	15
		D.	1	—	—	—	—	—	—
		F.	25.0	—	—	—	—	—	—
Hyde Park	...	C.	5	46	18	23	11	24	16
		D.	—	6	2	—	—	—	2
		F.	—	13.0	11.1	—	—	—	12.5
BOROUGH	...	C.	196	540	171	589	170	561	518
		D.	16	50	13	50	11	36	35
		F.	8.1	9.2	7.6	8.4	6.4	6.4	6.7

* C.—Cases. D.—Deaths. F.—Fatality per 100 cases.

comparable with that observed in the other disease. It is true that the mortality has decreased but there has not been that shortening of the "swing of the pendulum" observed in measles. This is apparent from the following figures.*

				Mean rates.	Maximum.	Minimum.
1897-1903	...	...	...	0.32	0.39	0.14
1904-1910	...	...	...	0.20	0.33	0.07

Last year's nett mortality in the Borough was three times that recorded in the Metropolis (Table 10) and was exceeded by that of Marylebone (0.34) only. In all districts, except Paddington and Marylebone, last year's rates were below the respective mean rates.

OTHER INFECTIOUS DISEASES.

Cases of German measles, chicken pox, mumps and ringworm are reported by the teachers of the public elementary schools, and occasionally by other persons. German measles is not distinguished, for administrative purposes, from measles and the cases reported are included in the quarterly totals for the latter disease. During the past year 77 cases were reported, as compared with 10 in 1909. The quarterly numbers of the other diseases are given below, those for 1909 being shown in *italic type* in parentheses. There was no death during the year from any of these diseases.

	Quarters	1.	2.	3.	4.	Year.
Chickenpox	...	222 (100)	103 (73)	55 (43)	140 (128)	520 (344)
Ringworm	...	41 (45)	24 (49)	13 (40)	24 (42)	102 (176)
Mumps	...	31 (211)	23 (114)	3 (30)	12 (65)	79 (420)

The following notes of an outbreak of illness simulating "food poisoning" appear to be suitable for report under "Other Infectious Diseases."

On June 14th, the House-Physician of the Hampstead General Hospital informed the Department that he had under his care two servants, admitted from Paddington as urgent cases, with all the symptoms of food poisoning, and that he understood that those two cases formed part of an extensive outbreak of that disease. From enquiries made at the house whence the servants were admitted and from the medical practitioners in attendance, it was ascertained that during the night of June 10-11th, eight out of 29 inhabitants of a high-class boarding-house had been suddenly attacked with diarrhoea and vomiting. The 29 inhabitants comprised 20 guests (with 3 cases), 7 servants (with 5 cases), and the two proprietors, who were not attacked. All the patients were females, and, with one exception, of fairly mature ages.

The symptoms were practically the same in all the cases, but one patient was much less severely attacked than the rest. That patient had, by a coincidence, taken a purgative on the night of the 9th, and the resultant free action of her bowels during the 10th, was probably the reason of her exemption from an attack of any severity. All the patients had severe abdominal pain, followed by vomiting and severe and persistent diarrhoea, which would not

* If a comparison be made between the alternative periods suggested in connection with measles, the figures are practically to the same effect:—

				Mean rates.	Maximum.	Minimum.
1895-1902	...	...	...	0.36	0.44	0.14
1903-1910	...	...	...	0.25	0.36	0.07

yield to the usual remedies. Fever supervened, the temperature rising in some cases as high as 102° and lasting for various periods up to a week. There were no indications of any pulmonary lesions, no splenic enlargement, and no delirium. Some of the older patients had attacks of grave syncope, and, with the exception already mentioned, convalescence was slow, but all the patients recovered.

At the outset enquiries were directed to determine which of the foods taken by the household had been the cause of the outbreak. The time of the commencement of the cases and the fact that none of the male residents had been attacked, gave rise to a suspicion that the infected food—if there had been any—had formed part of the mid-day meal on the 10th, at which only one male guest had been present. Careful inquiries, however, failed to elicit any evidence of any one food having been taken by the patients, and not by those who escaped. Still, in view of the known capriciousness with which an infected food will affect certain only of those partaking of it, it was thought desirable to push the enquiries into the origin of all the food stuffs supplied to the house on the 9th and 10th. Such inquiries proved quite abortive, and while they were in progress a preliminary report was received from the Lister Institute giving the results of the bacteriological examination of the specimens of faeces forwarded to the Institute on the 14th.* Briefly it may be stated that the causal organism was found to be one of the paratyphoid bacilli (*B. paratyphoid* "B.") a comparatively rare organism in this country, and one not previously recorded as causing gastro-enteritic attacks simulating "food poisoning."

The source whence that organism came could not be determined, but some suspicion was aroused of one of the servants (who had recently taken a situation in the house) being a "carrier." She was not included among the persons reported to have been ill during the outbreak, but her blood gave the "clumping reaction" with a culture from the bacilli isolated from the faeces of the patients.

Further interest attaches to the outbreak owing to the occurrence of cases of exactly the same character in persons residing in out-lying districts, viz. :—Willesden, Hampstead, and Lambeth, who either visited the house or were visited by residents in the house at the date of the outbreak or immediately after. Altogether eight cases in out-lying districts were reported, such specimens as were obtained from the patients giving the same results as did those from the patients in the originating household. Further particulars of these cases will be found in the communication in the *Journal of Hygiene* already referred to.

OTHER DISEASES.

The remaining diseases selected for special tabulation (Table 31) can be dealt with in a very few words.

Influenza.—The mortality was 0·20 last year, and compares favourably with that of the previous year (0·47) and with the quinquennial mean rate (0·34). The mortality was lower in all the Wards of the Borough last year, that of Church Ward (0·28) showing the smallest reduction from the mean rate (0·31).

Respiratory Diseases.—Although both measles and whooping cough were unduly prevalent last year, the mortality from bronchitis and the "pneumonias," fell from 2·44 in 1909 to 2·03 last year, the latter rate being 0·21 less than the mean rate. Of the rates recorded in the

* A full account of the bacteriological work in connection with this outbreak was published in the *Journal of Hygiene*, vol. xi., Pt. I., p. 24—issue of April, 1911.

Wards, that for Church Ward (3·15) was the only one in excess of the mean (2·95). It was in that Ward that the fatality from measles was so exceptionally high. (See Table 28).

TABLE 31.

Locality.				Epidemic Influenza.		Respiratory Diseases.		Alcoholism.		Cirrhosis of Liver.		Suicide.	
				1910.	1905-9.	1910.	1905-9.	1910.	1905-9.	1910.	1905-9.	1910.	1905-9.
Borough	...	...	...	0·20	0·34	2·03	2·24	0·06	0·07	0·08	0·14	0·08	0·10
WARDS.	Queen's Park...	...	...	0·18	0·26	3·10	2·48	...	0·07	0·12	0·11	...	0·09
	Harrow Road	...	...	0·23	0·33	1·82	2·10	0·03	0·03	0·20	0·13	0·03	0·08
	Maida Vale	...	...	0·14	0·38	1·59	2·02	0·05	0·07	0·10	0·13	...	0·11
	Westbourne	...	...	0·11	0·31	2·06	2·28	0·04	0·12	0·08	0·22	0·08	0·11
	Church	...	...	0·28	0·31	3·15	2·95	0·07	0·06	...	0·11	0·10	0·07
	Lancaster Gate, West	...	...	0·24	0·35	0·47	1·41	...	0·04	...	0·12	0·24	0·19
	Lancaster Gate, East	...	...	0·13	0·47	0·89	1·18	0·25	0·12	...	0·16	0·25	0·02
	Hyde Park	...	...	0·29	0·41	1·01	1·90	0·14	0·08	...	0·13	0·22	0·16

Alcoholic Excess.—Combining the mortalities from "Alcoholism" and "Cirrhosis of the Liver," the rate was 0·14 last year, as compared with 0·12 in the previous year, and a mean rate (1905-09) of 0·21. In Harrow Road Ward alone was the mortality (0·23) in excess of the mean (0·16).

Suicide.—The mortality fell last year to 0·08, having been 0·14 in 1909, while the mean rate for the quinquennium was 0·16. The whole of the change was due to the exceptionally low figures in the northern half of the Borough, higher rates being recorded in Church Ward, and in the three southern Wards, where the rates were quite abnormal. It must, however, be borne in mind that in the last named Wards the rates are based on very small numbers of deaths.

MORTALITY IN CHILDHOOD.

This part of the report is devoted to a consideration of the mortality at ages under five years, and is sub-divided into two main sections, viz.:—Infantile Mortality, and Mortality in Young Children. An account of the work in connection with Health Visiting in the past year is included in the former section, and some supplementary tables showing the changes in mortality during the twenty years 1891-1910, are given in Appendix B, at the end of the Report.

INFANTILE MORTALITY.

The deaths of children aged less than one year registered in the Borough during the year numbered 353, 68 of the deceased being children of non-resident parents. The crude*

* "Crude mortality" is the rate obtained by the use of the deaths and births registered in the Borough, without any corrections for non-residents, etc.

"Nett mortality" is the rate obtained by the use of the deaths, corrected as fully as possible, and of the births as registered.

"Corrected mortality" is the rate obtained from the deaths and births after full correction of both.

The last mentioned rate can only be used in comparisons of the mortality in different parts of the Borough during years subsequent to 1905. All other comparisons are based on the "nett mortality," except when otherwise stated.

infantile mortality was 121 per 1,000 births registered, showing an increase of one per 1,000 in comparison with the rate of 1909, but a decrease of 5 per 1,000 in comparison with the mean rate for the five years 1905-09. The corresponding rate for the decennium 1900-09 was 135, and that for the first half thereof 144. (Table I, Appendix A).

The corrected number of deaths was 294, as compared with 311 in the previous year, and the nett mortality 101 per 1,000 births. The nett rates recorded during the past four years, viz.:—115 in 1907, 110 in 1908, 107 in 1909, and 101 in 1910, show a continuous and steady decrease. As this is the rate which has to be used for comparing the experiences of different districts, the following figures will be of interest:—

Quarters		1.	2.	3.	4.
1891-95 ...	...	133	124	201	133
1896-1900...	...	130	120	238	137
1901-05 ...	...	130	101	156	127
1906-10 ...	...	113	91	108	124

Comparing the rates for the first period with those of the last, the decreases noted in the quarterly figures of the last period are—1st Qr., 15·1 per cent.; 2nd, 26·7 per cent.; 3rd, 53·7 per cent.; and 4th, 6·8 per cent. Such consistent changes show that the diminution in the infantile mortality has been due to something more than the very low prevalence of summer diarrhoea, which has been a characteristic of the last few years.

According to the figures given in the Quarterly Reports of the Registrar-General, the nett mortality in the Borough last year was 101 (Table 10), or 3 per 1,000 less than the mean rate (104) for the preceding quinquennium. The highest rate recorded last year in the circumjacent districts was that of Kensington (113) which was, however, 19 per 1,000 below the mean rate (132) for that Borough, and the lowest that of Hampstead (62) which was 18 per 1,000 below its mean (80). Annual rates of less than 100 were also recorded last year in Marylebone (98) and Willesden (82).*

The corrected mortality in the Borough was 97 per 1,000 (according to the Department's records), as compared with 102 in 1909 and 105 in 1908. The mean rate for the five years 1905-09, the longest period at present available, was 108. The mortality among males was 107 last year (mean rate 120) and that among females, 87 (mean rate 97). Of the rates recorded during the past year in the Wards, that of Church Ward (120) was the highest, and that of Lancaster Gate, West (28) the lowest. (Table 32.) Quarterly rates for the Wards would be of much interest, but, with the present method of obtaining the corrected number of births during the year, such rates cannot be determined. The best rates that can be presented are those based on the corrected numbers of deaths in each quarter and the registered numbers of births corrected for non-resident children but not for children born in outlying districts. Such rates are, in general, higher than the corrected rates, but are not, therefore, altogether useless. In Table 33 the rates for each quarter of last year are compared with the mean rates for the five years 1905-09. It will be seen that the rate for the last quarter of the year was the highest of the series, an occurrence which has been observed in previous years, but is contrary to the usual experience. Attention will be directed to this point when dealing with the mortality from "summer diarrhoea." In the first three quarters of the year, last year's rates were, with but few exceptions, below the respective mean rates, but in the last quarter of the year the rates tended to exceed the means.

* Since the above paragraph was written, the Annual Summary for 1910 has been issued by the Registrar General. From that Summary the corrected infantile mortality rates given in the last column of Table 10 (see page 11) have been extracted. The rate for the Borough for last year was 96, and the average for 1905-09, 107. In Hampstead the rate was 60 last year (average 76), and in Westminster 84 (average 103), those being the only two districts with rates below that for the Borough.

TABLE 32.

INFANTILE MORTALITY.

Fully corrected rates per 1,000 births.

District.	1910.			1905-09.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
BOROUGH	107	87	97	120	97	108
Queen's Park	96	86	91	114	76	96
Harrow Road	106	86	97	110	74	92
Maida Vale	92	74	83	112	98	105
Westbourne	96	113	105	107	113	109
Church	144	95	120	152	133	142
Lancaster Gate, West	28	28	28	60	51	56
" East	35	67	51	76	81	75
Hyde Park	88	47	68	124	89	107

TABLE 33.

INFANTILE MORTALITY.

Deaths, fully corrected. Births, partially corrected only.

District.	QUARTERS.							
	1		2		3		4	
	1910.	1905-09.	1910.	1905-09.	1910.	1905-09.	1910.	1905-09.
BOROUGH	103	117	95	99	80	119	134	124
Queen's Park	105	106	61	77	68	110	159	107
Harrow Road	91	105	131	98	73	81	125	104
Maida Vale	70	127	74	94	107	104	95	122
Westbourne	109	113	93	99	136	138	115	113
Church	132	138	118	134	73	170	192	181
Lancaster Gate, West	—	116	47	—	—	45	83	63
Lancaster Gate, East	125	91	—	47	—	92	90	106
Hyde Park	105	103	73	97	—	144	89	123

Attention has been called in recent reports to the number of children whose births have been registered simultaneously with, or subsequent to the registration of their deaths.* Last year 97 births were so registered, but the designation "Hopeless Births" which has been introduced in previous reports, does not apply to all the cases noted last year. Deaths due to diarrhoea (4), overlaying (1) and possibly some of those due to the respiratory diseases can, or ought to be, preventable. Particulars of the sexes of the children, their ages at death and certified causes thereof, are given in Table 34. Last year's total (97) shows a fair reduction below the numbers recorded in previous years, viz., 103 in 1909, 99 in 1908, 124 in 1907, and 99 in 1906. It is thought that the reduction may be due to earlier registration of birth which has resulted from the Registrars following up births which have been notified. Those Officers make a weekly search through the Register of Notifications.

* In several of the countries of Europe, children who have been born alive but die before the registration of their births, are counted as still-born, and are ignored in calculating the infantile mortality. The extent to which such practice understates the infantile mortality—according to English practice—may be judged from the figures for Paris for 1908. During that year 608 children were entered as "still-born" although they breathed after birth. If that number be added to the live births (50,826) and to the deaths under one year (5,214), an infantile mortality of 113 per 1,000 will be obtained instead of 102 if only the live births and deaths are used.

TABLE 34.

"HOPELESS BIRTHS" 1910.

Cause of Death.	Days.												Weeks.			Months	Total.								
	0—		1—		2—		3—		4—		5—		6—		1—		2—		3—		1—2		Males.	Females	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					
Not certified ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	
Diarrhoea ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	1	—	1	—	—	2	2
Premature Birth ...	15	9	2	—	3	—	1	1	—	2	—	—	—	1	4	3	3	—	—	2	—	1	28	19	
Injury at Birth ...	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	3	2	
Debility at Birth ...	2	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	5	—	
Congenital Malformation ...	—	1	1	1	—	—	—	—	—	—	—	—	—	1	3	3	—	—	1	—	—	—	5	6	
Atelectasis ...	2	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	3	
Atrophy, Debility...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	1	—	1	2	
Syphilis ...	1	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	3	—	1	—	—	—	7	2	
Septicæmia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	
Respiratory Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	1	—	1	2	3	
Overlaid ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	
TOTALS ...	23	12	4	1	3	1	2	1	—	2	—	—	4	10	9	6	3	5	5	3	3	56	41		

Last year's "Hopeless Births" included 9 of illegitimate children, equal to rather more than 9 per cent. of the total, the proportion of such births to the total births registered being 5.3 per cent. The total of 97 also included 14 children born in multiple births, 11 being twins and 3 triplets. Of the 39 children dying during the first twenty-four hours of life, 3 were entered as "new born," 3 as less than 1 hour old, 21 as having lived from 1-12 hours, and 7, 12-24 hours.

If the births which may fairly be described as "hopeless" be put at 92, the elimination of such deaths (and births) from the calculation of the infantile mortality reduces the nett rate from 101 to 72, and the corrected rate from 97 to 69.

In Table VI, Appendix A, is given an analysis of the deaths at ages under one year according to cause, sex, and age contrasted with the (uncorrected) annual numbers for the five years 1905-09. The figures given there show a saving of 58 lives, viz.:—35 of males, and 23 of females, but after making allowance for the smaller number of children born during the past year, the saving is found to amount to 52 lives, 27 of males, and 25 of females. The age-group nett mortality rates for the two sexes are given below, and show a fairly considerable increase (10 per cent.) in the rate for males under one month, and a slightly greater increase (13 per cent.) in that for females aged 1-3 months. At all other ages the rates recorded last year were lower than the mean rates.

NETT MORTALITY RATES.

		Males.			Females.	
		1910.	1905-09.		1910.	1905-09.
Under one month	...	47.19	42.73	...	26.95	34.38
Aged 1-3 months	...	23.25	28.31	...	24.18	21.23
Under 3 months	...	70.45	71.04	...	51.14	55.61
Aged 3-6 "	...	15.73	25.16	...	14.51	19.86
6-9 "	...	15.73	18.08	...	13.13	15.20
9-12 "	...	10.25	15.99	...	11.05	13.83

The nett mortality rates for groups of diseases show, in the case of males, increases in the rates for last year due to the "Common Infectious Diseases,"* and that due to "Developmental Diseases"; while of the rates prevailing among females increases occurred in those due to the first named group, and to the "Tuberculous Diseases."

NETT MORTALITY RATES.

Groups.	Males.			Females.	
	1910.	1905-09.		1910.	1905-09.
I.—"Common Infectious Diseases" ...	8.20	7.86	...	8.98	8.21
II.—"Diarrhoeal Diseases" ...	15.04	26.47	...	17.96	19.86
III.—"Developmental Diseases" ...	50.61	48.76	...	29.02	34.52
IV.—"Tuberculous Diseases" ...	3.41	5.37	...	4.14	3.83
V.—Other Diseases ...	34.88	41.42	...	29.02	37.39
Not certified ...	—	0.39	...	0.69	0.68

The rates given above confirm the view already expressed (*see* page 43) that the reduction in the infantile mortality observed during the last few years is due to more than the diminished prevalence and mortality from "summer diarrhoea." By excluding the deaths from the "Diarrhoeal Diseases," the infantile mortality among males during the past year is reduced to 97, while that for the five years 1905-09 becomes 103, thus showing a reduction of 6 per 1,000. Similarly the rate for females is found to be 72 last year, or 13 per 1,000 less than the mean rate (85).

Special Insulæ.—As in past years, the deaths of infants under one have been separately extracted for the six special "Insulæ," with well defined boundaries and characteristics. In Table 35, such rates are compared with the mean rates for the preceding quinquennium, the actual numbers of births and deaths on which last year's rates are based being given, to enable the value of the rates, for comparative purposes, to be gauged. The highest rate recorded last year was that of "North Wharf" (175), and the lowest that of "Hall Park" (80). In four of the six insulæ last year's rates were in excess of those recorded in 1909, but in two only was that rate in excess of the quinquennial mean rate. The two most interesting changes are the reduction in the rate in "Clarendon Street"—from a rate of 221 in 1909 and a mean rate of 137, to a rate of 122 last year—and the increase in that of "Queen's Park," where last year's rate (109) was in excess of both the 1909 rate (81) and the mean rate (92). These figures have not been taken out for a sufficiently long period to allow any conclusion to be drawn from the change noted.

TABLE 35.

INFANTILE MORTALITY.
Special Insulæ, fully corrected.

WARD.	Special Areas.— Insulæ.	1910.		INFANTILE MORTALITY.		
		Births.	Deaths under 1 year.	1910.	1909.	1905-09.
V.	"Hall Park" ...	142	12	80	144	157
	"North Wharf" ...	97	7	175	138	129
	"Clarendon Street" ...	285	35	122	221	171
IV.	"Alfred Road" ...	147	8	102	94	128
III.	"Amberley Road" ...	72	9	125	98	136
I.	"Queen's Park" ...	284	31	109	81	92

* The diseases included in each group will be found arranged under the Roman numerals in Table VI. Appendix A.

The influence of the mortality rates of these insulæ on the rates for the Wards of which the insulæ form parts, are shown in Table 36, which table should be read with the preceding. Both in Maida Vale and in Queen's Park Wards, the mortality experienced in the insulæ raised the rate for the whole Ward; in Church Ward it had no effect; and in Westbourne Ward it actually lowered it. The total mortality in the six insulæ was equal to rate of 115 per 1,000, as compared with one of 88 in the remainder of the Borough. (See Table 37). Whooping cough, congenital defects, atrophy and debility, and respiratory diseases were the principal causes of the higher mortality in the insulæ. The age-group rates were higher at all ages in the insulæ than in the rest of the Borough.

Diarrhœal Diseases.—The deaths certified during the year as having been due to "diarrhœa" and "epidemic (zymotic) enteritis" numbered 52 or 20 less than the annual average (72) during the five years 1905-09, the mortality being 0·34, as compared with a mean rate of 0·47 during the same five years. The mean rate for the five years 1895-99 was 1·28, while those for the first and last quinquennia (1891-95, 1906-10) of the twenty years for which comparable statistics are available, were 0·82 and 0·34 respectively. According to the figures published in the Registrar General's Quarterly Reports, the local rate (Table 10) was 0·28 last year and the quinquennial mean rate 0·44, the rate for last year being equal to that for the whole Metropolis, but higher than any of the other rates included in the table.

