

Annual report for 1896 of the Medical Officer of Health.

Contributors

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Chelsea Vestry.

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ANNUAL REPORT

For 1896,

OF THE

Medical Officer of Health.

LOUIS C. PARKES,

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FELLOW OF THE SANITARY INSTITUTE AND MEMBER OF THE BOARD OF EXAMINERS;

FELLOW OF THE SOCIETY OF MEDICAL OFFICERS OF HEALTH;

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MEDICAL SCHOOL.

TOWN HALL, KING'S ROAD, CHELSEA.

1897.

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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For 1896.

Section I.—STATISTICAL.

POPULATION OF CHELSEA.

The population of Chelsea at the census of 1896 was 96,646, The population of each sub-district was as follows :—

Chelsea North...	...	...	42,057
Chelsea South...	...	...	33,139
Kensal Town ...	...	...	21,450

The estimated population of Chelsea to the middle of the year 1896 is 96,666.

BIRTHS AND BIRTH-RATE FOR 1896.

Table I. gives the births and birth-rate per 1,000 per annum in the home district and in Kensal Town, in the whole parish, and in London.

TABLE I.

	Number of Births.	Birth-rate per 1,000.
Home District	1,999	26·2
Kensal Town.....	652	29·9
Whole Parish	2,651	27·0
London	135,796	30·2

In 1895 the birth-rate of the home district was 27·1, and of Kensal Town 32·4, the birth-rate of the whole parish being 28·3.

DEATHS AND DEATH-RATE FOR 1896.

The total number of deaths registered in the parish was 1,903. Of this total 305 were deaths, within the district, of non-parishioners—chiefly occurring in the hospitals in the parish; and 251 deaths of parishioners of Chelsea occurred outside the district in various public institutions. There were, therefore, 1,849 deaths of parishioners of Chelsea. These 1,849 deaths are equivalent to a death-rate for the year of 18·83 per 1,000.

The following Table II. gives the death-rate of Chelsea and its constituent districts, and of London, during the past six years :—

TABLE II.

Year.	Home District.	Kensal Town.	Chelsea.	London.
	Death-rate.	Death-rate.	Death-rate.	Death-rate.
1891	22.1	17.5	21.0	21.4
1892	21.9	17.8	21.0	20.7
1893	21.6	16.3	20.4	21.4
1894	17.6	14.1	16.8	17.8
1895	20.8	16.8	19.9	19.9
1896	19.0	18.2	18.8	18.6

The lessened mortality in Chelsea in 1896, as compared with 1895, is attributable to the lesser prevalence of influenza, and a corresponding diminution in the mortality from diseases of the respiratory organs. The general death-rate would have been considerably lower had it not been for the excessive prevalence of diphtheria and measles, which caused a large number of deaths, and of infantile diarrhoea in July and August, owing to the excessive heat and drought at that period of the year.

The deaths of parishioners of Kensal Town numbered 396, equivalent to a death-rate of 18.2 per 1,000, the death-rate of the home district (1,453 deaths) being 19.0 per 1,000.

Zymotic death-rate.—The death-rate in Chelsea from the seven principal zymotic diseases was 4.31 per 1,000 in 1896, the corresponding rate for London generally being 3.14 per 1,000. In 1891, the zymotic death-rate in Chelsea was 2.0 per 1,000; in 1892, it was 3.1 per 1,000; in 1893, it was 3 per 1,000; in 1894, it was 2.5 per 1,000; and in 1895, it was 2.7 per 1,000. The high rate in the past year is due to excessive mortalities from diphtheria, measles, and diarrhoea.

TABLE III.—For the year 1896.

	Birth-rate per 1,000.	Death-rate per 1,000.	Zymotic death-rate.	Influenza death-rate.	Phthisis death-rate.	Other tubercular diseases death-rate.	Respiratory diseases death-rate.	Deaths under 1 year to 1,000 births.	Percentage of deaths under 5 to total deaths.
Chelsea	27.0	18.8	4.3	0.13	1.79	0.63	3.56	167	41.8
London	30.2	18.6	3.1	0.11	1.73	0.72	3.27	161	42.6

There were no deaths from small-pox in 1896, and not a single case of the disease occurred in the parish. Measles caused 109 deaths, as compared with only 11 in 1895. Whooping-cough caused 62 deaths in 1896 (Kensal Town, 21), and only 35 in 1895. The mortality from enteric fever (10 deaths) was well below the average of the past 12 years (14 deaths annually). Of the 10 deaths, 2 belonged to Kensal Town.