The rates recorded last year in the Wards of the Borough are given below in comparison with the mean rates for 1905-09. Neglecting Lancaster Gate, West Ward, where only one death from diarrhœa occurred during the year, in Maida Vale Ward alone was a rate in excess of the mean observed.

	Queen's Park.	Harrow Road.	Maida Vale.	Westbourne.	Church.	Lancaster Gate, West. East.		Hyde Park.
1910	0·18	0·29	0·53	0·38	0·56	0·12	—	0·14
1905-09	0·60	0·48	0·34	0·44	0·92	0·02	0·07	0·19

The figures and rates given above relate to the deaths from "diarrhœa" at all ages, whereas the true interest in this cause of death lies in the mortality among very young children (under two years of age). Further, in dealing with the mortality at those younger ages it is advisable to include under the general head of "diarrhœal deaths" those certified as due to "enteritis," the seasonable distribution of deaths among young children from that cause closely resembling that from the causes previously mentioned.

The total diarrhœal mortalities at ages under one year are given in the tabular statement on page 48. In comparison with the mean rates, last year's rates show a substantial reduction (43 per cent.) in the mortality among males and a smaller one (10 per cent.) in that among females. Last year's rates were slightly higher than those recorded in 1909, the rate among males having been 12·82 in that year (15·04, 1910), that among females 14·14 (17·96, 1910).

Usually the deaths from diarrhœal diseases are markedly more numerous during the third quarter of the year than in any other quarter, but in 1907 and again last year the largest number of deaths took place in the fourth quarter. With a view to finding some explanation for this unusual distribution, the deaths at ages under two years have been specially taken out for each quarter of the years 1905 to 1910.

TABLE 36.

INFANTILE MORTALITY.

Ward	V.—Church.		IV.—Westbourne.		III.—Maida Vale.		I.—Queen's Park.	
Period	1910.	1905-09.	1910.	1905-09.	1910.	1905-09.	1910.	1905-09.
Whole Ward	121	143	105	110	83	106	91	96
<i>Insulæ</i>	121	161	102	128	125	137	109	91
Residuum	121	98	106	102	74	98	49	112

TABLE 37.

CAUSES OF DEATH AND MORTALITY RATES.

1910.

	Deaths.		Infantile Mortality.	
	Combined <i>Insulæ</i> .	Rest of Borough.	Combined <i>Insulæ</i> .	Rest of Borough.
NOT CERTIFIED	1	—		
Measles... ..	2	6	1·93	3·01
Whooping Cough	10	7	9·67	3·52
Diarrhoea	13	22	12·57	11·06
Enteritis	6	7	5·80	3·52
Premature Birth	21	39	20·30	19·61
Congenital Defects	11	9	10·63	4·52
Injury at Birth	2	4	1·93	2·01
Want of Breast Milk	2	2	1·93	1·00
Atrophy, Debility	6	4	5·80	2·01
Atelectasis	3	4	2·90	2·01
Debility at Birth	—	10	—	5·03
Tuberculous Diseases... ..	4	7	3·86	3·52
Syphilis	4	7	3·86	3·52
Meningitis	—	5	—	2·51
Convulsions	—	2	—	1·00
Respiratory Diseases	27	31	26·11	15·59
Suffocation (overlaid)	2	2	1·93	1·00
Other Causes	6	7	5·80	3·52
ALL CAUSES	119	175	115·08	88·02
Under 1 month	42	66	40·61	33·19
Aged 1—3 months	27	42	26·11	21·12
Under 3 months	69	108	66·73	54·32
Aged 3— "	18	26	17·40	13·07
6— "	18	24	17·40	12·07
9— "	14	17	13·53	8·55

DEATHS FROM DIARRHOEAL DISEASES.

Age (years)		0—								1—2							
Quarters		1		2		3		4		1		2		3		4	
Sex		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1905	3 (2)	1		4	—	28	19	7 (2)	6	—	—	—	—	6	6	—	—
1906	7 (2)	6 (1)		3 (1)	4	43 (1)	40 (1)	11 (4)	10 (1)	—	—	—	—	4	9	4 (2)	—
1907	1	3		11 (3)	2 (1)	7 (1)	3	16 (5)	6 (2)	—	1	—	—	1	1	2	—
1908	5 (4)	4 (2)		2 (1)	3 (2)	24 (4)	11 (2)	11 (3)	6 (1)	1	1 (1)	1	—	2	3	—	2
1909	3 (2)	2 (1)		5 (2)	1	5	11 (1)	6 (3)	6 (3)	1	1	—	—	2	1	1	3
1910	1 (1)	5 (2)		3 (1)	4 (3)	10	8 (1)	16 (4)	12 (2)	—	—	2	1	—	1	5 (1)	1

NOTE.—The numbers in parentheses represent the deaths from "enteritis."

The foregoing analysis relates to 392 deaths from "diarrhoea and zymotic enteritis," and 76 from "enteritis," the total deaths of males (260) being to those of females (208) as 125 : 100. The annual averages for each sex are compared below with the numbers recorded last year.

		Diarrhoea and Zymotic Enteritis.		Enteritis.	
		Males.	Females.	Males.	Females.
1910. ...	...	30	24	7	8
1905-9.	...	37	31	8	5

The changes in the sex incidence of death from these causes shown by the numbers for 1910 are set out below, the figures given being decreases (—) or increases (+) per cent. of the averages for 1905-09.

		Diarrhoea and Zymotic Enteritis.		Enteritis.	TOTAL.
Males	—19	—12	—18
Females	—23	+60	—11

Estimates of the numbers of children are not available at the moment, but, having regard to the reduced numbers of births recorded during the years covered by the analysis, it may be safely said that the decreases given above are probably too great, and the increase too small. There has, however, been a greater decrease in the mortality from "diarrhoeal diseases" among males than among females, and some change in the incidence on the sexes, the deaths among males during the past year (37) being to those among females (32) as 116 : 100.

The extent to which the seasonal distribution of these diseases departed from the normal in 1907 and 1910, is clearly shown by a comparison of the *percentages* of deaths recorded in the four quarters of those years with the averages for the remaining four years of the period (1905-10).

		Quarters.		1	2	3	4
1907	9	24	22	44
1910	9	14	27	49
"Rest"	10	7	62	21

The deaths from these diseases, as recorded by the Registrar-General in each of the four quarters of the same six years in each of the Western Districts of the Metropolis, have been taken out, but are not reproduced here from considerations of space. During the fourth quarter of 1907 there was a suggestion of a similar departure from the normal seasonal distribution in Westminster, where the proportion of deaths in the fourth quarter exceeded that in the third. Last year in none of the districts (save Paddington) was such variation manifested. The meteorological elements for the second half of each of the six years, as

recorded at Camden Square, have also been specially extracted month by month, but, as might be expected from what has already been written, no cause for the variation was disclosed thereby. The abnormality in seasonal distribution recorded in the Borough last year was due to purely local causes, and the same conclusion is, probably, but not so certainly, true with respect to 1907.

In looking for some other explanation for the change, the specially large proportions of deaths in the Infirmary invited attention. Of the 27 deaths which occurred in the fourth quarter of last year, 14 (or 52 per cent.) took place in that Institution, while in 1907, the proportion was 54 per cent. There has been a considerable increase during the period under review in the proportions of diarrhoeal deaths occurring in all institutions, but the proportions dying in the Infirmary during the last quarters of the two years mentioned, are quite exceptional. The Medical Superintendent of the Infirmary has kindly furnished information as to the dates of admission and the nature of the illness for which admission was sought—for all the patients who died from "diarrhoea" in the last half of each of the years 1905-10. There is nothing in the information supplied which explains the peculiarity in time distribution of the mortality from this cause. At present, therefore, no explanation is forthcoming but it is hoped that some statistical work now in hand with reference to infantile mortality—of which Appendix B is a preliminary note—may help to clear up the question.

As in previous years arrangements were made for obtaining information of cases of diarrhoea in young children under the care of the Poor Law Medical Officers and the Physicians of the Out-Patients' Departments of the Hospitals. Altogether 111 cases came to the knowledge of the Department between the beginning of June and the middle of October, by which date the numbers of fresh cases had fallen to one during the week. The subsequent deaths from diarrhoeal diseases during the fourth quarter, however, showed that the search for cases was given up too early.

Of the 111 patients, 100 were under 2 years of age and 11 over. The latter cases have, therefore, been excluded from the present consideration although the patients were visited by the Staff in the same way as the younger children. At St. Mary's Hospital 66 patients were treated, at the Children's, 24, while of the remaining 10, 4 were under the care of the District Medical Officers, 2 were found by the Staff of the Department, 2 were reported by the parents, and 1 by an interested friend. The number of cases is too small for a detailed analysis, and it will suffice to give the following brief particulars.

Dates of attack.—In June, 16 cases; in July, 17; in August, 26; in September, 35; in October (1st-8th), 4.

Age and Sex.—56 of the patients were males, 34 being aged less than one year, and 44 females, 22 aged under one.

Feeding.—Of the infants under one year, only 7 males and 4 females were breast-fed, 10 males and 7 females were having a mixed diet of breast and bottle, and the remainder were bottle-fed, but only 4 males (no females) were reported to be fed by the "long-tube" bottle.

Among the 100 patients known during life there were three deaths, all males, 2 being aged less than one year (both bottle-fed—one, "long-tube bottle") and one, 1-2 years. It is remarkable that, on the numbers given, the fatality works out exactly the same as that recorded in 1909, viz., 3 per cent., which was only 0.6 per cent. less than that recorded in 1908 (3.6 per cent.) Very much higher fatality rates have been given in reports from other

districts, but the recurrence of the same rate in three successive years, if it be merely a coincidence, is a remarkable one. In spite of the fact that 15 deaths were recorded during the third quarter among children whose illness was not reported during the patients' life, it is surmised that the fatality rate given here (viz., 3 per cent.) is not very far from the truth.

Two other points of interest remain for mention, (a) the frequency of relapses and (b) that of multiple cases in the invaded houses. Among the 100 patients under 2 years of age there were ten who had relapses of the disease after an apparent recovery, and in 19 houses two or more attacks of "diarrhœa" were reported to have occurred during the term covered by the investigations. The recorded facts connected with each group of events can be best given in tabular form. (*See below*).

RELAPSES.

M.	$\frac{2}{11}$	Onset 10, vii.	Apparent recovery 22, vii.	relapse 26, viii.	final recovery 18, x.
M.	1	" 9, viii.	" 12, viii.	" 8, ix.	" 21, x.
M.	$1\frac{1}{12}$	" 22, ix.	" 25, ix.	" 28, ix.	" 20, x.
M.	$\frac{2}{12}$	" 19, viii.	" 3, ix.	" 11, ix.	" 20, ix.
M.	$\frac{2}{12}$	" 12, vii.	" 19, vii.	" 4, ix.	" 30, ix.
M.	1	" 30, v.	" 7, vi.	" 8, vii.	" 30, viii.
M.	$\frac{2}{12}$	" 20, vi.	" 30, vi.	" 12, ix.	" 20, ix.
F.	$1\frac{1}{2}$	" 21, ix.	" 10, x.	" 2, xi.	" ?
M.	$\frac{5}{12}$	" 15, viii.	" 31, viii.	" 3, x.	Died 7, x.
M.	$\frac{9}{12}$	" 4, ix.	" 13, ix.	" 20, ix.	Final recovery 11, x.

MULTIPLE CASES.

Reported Cases.			Reported Cases.		
Sex and Age	Onset.	Dates, &c. of other cases.	Sex and Age	Onset.	Dates, &c. of other cases.
M.	$\frac{2}{12}$	10, vii.	M.	$1\frac{11}{12}$	29, vii.
M.	$\frac{4}{12}$	14, viii.	M.	$1\frac{4}{12}$	3, viii.
F.	$1\frac{1}{2}$	17, ix.	F.	$\frac{2}{12}$	26, ix.
F.	$\frac{8}{12}$	22, ix.	M.	$\frac{2}{12}$	10, vii.
F.	$1\frac{10}{12}$	19, ix.	M.	$\frac{2}{12}$	12, vii.
F.	2	25, viii.	F.	6	19, ix.
M.	$\frac{9}{12}$	28, ix.	M. F.	8	20, ix.
F.	$1\frac{10}{12}$	31, viii.	F.	$\frac{8}{12}$	7, vii.
F.	$\frac{1}{12}$	10, vii.	F.	$\frac{8}{12}$	5, ix.
F.	$\frac{5}{12}$	24, vii.	F.	1	2, ix.
M.	$\frac{1}{12}$	31, viii.	M.	2	7, viii.
M.	$\frac{8}{12}$	4, ix.	M.	$1\frac{4}{12}$	17, ix.
F.	$1\frac{10}{12}$	5, viii.	F.	$1\frac{1}{2}$	15, ix.
M.	$1\frac{10}{12}$	9, vii.	M.	5	19, ix.
M.	$1\frac{11}{12}$	19, viii.			

Mortality among Illegitimate Children.—During the year 69 deaths of illegitimate children were registered in the Borough, 15 more than in the previous year. Deducting 13 deaths of children not belonging to the Borough, and adding three others occurring beyond the Borough, a corrected total of 50 deaths is obtained, 24 of the deceased being males, and 26 females. The nett mortality among such infants under one (34 deaths) was 216 per 1,000 births, a decrease of 28 per 1,000 below the rate for the preceding year, the corresponding mortality among legitimate children being 90 last year, and 99 in 1909. The corrected mortality among illegitimate children was 230 and among legitimate, 90 per 1,000 births of

each description—a sufficiently wide difference. Full information as to causes and ages at death, and occupations of the mothers, is given below.

DEATHS OF ILLEGITIMATE CHILDREN.						
1910.						
(Corrected.)						
Ages (yrs.)	Males.		Females.		Persons.	
0— ...	15	...	19	...	34	
1— ...	9	...	6	...	15	
5— ...	—	...	1	...	1	
Totals...	24		26		50	

CAUSES OF DEATH.					
0—					
1—					
5—					
	M.	F.	M.	F.	M. F.
Measles ...	...	...	1	...	2 2
Whooping Cough...	2	—	...	1	...
Diphtheria ...	...	...	...	...	...
Diarrhoea ...	2	5	...	2	...
Enteritis ...	1	3	...	...	...
Tuberculous Dis. ...	...	1	...	1	...
Premature Birth ...	2	4	...	...	...
Developmental Dis. ...	2	2	...	...	...
Syphilis ...	3	...	...	...	...
Respiratory Dis. ...	2	3	...	2 2	...
Accident ...	...	...	...	1	...
Other Causes ...	1	...	2	...	...
Totals	15	19	9	6	...
Inquests held—2.					

INFANTILE MORTALITY.						
<i>Fully corrected.</i>						
	Males.		Females.		Persons.	
	I.	L.	I.	L.	I.	L.
1910	205	102	253	78	230	90
1905-09	249	112	180	94	215	104
<i>I—Illegitimate. L.—Legitimate.</i>						

OCCUPATIONS OF MOTHERS.					
Domestic Service ...	...	...	...	...	32
Cook...	...	5	General	...	6
Housemaid ...	6	"Servant"	...	...	12
Parlourmaid ...	3				
Other occupations—					16
Charwoman ...	4	Actress	...	...	1
Laundress ...	4	Clerk...	...	...	1
Dressmaker ...	4	Lady's Help	...	...	1
		Shopkeeper	...	...	1
No occupation, occupation not stated	...	...	...	...	2

INFANT REARING (*Health Visiting*).—Last year the cards of inquiry used in this work were issued as far as possible after the notifications of birth were received instead of after registration, and after the latter only when a birth had not been notified. Altogether 2,922 cards were issued to the Women Inspectors, 1,453 being passed on by them to the Health Society. The children visited numbered 2,115, the difference (808) being made up of 132 children dying before they could be visited, 172 removals, 81 wrong addresses, and 420 children deemed to be of a social position rendering a visit unnecessary. Of the 2,115 children visited, 1,298 were visited by the workers of the Health Society and 817 by the Women Inspectors. Visits were declined in 39 instances (not quite 2 per cent.), 31 refusals occurred among the cases visited by the Health Society and 8 among those paid by the Inspectors. The reports with sufficient information for tabulation numbered 1,988.

The most suitable time for the first visit to be made is during the third and fourth weeks of the child's life. In the families for whose children advice is needed, the doctor, or midwife, will have ceased attendance by the end of the second week and any possibility of friction is, therefore, avoided by delaying the first visit until the date mentioned. One hundred and fifty-eight visits were, however, made last year during the first two weeks, chiefly by the workers of the Health Society, most of whom are District Visitors and know the mothers sufficiently well to be able to call on them at that early date. During the third and fourth weeks, 865 visits (nearly 44 per cent. of the total) were made, and before the close of the second month, 1,499 (75.4 per cent.) of the children had been visited. On the other hand the visits to 489 children were made at too late a date to counteract any ill results arising from wrong methods of rearing.

INFANT REARING.

Ages of children on first visit and method of feeding.

		Breast.	Artificial, (bottle, &c.)	Combined Breast & Artificial.	TOTALS.
Weeks	{ 0—	16	1	—	17
	{ 1—	127	10	4	141
	{ 2—	447	36	20	503
	{ 3—	315	27	20	362
Months	{ 0—	905	74	44	1023
	{ 1—	379	63	34	476
	{ 2—	124	27	25	176
	{ 3—	146	49	24	219
Age not stated		76	8	10	94
TOTALS		1630	221	137	1988

The reports showed that 81·9 per cent. of all the children visited were being breast-fed at the date of the first visit, 11·1 per cent. were fed by artificial methods (mainly bottle), and 6·8 per cent. by a combination of breast and bottle. It would be instructive to ascertain the duration of breast feeding of infants, but such inquiry would involve the re-visiting of the children some two or three times during the first year. Such re-visiting is impracticable with the assistance available. Failing such information, it is desirable to note the extent to which breast feeding is practised among infants under three months. Of 1,675 infants visited during the first three months of life, 1,408 (a little better than 84 per cent.) were breast fed, 164 (9·7 per cent.) artificially, and 6·1 per cent. partly breast and partly artificially. Experience indicates that such combination of feeding is not desirable. Rather more than one-fifth (22·3 per cent.), of the children were found to be the first children born alive.

Records of the children born to and lost by 1,424 families were obtained. The total number of children born alive was 6,268, averaging 4·4 children to a family. Five hundred and three (503) families (35·3 per cent.) had suffered loss of 1,016 children, or an average of over 2 per family. The ratio of deaths to children born was 162:1,000, while that reported in connection with the families visited during 1909 was 185:1,000.

"Consultations" were held by the Hon. Medical Officers of the Health Society weekly at two centres during the year, 1,930 attendances being made by 397 infants. The Society gave grants of milk to 117 children.

MORTALITY AMONG YOUNG CHILDREN.

On the assumption that the children aged from one to five years constituted the same proportion of the total population as at the last census, the number of such children living in the Borough at the middle of last year was estimated to be 10,525, comprising 5,227 males, and 5,298 females. The mortality among such children was 15·96 per 1,000, or 0·20 per 1,000 in excess of the mean rate for the preceding five years. The rates for the two sexes are compared below.

		Males.		Females.		Persons.
1910	...	18·55	...	13·40	...	15·96
1905-09	...	16·38	...	14·98	...	15·76

A better estimate of the numbers living can be obtained by a summation of the survivors at each age from one to five years. The total for last year obtained by that method was

11,106 persons, comprising 5,647 males, and 5,459 females.* The mortality rates obtained by the use of these numbers are given below, all the rates for 1910 being a little lower, and comparing more favourably with the mean rates than did those already quoted.

		Males.		Females.		Persons.
1910	...	17.17	...	13.00	...	15.12
1905-09	...	15.44	...	14.28	...	14.12

The rates recorded last year at each of the four ages show a decline from 39.33 per 1,000 persons aged 1—2 years to 6.48 among persons aged 4—5 years. In 1910, the year from which the foregoing rates are taken, there was not a steady decrease with each age, the rate for the fifth year of life exceeding that for the fourth, but when an average is taken over a series of years (*as below*), the change is a uniform one. The fluctuations in mortality from diseases such as measles and whooping cough, are sufficient to produce wide irregularities in the rates for any individual year. This is shown clearly if the rates be taken out for each sex at each age (*as below*).

	Ages	Sex	1—			2—			3—			4—5				
			M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.		
1910	...	44.5	33.9	39.33	...	13.9	7.6	10.80	...	4.3	4.4	4.38	...	6.3	6.6	6.48
1905-09		33.9	30.5	30.66	...	13.8	12.0	12.19	...	8.4	8.4	7.99	...	5.0	5.8	5.12

The rates recorded in the Wards of the Borough at these ages are given in Table 38, such rates being derived from the corrected numbers of births, and not the births registered in the Borough as were the rates already given. The irregularities in the rates already referred to, are very evident in the records for the Wards. In Table 39 the mortality from each of the principal causes of death are given for the Borough, distinguishing the two sexes. The mortality from measles in the second year of life (age 1—2) was exceptionally heavy, and that from whooping cough not much less. Nevertheless, the mortality from the respiratory diseases was not much above the mean. Measles was responsible for the increase in the mortality among males in the third year.

TABLE 38.

MORTALITY RATES: One to Five Years.
Per 1,000 Individuals.

Ages (Years)—		1—				2—				3—				4—5			
		1910.		1906-09.		1910.		1907-09.		1910.		1908-09.		1910.		1909.	
Locality.		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
BOROUGH ...		44.5	33.9	32.3	26.8	13.9	7.6	13.2	13.7	4.3	4.4	6.6	9.8	6.3	6.6	5.0	8.0
Queen's Park ...		5.2	43.2	29.9	28.3	20.4	4.7	13.3	11.1	4.8	—	2.7	2.7	9.8	—	11.5	10.9
Harrow Road ...		37.9	24.3	20.0	20.2	5.0	5.3	10.1	12.1	2.9	2.8	5.5	7.3	5.2	10.6	5.7	8.9
Maida Vale ...		55.5	22.5	42.3	16.7	10.6	5.4	13.1	12.5	5.2	11.5	2.9	15.8	—	5.1	—	—
Westbourne ...		28.1	19.3	34.6	26.2	13.8	—	12.4	7.9	—	—	14.1	14.6	5.1	11.1	—	—
Church ...		80.8	68.2	47.5	44.1	29.7	19.8	18.9	26.5	9.1	9.9	10.7	12.4	6.1	3.6	9.5	17.5
Lancaster Gate,																	
West		31.2	—	15.0	—	—	—	—	—	—	—	—	—	34.4	—	—	—
East		—	—	31.3	—	—	—	7.2	—	—	—	—	15.1	—	31.2	—	—
Hyde Park ...		52.6	12.6	11.9	18.7	—	13.5	19.0	8.1	—	—	—	5.4	10.6	—	—	11.1

* The two estimates are in fairly close agreement, but the difference would have been accentuated had the survivors been calculated to the middle of 1910 instead of to the end of 1909. To that extent, therefore, the figures are not strictly comparable. Even as given, they lend some support to the expectation that the forthcoming census will not disclose a very great error in the estimated population.

TABLE 39.

Cause of Death.	Ages.															
	1—				2—				3—				4—5			
	1910.		1906-09.		1910.		1907-09.		1910.		1908-09.		1910.		1909.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Measles	13.63	12.81	5.24	4.52	8.34	2.79	1.63	1.92	0.71	0.74	0.70	1.08	1.40	2.22	—	0.73
Scarlet Fever	0.71	—	1.35	0.17	0.69	—	0.23	0.95	0.71	—	1.21	1.44	—	0.74	1.43	1.46
Whooping Cough...	7.17	1.50	3.68	1.92	0.69	0.69	1.40	0.71	—	—	0.35	2.19	—	1.48	0.71	0.73
Diphtheria	0.71	—	0.50	0.52	0.69	—	0.69	1.67	—	0.74	1.90	1.45	1.40	—	0.71	—
Diarrhoea	5.02	2.26	2.88	2.65	—	—	0.23	0.24	—	—	—	0.36	—	—	—	—
Enteritis	0.71	—	0.34	0.18	—	—	—	—	—	—	—	0.36	—	—	—	—
Congenital Malformations	—	—	0.17	—	—	—	—	—	—	0.74	—	—	—	—	—	—
Atrophy and Debility ...	—	—	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Diseases ...	4.30	2.26	3.18	2.09	—	0.69	2.80	1.68	1.42	—	1.41	0.36	0.70	0.74	1.43	1.46
Syphilis	—	—	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—
Rickets	0.71	1.50	0.67	0.52	—	—	—	—	—	—	—	—	—	—	—	—
Convulsions	—	—	0.49	0.88	—	—	—	0.72	—	—	—	0.36	0.70	—	—	—
Dentition	—	—	0.17	0.87	—	—	0.46	0.24	—	—	—	—	—	—	—	—
Respiratory Diseases ...	9.33	8.28	9.91	7.89	2.78	0.69	3.96	3.60	1.42	0.74	0.69	—	0.70	0.74	1.43	1.46
Accident and Violence ...	—	—	0.85	0.34	—	—	0.46	0.71	—	—	0.34	1.45	—	—	—	—
Other Causes	2.15	5.27	2.53	1.58	0.69	2.09	0.93	0.72	—	1.48	1.21	0.72	1.40	0.74	—	2.20
All Causes	44.50	33.91	32.35	25.86	13.90	7.67	13.26	13.71	4.31	4.44	6.70	9.82	6.31	6.66	5.02	8.07

The appended figures relating to the mortality among these children in the *Insulæ* are given in continuation of those included in the previous report.

MORTALITY RATES IN COMBINED *Insulæ*.

	Ages.									
	1—				2—			3—		4-5
	1907	1908	1909	1910	1908	1909	1910	1909	1910	1910
Males	52	35	53	67	21	14	26	9	8	6
Females	24	28	39	58	6	29	6	13	11	4
Persons	38	31	46	63	14	21	16	11	10	5

INQUESTS.

Last year 203 deaths were registered in the Borough on Coroners' certificates, 5 more than in the preceding year, but 2 less than the annual average (205) for the five years 1905-09. Of the 203 deceased persons, 60 were non-residents, and in out-lying districts 14 inquests were held on residents, so that the corrected number of deaths which formed the subjects of Coroner's inquisition during the year, was 157, equal to 8.7 of the total deaths of residents, as compared with an average of 8.3 during 1905-09. The "findings" of the juries are tabulated in Table 40, and are there compared with the average numbers for the preceding quinquennium. The changes noted last year are quite insignificant.

TABLE 40.

INQUESTS.

	1910.		1905-09.	
	Males.	Females.	Males.	Females.
Natural Causes ...	38	44	38	41
By Misadventure ...	6	3	5	3
Accidental Causes ...	27	24	29	21
Murder ...	—	—	1	0
Suicide ...	10	3	11	5
"Open" ...	—	—	3	1
"Neglect" ...	—	2	2	1
Execution ...	—	—	0	—

The increased rapidity of road traffic appears to be leading to an increase in the number of deaths ascribed to "vehicular traffic." Last year 13 deaths were attributed to that cause. In the five years 1901-05 there were 47 deaths from accidents in connection with road traffic, the total rising to 52 in the five years 1906-10. The deaths from suffocation in bed ("overlying") show a satisfactory decrease. In the first half of the decennium 52 deaths were due to this cause, and in the second half, 41. The totals for the past five years bring out the change very strikingly, the deaths in each year, from 1906 onwards, having been 10, 12, 10, 5, and 4. Four deaths from injury at birth, and one due to enteric fever, were subjects of inquiry last year—the latter a somewhat unusual occurrence.

DEATHS IN INSTITUTIONS.

In the local institutions 808 deaths took place during the year, as compared with 813 during 1909, and an annual average of 758 during the decennium 1901-10. The annual numbers of deaths in each institution are given in Table V, Appendix A, and the causes of death during the past year in Table VI. Included in the total for last year were the deaths of 359 non-residents, while 160 deaths of residents took place in out-lying institutions. (See Table VI). The nett number of deaths in institutions was, therefore, 632, equal to 35·2 per cent. of all deaths, the same proportion as in 1909, but 2·3 per cent. above the mean proportion (32·9) for the years 1905-09. The proportions recorded in each Ward during the past year and the preceding five years, are given below. In Lancaster Gate, West, Ward only, was there any reduction from the average.

Percentages of all Deaths of Residents.

	1910	1905-09		1910	1905-09
Queen's Park ...	36·8	33·1	Church ...	45·7	41·9
Harrow Road ...	33·6	29·9	Lancaster Gate, West	16·6	21·3
Maida Vale ...	28·5	27·6	" " East	27·7	23·7
Westbourne ...	33·7	32·2	Hyde Park ...	27·7	26·5

An analysis of the class of institution (*see below*) shows that there were reductions in the proportions of deaths in the Hospitals of the Metropolitan Asylums Board and in Lunatic Asylums, but increases in the other institutions, the increase recorded in connection with those of the Poor Law Institutions being the greater.

	Deaths	Percentages of Deaths of Residents.	
	1910.	1910.	1905-09.
<i>Rate maintained—</i>			
Hospitals of Metropolitan Asylums Board ...	16	0·8	1·3
Poor Law Institutions (Workhouse and Infirmaries) ...	372	20·7	17·7
Lunatic Asylums ...	41	2·2	2·5
<i>Supported by Voluntary Contributions—</i>			
Hospitals and Homes (excluding Nursing Homes) ...	203	11·3	10·8

ADMINISTRATIVE WORK.

Table 41 contains the records of the work of the District Inspectors with reference to nuisances.

PREVENTION OF INFECTIOUS DISEASE.—In connection with the cases of diseases of all descriptions reported during the year, the Staff made 7,279 visits, as compared with 6,325 in 1909. The increase was entirely due to the excessive prevalence of measles, the visits in connection with the notified diseases made by the male staff decreasing from 3,010 in 1909 to 2,008 last year, while those made by the Women Inspectors and Students increased from 3,315 to 5,181, the calls made by the latter with respect to each disease being as set out below.

Measles ...	3,051 (1,005)	Chicken-pox ...	461 (285)	Whooping Cough	430 (479)
Diarrhoea...	410 (546)	Consumption ...	807 (991)	Puerperal Fever ...	22 (9)

(Italic figures—records for 1909.)

The largest number of calls was made in the second quarter of the year, and the smallest in the fourth. (See below).

	Quarters	1st	2nd	3rd	4th
1910	...	1,878	2,425	1,493	1,483
1909	...	1,530	1,905	1,488	1,393

The number of patients removed to hospital for isolation and treatment fell from 797 in 1909 to 406 last year. The Hospitals of the Metropolitan Asylums Board were opened to cases of measles and whooping cough in December of last year, but no cases were admitted from the Borough before the beginning of this year. The "Letters of Advice" sent when patients are treated at home decreased from 41 in 1909 to 26 last year. Four (4) warnings were sent to midwives and others after notifications of cases of puerperal fever, as compared with one in 1909.

DISINFECTION.—Disinfection of the rooms occupied by persons suffering from infectious disease is effected by the use of formaldehyde (spray), the work being done by the Staff of the Department. Last year 2,941 rooms were so treated (including 171 after consumption), as compared with 2,351 in 1909. After 25 other cases the work was done privately, the efficiency of the processes adopted being certified by the medical attendants.

The disinfection and cleansing of bedding, personal clothing, etc., is still carried out, under contract, by Messrs. Armfield & Sons. The goods removed last year weighed 58½, as compared with 54½ tons in the previous year, the cost of the work, however, decreasing from £1,106 to £1,067. Some of the increase in this work, here recorded, is due to voluntary requests for disinfection after illness (and death) not reported to the Department.

The Contractors continue to perform their work satisfactorily. Complaints are rare, only 26 being received last year, the majority of which related to delay in returning the goods, such delay having been due to the amount of stuff to be dealt with.

WATER SUPPLY.—The notices relating to the discontinuance of water supply to dwelling houses numbered 74 last year, as compared with 84 in the preceding year, but there was an

TABLE 41.

Report of the Work of the District Inspectors during the year 1910.

Quarters.	Inspection of Dwelling Houses.					Sanitary Works completed in Dwelling Houses.																To Regulate Keeping of Animals.				
	No. of Complaints received.	"House-to-House."	On Complaint or after Illness.	Cellar Dwellings.	Re-inspection of all kinds.	Drainage, &c.					Water Supply.				Dust Receptacles.		Miscellaneous.					Manure Receptacles Reconstructed, &c.	Accumulations Removed.	Improperly-kept Removed.		
						Entire Reconstruction.	Drains Relaid, Trapped, or Ventilated.	Waste Pipes Disconnected.	Rain-water Pipes Disconnected.	W.C's, New Provided, Repaired, &c.	Soil Pipes Ventilated.	Services Separated.	Supplies Reinstated.	Cisterns, New, Provided.	Cisterns Cleansed, Repaired, &c.	Cistern Overflows Disconnected.	New, Provided.	Repaired, &c.	Drains Cleared, Flushed, &c.	Houses or Rooms Cleansed, White-washed, &c.	Cases of Overcrowding Abated.				Cellar Dwellings Closed.	Yards and Areas Paved and Drained.
First ...	125	60	418	—	3,837	47	23	61	19	103	30	6	1	1	45	—	12	14	5	43	2	5	21	—	2	—
Second ...	133	28	641	—	3,991	32	20	45	13	73	20	3	—	—	31	—	13	7	24	47	3	—	17	7	12	—
Third ...	122	—	486	—	3,695	37	27	35	12	70	12	2	3	—	19	—	16	2	21	13	1	—	4	—	3	3
Fourth ...	122	32	439	—	3,577	37	26	39	11	90	18	2	10	—	31	—	14	7	19	37	—	2	18	1	15	—
Year.....	502	120	1,984	—	15,100	153	96	180	55	336	80	13	14	1	126	—	55	30	69	140	6	7	60	8	32	3

increase in the number of cuttings-off for unpaid rates, which numbered 10 last year, or double the number recorded in 1909. The Inspectors reported the cutting-off to have been due, in the remaining cases, to—

Empty Premises ... 59 Defective Fittings ... 6 Owner's Request ... 1

Notices for the restoration of the supply were served with respect to 12 houses, and one summons was issued. Three of the 17 occupied houses were vacated, and the supply reinstated in the remaining houses.

MORTUARIES.—Last year 276 bodies were received at the Mortuaries, being 12 less than in the previous year. (*See below.*)

		Paddington Green.		Kensal Road.	
Number of bodies deposited	...	263	...	13	
Coroners' cases	...	191	...	13	
Awaiting burial:—					
Infectious	...	3	...	—	
Non-infectious	...	60	...	—	
P.M. examinations made	...	92	...	13	

A re-arrangement of the Coroners' Districts has been agreed to, whereby the Borough will be in one District only, instead of two as at present. The change will enable all bodies of persons awaiting inquest to be taken to the Paddington Green Mortuary, and that in Kensal Road will then be no longer required for that purpose.

SCHOOLS.—During the past year a class-register of the cases of (notified) infectious diseases occurring among children attending school, or among the members of their families, has been carefully kept up. The information collated cannot be conveniently summarised for the individual classes, but the form of the table usually included in these reports (Table 42) has been modified to show the numbers of infected scholars and of contacts for all diseases. The class-register affords the earliest intimation of the need of action to check the spread of infection in any school.

The notices issued relating to the exclusion and re-admission of school children numbered 4,041 last year, showing a slight increase over the total for 1909 (3,947), the exclusion notices numbering 2,682 and the re-admission 1,359. In many cases the exclusion notice includes an intimation of the date on which the child can be re-admitted, and hence a re-admission notice is not always required. That fact accounts for the differences in the numbers of the two classes of notices. (*See below.*)

In connection with		Notices Issued.	
		Exclusion.	Re-admission.
Notified diseases	...	789 (1,070)	457
Non-notified diseases	...	1,893 (1,360)	902 (447)

In addition to excluding individual children, closure of classes or departments and the exclusion of unprotected children after the occurrence of measles are made free use of, such closure or exclusion being ordered by the Medical Officer (Education) of the County at the request of the Medical Officer of Health of the Borough. Consultations take place almost daily between the two Departments when any disease is specially prevalent. The action taken in this direction during the past year is recorded on the next and following pages.

TABLE 42.

			Notified Diseases.				Non-notified Diseases.					
			Scarlet Fever.		Diphtheria.		Measles.		Chickenpox.		Whooping Cough.	
			P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.
Places.												
PROVIDED—												
Amberley Road (1) ...	1,006	12	2	5	...	69	57	9	7	2	1	
Beethoven Street ...	1,205	4	1	6 (2)	2 (1)	49 (2)	23	34	7	22	8	
Campbell Street ...	972	4	1	...	3 (2)	61 (2)	59	28	12	15	18	
Droop Street ...	1,102	15	7	5 (1)	2	70 (2)	44 (1)	27	6 (1)	25	15	
Essendine Road (2) ...	1,282	13	5	7	1	130 (2)	87 (1)	25	11	72	49	
Harrow Road ...	1,594	14	2	2	2 (1)	123 (8)	77	39	14	28 (2)	21	
Kilburn Lane ...	1,539	9 (7)	3 (2)	2 (1)	...	62 (16)	21 (1)	22 (6)	8 (2)	12 (3)	9	
Royal Oak (3) ...	360	1	...	1	...	45	53	1	2	...	3	
NON-PROVIDED—												
Bayswater Jewish ...	396	3 (1)	2 (1)	...	2 (2)	11 (4)	1	...	...	5 (2)	...	
Desborough Street (R.C.)	523	1	...	...	2	46	36	8	4	...	...
Holy Trinity ...	404	4	2	1	1	4	6	13	4	9	3	
St. Augustine ...	1,171	4 (4)	3 (2)	1 (1)	1	18 (11)	6	6 (4)	2	2 (2)	...	
St. James ...	322	...	...	5	2	39 (1)	15	34 (1)	2	8	3	
St. John, Kilburn Lane	190	3 (3)	...	2 (1)	...	22 (14)	8 (1)	4 (4)	...	...	...
St. John, Titchborne St.	482	8 (2)	2	...	1	49 (1)	16	7	1	4	...	
St. Luke ...	424	2	4	...	...	31 (12)	18 (1)	16 (1)	7	15 (5)	5	
St. Mary ...	170	...	...	...	...	6	1	2	2	1	...	
St. Mary of the Angels (R.C.)	246	...	1	3	...	11 (1)	4	3 (3)	...	...	...
St. Mary Magdalene...	474	3	2	1	1	3	26	1	...	...	...
St. Matthew ...	422	...	...	2 (1)	1	14 (1)	9	34 (2)	9	...	2	
St. Michael, Star Street	466	2	2	...	...	66 (3)	28	22	1	9	5	
St. Paul ...	444	2	...	...	...	55	40	2	3	...	...
St. Peter ...	545	12	4	2 (1)	...	43 (1)	41	2	3	16	9	
St. Saviour...	520	4	2	4	...	52	31	4	1	1	2	
St. Stephen...	791	2	...	1	...	16 (1)	11	2 (1)	1	3	...	
Wilberforce ...	862	4	...	...	1	92 (33)	43 (3)	9 (4)	9	21 (3)	14 (1)	

Non-residents are shown in parentheses.

(1) Accommodation increased during the year to 1,610.

(2) do. do. 1,695.

(3) School closed during part of year and classes transferred to Amberley Road.

SCHOOL CLOSURES.

School.	Department.	Closure		Disease.
		Date of.	Duration of.	
St. Peter's	Mixed	July 14	Until Summer Holidays.	Scarlet Fever.

"UNPROTECTED" CHILDREN EXCLUDED.

School.	Class-room.	Exclusion		Disease.
		Date of.	Duration of.	
St. Luke's (Infants')...	C	Jan. 26	7 days	Measles.
Beethoven Street	B	Jan. 26	7 "	"
"	A and B	Mar. 7	Until Easter Holidays	"
"	B	Oct. 17	4 days	"
"	C	Dec. 21	Until Christmas Holidays	"
Essendine Road	I.	Feb. 7	4 days	"

"UNPROTECTED" CHILDREN EXCLUDED—continued.

School.		Class-room.	Exclusion		Disease.
			Date of.	Duration of.	
Essendine Road	(Infants')...	Whole Department	Mar. 15	Until Easter Holidays	Measles.
Campbell Street	" ...	B	Feb. 9	7 days	"
"	" ...	D	May 18	6 "	"
"	" ...	C	Oct. 17	4 "	"
"	" ...	D	Nov. 14	4 "	"
Kilburn Lane	" ...	D and F	Feb. 11	14 "	"
"	" ...	E	" 23	9 "	"
Wilberforce	" ...	E	" 15	7 "	"
"	" ...	B	" 21	4 "	"
"	" ...	B	" 22	4 "	"
"	" ...	C	" 22	11 "	"
"	" ...	A	Mar. 3	8 "	"
"	" ...	C	May 21	6 "	"
Moberly	" ...	F	Feb. 18	7 "	"
"	" ...	E	Nov. 21	5 "	"
"	" ...	D	Dec. 1	8 "	"
"	" ...	F	" 5	11 "	"
"	" ...	B	" 12	Until Christmas Holidays	"
St. Michael	" ...	C	Feb. 23	9 "	"
"	" ...	C	Sep. 26	15 "	"
Our Lady of Dolours	" ...	A	Feb. 24	5 "	"
"	" ...	B	Apl. 29	7 "	"
St. Paul's	" ...	J	Feb. 24	8 "	"
"	" ...	J	Apl. 18	4 "	"
"	" ...	J	July 7	5 "	"
Droop Street	" ...	E	Feb. 25	10 "	"
"	" ...	F	Mar. 18	3 "	"
"	" ...	F	Apl. 9	20 "	"
"	" ...	G	" 18	11 "	"
"	" ...	D	" 18	9 "	"
"	" ...	C	" 25	7 "	"
St. John, Titchborne Street	" ...	C	Mar. 2	6 "	"
"	" ...	A	July 8	12 "	"
"	" ...	B	Nov. 24	8 "	"
"	" ...	A	Dec. 12	Until Christmas Holidays	"
Amberley Road	" ...	B	Mar. 14	4 days	"
"	" ...	C	Apl. 13	10 "	"
"	" ...	C	June 20	24 "	"
"	" ...	B	" 27	4 "	"
St. Peter's	" ...	A and D	Apl. 21	13 "	"
St. Matthew's	" ...	B and C	May 26	2 "	"
"	" ...	B	Dec. 8	Until Christmas Holidays	"
Bayswater Jewish	" ...	B	June 9	2 days	"
Royal Oak	" ...	F	" 7	3 "	"
St. Augustine	" ...	F	" 20	4 "	"
Holy Trinity	" ...	K	" 27	2 "	"
St. James	" ...	G	Oct. 20	5 "	"
"	" ...	All children under 5	" 26	23 "	"
"	" ...	H	Nov. 17	15 "	"
"	" ...	G	" 21	14 "	"
St. John's, Kensal Green	" ...	All children under 5	Oct. 26	23 "	"
Westmoreland Road (R.C.)	" ...	C	Nov. 2	9 "	"
St. Stephen's	" ...	All children under 5	" 25	18 "	"

Children under 5 years of age were also excluded from all Schools from April 25th to May 18th.