Diphtheria.—This disease caused 108 deaths in 1896, as against 57 in 1895. In addition there were 4 deaths from membranous croup. The average mortality from diphtheria and croup in the 12 years, 1884-1895, is 44 deaths annually, the largest number recorded in any one year being 61 in 1884. The mortality (112 deaths) from fatal throat disease in 1896 is, therefore, more than double the average of the preceding 12 years, and nearly double the mortality recorded for the worst of those years. Of these 112 deaths, 78 were under 5 years of age, and 34 were over 5: 62 deaths occurred in hospitals, and 50 at the patients' own homes. Of the total number of deaths, 16 only belong to Kensal Town, the remaining 96 being deaths of residents in the home district.

TABLE IV.—*Zymotic Disease Mortality in Chelsea in 1896.*

	Actual number of Deaths in Chelsea.	Chelsea's proportion of total London Deaths according to its population.
Measles	109	81
Scarlet Fever.....	28	21
Diphtheria	108	59
Whooping Cough	62	64
Enteric Fever.....	10	13
Diarrhœa	105	70

Scarlet Fever.—This disease was again very prevalent in 1896, and is credited with the causation of 28 deaths, 9 of which belonged to Kensal Town. From May until late in the autumn, the Fever Hospitals of the Metropolitan Asylums Board were unable to admit all the patients suffering from this disease, and also those suffering from diphtheria, who applied for admission; and, in consequence, numerous cases of both diseases in Chelsea experienced a delay of one or more days in removal, whilst others were treated in their own homes during the entire period of illness.

Measles.—This disease caused 109 death in 1896, as compared with only 11 in 1895. Of this number 25 were deaths of Kensal Town residents. The epidemic commenced in February, and continued until the middle of June, the latter half of the year being practically free from the disease.

TABLE V.—*Zymotic Mortality in Chelsea in 1896.*

	Deaths in 1896.	Average number of Annual Deaths in 1884-95.
Measles	109	58
Scarlet Fever.....	28	18
Diphtheria and Croup	112	44
Enteric Fever	10	14
Whooping Cough	62	58

The *Diarrhœa* mortality was rather below that of 1895, when 123 deaths were registered from this disease, or from gastro-enteritis, but was much in excess of the average. The early summer of 1896 (June and July) was characterised by great heat and drought, but the weather in August was cooler, and September was very cold and wet. The fatal cases of diarrhœa occurred very largely in July and August. Of the 105 deaths from this disease, 27 belonged to Kensal Town; and 102 were deaths of children under 5 years of age.

Influenza.—The number of deaths referred to influenza, as a primary or secondary cause of death, amounted to only 13 in 1896, as against 68 in 1895, 28 in 1894, 33 in 1893, 84 in 1892, 90 in 1891, and 18 in 1890. In London, generally, there was no epidemic in 1896, but deaths have been recorded in every week of the year, amounting to a total of 496, as compared with 2,156 in 1895.

Respiratory Diseases.—The death-rate from diseases of the respiratory organs in Chelsea was 3·56 per 1,000, or nearly 1 per 1,000 lower than in 1895, when not only was influenza prevalent, but the climatic conditions in the late winter and early spring were very unfavourable.

The weather of 1896 on the whole was mild, and was more remarkable for the eccentricities in its rainfall, than for extremes of temperature.

TABLE VI.—*Respiratory Diseases.*

DEATH-RATE PER 1,000 PER ANNUM.

Years.	Chelsea.	London.
1884-89 (inclusive)	4·3	4·2
1890 (1st Influenza Epidemic)...	4·4	5·0
1891 (2nd " ")...	5·5	5·3
1892 (3rd " ")...	4·8	4·6
1893 (4th " ")...	4·3	4·6
1894 ...	3·0	3·4
1895 (5th " ")...	4·5	4·2
1896 ...	3·6	3·8

Tubercular Diseases.—The death-rate from phthisis and other tubercular diseases in Chelsea in 1896 was 2·42 per 1,000, as against 2·45 in London generally. The Kensal Town rate was 2·71 per 1,000. The average death-rate from these diseases in Chelsea during the 12 years, 1884-95 was 2·97 per 1,000.

Cancer.—Malignant cancerous diseases caused 86 deaths amongst Chelsea parishioners, of which number 26 belonged to Kensal Town. The annual average of the 12 years, 1884-95, is 75 deaths. Chelsea's proportion of the total London deaths for 1896 is 84.

Deaths in Public Institutions.—In 1896, 29·7 per cent. of the total deaths of parishioners of Chelsea occurred in public institutions, the average for the 5 years, 1891-5, being 31 per cent. In 1896, 13·9 per cent. of the total deaths of parishioners occurred in the Chelsea Workhouse and Infirmary, the average of the 5 years, 1891-5, being 14·9 per cent.