In August last the Education Committee of the County Council issued new regulations relating to infectious disease in schools. The most important change made therein, was the extension of the quarantine periods for scarlet fever and diphtheria—the time being now a fortnight in each case from the date of last contact, if the patient be removed to hospital, and a week from day of disinfection, if the patient be kept at home. Fresh instructions were issued to the Staff of the Department, to bring the work into harmony with the new rules. From the beginning of this year notices have been left with each family residing in an infected house stating the earliest day on which any children attending school may resume attendance, such notices being additional to the exclusion notices sent to the schools.

Complaints having been received from time to time of children being forced to attend school when absence was directed by the medical attendant—usually the physicians of out-patients' departments of hospitals—an arrangement was concluded with the Education Officer of the County whereby hospital attendance cards or papers bearing the doctor's initials and a recent date will be accepted as certificates exempting children from attendance at school.

A considerable number of children excluded from school on account of sore throat, ring-worm, &c., have been seen and examined by the Medical Officer of Health, before re-admission to school. Such practice appears to be desirable, as otherwise a number of excluded children would be sent to school without any evidence of freedom from infection. Advice is not given, the parents being instructed to consult a private practitioner when advice or treatment is found necessary.

School notices (Form 84) are, as a rule, sent in more promptly than in the past but occasionally there is still delay and considerable correspondence is required to secure the information which the Code directs shall be sent in as soon as a child has been excluded from school. Some teachers wait until they have made certain of the cause of a child's absence instead of informing the Department of an unexplained absence at once. Such course involves delay which may be disastrous. To effectively check infectious disease and prevent its spread in a school prompt notice to the Department is essential, to allow investigations to be made at the earliest possible date. There is still one defect in the system of dealing with infectious diseases in school, in that any information of infectious disease which the Attendance Officers may collect in the course of their visits, is not communicated to the Department direct, but has to come through the School Teachers. Such procedure involves an unnecessary delay which may amount to a week.

INTERNOTIFICATION.—Information relating to non-resident children attending school and to the members of their families, is exchanged between the Medical Officers of Health of this and the circumjacent Districts. Last year information relating to 180 cases in connection with local schools, was received, the particulars of which are given below.

Disease.		KENSINGTON.		WILLESDEN.		HAMPSTEAD.		MARYLEBONE.
Scarlet fever ...	...	6	...	6	...	1	...	2
Diphtheria ...	...	7	...	3	...	—	...	2
Enteric fever ...	...	—	...	1	...	—	...	1
Measles ...	...	11	...	77	...	—	...	5
Whooping Cough ...	...	5	...	28	...	—	...	1
Chickenpox ...	...	2	...	22	...	—	...	—
Cerebro-Spinal Fever ...	...	—	...	—	...	—	...	—
		31 (31)		137 (77)		1 (11)		11 (4)

BACTERIOLOGICAL EXAMINATIONS.—Last year 200 specimens were received for bacteriological examination, as compared with 177 in 1909. (*See below.*) The increase was due to the larger number of specimens of sputum, 54 being received last year, or more than double the number sent in during the previous year. The positive results obtained constituted 24·5 per cent. of the whole.

					Results.	
					Positive.	Negative.
					No. of specimens received.	
Diphtheria	...	...	...	...	114 (122)	28 (37) 86 (85)
Enteric fever	...	...	...	...	26 (27)	11 (7) 15 (20)
"Consumption"	...	...	...	...	54 (26)	7 (7) 47 (19)
Cerebro-Spinal Meningitis	...	...	...	...	1 (2)	1 (—) — (2)
Miscellaneous	...	...	...	...	5 (—)	2 (—) 3 (—)
Totals	...	...	...	...	200 (177)	49 (51) 151 (126)

Increased expenditure on bacteriological work means real economy. A practitioner suspecting (say) diphtheria would, in the absence of facilities for bacteriological test, send the patient to the hospital as a matter of precaution. Moreover, relatives and others are spared much anxiety and unnecessary expenditure by the removal of doubt as to the nature of the disease.

In the case of pulmonary tuberculosis, the value of the test lies in the other direction. The prospect of recovery is greatly improved by early diagnosis and treatment. Hence it is to the advantage of the patient and public alike that, in suspected cases of the disease, resort to bacteriology should be had not merely once but repeatedly until it is humanly certain that the tuberculosis bacillus is not present.

OFFENSIVE REFUSE: Trade Refuse.—Under this sub-heading are included the offal and other refuse produced by fishmongers, poulterers, greengrocers, etc. A good deal of such refuse is removed by the Council, and it would, it is believed, be advantageous if the whole of such work were done by the Council. Only one complaint was received during the year, of nuisance from offal in the course of removal.

Manure.—The usual notices calling attention to the obligation to remove all manure at least three times a week (*viz.*, either on Mondays, Wednesdays and Fridays, or the other three week days) were posted throughout the Borough during the month of May. Sixteen (16) complaints touching manure were received during the year, and dealt with by periodical inspection of the stables in connection with which the complaints arose. With the increase in motor traffic the amount of manure is much reduced, and doubtless it will not be long before manure merchants will be required to pay for the manure removed, as in former days, instead of being paid to take it away. As soon as the supply falls to the level of the demand all difficulty about the removal of manure will, it is anticipated, disappear.

House Refuse.—The rule is to remove all refuse once a week, but during the warmer weather removal is effected twice a week from a considerable proportion of the houses. Last year 91 complaints were received by the Department relating to irregularity or infrequency of removal, 23 of the complaints being addressed to the Department direct, and the remainder being forwarded by the Borough Surveyor. A second collection each week, at the cost of the Council, was recommended in 65 cases, after investigation by the Inspectors, in accordance with the resolution of the Works Committee of October 27th, 1908.

Trade Nuisance.—Five (5) complaints of an ordinary character were received with reference to marine stores (one complaint), fishcuring (2), refuse burning (2), and a large

number of complaints with reference to smells (sulphuretted hydrogen) arising from an ice factory opened at the end of March. In the last case the smells were due to the incomplete purification of wash-water from the scrubbers belonging to a "suction gas" plant. The nuisance has been obviated by the use of tanks packed with oxide of iron through which the wash-water is passed before being discharged into the sewer.

DRAINAGE WORK.—The drainage systems of 287 houses were re-constructed during the year, as compared with 554 in 1909, and 605 in 1908. In addition the drains of 12 houses were made water-tight by means of the patent process. The drains of 70 other houses were tested for various reasons, and found to be sound. In 1909, 97 drains were found on first test to be water-tight.

Queen's Park Estate.—The reconstruction of the combined drainage systems on this Estate, commenced in 1900, was completed, except for a few odd lengths, last year. The systems serving 129 houses were re-laid last year in the following blocks.

Nos. 100-114, Fifth Avenue	} Commenced in 1909	Nos. 83-97, Fifth Avenue	}
Nos. 1-85, Marne Street		Nos. 86-120, Kilravock Street	
Nos. 2-90, Lothrop Street		Nos. 95-119, Lothrop Street	
Nos. 71-85, Third Avenue		Nos. 66-80, Sixth Avenue	
Nos. 115-119, Fifth Avenue—Part of 12-in. main drain relaid after complaint of rats.			
Nos. 116-130, Fifth Avenue	}	Nos. 67-81, Fifth Avenue	}
Nos. 2-80, Marne Street		Nos. 100-124, Ilbert Street	
Nos. 1-67, Nutbourne Street		Nos. 99-123, Kilravock Street	
Nos. 87-107, Third Avenue		Nos. 50-64, Third Avenue	

After the receipt of complaints (14), and the occurrence of infectious disease (12), the drains at 26 houses were tested during the year, 14 proving to be defective. In 5 other instances the presence of rats was complained of, defective main drains being found to be the source of the rats in 2 cases, and rats left under the houses after reconstruction of the drains, in the remaining.

Deposit of Drainage Plans, etc.—Last year 303 sets of plans and notices were received, as compared with 367 in the previous year, involving the dispatch of 674 letters (728 in 1909). Only one summons was issued last year for non-compliance with the by-laws dealing with this matter, as compared with 6 in 1909, and 11 in 1908.

Combined Drainage.—In addition to the combined drainage on the Queen's Park Estate, 6 other systems examined last year were found to be in need of reconstruction, and were reconstructed by the Council, viz.:—

Nos. 7 and 9, Bishop's Road.	Nos. 29 and 31, Portsdown Road.
Nos. 12 and 13, Caroline Place.	Nos. 2—12 (even), Clifton Gardens, and
Nos. 9 and 11, Harrow Road.	Stranraer House, and Cumberland
Nos. 6 and 7, Warwick Place.	House.

New systems of combined drainage were sanctioned (by Order under Sec. 74 of the Metropolis Management Act, 1855), at:—

No. 103, Westbourne Grove, and	Nos. 1a, 2a, 3a, & 5a, Chepstow Place, and
No. 26, Monmouth Road.	Nos. 129 & 131, Westbourne Grove.

SMOKE PREVENTION.—Twenty (20) premises were kept under special observation last year (*see list*), the total time given to this work amounting to 84½ hours. The number of premises requiring special attention shows a steady diminution, 28 being so watched in 1908, and 24 in 1909. The total time during which "black smoke" was observed last

year was 40 minutes, as compared with 50 and 59 minutes in the two preceding years. Other shades (degrees of density) of smoke were observed during 38½ hours, as compared with 81½ and 110½ hours in 1909 and 1908.

The improvement in the air of the Borough, *quâ* smoke, is shown by the following figures (percentages):—

				In 100 hours' observations.				
				1910	1909	1908	1907	1906
"Black Smoke"	...	...	...	0.9	0.5	0.6	1.2	1.7
"Smoke"	...	...	...	46	69	74	65	67
No Smoke	...	...	...	53.1	30.5	25.3	33.3	31.3

Thirteen complaints of smoke, not necessarily "black smoke," were received during the year, with reference to factories (5), fried fish shops (3), laundries (2), and brewery, bakehouse, and destructor one each.

1910.

SMOKE OBSERVATIONS.

Address.	Business.	Chimney Shaft of
27, Beethoven Street	Laundry	Steam Boiler
29, " " " " " " " " " " " "	" " " " " " " " " " " "	" " " " " " " " " " " "
8, Bishop's Road	Refreshment Rooms	Kitchen Stove
8, Bristol Gardens	Bakehouse	Baker's Oven
99, Chippenham Road	" " " " " " " " " " " "	" " " " " " " " " " " "
— Eastbourne Terrace	Dining Club	Steam Boiler and Stove
75-77, Edgware Road	Restaurant	" " " " " " " " " " " "
189, " " " " " " " " " " " "	Bakehouse	Baker's Ovens "
— Goods Yard	Hydraulic Works	Steam Boilers
223-5, Harrow Road	Bedding Factory	" " " " " " " " " " " "
1-3, Inverness Terrace	Private Hotel	Steam Boiler and Stove
— Praed Street	G.W.R. Hotel	" " " " " " " " " " " "
25, Queen's Road	Restaurant	Kitchen Stove "
136, " " " " " " " " " " " "	Surveyor's Office	Warming Stove
120, Shirland Road	Dairy	Steam Boiler
8, South Wharf	Builder's Merchant	Travelling Crane
91, Star Street	Bakehouse	Baker's Oven
33, Westbourne Grove	General Store	Steam Boilers
67, " " " " " " " " " " " "	Fish Shop	Lobster Boiler
23, Westbourne Terrace North ...	Bakehouse	Baker's Ovens

CANALS, WHARVES.—The wharves on the Canal side were regularly inspected at least once a week, and no complaint was received last year with reference to any accumulation or other offence, save one relating to smoke.

The Basin was emptied and cleansed at Easter, when approximately 400 tons of mud and refuse were removed, and some necessary repairs to the bottom of the Canal and the retaining walls executed. One complaint was received with reference to a barge loaded with refuse which was tied up outside the Basin when the latter was being emptied. The boat had been moved on by the Inspector before the complaint came to hand.

CANAL BOATS.—The annual report of the Examining Officer was submitted to the Council and forwarded to the Local Government Board in February last. Eighty-five (85) breaches of the Acts were discovered last year, but no legal proceedings were required. There are 152 boats on the Register, 2 having been added during the past year, but actually only 39 boats are known to be working in and out of the Borough.

Three cases of scarlet fever (on one boat), and three of diphtheria were reported during the year, and the patients removed to hospital. Information was received of a case of measles, but by the time the information was received the boat had started on a trip up the Canal. The information was telephoned to other authorities on the route which the boat was taking.

WORKSHOP SUPERVISION.

This part of the report is compiled in pursuance of Section 132 of the Factory and Workshop Act, 1901, which requires a medical officer of health to "report specifically" on the administration of the Act within his district. The information here given is in the form prescribed by Memorandum of the Home Office, that Office also requiring a special table, Table IX., Appendix A.

Registration.—At the close of 1909 there were 1,688 workshop premises on the Register of the Department. Last year 338 premises were removed from the Register and 158 added to it, leaving 1,508 effective entries at the close of the year—a nett decrease of 180. The premises then on the register included 129 factories, 33 of them being laundries, 975 workshops 29 domestic workshops, 60 workplaces and 324 premises in the occupation of "single workers," 220 of whom were on the Register of Outworkers. An analysis of the occupations carried on at the premises (of all descriptions) with the latest known numbers of persons working therein, will be found in Table 43, the numbers of outworkers being shown by the figures in parentheses.

Notices relating to 56 new workshops were received from the Home Office during the year, 34 of which had been previously inspected by the Staff of the Department.

Home Work.—Employers of outworkers (home workers) forwarded 83 lists in February of last year and 71 in August, or a total of 154 lists, as compared with 177 in 1909 and 150 in 1908. The addresses included in those lists numbered 676, of which 431 were forwarded to other districts, where the homeworkers resided, in accordance with the Act. From other districts 281 addresses (in 44 lists) of homeworkers residing in the Borough were received, the number received in 1909 having been 309 in 57 lists. The numbers of lists received from other districts last year are shown below.

Kensington	...	7	(7)	City of London	...	4	(7)	Chelsea	...	...	2	(3)
Hampstead	...	4	(10)	Bethnal Green	...	1	(0)	Lambeth	...	...	3	(3)
Westminster	...	5	(6)	Willesden	...	...	4	(3)	London County	...	...	...
Finsbury	...	...	4	(6)	Marylebone	...	4	(3)	Council	...	4	(1)
				Holborn	...	...	1	(1)				

NOTE.—Figures in parentheses are the numbers for 1909.

In 1909, but not in 1910, lists were received from

Hammersmith	...	3	St. Pancras	...	2
Chiswick	...	1	Islington	...	1

At the close of last year the Register contained 385 effective entries or 51 less than at the end of the previous year. The 385 entries comprised 120 workshops, and 265 single workers, the corresponding numbers for 1909 being 136 and 306 respectively.

Inspections.—The inspections of all descriptions numbered 2,951 last year (2,280 in 1909), 306 being first inspections (270 in 1909). Seventy-three (73) workrooms were measured, or 22 fewer than in the previous year. The numbers of nuisances discovered and dealt with in the course of inspection are given in Table 44. Twenty (20) notices of all kinds were served during the year, as against three (3) in 1909.

TABLE 43.
 FACTORIES, WORKSHOPS, AND WORK-PLACES.

1910.

Business.	No. of Premises.	No. of Rooms.	Employees.			
			Women.	Young Persons.	Men.	Totals.
<i>Clothing—</i>						
Boot-making ...	145 (85)	148 (85)	6 (5)	7 (7)	204 (102)	217 (114)
Corset-making ...	7 (1)	8 (1)	16 (1)	—	—	16 (1)
Dressmaking ...	404 (60)	732 (68)	1,848 (161)	337 (36)	32 (2)	2,217 (199)
Furriers ...	9	16	19	3	11	33
Mantle-making ...	10 (5)	15 (8)	32 (7)	1	—	33 (7)
Millinery ...	39 (1)	64 (1)	237 (1)	19	—	256 (1)
Millinery and Dressmaking ...	22 (2)	63 (2)	380 (3)	52	4	436 (3)
Outfitting and Plain Needle-work ...	45 (31)	50 (31)	165 (67)	12	—	177 (67)
Tailoring ...	189 (138)	229 (147)	197 (66)	36 (31)	318 (165)	551 (262)
" Ladies' ...	28 (9)	43 (9)	79 (9)	10	30	119 (9)
Various ...	15 (5)	15 (5)	27 (5)	—	2	29 (5)
<i>Fancy Work—</i>						
Embroidery and Art Needle-work ...	11 (8)	13 (9)	51 (17)	4 (1)	6 (1)	61 (18)
<i>Cleansing—</i>						
Dyers and Cleaners' Receiving Offices ...	17	24	44	—	—	44
Laundries ...	118 (9)	284 (9)	905 (10)	40	94	1,039 (10)
" —Receiving Offices ...	33	33	44	—	—	44
Mangling ...	18 (1)	18 (2)	18 (1)	—	—	18 (1)
<i>Other Businesses—</i>						
Blind-making ...	7	12	7	—	22	29
Bookbinding and Printing ...	28	42	88	22	298	408
Carpentry and Joinery ...	21	42	—	—	259	259
Chaff-cutting ...	17	21	—	—	58	58
Coach Building ...	15	29	—	—	89	89
Cycle and Motor Works ...	57	85	—	6	244	250
Farriers and General Smiths... 26	30	—	—	—	81	81
Florists ...	12	18	50	9	5	64
Jewellery and Clock-repairing 12	16	—	—	1	45	46
Metal-working ...	20	33	—	—	87	87
Saddlery ...	11	13	—	—	27	27
Sign and Ticket Writing ...	7	9	6	2	24	32
Trunk-making ...	12	13	—	—	25	25
Umbrella-making ...	7	8	11	4	10	25
Undertaking ...	11 (2)	18 (4)	1 (1)	—	50	51 (1)
Upholstery ...	55 (24)	87 (29)	148 (40)	20 (4)	164 (5)	332 (49)
Wig-making and Hair-work... 7	9	—	10	7	8	25
Various ...	73 (4)	106 (4)	166 (6)	47	549 (7)	762 (13)
	1,508 (385)	2,346 (414)	4,555 (400)	639 (78)	2,746 (282)	7,940 (760)

Women were employed in 925 workshops, including 164 where men and women were employed.

The total number of female workers therein was 5,182, including 627 young persons.

Women were employed at 375 outworkers' premises, including 36 where men and women were employed.

The total number of female workers employed therein was 467, including 67 young persons.

TABLE 44.
INSPECTIONS OF WORKSHOPS, &c.
1910.

						1910.	1909.
Workshops—							
On register end of previous year	...	...	...	...	...	1,688	1,532
added during year	...	...	...	...	...	158	230
removed " "	...	...	...	...	...	338	74
On register end of year	...	...	...	...	...	1,508	1,688
Inspections ...						306	270
Re-inspections and miscellaneous calls ...						2,647	2,010
Rooms measured ...						73	95
Workrooms used as bedrooms ...						78	97
Workrooms without Abstracts ...						49	11
Notices served, totals ...						20	3
Written intimations ...						16	3
Under Sec. 4 } Public Health						—	—
37 } (London) ...						—	—
38 } Act, 1891.						3	—
By-laws, under same Act						1	—
Nuisances dealt with—						Discovered. Abated.	Discovered. Abated.
Overcrowding ...						1 1	2 2
Dirty Conditions ...						12 12	26 26
Deficient Ventilation ...						— —	— —
Temperature too high ...						— —	— —
Temperature too low ...						— —	— —
Sanitary conveniences—							
Insufficient ...						3 3	— —
Not separately provided ...						2 2	2 2
Badly placed ...						8 8	1 1
Unventilated ...						— —	— —
Defective ...						16 16	13 13
Vapour, effluvia not removed ...						— —	— —
Steam in washhouses ...						1 1	— —
Gas fumes ...						2 2	2 2
Drains ...						2 2	— —
Wet floors, laundries ...						1 1	— —
Accumulations of refuse ...						— —	— —
Other nuisances or offences ...						2 2	1 1
Totals ...						50 50	47 47

Complaints.—The Home Office forwarded 24 complaints, 6 more than in 1909, the matters complained of being—

Dirty conditions...	...	...	...	...	10 (8)
Overcrowding	...	...	...	...	1 (2)
Other matters	...	...	...	...	13 (8)

No complaints were received from any other source.

Overcrowding.—No case of overcrowding was discovered by the Staff during the year, and only one case reported by the Home Office. In 1908, 9 cases were reported by the Staff and 4 reported by the Home Office, the corresponding figures for 1909 being 0 and 2 respectively.

Deficient Ventilation.—The numbers of workshops reported to be insufficiently ventilated in 1906, and each succeeding year are 3, 4, 6, 0 and 0. It seems justifiable to conclude that a real improvement has been effected in this direction.

Warming.—Although the maintenance of a proper temperature is intimately connected with ventilation, yet the former is under the jurisdiction of the Home Office exclusively. The Staff of the Department are, nevertheless, instructed to report any workshop which may be either too hot or too cold, with a view to the case being brought to the notice of the Home Office. No infraction of this enactment was reported last year.

Sanitary Conveniences.—The following figures show the improvement which has taken place in this matter.

				WATER-CLOSET ACCOMMODATION.					
				1902.	1903.	1907.	1908.	1909.	1910.
Insufficient	...	...	...	9	2	—	2	—	3
Not separately provided	...	...	...	33	4	1	2	2	2
Badly placed	...	...	...	18	13	—	3	1	8
Unventilated	...	...	...	8	—	—	—	—	—
Defective	...	...	...	29	23	15	11	13	16

Sickness.—One hundred and forty-seven (147) cases of infectious disease occurred on workshop premises, 57 more than in the previous year. Of last year's cases 12 were on out-workers' premises. The numbers of each disease are shown below.

Scarlet Fever	...	18 (3)	Erysipelas	...	4 (1)	Chickenpox	...	20 (3)
Diphtheria	...	7 (1)	Measles	...	64 (2)	Whooping Cough	...	30 (1)
Enteric Fever	...	3 (1)	Puerperal Fever	...	2 (—)			

NOTE.—The figures in parentheses refer to out-workers' premises.

The deaths from the above diseases numbered eleven, five from measles and six from whooping cough, one of the eleven being on an out-workers' premises. In 1909 the total number of deaths was three. In addition to the eleven deaths mentioned above, there were eleven (14 in 1909) deaths from pulmonary tuberculosis on workshop premises, including one (two in 1909) on an out-worker's.

A careful scrutiny is made of the addresses whence cases of all forms of infectious disease are reported and if any case occur on workshop premises, the necessary steps are taken to prevent any work becoming the vehicle of infection. The majority of patients suffering from the diseases mentioned in the Act are removed to hospital and the subsequent disinfection includes that of any work, or work material, which has been exposed to infection. No difficulty has been experienced in securing the observance of all necessary precautions, and neither notices nor summonses have been required.

BAKEHOUSES.—At the end of 1909 75 bakehouses were on the register, 17 of which were "level" and 58 "underground." Last year eight bakehouses (one level, seven underground) went out of use, and four (1 level, 3 underground) were re-opened. At the end of the year there were 71 bakehouses on the Register, 17 level and 54 underground.

The 71 bakehouses left on the Register included 10 factory bakehouses, three level and seven underground. These are under the supervision of the Department in virtue of the

provisions of Sections 26 and 141 of the Public Health (London) Act, 1891. Forty (40) inspections were made during the year of the factory bakehouses and 495 of the workshop. The re-opening of a bakehouse is made an opportunity for securing a complete overhaul of the premises and fittings.

HOUSING.

HOUSING, TOWN PLANNING, &c. ACT, 1909.

A report on this Act embodying a synopsis of the amendments in the older Housing Acts and a statement of the methods of procedure as prescribed by the Act itself, was submitted at the beginning of January of last year. Communications were received from the Local Government Board during the year forwarding the forms of notices to be adopted, rules for appeals, etc.

Only one house was brought before the Council during the year under the Act. Notices were served under Section 15 of the Act for the repair and making good of dilapidations. The landlord failed to comply with the notices, and the Council resolved to issue tenders for the execution of the work. It was, however, found impossible to proceed with the case as vacant possession of the house was necessary to enable the work to be done. There is no provision in the Acts by which such vacant possession can be obtained. Subsequently the landlord did carry out some of the work, but at the close of the year the case was still before the Public Health Committee. The difficulty experienced was reported to the Local Government Board.

HOUSES LET IN LODGINGS.

Registration.—At the beginning of last year 1,320 houses were on the Register, and during the year 20 were added and 14 removed, so that at the close of the year 1,326 houses were registered. The registration of the 20 houses involved 277 visits (inspections). The houses registered during the year were situated in—

(Streets in which the majority of houses were previously registered).

Albert Street.	Cuthbert Street.
Braithwaite Place.	Hall Place.
Campbell Street.	Hethpool Street.
Carlton Mews, Maida Vale.	Kensal Road.
Crompton Street.	North Wharf Road, and

(Houses the registration of which was specially ordered, on account of the conditions found existing therein).

Chippenham Road.

Edbrooke Road.

The housing conditions found to prevail at the time of registration are given below:—

No. of Houses visited and registered	20	No. of Rooms Registered	...	...	91
Inhabitants in registered rooms	176	For living only	...	...	12
Persons under 10 years of age	56	For sleeping	...	...	44
" over " "	120	For living and sleeping	...	...	35
Inhabitants in other rooms	25	Other Rooms	...	...	39
Persons under 10 years of age	6	Occupied by landlords	...	...	21
" 10 years and over	19	Exempt by rent	...	...	—
Total Inhabitants	201	Occupied, not inhabited	...	...	7
		Empty	...	...	11
		Total Rooms	...	...	130

No. of Rooms to Tenement.	Totals.		Nos. of occupants of a tenement.																
			1		2		3		4		5		6		7		8		
	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	T	$\frac{P}{10P}$	
1	37	57	18	16	16	...	9	18	...	8	15	9	3	6	6	1	2	3	...
2	21	51	27	...	...	...	4	8	...	6	13	5	5	17	3	4	9	11	2
3	4	12	11	...	...	...	1	2	...	...	...	...	...	...	...	1	2	4	1

T—number of Tenements containing $\left(\frac{P}{10}\right)$ Persons over 10 years of age, and $\left(\frac{10}{P}\right)$ Persons under 10 years of age.

Judged by the theoretical standard of the Registrar-General, nearly one-third of the tenements registered (20 out of 62) were overcrowded, that is to say, the inhabitants of such tenements averaged more than two persons, irrespective of their ages, per room, but there were only 9 tenements overcrowded according to the legal standards, those tenements being occupied by 41 persons. In each class of home the average numbers of occupants per room was higher than that recorded at last census, there being 2.0 per room in one-room tenements (census, 1.8), 1.8 in two-room (census, 1.7), 1.9 in three-room (census, 1.3).

Supervision.—Apart from registration, annual cleansing and sickness, 2,430 inspections were made of registered houses during the past year, as compared with 2,487 in 1909. The nuisances and infringements of by-laws discovered and dealt with in the course of such inspections are set out in Table 45. A total of 1,177 notices of all descriptions were served last year (1,223 in 1909), including 315 "written intimations," 54 "statutory notices," 625 notices under the various by-laws, and 183 under the London County Council (General Powers) Acts, viz., 179 for verminous rooms (152 in 1903), and 4 with reference to dustbins.

Annual Cleansing.—The annual cleansing was carried out last year much better than was expected, having in mind the decision given in *Arlidge v. Islington Borough Council*, and the course adopted by the Magistrate at the Marylebone Police Court after that case had been decided. It was felt that no summonses could be issued, and as a consequence the work dragged on for an unusually long period. New By-laws relating to Houses Let in Lodgings were drafted last autumn, and at the end of the year were under the consideration of the Public Health Committee. The new draft incorporates the provisions of Section 16 of the Housing, Town Planning, &c., Act, 1909.

The 1,340 (1,254 in 1909) houses on the Register at the end of March were inspected in connection with this work, 4,674 inspections in all being required to secure its completion. The rooms reported as in need of cleansing numbered 2,006 (1,920 in 1909), and the notices served 2,747 (3,088 in 1909) comprising 2,075 cleansing notices, 174 for verminous rooms, and 498 for sanitary defects, etc. Forty cases were referred to the Solicitor, but no summonses were taken out.

An enumeration of the inhabitants was made, the results of which as regards tenements of less than five rooms are given in Table 46. The enumeration covered 4,366 tenements

(4,563 in 1909), containing 7,363 rooms (7,536 in 1909) occupied by 14,789 persons (15,195 in 1909). There was a slight increase in the average number of occupants to a tenement (from 3.33 in 1909 to 3.38 last year), but a reduction in the average per room (from 2.01 to 2.00).

TABLE 45.
Sanitary Defects Remedied in Registered Houses.

	1909.	1910.
Drain defective	10	9
" choked	7	16
" untrapped	—	26
" unventilated or improperly ventilated	2	3
Manhole cover defective	4	5
Surface inlet improperly trapped	2	1
Gully choked	13	8
Ventilating pipe improperly constructed... ..	—	—
Soilpipe defective	—	1
" improperly constructed	—	—
" unventilated or improperly ventilated	—	—
Water-closet choked	56	42
" defective	72	95
" flushed from drinking water cistern	—	1
" insufficiently flushed	37	35
" flushing apparatus defective	71	42
" without water supply	21	16
" foul	41	16
" improperly constructed	—	1
" accommodation insufficient	44	33
" without door	19	6
" without external light or ventilation	—	1
Rain-water pipe not disconnected from drain or soilpipe	1	2
" defective	45	35
" choked	15	5
Waste pipe not disconnected	—	—
" defective	2	14
" choked	1	3
" not provided	3	6
Other drainage defects	2	5
Cistern defective	7	3
" dirty	58	58
" improperly placed	—	1
" without proper cover	4	14
" cover defective	13	10
Dustbin defective	72	59
" not provided	8	3
" insufficient	1	1
" disused and not abolished	5	6
Paving defective in area or yard	79	82
" " washhouse	51	55
Guttering defective	27	17
Premises damp	16	24
" dirty	13	6
Rooms verminous	213	284
Roof defective	179	144
Accumulation of refuse	16	33
Animals improperly kept	4	6
Water supply to premises insufficient	78	4
Other defects or nuisances	35	17

The averages for tenements of different sizes are given below, the corresponding averages for the whole Borough (Census 1901), being shown by the figures in parentheses. In homes of one and two rooms the averages recorded last year showed no changes from the figures of the previous year, but in the others there were small increases in the numbers per tenement, the changes per room being too small to affect averages carried to one place of decimals only.

						Persons	
						per tenement.	per room.
In 1,980 tenements of <i>one</i> room 4,304 persons averaging						2.1	2.1 (1.8)
" 1,821	"	<i>two</i> rooms	7,564	"	"	4.1	2.0 (1.7)
" 522	"	<i>three</i>	" 2,665	"	"	5.0	1.7 (1.3)
" 40	"	<i>four</i>	" 234	"	"	5.8	1.4 (1.1) *
" 3	"	<i>five</i>	" 22	"	"	7.3	1.4 (?)

In 1907, no enumeration was made, and a comparison (*see below*) of the percentages of the different sizes of tenements in 1906, and in each of the years 1908-10, shows that that omission had a distinct effect in lowering the standard of housing. Such view is confirmed by the changes which have taken place in the percentages recorded in the last three years, and may be taken as evidence of the desirability of making such enumerations systematically each year.

Rooms in tenement	1	2	3	4	5	} per cent. of all tenements enumerated.
1906 ...	43.6	45.0	10.0	1.2	0.04	
1908 ...	44.0	45.4	9.7	0.6	0.04	
1909 ...	47.2	41.2	10.8	0.6	0.09	
1910 ...	45.3	41.7	11.9	0.9	0.07	

Overcrowding.—On the theoretical standard (already explained) 1,457 tenements of less than five rooms were overcrowded, the occupants of the same numbering 7,369 persons of all ages, in other words 33.3 per cent. of the tenements and 49.8 per cent. of the people living in registered tenements were overcrowded according to this standard.

" Overcrowded."	1906.	1908.	1909.	1910.
Percentage of all tenements ...	33.6	37.1	33.9	33.3
Percentage of all inhabitants ...	50.6	49.3	50.2	49.8
Percentage of children under 10 years...	74.6	72.5	73.0	73.2

The total number of cases of real (or legal) overcrowding discovered during the year was 282, as compared with 412, 344, 300, and 432 in each of the years 1906 to 1909. In 56 (19.8 per cent. of the total number) the deficiency in air space was so small that the cases were allowed to stand over for the time being. None of the 56 cases were in the Clarendon Street area. Full particulars are given below.

OVERCROWDING, 1910.

	Registration.	Annual Cleansing.	Other Visits.	Totals.
Tenements overcrowded ...	9	234	39	282
Rooms overcrowded ...	9	255	43	307
Occupants, total ...	41	1,072	225	1,338
Under 10 years ...	19	431	118	568
Ten and upwards ...	22	641	107	770
Overcrowding abated (<i>rooms</i>)—				
By re-arrangement ...	6	56	—	62
By voluntary removal ...	1	61	—	62
Under notice ...	2	63	37	102
Cases held over ...	—	54	2	56

As all tenements are inspected in connection with the annual cleansing, the proportion of overcrowding then discovered gives the best idea of the evil. Last year 234 tenements (5.3 per cent. of the total inspected) were found to be overcrowded, the occupants numbering 1,072, or an average of 4.2 per room. Among the occupants were 431 children under 10 years of age. In 1909, 267 tenements were found to be overcrowded, equal to 6.1 per cent.

which may be regarded as a close approximation of the true numbers. Hence practically the whole of the error in the estimate of the population of the Borough will fall in the figure used as the population of the "Rest of the Borough," and the rates given for the "Rest" are too low.

TABLE 47.

Disease.	Registered Streets.		Rest of Borough.	
	1909.	1910.	1909.	1910.
MORBIDITY*—				
Small-pox	—	—	—	—
Diphtheria and Membranous Croup	2·01	0·89	1·03	0·74
Erysipelas	1·57	1·68	0·57	0·52
Scarlet Fever	10·58	2·74	3·27	1·55
Enteric (and Continued) Fever	0·37	0·50	0·16	0·23
Puerperal Fever	0·05	0·17	0·01	0·04
All Diseases	14·62	6·03	5·06	3·14
MORTALITY*—				
Small-pox	—	—	—	—
Measles	1·03	2·01	0·12	0·29
Scarlet Fever	0·43	0·01	0·04	0·03
Whooping Cough	1·25	0·44	0·09	0·20
Diphtheria	—	0·33	0·08	0·02
Enteric Fever	—	—	0·02	0·03
Diarrhoeal Diseases	1·41	1·00	0·09	0·25
Erysipelas	—	0·05	0·03	0·01
Puerperal Fever	—	—	0·01	0·01
Phthisis	2·06	1·50	0·92	0·74
Other Tuberculous Diseases	0·76	0·83	0·21	0·20
Alcoholism	0·32	—	0·03	0·06
Cancer	1·35	0·94	0·98	1·10
Premature Birth	0·76	0·66	0·31	0·35
Developmental Diseases	1·46	1·34	0·40	0·31
Bronchitis	3·26	2·29	1·09	0·94
Pneumonia	2·39	2·46	0·91	0·72
Cirrhosis of Liver	0·10	—	0·04	0·08
Accidents and Diseases of Parturition	0·05	0·16	0·07	0·05
Suicides	0·10	0·05	0·15	0·08
Other Causes	9·51	7·82	5·44	6·75
All Causes	26·32	22·08	11·12	10·48

* Rates per 1,000 persons.

CLARENDON STREET AREA.—The number of one-room tenements enumerated during the annual cleansing last year was 716, showing a reduction of 51 below the number discovered in 1909. The number of occupants decreased from 1,889 to 1,762. In 1901 662 one-room tenements were enumerated, occupied by 1,556 persons. The average numbers of inhabitants per room was 2·3 in 1901, and 2·4 in 1909 and 1910. Of the one-room tenements 496 (or 69·2 per cent.) were front rooms on the first and second floors, the largest and airiest rooms in the houses, and 118 (16·4 per cent.) basement front rooms.

The number of tenements in the Area found overcrowded at the annual cleansing was 32 last year as compared with 57 in 1909 and (not less than) 204 in 1901 (the Special Inquiry). The inhabitants of overcrowded tenements numbered 130 last year, 237 in 1909, and (at least) 1,174 in 1901. The persons living in overcrowded tenements constituted 2·4 per cent. of the whole number of persons living in the Area last year, 3·9 per cent. in 1909, and 11 per cent. in 1901. It may be mentioned that the population of the Area was estimated at 7,283

persons in 1901, 4,949 aged 10 years and upwards and 2,334 aged less than 10. According to the results of the enumeration of last year the total population was 6,259 persons, 4,207 aged 10 and over, 2,052 aged less than 10 years.

Vital Statistics.—Certain rates from disease and death during the past two years are given in Table 48. Enteric fever was the only disease which showed an increased prevalence last year, that increase being, however, due to direct spread of infection in two families, the circumstances of which have been detailed in the first part of this report (page 18). The reduction in the prevalence of scarlet fever amounted (approximately) to 75 per cent. of the rate for 1909, the reduction in the "Rest of the Borough" being rather more than 50 per cent.

TABLE 48.

	"Clarendon Street Area."		Rest of Borough.	
	1909.	1910.	1909.	1910.
MORBIDITY*—				
Diphtheria	2.00	1.11	1.11	0.73
Erysipelas	1.84	0.95	0.64	0.64
Scarlet Fever	13.55	3.83	3.73	1.60
Enteric Fever	0.92	1.27	0.15	0.21
Puerperal Fever	—	—	0.02	0.06
MORTALITY—ALL CAUSES—				
All ages *	30.04	27.65	12.20	11.09
0—10 years	50.96	33.50	16.67	19.93
10— "	20.17	16.98	11.35	10.12
Infantile Mortality † ...	220	122	89	95
Institution Deaths ‡ ...	48.1	54.3	31.7	33.1

* Rates per 1,000 persons. † Per 1,000 births, fully corrected. ‡ Per 100 deaths.

The mortality at all ages (27.65) was over 3 per 1,000 less than the rate for the previous year, but still in excess of that for 1908 (23.08). The age-group rates were both lower last year than in 1909, and that for the age-group 10 years (16.98) less than the same rate for 1908 (18.88). At ages under 10 the mortality rate for last year while considerably less than that for 1909 was slightly above the corresponding rate for 1908.

There was so slight a change in the numbers of the population enumerated in the two years that the actual numbers of deaths will serve to compare the changes in mortality.

CLARENDON STREET AREA.

Deaths from—	1909	1910
Measles	12	24
Whooping Cough	8	0
Diarrhoeal Diseases	14	5
Tuberculous Diseases	21	16
Bronchitis, Pneumonia	47	38

The deaths from tubercular phthisis (consumption) numbered 12 and 10 in the two years.

There was a satisfactory reduction in infantile mortality from 220 per 1,000 births in 1909 to 122 last year. In 1908 the rate was 173. The proportion of deaths in institutions

after falling from 63·1 per cent. in 1908 to 48·1 per cent. in 1909, rose to 54·3 per cent. last year. In the "Rest of the Borough" the corresponding percentages have been—in 1908, 32·3; 1909, 31·7; and 1910, 33·1.*

COMMON LODGING HOUSES.

The number of houses licensed last year remained unchanged at 7—6 being for men (195 beds) and 1 for women (40 beds). No case of infectious illness was reported from any house last year. The deaths among the lodgers numbered 12 (6 in 1909), the causes being returned as—

Cancer	3	Tubercular Disease	} 1 each.
Heart Disease ...	...	} 2 each.	Old Age ...	...
Respiratory Diseases ...	...		Accident ...	...
Other Diseases ...	...			

INHABITED HOUSE DUTY.

Five applications were received for certificates under the Revenue Act, 1903, to obtain abatement or remission of the duty, and the like number of certificates relating to 83 tenements issued.

FOOD SUPERVISION.

Slaughterhouses.—There were seven slaughterhouses in use during the year, situate as described below:—

Bishop's Mews, No. 1.	Chippenham Mews, No. 18.
Edgware Road, No. 275.	Harrow Road, No. 125.
Portsmouth Mews (No. 249 Maida Vale).	Southwick Mews, No. 15.
Upper Brook Mews, No. 6.	

The Inspector was present at the slaughterhouses on 464 (492) occasions when killing was in progress, and examined the carcasses of 87 (131) bullocks, and 4,865 (4,536) sheep. The following organs were destroyed under his supervision:—

<i>Sheep.</i>	Livers, 7—parasitic 4, and abscess 3.
	Plucks, 3—pneumonic 2, and parasitic 1.
<i>Bullocks.</i>	Livers, 14—parasitic 12, and tuberculous 2.
	Lungs, 4— " 1, " " 3.
	Hearts, 2—tuberculous, and inflammatory condition, 1 each.
	Heads and tongues, 2—tuberculous.
	Mesenteries, 2—tuberculous.
	Spleens, 2—tuberculous.

In addition one carcase of a sheep was destroyed owing to death (not slaughter), and one of a bullock (tuberculous).

The premises were specially inspected by the Medical Officer of Health during the autumn, after receipt of the customary notices of intention to apply for renewal of licences, all being found clean and well kept.

*The remarks on the differences in the rates for the "Registered Streets" and the "Rest of the Borough" apply with very nearly equal force to the rates for the "Area" and the "Rest of the Borough."

FOOD PURVEYORS.

There were 622 places on the Register of Food Purveyors, the numbers of each trade being as here given :—

Butchers	...	...	80	Milkshops, Dairies	...	114
" Pork	...	...	24	Refreshment Houses	...	121
Fishmongers	...	...	28	Fried Fish, Sausages	...	29
Game, Poultry	...	...	12	Ice Cream Makers, Vendors	...	120
Fruiterers, Greengrocers	...	...	82	Margarine Dealers	...	12

In addition there are 6 places where fish-curing is carried on, 9 where sausages and saveloys are made, and 2 (factories) where artificial ice is produced.

The costermongers' stalls in the Borough are inspected at least twice each Saturday, and such as take pitches on other days in the week, daily. Below is given a tabulated statement of the numbers of inspections (total 969) reported by the Inspector :

Butchers' Shops (all kinds)	...	436	Milkshops	...	200
Greengrocers' Shops	...	14	Restaurants, &c.	...	190
Fishmongers' Shops	...	18	Ice Cream Shops and Barrows	...	65
Fried Fish Shops	...	46			

(NOTE.—Inspections of coster barrows are not included in the above figures.)

Besides inspections for the purposes of the Public Health (London) Act (including discovery of unsound food) all the above premises are subject to special provisions of the London County Council (General Powers) Acts. Inspections made under the latter Acts are not included in the above figures, but are given below :—

Coffee and Dining Rooms	...	10	Butchers'	...	1
Confectioners' Shops	...	7	Fishmongers'	...	6
Grocery, Provisions	...	10	Greengrocer's	...	1
Poultry	...	2			

MILK SUPPLY.

There is only one cowshed in the Borough, that at—

Star Street, No. 39, is licensed for 10 cows (usual number, 5).

The shed is visited periodically by the Inspector, but the effective control is vested in the County Council. The shed is always clean and in good condition when visited.