TABLE OF DEATHS DURING THE YEAR 1896, IN THE CHELSEA METROPOLITAN SANITARY DISTRICT; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																							
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.																								
								(i)	1	2	3	4	FEVERS.					Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	TOTAL.	
													5	6	7	8	9														
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Chelsea North, exclusive of Public Institutions	520	146	106	24	13	143	88	Under 5	...	5	18	1	...	...	...	...	...	...	...	37	19	35	...	...	57	...	...	5	75	252
Chelsea South, exclusive of Public Institutions	426	139	80	25	13	110	59	5 upwds.	...	1	6	...	...	2	...	1	1	...	2	44	18	34	1	43	59	30	6	10	106	268
Kensal Town	309	118	63	11	6	74	37	5 upwds.	...	1	9	...	...	1	1	...	3	...	2	2	1	...	2	28	31	25	1	10	90	207
Workhouse and Infirmary	265	18	3	1	9	127	107	5 upwds.	4	1	1	...	1	...	24	20	25	...	19	28	12	4	1	55	128
Brompton Hospital	96	...	...	6	20	70	...	5 upwds.	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	59	53	26	...	5	96	244
Cancer Hospital	104	...	...	...	...	83	21	5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85	2	4	...	...	...	...
Hospital for Women	8	...	...	...	...	8	...	5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Royal Hospital for In-Pensioners	49	...	...	...	...	14	35	5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria Hospital for Children	111	40	53	17	1	5 upwds.	3	1	...	1	12	1	3	15	19	1	...	11	49	...
Cheyne Hospital	5 upwds.	1	1	1	...	5	10	18	...
St. Camillo's Hospital	15	2	...	9	1	2	1	5 upwds.	2	2	2	...
Lying-in House of St. John	5 upwds.	10	13	...
TOTALS	1903	463	305	93	63	631	348	Under 5	...	6	29	4	...	...	...	...	...	...	2	105	60	108	2	2	171	...	1	17	261	768
								5 upwds.	...	1	20	6	1	1	6	...	7	3	2	1	4	241	190	121	12	26	493	1135	

The subjoined numbers have also to be taken into account in judging the above Records of Mortality.

Deaths occurring outside the district among persons belonging thereto...	251	11	65	34	20	107	14	Under 5	...	8	48	...	...	...	...	...	...	...	1	1	4	...	...	4	...	...	1	9	76
								5 upwds.	...	13	14	...	...	5	...	...	...	...	1	...	2	1	18	16	17	...	17	71	175
Deaths occurring within the district among persons not belonging thereto	305	31	40	27	23	160	24	Under 5	...	...	3	...	...	1	...	...	...	1	...	1	10	1	...	26	...	...	3	26	71
								5 upwds.	...	...	...	...	...	...	...	...	...	1	...	...	...	...	85	5	7	...	4	131	234

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH DURING THE YEAR 1896, IN THE CHELSEA METROPOLITAN SANITARY DISTRICT; CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.													
	Census, 1896.	Estimated to middle of 1896.			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.							Cholera.	Erysipelas.	Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.							Cholera.	Erysipelas.	
									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Typhus.	Enteric or Typhoid.							Continued.	Relapsing.	Puerperal.							
																									1	2	3	4			5
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13	
Chelsea Home District	75,196	75,233	1999	{ Under 5 5 upwds.	...	100 288	158 255	3 1	...	2 57	...	...	...	...	7 64	...	...	...	62 198	98 138	1 ...	...	2 30	...	...	...	1 ...	...	...	...
PUBLIC INSTITUTIONS:—																															
Chelsea Infirmary.....	...	...	...	{ Under 5 5 upwds.	...	8 2	...	...	...	1 ...	...	...	...	...	11 ...	...	...	...	4 2	...	...	...	1 ...	...	...	...	...	...	...	...
Victoria Hospital .....	...	...	...	{ Under 5 5 upwds.	...	...	1 2	...	...	...	...	...	...	...	1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Duke of York's School ..	...	...	...	{ Under 5 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hospital for Women .....	...	...	...	{ Under 5 5 upwds.	...	...	...	...	...	1 ...	...	...	...	...	...	...	...	...	...	...	...	...	1 ...	...	...	...	...	...	...	...
Kensal Town	21,450	21,433	652	{ Under 5 5 upwds.	...	57 83	18 33	1 ...	...	...	...	...	2 ...	...	5 28	...	...	...	30 47	11 13	1 ...	...	...	...	...	...	...	1 1	...	...
TOTALS	96,646	96,666	2651	{ Under 5 5 upwds.	...	165 401	177 290	4 1	...	2 66	...	...	...	6 ...	12 104	...	...	...	96 247	109 151	2 ...	...	2 36	...	...	...	1 ...	...	1 ...	...