Dairies and Milkshops.—At the end of 1909 there were 183 names of milk vendors on the Register. In March last action was taken under Sec. 5 of the London County Council (General Powers) Act, 1908—on the lines of the Resolutions of the Council, of December 5th, 1909, which were included in the annual report for that year. In the end 69 names were removed from the Register on the ground that their premises were unsuited for the sale of milk. No new milk vendors were added, but 12 old businesses changed hands. The Register contained 114 effective entries at the close of the year. The businesses carried on in combination with the sale of milk by the vendors now on the Register are given below—

Dairies : milk, butter and eggs only	...	...	...	84 (81)
" wholesale	...	...	...	4 (4)
Grocers' shops...	...	...	...	1 (10)
General shops	...	...	...	9 (61)
Sweet-stuff, confectionery	...	...	...	2 (10)
Provisions	...	...	...	1 (2)
Refreshments	...	...	...	9 (10)
Bakers' shops	...	...	...	4 (3)

One case of diphtheria occurred at a dairy, and 3 cases of scarlet fever, and 1 of diphtheria in the families of milk carriers. Suitable precautions were taken in each case, and there was no conveyance of infection therefrom by the milk.

ICE-CREAM MAKING.

For the purpose of duly enforcing the provisions of Part VIII of the London County Council (General Powers) Act, 1902, a special Register of all makers and vendors of this commodity is kept. At the end of 1909 there were 120 names on the Register, 4 were removed during the past year and none added, leaving 116 on the Register at the close of the year. The businesses with which the ice-cream trade is combined, are indicated below—

Sweet shops ...	58	Newspapers and Tobacco...	2
Bakers ...	24	Confectioners ...	4
Milk ...	4	Cook ...	1
Restaurants ...	15	General ...	8

In addition to 4 barrow-men residing in the Borough, 10 others have regular pitches in the Borough, the proprietors residing in—

Kensington ...	5	Marylebone ...	4	Willesden ...	1.
----------------	---	----------------	---	---------------	----

UN SOUND AND DISEASED FOOD.

The appended statement, including 2,093 lbs. of foodstuffs destroyed, is additional to the amount dealt with in the slaughterhouses. The inclement summer was doubtless responsible for some of the decrease in the amount destroyed, and certainly for the smaller amount dealt with at the request of the G.W.R., 140 lbs. last year, as compared with 1,351 lbs. in 1909.

Meat (Butchers' Shops):—

Carcase of Bullock, and 3 pairs of lungs ...	...	...	Tuberculous.
Rabbits' Liver ...	...	...	Parasitic.

*Fish:—*Haddocks, 56 lbs. Cod, 126 lbs. Mackerel, 30 lbs. Decomposed.

<i>Vegetables and Fruit:—</i> Apples ...	140 lbs.	Cherries ...	68 lbs.
Tomatoes ...	144 "	Currants ...	10 "
Strawberries ...	221 "		

SUMMARY.

Meat ...	1,158 lbs.	Per G.W.R. Co.,	
Fish ...	212 "	Pickled Herrings ...	140 lbs.
Vegetables ...	583 "		
	1,953 "	Grand Total ...	2,093 lbs.

FOOD ADULTERATION.

There was again a slight increase in the proportion of adulterated samples last year, 54 out of a total of 600 (equal to 9.0 per cent.) being reported adulterated. In the years 1905-09 the proportions were 6.5, 10.2, 9.2 2.6 and 8.6 per cent. A list of the samples taken, with numbers and proportions of those found to be adulterated, is given in Table 49.

TABLE 49.

	Total.	Found Adulterated.	Percentage Adulterated.
Milk	317*	23	7.2
Butter	56	4	7.1
Jam	33	5	15.1
Sausages	23	—	—
Cream	18	6	33.3
Lard	18	1	5.5
Coffee	17	1	5.9
British Wines	13	13	100
Vinegar	13	—	—
Potted or Tinned Paste	9	—	—
Cheese	8	—	—
Margarine	8	—	—
Cocoa	8	1	12.5
Brawn	7	—	—
Glycerine	7	—	—
Olive Oil	6	—	—
Condensed Milk	4	—	—
Salad Oil	4	—	—
Infant Food	2	—	—
Flour	2	—	—
Mustard	2	—	—
Pepper	2	—	—
Ground Ginger	2	—	—
Tapioca	2	—	—
Sago	2	—	—
Cream of Tartar	2	—	—
Marmalade	2	—	—
Tea	2	—	—
Butter on Bread	1	—	—
Cream Cheese	1	—	—
Ammon. Tinct. Quinine	1	—	—
White Precipitate Ointment	1	—	—
Sal Volatile	1	—	—
Epsom Salts	1	—	—
Oil of Juniper	1	—	—
Camphorated Oil	1	—	—
Milk of Sulphur	1	—	—
Formalin	1	—	—
Pressed Beef	1	—	—
	600	54	9.0

* Including 67 taken at Paddington (G.W.R. Terminus in course of delivery; 10 adulterated.

Of the 317 samples of milk, 67 were taken at the Paddington (G.W.R.) Terminus at the request of the consignees who had contracts with the farmers sending the milk to London. Of such samples, 10, or 14.9 per cent. were found to be adulterated, as compared with 24.3 in 1909; 6.4 in 1908; 32.3 in 1907; 30.6 in 1906; and 12.6 in 1905.

Eighty-six (86) samples were purchased on Sundays, most of them in the streets, viz.: 77 milk, 1 butter, 1 flour, and 1 margarine. Of the samples of milk 4 were found to be adulterated. The sample of margarine was not supplied from labelled bulk as required by the Act. The adulterated samples constituted 4.6 per cent. of the whole number (86), as compared with 8.0 per cent. of all the samples purchased during the year (excluding the railway samples).

British Wines.—The results of analyses of the samples taken show that these wines fall into two categories, viz., (a) the non-alcoholic—in which preservatives replace the alcohol, and (b) the alcoholic.

The preservative found in the non-alcoholic samples was salicylic acid in each case. The amount of the drug present varying from "a trace" to 7 grains per pint. In the alcoholic group the proportion of alcohol present varied from 17-23 per cent. of proof spirit, equivalent to 8.5-11.5 per cent. of absolute alcohol. An ordinary claret contains about 20 per cent. of proof spirit.

In the absence of any "standard" composition of "British Wines," it was not thought desirable to institute proceedings in any of the cases. The labels did not indicate the presence of preservative but the amount present could not be deemed injurious. The facts were reported to the Local Government Board.

Jams.—The 5 samples of jam reported as adulterated contained 10-15 per cent. of apple pulp, that is the pulp of a fruit which was other than that described on the label. In the two cases which were taken into Court, there was nothing on the labels to indicate any admixture. In the other cases the label stated that the jams had been "improved" by the addition of fruit juice (not pulp). No proceedings were instituted but the vendor's attention was directed to the misleading wording of the labels. An appeal is now pending from convictions on similar cases obtained by the Marylebone Borough Council.

Cream.—In December, 1909, a circular letter was issued to all vendors of cream warning them that proceedings would be taken with respect to any sample sold under conditions not conforming to the suggested regulations set out in Dr. J. M. Hamill's Report to the Local Government Board.* One-third of the samples purchased last year did not conform with the prescribed conditions and 4 of the samples formed the subject of proceedings.

Lard.—In respect of the sample reported as adulterated, the vendor satisfied the Committee that a mistake had been made by his assistant who served "nut lard" for "lard."

Cocoa.—In this case "chocolate" was sold for "cocoa" but the vendor satisfied the Committee that the assistant had made a mistake.

OFFICE (CLERICAL) WORK.

The appended figures suggest the mass of work which has to be performed by the Clerical Staff, and give but a very imperfect idea of the very large amount of writing which is necessary, the bulk of which cannot be set out in the form of statistics.

Letters received ...	4,300	(4,337)	Complaints received ...	662	(683)
" dispatched ...	3,591	(3,251)	Plans dealt with ...	303	(367)
Entries in postage book ...	12,125	(12,400)	New openings in Journals	750	(627)
Cases of infectious disease					
entered in Register ...	531	(948)	Disinfection Orders		
Notices sent re above and			(duplicate)	3,173	(2,135)
other diseases ...	6,225	(6,443)	Notices to abate nuisances	1,251	(1,736)

The figures in parentheses are the returns for 1909.

LEGAL PROCEEDINGS.

The results of the cases which were brought before the Police Magistrate are appended hereto. The Department is able to secure the abatement of nearly all nuisances by service of "written intimations" which are not, in the legal sense, "notices" at all, and the cases taken into Court form but a small proportion of the total dealt with during the year.

* See page 82 of Report for 1909.

The fines imposed during the year amounted to £101 17s. and the costs awarded to £37 6s. 6d. Those sums are paid to the Council's account except fines imposed under Notifications of Births Act, which are claimed by the Police. One defendant served three months imprisonment in default of paying fines and costs amounting to £45 4s.

The following statement compares last year's amounts (fines and costs) with those received during the 5 years, 1905-09.

		Health Cases.			Adulteration Cases.		
		£	s.	d.	£	s.	d.
1910	...	13	15	0	...	125	8 6
1909	...	52	6	6	...	86	6 6
1908	...	43	10	0	...	55	17 6
1907	...	69	19	0	...	31	16 6
1906	...	34	15	0	...	63	1 0
1905	...	25	6	0	...	126	17 0

ADULTERATION CASES.						
	1910.	1909.	1908.	1907.	1906.	1905.
Average per { Fine	£2 3 8	£1 3 9	£1 2 3	£0 17 0	£0 16 6	£3 8 7
conviction { Costs	0 12 2	0 12 2	0 13 9	0 12 8	0 15 0	1 2 0

LEGAL PROCEEDINGS, 1910.

<i>Under Public Health (London) Act, 1891.</i>				Fines.	Costs.
<i>Section 4.</i>					£ s. d.
20, Amberley Road	...	Sink and waste pipe defective	...	Work done.	0 10 6
35, Herries Street	...	Premises dirty	...	Order made.	0 5 0
55, Clarendon Street	...	No water supply to premises	...	"	0 15 0
<i>By-laws.</i>					
20, Amberley Road	...	Closet defective	...	Work done.	0 10 6
4, Campbell Street	...	"	...	"	0 10 6
26, Cirencester Street	...	Room overcrowded	...	Overcrowding abated	0 10 6
27, Cirencester Street	...	Drain choked, &c.	...	Work done.	0 2 0
25, " "	...	Closet and interceptor choked, &c.	...	"	0 10 6
11, Crompton Street	...	Yard paving defective	...	"	0 2 0
7, Netley Street	...	Closets defective	...	"	0 2 0
18, " "	...	Insufficient flush to closet	...	"	1 1 0
19, South Wharf Road	...	Insufficient closet accommodation	...	"	1 3 0
J. Bosher, Park Royal	...	Removing offensive refuse during prohibited hours	...	0 5 0	0 2 0
<i>Metropolis Management Act, 1855.</i>					
<i>By-laws pursuant to Section 202.</i>					
G. A. Nichols, 233, Lavender Hill	...	Neglecting to deposit plans of drainage works	...	Plans submitted.	0 12 6
<i>London County Council (General Powers) Act, 1908.</i>					
Jane Edwards, 3, South Wharf Road	...	Selling milk without being registered	...	0 1 0	0 2 0
L. Farebrother, 108, Richmond Road	...	"	...	0 1 0	0 10 6
H. Fitzpatrick, 5, Hall Place	...	"	...	"	0 2 0
A. L. Grosch, 57, Clarendon Street	...	"	...	Summons	withdrawn
E. Izzard, 19, North Wharf Road	...	"	...	do.	do.

LEGAL PROCEEDINGS, 1910.

<i>Notification of Births Act, 1907.</i>						Fines.	Costs.
<i>Failing to notify birth of child.</i>							
43	Summonses issued against parents—					£ s. d.	£ s. d.
	1 Dismissed					—	—
	5 Withdrawn					—	—
	1 Withdrawn on payment of					—	0 2 0
	1 Withdrawn on payment of					—	0 10 6
	35 Convictions					1 15 0	3 10 0
2	Summonses issued against medical practitioners—						
	1 Withdrawn					—	—
	1 Conviction					0 5 0	0 2 0

SUMMARY OF LEGAL PROCEEDINGS DURING 1910.
Under Sale of Food and Drugs Acts, 1875-1907.

						Fines.		Costs.	
						£	s. d.	£	s. d.
(1)	Milk	...	...	6% added water...	...	2	0 0	1	3 0
(2)	"	...	...	4% "	...	2	0 0	0	2 0
	"	...	...	9% "	...	5	0 0	4	11 0
	"	...	...	12% "	...	—	—	0	2 0
	"	...	...	4% "	...	—	—	0	2 0
(3)	"	...	...	8% "	...	—	—	0	2 0
	"	...	...	5% "	...	—	—	0	2 0
	"	...	...	14% "	...	—	—	0	2 0
	"	...	...	8% "	...	—	—	0	2 0
	"	...	...	6% "	...	—	—	0	2 0
(4)	"	...	...	15% "	...	10	0 0	5	5 0
	"	...	...	12% "	...	0	10 0	0	12 6
	"	...	...	8% fat abstracted	...	5	0 0	0	12 6
(2)	"	...	...	12% "	...	2	0 0	0	2 0
	"	...	...	6% "	...	2	0 0	0	2 0
	"	...	...	26% "	...	2	0 0	0	2 0
	"	...	...	13% "	...	2	0 0	0	2 0
(5)	"	...	...	26% "	...	5	0 0 or 1 month.	—	—
(6)	"	...	...	12% "	...	0	10 0	1	8 0
	"	...	...	11% "	...	0	10 0	0	2 0
	"	...	...	10% "	...	0	10 0	0	12 6
	"	...	...	15% "	...	Summons withdrawn.	—	1	1 0
	Butter	...	...	73% foreign fat	...	15	0 0	0	12 6
(7)	"	...	...	74% "	...	Summons withdrawn.	—	—	—
	"	...	...	32 1/2% "	...	{ 20 0 0	—	0	2 0
	"	...	...	"	...	{ or 2 months.	—	—	—
(5)	"	...	...	72% "	...	{ 20 0 0	—	0	2 0
	"	...	...	"	...	{ or 2 months.	—	—	—
	Plum Jam	...	...	10% apple pulp	...	0	10 0	0	12 6
	Raspberry Jam	...	...	10% "	...	0	10 0	0	12 6
	Cream	...	...	13 1/4 grs. boric acid per lb.	...	0	5 0	0	12 6
	"	...	...	24 1/2 " " "	...	0	5 0	0	12 6
	"	...	...	45 1/2 " " "	...	Withdrawn.	—	0	10 6
	"	...	...	21 " " "	...	—	—	0	12 6
	Exposing unlabelled Margarine for sale	...	...	...	...	0	5 0	0	2 0
(8)	"	...	...	...	...	0	5 0	0	12 6
	Selling Margarine from unlabelled bulk	...	...	...	...	0	5 0	0	2 0
	Selling Margarine in an unstamped wrapper	...	...	...	...	0	5 0	0	17 6
(9)	"	...	...	...	...	Summons not served.	—	—	—
(10)	"	...	...	...	...	1	0 0	0	12 6
	"	...	...	...	...	0	5 0	0	12 6
	Selling Margarine from unlabelled bulk	...	...	...	...	0	5 0	0	12 6
	"	...	...	...	...	0	10 0	0	12 6
(10)	Name and address not inscribed on milk churn	...	...	...	...	—	—	0	2 0
	"	...	...	and barrow	...	0	10 0	0	2 0
	Words "skimmed milk" not inscribed on churn	...	...	...	...	Summons withdrawn.	—	—	—
	Name and address not inscribed on hand can	...	...	...	...	0	5 0	0	2 0
(11)	"	...	...	...	...	0	5 0	0	7 6

NOTES.

- (1) Defendant fined 5/- with 12/6 costs, Nov. 5th, 1909, for selling milk containing 9 per cent. of added water.
- (2) The same defendant.
- (3) " "
- (4) Defendant fined 10/- with 12/6 costs on each of two summonses, Aug. 2nd, 1907, for selling milk 18 and 10 per cent. respectively deficient in fat.
- (5) The same defendant. Fined £3 with 12/6 costs, Aug. 20th, 1896, for selling milk 28 per cent. deficient in fat. Defendant served term of imprisonment.
- (6) The same defendant.
- (7) Butter had been supplied by vendor of sample in respect of which the fine of £15 was imposed.
- (8) Two offences in respect of the same sample.
- (9) Defendant went away before summons could be served.
- (10) The same defendant. Fined £5 with 12/6 costs, June 19th, 1906, for selling margarine as butter.
- (11) Defendant fined £2 with 12/6 costs, Nov. 30th, 1906, for selling margarine as butter.

APPENDIX.—A.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1910 AND TEN PREVIOUS YEARS.

L. G. B.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in the District.	Deaths of Residents registered beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1,000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1900	143,518	3,370	23.51	524	155	2,519	17.57	708	401	218	2,336	16.29
1901	144,188	3,359	23.29	484	144	2,163	15.00	652	324	218	2,057	14.26
1902	145,052	3,305	22.41	474	144	2,311	15.67	735	366	207	2,152	14.58
1903	145,927	3,302	22.62	425	128	2,163	14.41	743	366	181	1,918	13.14
1904	146,815	3,295	22.44	490	148	2,228	15.17	780	387	173	2,014	13.71
1905	147,713	3,184	21.55	441	139	2,210	14.96	806	410	161	1,961	13.27
1906	148,621	3,152	21.22	395	125	2,041	13.73	775	395	197	1,843	12.40
1907	149,542	3,074	20.55	396	128	2,154	14.40	770	372	232	2,014	13.46
1908	150,489	3,149	20.58	374	118	2,079	13.58	825	400	217	1,896	12.36
1909	151,437	2,895	19.11	347	119	2,154	14.22	813	409	219	1,964	12.96
Averages for years 1900-1909.	147,377	3,208	21.73	435	135	2,196	14.87	761	383	202	2,015	13.62
1910	152,396	2,909	19.08	353	121	2,004	13.14	808	384	175	1,795	11.77

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 1,336.

Total population at all ages, 143,976
 Number of inhabited houses, 13,221
 Average number of persons per house, 8.9 } At Census of 1901.

TABLE II.

ESTIMATED POPULATIONS OF AND NUMBERS OF BIRTHS AND DEATHS (BOTH CORRECTED) IN BOROUGH AND ITS WARDS.

L. G. B.

	Year.	BOROUGH.	Queen's Park.	Harrow Road.	Maida Vale.	Westbourne.	Church.	Lancaster Gate,		Hyde Park.	
								West.	East.		
ESTIMATED POPULATION.	1901	144,188	17,152	27,775	18,769	23,842	26,335	8,454	7,939	13,922	
	1902	145,052	17,038	28,071	18,969	24,096	26,579	8,449	7,935	13,915	
	1903	145,927	16,924	28,370	19,171	24,352	26,826	8,445	7,931	13,908	
	1904	146,815	16,813	28,672	19,375	24,612	27,076	8,441	7,926	13,900	
	1905	147,713	16,701	28,978	19,581	24,874	27,326	8,436	7,923	13,894	
	1906	148,621	16,589	29,286	19,790	25,138	27,580	8,432	7,919	13,887	
	1907	149,542	16,478	29,597	20,001	25,406	27,837	8,428	7,915	13,880	
	1908	150,489	16,368	29,917	20,216	25,680	28,100	8,428	7,911	13,873	
	1909	151,437	16,259	30,236	20,432	25,954	28,363	8,420	7,907	13,866	
	Averages	147,812	16,705	29,005	19,600	24,898	27,349	8,437	7,923	13,894	
1910	152,396	16,150	30,559	20,650	26,231	28,628	8,417	7,903	13,858		
BIRTHS.	1901	3,499	}		not known.						
	1902	3,464									
	1903	3,465									
	1904	3,458									
	1905	3,299	428	818	423	510	760	72	91	197	
	1906	3,286	458	844	430	453	769	63	71	198	
	1907	3,206	436	797	424	468	768	72	65	176	
	1908	3,296	455	858	427	505	739	68	65	179	
	1909	3,031	382	741	392	470	743	63	48	192	
	Averages	3,334	432	812	419	481	756	68	68	188	
1910	3,022	406	717	407	468	720	70	58	176		
DEATHS.	All Ages.	1901	2,057	257	401	255	354	484	77	61	168
		1902	2,152	270	433	264	373	539	59	70	144
		1903	1,918	237	353	244	349	470	51	60	154
		1904	2,014	249	402	260	310	482	68	66	177
		1905	1,961	221	396	257	338	448	77	76	148
		1906	1,843	206	319	250	297	487	58	57	169
		1907	2,014	235	398	292	337	470	72	64	146
		1908	1,896	225	381	249	343	434	64	53	147
		1909	1,964	202	377	272	324	491	73	62	163
		Averages	1,979	233	384	261	336	478	67	63	157
	1910	1,795	198	391	246	293	440	54	54	119	
	Under One Year.	1901	455	62	105	49	75	132	9	4	19
		1902	433	76	101	49	63	117	3	8	16
		1903	388	43	84	44	63	123	3	6	22
1904		449	71	96	52	62	131	7	7	23	
1905		391	52	94	51	57	111	4	5	17	
1906		353	42	63	46	55	113	3	6	25	
1907		354	46	85	46	47	99	6	6	19	
1908		348	41	79	43	55	102	2	4	22	
1909		311	28	55	36	50	116	4	4	18	
Averages		387	51	85	46	58	116	5	6	20	
1910	294	37	70	34	49	87	2	3	12		

TABLE III.

CAUSES OF DEATH: BOROUGH—SEX AND AGE DISTRIBUTION.

1910.

Corrected for Non-Residents dying within, and (as far as possible) for Residents dying beyond the Borough.

L. G. B.

Cause of Death.	Age at Death.												All Ages.		
	0—		1—		5—		15—		25—		65—		Persons.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	1910	1909	1908
Small-pox	2	6	34	25	1	6	...	...	1	...	...	...	37	38	75
Measles ... ..	...	...	3	1	2	1	...	...	...	...	...	...	5	2	7
Scarlet Fever ... ..	...	...	...	...	1	2	...	1	7	7	3	9	12	19	31
Epidemic Influenza	10	7	11	5	1	1	...	...	...	...	...	...	22	13	35
Whooping-cough ... ..	...	...	4	1	...	3	...	...	...	...	1	4	5	9	11
Diphtheria, Membranous Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup ... ..	...	...	...	...	1	...	1	1	1	...	...	2	2	4	3
Enteric Fever	9	10	1	1	...	...	...	...	2	...	4	10	17	27	29
Diarrhoea, Dysentery	8	8	6	2	...	...	...	...	1	...	...	14	11	25	9
Epidemic, Zymotic Enteritis...	5	8	1	1	...	1	...	2	1	...	1	8	12	20	21
Enteritis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Continued Fevers—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever ... ..	...	...	...	...	1	...	...	...	...	...	...	1	1	2	...
Mumps ... ..	...	...	...	...	...	...	1	...	1	4	...	9	8	17	8
Syphilis	7	4	...	...	...	...	...	1	2	...	...	1	2	3	4
Erysipelas ... ..	...	...	...	...	...	...	...	...	2	...	...	2	2	2	2
Puerperal Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pyæmia	1	...	...	...	...	...	...	1	1	...	...	2	1	3	2
Infective Endocarditis ... ..	...	...	...	...	1	...	...	1	2	...	...	2	2	4	3
Cancrum Oris ... ..	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...
Cellulitis ... ..	...	...	...	...	...	...	...	1	1	2	...	2	2	4	3
Carbuncle ... ..	...	...	...	...	...	...	...	1	...	...	...	1	...	1	1
Stomatitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Septic Pneumonia ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Rheumatic Fever ... ..	...	...	...	...	2	...	...	1	2	...	...	3	2	5	...
Tuberculosis—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of Meninges	3	1	2	2	4	2	...	1	...	1	...	9	7	16	17
" of Lungs ... ..	...	1	2	2	1	1	11	7	51	41	8	2	73	54	127
" (other forms)	2	4	5	1	1	3	1	1	4	4	...	1	13	14	27
Alcoholism ... ..	...	...	...	...	...	...	...	...	...	...	...	...	5	4	9
Cancer ... ..	...	...	...	...	1	2	2	1	38	59	28	34	69	96	165
Premature Birth	40	20	...	...	...	...	...	...	...	...	...	...	40	20	60
Developmental Diseases	36	24	3	4	...	...	...	...	...	...	...	...	39	28	67
Old Age ... ..	...	...	...	...	...	...	...	...	1	39	87	39	88	127	117
Convulsions	1	1	1	...	...	...	...	...	...	...	...	2	1	3	13
Meningitis	3	2	...	2	1	...	...	...	3	5	1	9	5	14	19
Inflam. & Softg. of Brain	1	...	...	...	...	...	...	...	5	5	4	9	9	14	23
Apoplexy ... ..	...	...	...	...	...	...	...	...	11	10	11	12	22	22	44
Cerebral Haemorrhage ... ..	...	...	...	...	1	4	1	1	17	19	7	16	26	40	66
Organic Diseases of Heart ... ..	...	...	...	...	1	...	1	2	12	16	13	14	27	32	59
Heart Disease	13	14	4	3	1	...	...	...	19	17	48	49	85	83	168
Bronchitis ... ..	...	...	2	...	...	...	1	1	6	5	...	3	9	9	18
Lobar (Croupous) Pneumonia	5	13	8	6	2	...	...	...	2	1	6	9	23	29	52
Lobular (Broncho-) Pneumonia	9	4	6	5	...	...	2	...	20	13	4	9	41	31	72
Pneumonia	2	1	...	...	...	...	1	1	5	6	1	2	9	10	19
Diseases of the Stomach ... ..	...	...	...	...	...	...	...	...	2	5	...	2	2	7	9
Obstruction of the Intestines ... ..	...	...	...	...	...	...	...	...	4	7	...	1	4	8	12
Cirrhosis of the Liver ... ..	...	...	...	...	...	...	2	...	19	16	7	8	28	24	52
Nephritis and Bright's Disease ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumours, &c., of Female	...	...	...	...	...	...	...	...	...	...	2	...	1	...	3
Genital Organs ... ..	...	...	...	...	...	...	...	...	3	...	7	...	10	10	11
Accid. and Dis. of Parturition	2	2	3	6	7	2	...	1	13	9	4	7	29	27	56
Accident and Negligence ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Homicide ... ..	...	...	...	...	...	...	2	...	7	3	1	...	10	3	13
Suicide ... ..	...	...	...	...	...	...	...	...	...	...	...	1	...	1	3
Ill-defined Causes	4	...	1	4	5	6	2	6	61	50	40	35	113	101	214
All other Causes ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ALL CAUSES, 1910	164	130	97	71	34	35	27	28	319	335	227	328	868	927	1795
" 1909	165	146	69	76	24	29	30	27	399	367	236	396	923	1041	1964
" 1908	198	150	86	69	18	28	32	20	376	354	225	340	935	961	1896

TABLE IV.

CAUSES OF DEATH: ALL AGES, PERSONS.—IN WARDS.

1910.

Corrected for Non-Residents dying within, and (as far as possible) for Residents dying beyond, the Borough.

L.G.B.

Cause of Death.	Queen's Park.	Harrow Road.	Maida Vale.	West-bourne.	Church.	Lancaster Gate,		Hyde Park.
						West.	East.	
Small-pox ... ..	...	...	...	...	...	...	...	...
Measles	6	10	6	10	35	1	2	5
Scarlet Fever	2	2	...	...	3	...	...	...
Epidemic Influenza	3	7	3	3	8	2	1	4
Whooping-cough	3	11	8	1	10	...	...	2
Diphtheria and Membranous Croup	1	2	...	2	2	1	1	...
Croup ... ..	...	...	...	...	...	...	...	...
Enteric Fever ... ..	...	1	...	1	2	...	...	...
Diarrhoea, Dysentery	2	4	7	5	8	1	...	...
Epidemic, Zymotic Enteritis	1	5	4	5	10	...	...	...
Enteritis	3	4	2	3	6	...	...	2
<i>Other Continued Fevers—</i>								
Cerebro-Spinal Fever ... ..	...	...	...	...	1	...	...	...
Mumps ... ..	...	...	...	...	...	...	...	...
Syphilis	2	3	4	1	6	...	...	1
Erysipelas ... ..	...	2	...	1	...	...	...	...
Puerperal Fever ... ..	...	1	...	1	...	...	...	...
<i>Other Septic Diseases—</i>								
Pyæmia ... ..	...	...	...	2	...	...	1	...
Infective Endocarditis ... ..	...	...	...	...	2	1	...	1
Cancrum Oris ... ..	...	...	...	...	1	...	...	...
Cellulitis ... ..	...	1	1	1	1	...	...	...
Carbuncle ... ..	...	...	...	...	1	...	...	...
Rheumatic Fever ... ..	...	2	...	...	2	...	...	1
<i>Tuberculosis—</i>								
" Of Meninges	1	6	1	2	5	...	...	1
" Of Lungs	11	36	20	27	21	3	1	8
" Other Forms	3	7	3	5	6	1	...	2
Alcoholism ... ..	...	1	1	1	2	...	2	2
Cancer	17	33	36	29	18	10	10	12
Premature Birth	10	14	9	11	13	...	...	3
Developmental Diseases	8	18	3	17	18	1	...	2
Old Age	15	29	8	23	31	4	5	12
Convulsions ... ..	...	1	...	...	...	...	1	1
Meningitis ... ..	...	5	1	...	3	1	...	...
Inflammation and Softening of Brain	1	4	2	5	6	1	...	...
Apoplexy	2	7	2	2	9	...	...	1
Cerebral Hæmorrhage	7	12	6	5	7	1	2	4
Organic Diseases of the Heart	4	19	10	14	7	3	1	8
Heart Disease	6	14	6	6	21	1	2	3
Bronchitis	27	30	22	32	44	4	1	8
Lobar (Croupous) Pneumonia	2	5	1	3	6	...	...	1
Lobular (Broncho-) Pneumonia	7	8	6	8	19	...	2	2
Pneumonia	15	14	4	11	21	...	4	3
Diseases of the Stomach	2	6	4	2	4	...	...	1
Obstruction of the Intestines	...	1	1	2	2	2	...	1
Cirrhosis of the Liver	2	6	2	2	...	...	...	...
Nephritis and Bright's Disease	5	6	9	9	13	4	2	4
Tumours, &c., of Female Genital Organs	...	...	...	...	...	...	1	2
Accidents and Diseases of Parturition	3	1	...	1	4	...	...	1
Accidents and Negligence	8	12	5	5	17	3	2	4
Homicide ... ..	...	...	...	...	...	...	...	...
Suicide ... ..	...	1	...	2	3	2	2	3
Ill-defined Causes ... ..	...	...	1	...	...	...	...	...
All other Causes	19	41	47	33	42	7	11	14
<i>ALL CAUSES—</i>								
1910	198	392	245	293	440	54	54	119
1909	202	377	272	324	491	73	62	163
1908	225	381	249	343	435	64	53	146

TABLE V.
DEATHS IN LOCAL INSTITUTIONS.

Year.	Paddington Workhouse and Infirmary.	St. Mary's Hospital.	Children's Hospital.	Lock Hospital.
1900	255	386	63	4
1901	238	317	92	5
1902	298	359	76	2
1903	317	342	82	2
1904	327	360	92	1
1905	324	387	91	4
1906	314	356	98	7
1907	347	332	88	3
1908	373	351	91	—
1909	350	362	88	5
Averages				
1900-1909	314	355	86	3
1910	375	310	104	8

TABLE VI.
CAUSES OF DEATHS* IN INSTITUTIONS.
1910.

Causes of Death.	Local Institutions.						Deaths of Residents recorded beyond the Borough.				
	Workhouse and Infirmary.	St. Mary's Hospital.	Children's Hospital.	Lock Hospital.	Home of Compassion.	Nursing Homes.	Hospitals of Metropolitan Asylums Board.	Special and General Hospitals.	Lunatic Asylums.	Poor Law Institutions.	Elsewhere.
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	14	1	...	...	...	...	1	...	1	...	...
Scarlet Fever	...	...	...	...	...	...	1	...	...	...	...
Influenza	2	...	...	...	...	2	...	...	...	...	...
Whooping-cough	4	...	...	...	...	...	...	1	...	1	...
Diphtheria	...	5	...	...	...	...	5	...	...	...	...
Enteric Fever	1	1	...	...	...	...	...	...	...	...	...
Diarrhoea	1	3	15	...	...	...	...	...	2	...	1
Epidemic Enteritis	12	3	1	...	...	...	...	...	...	...	...
Erysipelas	1	1	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	1	...	...	...	...	...	...	...	...	...
Other Septic Diseases	2	10	...	...	...	...	...	1	2	...	...
Tuberculosis of Lungs	35	12	...	...	1	...	...	16	3	1	1
Other forms of Tuberculosis	14	15	11	...	...	1	1	7	1	1	...
Cancer	31	29	1	...	5	8	...	21	1	1	3
Premature Birth	4	2	1	1	...	...	...	3	...	...	...
Developmental Diseases	5	11	10	...	...	1	...	4	...	...	...
Old Age	55	...	...	...	1	1	...	...	5	1	...
Bronchitis	31	11	1	...	...	1	...	5	1	2	...
Pneumonia	23	21	17	...	...	1	1	1	4	...	1
Cirrhosis of Liver	...	4	...	...	...	1	...	1	...	...	...
Accidents of Childbirth	4	...	...	...	...	...	...	1	...	...	...
Accident and Violence	9	40	2	...	...	...	...	3	...	...	3
Suicide	1	4	...	...	...	...	...	1	...	...	2
All other Causes	125	136	45	7	4	18	1	27	21	4	4
All Causes	375	310	104	8	11	34	16	92	41	11	15
Non-Residents*	14	228	77	8	9	23					

* The deaths of 25 other non-residents took place either in the streets or houses in the Borough.
Total deaths of non-residents—384.

TABLE VII.
DEATHS OF INFANTS UNDER ONE YEAR.

L. G. B.

Groups.		L. C. C.																			Totals, under One Year.															
		Weeks.				Months.																														
		0— M. F.	1— M. F.	2— M. F.	3— M. F.	0— M. F.	1— M. F.	2— M. F.	3— M. F.	4— M. F.	5— M. F.	6— M. F.	7— M. F.	8— M. F.	9— M. F.	10— M. F.	11— M. F.	1910 M. F.	1905-09 M. F.																	
	NOT CERTIFIED	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2	1	1												
I.	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chickenpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	3	2	...	1	2	6	5	5									
	Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	...	...	...	...	...	...	2	1	...	1	...	...	...	1	1	2	2	1	...	1	1	10	7	6	7							
II.	Diarrhoea (all forms)	...	1	...	...	1	1	...	1	2	3	3	4	5	4	2	...	2	5	1	...	1	...	...	...	...	...	...	...	...	...	...
	Enteritis	...	...	...	...	...	...	...	1	2	3	1	2	2	4	2	...	1	1	...	1	2	...	...	1	...	...	...	1	17	18	32	25
III.	Premature Birth	29	11	5	3	4	...	2	38	16	1	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	40	19	33	24
	Congenital Defects	3	4	3	4	...	...	2	8	8	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	10	8	8
	Injury at Birth	3	2	...	1	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	3	3
	Want of Breast Milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	2
	Atrophy, Debility	...	...	2	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	3	14	6
	Atelectasis	4	2	...	...	...	...	...	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	3	4	2
	Debility at Birth	4	...	1	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	2	9	7
IV.	Tubercular Meningitis	1		
	Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Dis.	1	1	4	2	1		
V.	Erysipelas		
	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets	1	1	1	1	3	5	2	...	2	1	7	4	4	4		
	Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Suffocation (overlaid)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Other Causes		
ALL CAUSES, 1910		44	21	12	10	7	3	6	5	69	39	18	20	16	15	6	9	7	7	10	5	5	5	12	4	6	10	5	9	4	3	6	4	164	130	
1905-09		40	30	10	8	8	7	7	6	65	51	26	20	17	11	13	11	12	10	14	8	10	8	10	9	7	5	9	8	8	7	8	5	...	199	153

POPULATION—
(estimated) 1910 } 152,396.

BIRTHS registered { 1910. 1,462
within Borough { 1905-09. 1,526
F. 1,447 ... 1,460

DEATHS— { 1910. 868
all causes, all ages { 1905-09. 933
F. 927 ... 1,002

TABLE VIII.
PROCEEDINGS DURING 1910.

L.C.C.

Premises.	Number of Places—				Number of Inspections, 1910.	Number of Notices, 1910.	Number of Prosecutions, 1910.
	On Register at end of 1909.	Added in 1910.	Removed in 1910.	On Register at end of 1910.			
Milk premises ...	183	...	69	114	200	...	...
Cowsheds ...	1	...	...	1	4	...	...
Slaughter-houses ...	7	...	...	7	464	...	...
Other offensive trade premises ...	...	...	...	...	...	...	...
Ice cream premises	120	...	4	116	65	...	...
Registered houses let in lodgings ...	1,320	20	14	1,326	7,104	{ (a) 102 (b) 3,822	{ (a) 1 (b) 10

(a) For overcrowding.

(b) For other conditions (including annual cleansing).

Total number of intimation notices served for all purposes ...	...	...	...	564
<i>Overcrowding, 1910—</i>				
Number of dwelling rooms overcrowded ...	...	...	...	313
Number remedied ...	...	...	...	257*
Number of prosecutions ...	...	...	...	1
<i>Underground rooms—</i>				
Illegal occupation dealt with during year ...	...	...	...	8
Number of rooms closed ...	...	...	...	9
<i>Insanitary houses—</i>				
Number closed under the Public Health (London) Act, 1891 ...	...	...	...	—
Number closed under the Housing of the Working Classes Act ...	...	...	...	—
Number of premises cleansed under Sec. 20 of the L.C.C. (General Powers) Act, 1904 ...	...	...	...	189
<i>Shelters provided under Sec. 60 (4) of the Public Health (London) Act, 1891—</i>				
Number of persons accommodated during the year ...	...	...	...	—
<i>Revenue Acts—</i>				
Number of houses for which applications were received during year ...	...	...	...	5
Number of tenements comprised therein ...	...	...	...	83
Number of tenements for which certificates were {	(a) granted	...	...	83
	(b) refused	...	...	—
	(c) deferred	...	...	—
<i>Number of prosecutions under By-laws under Public Health Act, 1891—</i>				
(a) For prevention of nuisance arising from snow, ice, salt, filth, etc. ...	...	...	...	—
(b) For prevention of nuisance arising from offensive matter running out of any manufactory, etc. ...	...	...	...	—
(c) For the prevention of keeping of animals in such a manner as to be injurious to health ...	...	...	...	—
(d) As to paving of yards, etc., of dwelling houses ...	...	...	...	1
(e) In connection with the removal of offensive matter, etc. ...	...	...	...	1
(f) As to cesspools and privies, removal and disposal of refuse, etc. ...	...	...	...	—
(g) For securing the cleanliness of tanks, cisterns, etc. ...	...	...	...	—
(h) With respect to water closets, earth closets, etc. ...	...	...	...	6
(i) With respect to sufficiency of water supply to water closets ...	...	...	...	1
(j) With respect to drainage, etc. (Metropolis Management Act, Sec. 202) ...	...	...	...	—
(k) With respect to deposit of plans as to drainage, etc. (Metropolis Management Acts Amendment (By-laws) Act, 1899) ...	...	...	...	1
<i>Mortuaries—</i>				
Total number of bodies removed ...	...	...	...	276
Total number of infectious bodies removed ...	...	...	...	3

* In 56 cases no action was taken, the deficiency of air space being very small.

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts:—</i>				
Want of Cleanliness	12	12	...	...
Want of Ventilation ... ..	...	...	...	...
Overcrowding	1	1	...	...
Want of drainage of floors... ..	...	...	...	...
Other nuisances	6	6	...	...
Sanitary accommodations {	insufficient	3	3	...
	unsuitable or defective	26	26	...
	not separate for sexes	2	2	...
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bakehouse (S. 101)... ..	...	...	...	...
Breach of special sanitary requirements for bakehouses (SS. 97 to 100) .. ..	...	...	...	...
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report) ... ..	...	...	...	...
Total	50	50	...	...

WORK.

Prosecutions.		Number of Inspections of Outworkers' premises.	OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
			Instances.	Notices served.	Prosecutions	Instances.	Orders made (S. 110).	Prosecutions (Section) 109, 110.
Failing to keep or permit inspection of lists.	Failing to send lists.	305	...	...	...	10	...	...
...
...	...		...	...	...	2	...	...
...
...
...	...	305	...	...	...	12	...	...

5.—OTHER MATTERS.

Class.	Number.
<i>Matters notified to H.M. Inspector of Factories:—</i>	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	49
Action taken in matters referred by H.M. Inspector {	26
as remediable under the Public Health Acts, but {	
not under the Factory and Workshop Act (S. 5) {	25
Other ... ..	...
<i>Underground Bakehouses (S. 101):—</i>	
Certificates granted during the year ... ..	...
In use at the end of the year	54

APPENDIX B.

MORTALITY OF YOUNG CHILDREN.

The Department now possessing very complete records of the deaths of young children (0-5 years of age) from 1891-1910, it has been thought that a short preliminary note on the changes which have taken place during the twenty years in the sex and age mortalities would be of interest. The records show the numbers of deaths of *residents* which have occurred each year in each Ward from certain causes arranged in sex-age groups. The complete scheme of sex-age division will be apparent on reference to Tables II. and IIa (p. 101).

The numbers of children living at each age on which the mortality rates are based, have been derived from the births registered within the district, which, during the first ten years was the old Parish, and during the second ten, the Borough of Paddington. To bridge the gap in the numbers living at ages 1-5 years during 1901-5, which would otherwise have occurred by reason of the change in the boundaries of district effected in 1901, the numbers of children born and surviving their first year of life in (what is now known as) Queen's Park Ward, have been estimated from the numbers of births in the old Registration Sub-district "Kensal Town." The recorded mortality rates for the first five years of life are given in Table I. (p. 100), the rates for ages 1-5 years being necessarily incomplete prior to 1895, as the tabulation of deaths for single years of life was not commenced until 1891.

The mortality among males during the first year of life, ranged from 197 per 1,000 births registered (in 1898) to 111 (in 1909), while that for females varied between the limits of 153 (in 1900) and 91 (in 1910). Mortality during the first year of life being subject to great annual fluctuations, due to some extent to the weather, it is better to consider averages for groups of years, quinquennial periods being the intervals usually selected for that purpose. By that method four averages for each sex can be obtained from the data in Table I. (*See below.*)

AVERAGE ANNUAL MORTALITY PER 1,000 BIRTHS REGISTERED.

			1891-95.	1896-1900.	1901-05.	1906-10.
Males...	...	...	160	173	141	121
Females	...	...	135	134	115	97

There was, therefore, an increase in the average annual mortality among males during the second period, and a fall of only 1 per 1,000 among females. Since 1901 there has been a continuous, or nearly continuous, fall in the rates both for males and females. The changes just mentioned can be better understood if the rate for each sex during 1891-95 be written as 100, and the rates for the later periods be converted into percentages of those for the first, such percentages being known as "index numbers."

INFANTILE MORTALITY: INDEX NUMBERS.

			1891-95.	1896-1900.	1901-05.	1906-10.
Males...	...	...	100	108	88	76
Females	...	...	100	99	85	72

Such index numbers show that during the twenty years under review there has been a decline in the mortality among males of 24 per cent., and among females of 28 per cent. It also appears that there has been some slackening off of the rate of decrease in both cases, the male mortality decreasing by 12 per cent. during the fourth period as compared with

20 per cent. in the third, the rates of decrease in the case of females being 13 and 14 per cent. respectively. Naturally, some decrease in the proportional rate of reduction is to be expected as the quantity, or variable, which is decreasing approaches its irreducible minimum. It is as an indication of an exhaustion of the possibility of reducing the infantile mortality to a level much below that now prevailing that importance attaches to the change rate of decrease.