Section II.

INFECTIOUS DISEASES.

Small-Pox.—Two cases of this disease were notified in Chelsea in 1896, but both proved to be chicken-pox. In 1895, there were 4 cases of small-pox in Chelsea; in 1894 there were 12 cases; in 1893, 29 cases; and in 1892 four cases. In London, during 1896, 260 cases of small-pox were notified, as against 1,076 cases in 1895, 1,391 cases in 1894, 2,933 cases in 1893, and 436 cases in 1892. In the 8 parishes forming the western district of London, only 35 cases of small-pox were notified in 1896, 14 of which belonged to Kensington.

TABLE VII.—*Notifications in 1895 and in 1896 per 10,000 of Population (1896 census).*

	Scarlet Fever.		Diphtheria.		Enteric Fever.	
	1895	1896	1895	1896	1895	1896
*LONDON	49·0	61·1	27·1	32·2	8·81	7·67
CHELSEA	64·7	58·6	34·5	48·3	7·90	7·04
Kensington	31·6	59·3	21·9	21·1	5·95	5·51
*Fulham	38·5	57·0	42·4	31·5	7·09	5·10
*Hammersmith	40·2	53·5	21·0	21·4	6·07	5·09
*Paddington	37·4	68·5	20·9	20·6	6·19	5·46
*St. George's, Hanover Square	41·7	47·5	14·5	18·3	5·23	7·38
*Westminster	33·6	44·3	20·1	22·2	5·03	7·51
*St. James's	37·6	35·6	19·6	16·1	5·60	2·60

*Uncorrected for dual notifications.

Table VII. shows the comparative prevalences of Scarlet Fever, Diphtheria, and Enteric Fever in London, and in the western parishes of London, in each of the years 1895 and 1896.

Scarlet Fever.—This disease was not quite so prevalent in Chelsea in 1896 as in 1895. In the latter year Chelsea was the only western parish that suffered from an excess of scarlet fever; whilst in 1896 the incidence rate on Chelsea was exceeded by that of Kensington and Paddington, and was nearly equalled by that of Fulham.

Out of the total of 566 cases in Chelsea, 26 occurred in the Duke of York's Royal Military School. These cases were notified in the interval between August 24th and November 3rd. In the parish generally the disease became prevalent in July, the prevalence reaching its maximum about the middle of October. Out of the total 566 cases, 389 or 69 per cent. occurred in the 6 months, July to December. The fall in notified cases following the closure of the schools in August was somewhat later than usual, being most marked in the 33rd, 34th, 35th, and 36th weeks of the year. In this period 41 cases of this disease only were notified, as against 67 in the immediately preceding 4 weeks—a reduction of 39 per cent.

Removal to hospital was carried out in 60·6 per cent. of the cases, as compared with 55·2 per cent. in 1895. Out of the total 566 cases, 140, or 24·7 per cent., belonged to Kensal Town, which shows that the disease was slightly more prevalent in Kensal Town than in the home district, the population of Kensal Town, according to the 1896 census, forming 22·2 per cent. of the population of the whole parish.

Diphtheria.—This disease was very prevalent in the home district of Chelsea in 1896, the incidence rate being much higher even than in 1895, which was the highest rate on record. It will be seen from Table VII. that Chelsea's figure for 1896 is very largely in excess of any of the other western parishes, and much higher than the figure characterising the Metropolis as a whole. Excluding Kensal Town, and taking the home district population only, the incidence rate of diphtheria per 10,000 of the home district population is 55·3, as against 39·9 in 1895. Out of the total 467 cases, only 51, or 11 per cent., belonged to Kensal Town, which is only about half of Kensal Town's share in proportion to its population. In 1895, Kensal Town took only 9·6 per cent. of the total cases. Removal to Hospital was effected in 55·7 per cent. of the cases, as compared with 61·7 per cent. in 1895.

It will be remembered that the epidemic prevalence of diphtheria in the home district commenced in the fourth quarter of 1895, 125 cases of the disease being notified in the last three months of that year. The disease commenced to decline in January, 1896, when 32 cases were notified; and the decline continued until April, in which month only 12 cases occurred. In May, however, there was an increase to 24 cases; followed by 27 cases in June, 55 in July, 59 in August, 70 in September, 39 in October, 41 in November, and 30 in December. The epidemic prevalence commenced late in June or early in July, and the height of the epidemic was reached in September. In June and July the central portion of the parish was chiefly affected, namely, the Marlborough Road, College Street, Leader Street, Arthur Street, and Flood Street neighbourhoods; but later on the contagion became more widely diffused throughout the parish. The closure of the schools in August had but little effect in arresting the progress of the epidemic. In the fortnight comprising the 34th and 35th weeks of the year 17 cases only were notified, as compared with 31 and 32 cases in the two preceding fortnights. The diminution, therefore, was late in coming, the schools closing for the vacation in the 30th week of the year, and was confined to a period of a fortnight, instead of the month that might have been anticipated.