During the second year of life (age 1-2 years) the annual mortality (Table I) ranged from 69 (in 1892) to 28 (in 1906), and that among females from 60 (in 1898) to 22 (in 1901); in the third year, the ranges were for males—26 (in 1893, 1894 and 1896) to 9 (in 1909), and for females—28 (in 1896) to 7 (in 1906); in the fourth year, for males—20 (in 1898) to 4 (in 1899 and 1910), and for females—24 (in 1894) to 3 in 1903; and in the fifth year, for males—19 (in 1896) to 3 (in 1906), and for females—15 (in 1896) to 3 (in 1908). At these ages only three complete quinquennial periods are available, the means for each year of life during which are given below, the corresponding index numbers being shown in the right half of the tabular statement.

YEARS OF LIFE.	MORTALITY PER 1,000 ESTIMATED LIVING.			INDEX NUMBERS.		
	1896-1900.	1901-05.	1906-10.	1896-1900	1901-05	1906-10
Second						
Males	... 47	39	37	100	83	79
Females	... 43	34	28	100	80	74
Third						
Males	... 20	17	13	100	85	65
Females	... 20	12	11	100	60	55
Fourth						
Males	... 14	9	8	100	64	57
Females	... 13	8	8	100	61	61
Fifth						
Males	... 11	6	6	100	54	54
Females	... 10	6	6	100	60	60

As in the case of the mortality under one year of age there was a slowing down of the rate of decrease between the second and last periods. The decrease in mortality was proportionately greater in males than females in the last period for the fourth year, and in both the second and last periods for the fifth year. In the fifth year of life the mortality among females was at the same level in the second and third periods (decrease = 0).

Having thus shown what have been the changes in the recorded mortalities, some indication will now be given of the saving of young lives which has resulted therefrom. That can best be effected by means of life tables. (See Tables II. and II_A.) Those now submitted have been obtained by a shortened method recently described in the *Journal of the Royal Statistical Society*.*

The p_x and L_x columns only of the tables prepared are given in Tables II and II_A, the other columns being omitted from considerations of space. The p_x column shows the "probability of surviving" through any age (say, one day) to the next. The maximum value p_x can possibly have is unity, which would imply that there were no deaths at that particular age. The L_x column gives the numbers surviving, or living, at each age, from among 100,000 children born alive (represented by "Age 0."). Tables similar to II and II_A have been constructed for 'persons,' but it has not been thought necessary to include them

* *Journal of the Royal Statistical Society*, vol. lxxiv., p. 540 (April, 1911).

here, but use of them is made in the text. Before passing to a consideration of the summaries of the life tables which have been prepared, attention may be called to certain irregularities in the p_x columns for which no explanation can at present be offered. If the figures be examined carefully it will be seen that—to take the case of the ages under one week—the p_x values increase fairly steadily (both for males and for females) up to the age of five days, and that there is in nearly every quinquennial period a lower value for the age six days. Similar irregularities may be observed in certain of the values for the ages three weeks, six and (or) seven months and eleven months. As already observed no explanation can at present be offered for these irregularities, but it is hoped that further analysis of the records may clear the point up.*

It is very difficult to assimilate the meaning of a long series of figures such as that presented in Tables II and IIa, hence tables giving the numbers of survivors at selected ages, and the numbers dying during the periods included between those ages, have been prepared. For the sake of clearness it has been thought desirable to exclude the figures for ages over one year from the tables dealing with ages under one year. It should, however, be borne in mind that the figures in the two sets of tables are the results of uninterrupted calculations starting from one datum only, viz.: an assumed total of 100,000 births of each sex.

Table 1 shows the numbers of survivors at the selected ages, and Table 2 the numbers dying between these ages. The former table is to be read thus—On the experience of the five years 1891-95 of 100,000 children born alive, 98,743 would survive the first day of life (i.e., would reach the age of one day), 97,385 would survive the first week and attain the age of

TABLE 1.
Of 100,000 Children Born, numbers Surviving at each Age.

Age.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1891-1895.	1896-1900.	1901-1905.	1906-1910.	1891-1895.	1896-1900.	1901-1905.	1906-1910.
	Persons.				Males.				Females.			
1 day ...	98,743	98,636	98,949	98,813	98,560	98,396	98,769	98,675	98,933	98,890	99,134	98,959
1 week ...	97,385	97,368	97,820	97,747	97,122	96,976	97,445	97,365	97,659	97,783	98,208	98,150
1 month ...	95,734	95,359	96,069	96,250	95,378	94,760	95,690	95,694	96,107	95,995	96,464	96,838
3 months ...	92,628	92,421	93,466	93,850	92,139	91,473	92,563	93,121	93,237	93,429	94,311	94,619
6 " ...	89,679	89,114	90,834	91,680	89,084	87,926	89,809	90,856	90,395	90,377	91,898	92,753
9 " ...	87,178	86,581	88,829	90,225	86,268	85,162	87,515	89,236	88,219	88,088	90,191	91,468
1 year ...	85,242	84,402	87,141	88,961	84,092	82,711	85,855	87,872	86,528	86,200	88,471	90,306

one week, and so on. In each (sex) section of the table it will be seen that the numbers of survivors according to the experience of 1896-1900 were fewer than those for any other quinquennial period, and that in the two later periods there were steady increases in the numbers surviving. Comparing the last period with the first there were 3,719 more children (of both sexes) alive at the end of the year than in the first. The index numbers for the survivors attaining the age of one year are given below.

SURVIVORS TO AGE ONE YEAR: INDEX NUMBERS.

	1891-95.	1896-1900.	1901-05.	1906-10.
Persons ...	100	99.0	102.2	104.3
Males ...	100	98.3	102.0	104.4
Females ...	100	99.6	102.2	104.3

*The data possessed by the Department furnish valuable material for work, and it is hoped to submit a more detailed report on the subject at some future date.

From the above index numbers it is evident that the increase in the mortality among males during the second quinquennium was greater than that among females, while the decrease among males in the third and last quinquennia was greater than that among females. The "crossover" in the directions of the curves of mortality is interesting, but until the causes of death have been analysed for each sex, no explanation of the change can be offered.

The changes in the numbers dying (Table 2) out of a standard number of 100,000 children born alive in each quinquennium, show that in the second quinquennium more deaths of persons (*i.e.*, children of both sexes) occurred at all periods of life under one year of age, except

TABLE 2.
Of 100,000 Children Born, numbers Dying during each period of Life.

Period of Life.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.
	Persons.				Males.				Females.			
1st day ...	1,257	1,364	1,051	1,187	1,440	1,604	1,231	1,325	1,067	1,110	866	1,041
2nd-7th days ...	1,358	1,268	1,129	1,066	1,438	1,420	1,324	1,310	1,274	1,107	926	809
1st week ...	2,615	2,632	2,180	2,253	2,878	3,024	2,555	2,635	2,341	2,217	1,792	1,850
2nd-4th weeks...	1,651	2,009	1,751	1,497	1,744	2,216	1,755	1,671	1,552	1,788	1,744	1,312
1st month ...	4,266	4,641	3,931	3,750	4,622	5,240	4,310	4,306	3,893	4,005	3,536	3,162
2nd & 3rd months	3,106	2,938	2,603	2,400	3,239	3,287	3,127	2,573	2,870	2,566	2,153	2,219
1st trimester ...	7,372	7,579	6,534	6,150	7,861	8,527	7,437	6,879	6,763	6,571	5,689	5,381
2nd "	2,949	3,307	2,632	2,170	3,055	3,547	2,754	2,265	2,842	3,052	2,413	1,866
3rd "	2,501	2,533	2,005	1,455	2,816	2,764	2,284	1,620	2,176	2,289	1,707	1,285
4th "	1,936	2,179	1,688	1,264	2,176	2,451	1,660	1,364	1,691	1,888	1,720	1,162
1st year...	14,758	15,598	12,859	11,039	15,908	16,451	14,135	11,950	13,472	13,800	11,529	9,964

the 2nd-7th days and the second and third months. In the third and fourth quinquennia fewer deaths occurred at all periods than in the first but the deaths during the first day of life in the fourth quinquennium were more numerous than in the third, the increase being sufficient to counterbalance the decrease in the number of deaths taking place during the fourth period, during the remainder of the first week of life. Hence the number of deaths during the first week is higher in the fourth than in the third quinquennium. The figures for each sex are, practically, to the same effect, but fewer deaths were recorded in the second than in the first quinquennium during the third trimester among males and during the 2nd-4th weeks, among females.

At ages over one year (Table 3) decreases in the numbers of survivors have to be noted for each year of life in the second quinquennium, but, as will be shown later, those decreases

TABLE 3.
Of 100,000 Children Born, numbers Surviving to ages of one year and upwards.

Age (years).	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.
	Persons.				Males.				Females.			
1	85,242	84,402	87,141	88,961	84,092	82,711	85,855	87,872	86,258	86,200	88,471	90,036
2	81,224	80,516	83,943	86,015	79,807	78,733	82,485	84,602	82,784	82,411	85,451	87,695
3	79,484	78,896	82,703	84,895	78,165	77,142	81,063	83,418	80,939	80,759	84,399	86,640
4	78,335	77,780	81,992	84,223	77,031	76,020	80,298	82,749	79,774	79,649	83,743	85,964
5	77,458	76,933	81,475	83,716	76,190	75,146	79,808	82,286	78,859	78,830	83,199	85,409

were due to the smaller numbers of survivors reaching their first birthday and not to increased mortality at the higher ages. After the second quinquennium there were uniformly greater numbers of survivors at each age of life, the number of children (persons) reaching their fifth birthday increasing from 77,458 in 1891-95 to 83,716 in 1906-10. The index numbers for the survivors at age 5 years are given below.

SURVIVORS TO AGE FIVE YEARS: INDEX NUMBERS.

			1891-95.	1896-1900.	1901-05.	1906-10.
Persons	...	...	100	99.3	105.1	108.1
Males	...	...	100	98.6	104.7	108.0
Females	...	...	100	99.9	105.5	108.3

It appears from the above index numbers that the increase in the numbers of male survivors was relatively greater than that of female.

With a single exception fewer deaths have to be noted at each age in each quinquennium after the first (Table 4), which observation confirms what has already been written as to the smaller numbers of survivors in the second quinquennium not being due to higher mortality

TABLE 4.

Of 100,000 Children Born, numbers dying after first year of life.

During (year).	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.
	Persons.				Males.				Females.			
2nd	4,018	3,886	3,198	2,946	4,285	3,978	3,370	3,270	3,744	3,789	3,020	2,611
3rd	1,740	1,620	1,240	1,120	1,642	1,591	1,422	1,184	1,845	1,652	1,052	1,055
4th	1,149	1,116	711	672	1,134	1,122	765	669	1,165	1,110	656	676
5th	877	847	517	507	841	874	490	463	915	819	544	555

in that period, but to a reduction in the numbers of children reaching their first birthday. The solitary exception to the rule is the slight increase in the number of deaths of females in the fifth year of life to be noted in the last quinquennium.

The "force of mortality"—otherwise the "central death rate"—is obtained by dividing the number of deaths during any interval of time by one-half the sum of the numbers of individuals alive at the beginning and end of that interval of time. Thus the "force of mortality" for males in the quinquennium 1891-95 during the first day of life is obtained by dividing the number of deaths (1,440, see Table 2) observed during that period by half the sum of the number of children born alive (assumed to be 100,000), and the number surviving to the end of the first day, otherwise the number entered as alive on the second day (98,560, see Table 1). Put into algebraical form—

$$m_x = \frac{14,400}{\frac{1}{2} (100,000 + 98,560)} = 0.01450$$

The results of the calculations of the force of mortality for males and females separately, are given in Table 5. The table is useful as giving a truer indication of the changes which have taken place in the rates of mortality at different age intervals than do the mortality

* The actuarial formula for the "force of mortality" (m_x) is $\frac{d_x}{\frac{1}{2} (l_x + l_{x+1})}$ or $\frac{d_x}{l_x + \frac{1}{2} l_{x+1}}$

TABLE 5.

Force of Mortality (m_x Values) for given Periods.

During		1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.	1891- 1895.	1896- 1900.	1901- 1905.	1906- 1910.
		Males.				Females.			
1st day	...	·01450	·01616	·01238	·01323	·01072	·01116	·00869	·01046
2nd-7th days	...	·01469	·01453	·01349	·01336	·01296	·01125	·00938	·00820
1st week	...	·02909	·03059	·02579	·02661	·02361	·02235	·01803	·01863
2nd-4th weeks	...	·01811	·02311	·01817	·01731	·01601	·01845	·01791	·01345
1st month	...	·04710	·05350	·04385	·04382	·03954	·04068	·03583	·03202
2nd-3rd months	...	·03454	·03530	·03322	·02725	·03031	·02709	·02258	·02318
1st trimester	...	·08114	·08830	·07662	·07076	·06948	·06749	·05824	·05498
2nd "	...	·03371	·03954	·03020	·02462	·03095	·03320	·02591	·01991
3rd "	...	·03627	·03193	·02576	·01799	·02436	·02565	·01874	·01395
4th "	...	·02554	·02920	·01914	·01540	·01935	·02166	·01925	·01278
1st year	...	·17181	·17887	·15143	·12675	·14379	·14748	·12178	·10156
2nd "	...	·05228	·04928	·04003	·03791	·04422	·04494	·03472	·02933
3rd "	...	·02078	·02041	·01738	·01409	·02253	·02024	·01238	·01210
4th "	...	·01461	·01465	·00948	·00805	·01449	·01383	·00780	·00783
5th "	...	·01097	·01156	·00612	·00561	·01153	·01033	·00651	·00647

rates calculated in the customary manner. There are several points in the table which require elucidation, but consideration of them must be postponed until the causes of death have been examined in connection with sex and age.

One last criterion of the changes which have taken place in the incidence of death at these ages may be mentioned, viz., the postponement (or advancement) of the ages at which the original number of children born alive (assumed to be 100,000) was reduced to 95,000, 90,000 . . . or less. In Table 6 the ages for each sex are given at which less than the stated numbers of survivors were observed, the actual numbers of survivors at those ages being shown in parentheses. The material for such a table is furnished by Tables II. and IIa.

TABLE 6.

Ages at which Survivors numbered less than figure named and number of Survivors at those ages.

Survivors numbered less than	1891-95		1896-1900		1901-05		1906-10	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
95,000	2 months (93,658)	2 months (94,471)	1 month (94,760)	2 months (94,525)	2 months (94,053)	3 months (94,311)	2 months (94,124)	3 months (94,619)
90,000	5 months (89,965)	7 months (89,508)	5 months (88,969)	7 months (89,558)	6 months (89,809)	10 months (89,585)	8 months (89,686)	2 years (87,695)
85,000	11 months (84,799)	2 years (82,784)	10 months (84,432)	2 years (82,411)	2 years (82,485)	3 years (84,399)	2 years (84,602)	5+ years (85,409) *
80,000	2 years (79,807)	4 years (79,774)	2 years (78,733)	4 years (79,649)	5 years (79,808)	5+ years (83,199)	5+ years (82,286)	5+ years (85,409)

* The italic figures indicate that the marginal figure of 85,000 (or 80,000) was not reached during the first five years of life.

TABLE I.
MORTALITY PER 1,000 BIRTHS REGISTERED.

		MALES. Ages (years).					FEMALES. Ages (years).				
		0—	1—	2—	3—	4—5	0—	1—	2—	3—	4—5
Old Parish.	1891	155					135				
	1892	162	69				122	46			
	1893	155	42	26			143	38	26		
	1894	149	48	26	14		121	42	26	24	
	1895	177	48	12	14	5	152	48	21	7	13
	1896	169	58	26	17	19	139	52	28	21	15
	1897	155	31	19	18	10	142	27	13	12	9
	1898	197	59	23	20	15	122	60	27	18	10
	1899	167	44	13	4	5	133	36	15	9	8
	1900	177	47	19	13	8	153	42	18	7	9
Borough.	1901	138	<i>41</i>	<i>21</i>	<i>14</i>	<i>11</i>	133	<i>22</i>	<i>11</i>	<i>9</i>	<i>8</i>
	1902	159	42	18	11	4	102	43	11	9	7
	1903	125	46	17	7	5	109	36	15	3	6
	1904	153	35	14	7	5	120	24	13	8	6
	1905	132	32	16	8	5	113	44	10	9	5
	1906	121	28	11	8	3	103	26	7	6	4
	1907	138	47	17	12	4	91	30	18	6	8
	1908	123	32	15	8	11	97	27	8	14	3
	1909	111	30	9	6	5	103	25	16	7	8
	1910	112	49	15	4	7	91	35	8	5	7

NOTE.—The italic figures indicate rates affected by the estimations of the numbers of survivors at age one year in the transferred portion of "Chelsea Detached."

TABLE II.
PROBABILITY OF SURVIVING (p_x) AND
NUMBERS OF SURVIVORS (L_x)

MALES.		At each Age.							
Age.		1891-1895.		1896-1900.		1901-1905.		1906-1910.	
		p_x	L_x	p_x	L_x	p_x	L_x	p_x	L_x
Days.	0—	.98560	100,000	.98396	100,000	.98769	100,000	.98675	100,000
	1—	.99595	98,560	.99590	98,396	.99565	98,769	.99596	98,675
	2—	.99620	98,160	.99588	97,992	.99612	98,339	.99660	98,276
	3—	.99700	97,787	.99626	97,588	.99720	97,957	.99725	97,942
	4—	.99809	97,494	.99880	97,223	.99841	97,683	.99869	97,673
	5—	.99918	97,308	.99933	97,106	.99927	97,528	.99908	97,545
	6—	.99891	97,228	.99933	97,041	.99988	97,457	.99908	97,455
Weeks.	1—	.99438	97,122	.99328	96,976	.99387	97,445	.99287	97,365
	2—	.99338	96,576	.99080	96,324	.99359	96,848	.99495	96,671
	3—	.99417	95,937	.99290	95,438	.99442	96,227	.99492	96,183
Months.	1—	.98197	95,378	.98046	94,760	.98289	95,690	.98359	95,694
	2—	.98378	93,658	.98456	92,908	.98514	94,053	.98934	94,124
	3—	.98668	92,139	.98617	91,473	.98723	92,653	.99240	93,121
	4—	.98958	90,912	.98627	90,208	.98894	91,470	.99276	92,413
	5—	.99021	89,965	.98828	88,969	.99182	90,550	.99032	91,744
	6—	.98817	89,084	.99110	87,926	.99122	89,809	.99420	90,856
	7—	.99060	88,030	.98953	87,143	.99074	89,020	.99288	90,329
	8—	.98929	87,202	.98760	86,231	.99228	88,196	.99498	89,686
	9—	.99087	86,268	.99143	85,162	.99318	87,515	.99452	89,236
	10—	.99204	85,480	.99058	84,432	.99464	86,918	.99522	88,747
	11—	.99166	84,799	.98893	83,637	.99309	86,452	.99490	88,323
Years.	1—	.94904	84,092	.95191	82,711	.96075	85,855	.96279	87,872
	2—	.97943	79,807	.97979	78,733	.98276	82,485	.98601	84,602
	3—	.98549	78,165	.98546	77,142	.99057	81,063	.99198	83,418
	4—	.98909	77,031	.98851	76,020	.99590	80,298	.99440	82,749
Survivors aged 5 years		—	76,190	—	75,146	—	79,808	—	82,286

TABLE IIa.
PROBABILITY OF SURVIVING (p_x) AND
NUMBERS OF SURVIVORS (L_x)

FEMALES.		At each Age.							
Age.		1891-1895.		1896-1900.		1901-1905.		1906-1910.	
		p_x	L_x	p_x	L_x	p_x	L_x	p_x	L_x
Days.	0—	.98933	100,000	.98890	100,000	.99134	100,000	.98959	100,000
	1—	.99594	98,933	.99720	98,890	.99776	99,134	.99768	98,959
	2—	.99719	98,531	.99818	98,613	.99763	98,912	.99795	98,729
	3—	.99775	98,254	.99761	98,433	.99800	98,677	.99863	98,527
	4—	.99887	98,033	.99831	98,198	.99887	98,480	.99932	98,392
	5—	.99816	97,922	.99831	98,032	.99925	98,369	.99918	98,325
	6—	.99915	97,742	.99915	97,866	.99912	98,295	.99904	98,244
Weeks.	1—	.99418	97,659	.99291	97,783	.99282	98,208	.99504	98,150
	2—	.99501	97,091	.99343	97,090	.99404	97,503	.99557	97,663
	3—	.99484	96,606	.99526	96,452	.99528	96,922	.99597	97,230
Months.	1—	.98298	96,107	.98469	95,995	.98640	96,464	.98561	96,838
	2—	.98694	94,471	.98841	94,525	.99116	95,152	.99136	95,444
	3—	.98825	93,237	.98574	93,429	.98924	94,311	.99228	94,619
	4—	.98917	92,141	.98931	92,097	.99125	93,296	.99352	93,888
	5—	.99179	91,143	.99193	91,112	.99371	92,480	.99435	93,280
	6—	.99019	90,395	.99094	90,377	.99287	91,898	.99577	92,753
	7—	.99226	89,508	.99133	89,558	.99471	91,243	.99444	92,361
	8—	.99329	88,815	.99219	88,781	.99373	90,760	.99588	91,847
	9—	.99277	88,219	.99418	88,088	.99328	90,191	.99512	91,468
	10—	.99494	87,581	.99271	85,575	.99351	89,585	.99555	91,022
	11—	.99300	87,138	.99154	86,936	.99402	89,003	.99657	90,617
Years.	1—	.95673	86,528	.95605	86,200	.96586	88,471	.97109	90,306
	2—	.97772	82,784	.97996	82,411	.98769	85,451	.98797	87,695
	3—	.98561	80,939	.98626	80,759	.99223	84,399	.99220	86,610
	4—	.98853	79,774	.98972	79,649	.99350	83,743	.99355	85,964
Survivors aged 5 years		—	78,859	—	78,830	—	83,199	—	85,409