Amongst children of school age—3—13 years,—there was a diminution of cases in the period comprising the 33rd to 36th weeks of the year, namely 31 cases, as compared with 38 cases in the 4-weekly period immediately preceding (29th to 32nd week); but this diminution was very much less than the average of the preceding 6 years.

During February, March, and April, the cases at school age (3 to 13 years) formed 52 per cent. of the total cases. In May this percentage was increased to 58, in June to 69, and in July, when the full force of the epidemic began to be felt, to 76 per cent.

In view of this progressive increase in the proportionate numbers of cases at school-age, at a time when the epidemic was rapidly increasing in intensity, and having regard to other circumstances which are within my knowledge, I am much inclined to the opinion that the epidemic in July was, in some degree, facilitated by the existence at that time of mild, unrecognised cases of the disease, which continued school attendance. The marked increase in the number of cases at school age in June and July is very suggestive, whilst in August, when the schools were closed, the percentage of cases at school age at once fell to 63 from 76 in July. In view, then, of the very strong probability that the July outburst was facilitated by the continued attendance at school of cases of sore-throat, which were in reality mild cases of diphtheria, it is my intention in the future, should circumstances appear to demand it, to ask the school authorities to co-operate with me in an endeavour to exclude from attendance at school all children suffering from sore-throat, and to concert such measures as may appear to be needful to carry this endeavour into practice. With diphtheria, as with other infectious diseases, an epidemic may be stamped out at its commencement by measures designed to prevent the diffusion of infection amongst the susceptible population, but once allowed to obtain headway, an epidemic gets beyond control, as indeed occurred in July last.

The case mortality, or percentage of deaths from diphtheria and croup to cases, was 22·9, or 3 per cent. higher than the average of the preceding 6 years, which shows that, unlike scarlet fever, the type of disease is more fatal when diphtheria is highly prevalent, than when restricted within its more usual limits. Part of this higher case mortality is no doubt, however, attributable to the fact that during the past year the proportionate number of children under ten years of age attacked has been somewhat higher than the average of former years, with a corresponding diminution in the attack rate over ten years of age. As is well known, the liability to a fatal issue in diphtheria is greater the lower the age of the person attacked.

Another remarkable feature in the past epidemic has been the large number of secondary or multiple cases in houses as compared with houses in which only a single case occurred. During the non-epidemic periods of diphtheria in Chelsea (1890-5), the multiple cases formed only 18 per cent. of the total cases, whilst during the epidemic period comprising the last quarter of 1895, and July to November 1896, the multiple cases formed 40 per cent. of the total cases. In the latter period, in 3 instances 5 in a house were attacked practically simultaneously, in 7 instances 4 in a house were attacked together, and in 13 instances 3 in a house were attacked. These facts point either to a greater susceptibility on the part of the juvenile population when diphtheria is epidemic, than when it is not; or more probably to a virus in a higher state of activity, and with greater striking power than ordinary.

Enteric Fever.—The number of cases of enteric fever in 1896 was 68, as compared with 76 in 1895. The number of cases in Kensal Town was only 7, or 10·3 per cent. of the total cases, which is less than half Kensal Town's due proportion in accordance with its population.

There was, practically, no autumnal rise in the prevalence of the disease in 1896, only 18 cases being notified in the last quarter of the year, as against 39 in the last quarter of 1895.

The following Table VIII. shows the case mortality, or percentage of deaths to notifications of scarlet fever, diphtheria (including membranous croup), and enteric fever in Chelsea and in London in each of the seven years, 1890-6.

TABLE VIII.—*Case Mortality in Chelsea and in London, 1890-6.*

	Scarlet Fever.		Diphtheria and Membranous Croup.		Enteric Fever.	
	Chelsea.	London.	Chelsea.	London.	Chelsea.	London.
1890... ..	7·0	5·7	17·6	*24·1	17·4	23·0
1891... ..	3·6	5·1	15·4	*22·5	17·4	15·6
1892... ..	5·3	4·3	22·9	*23·9	13·6	17·2
1893... ..	5·3	4·3	23·4	*24·5	22·1	18·4
1894... ..	5·1	5·2	21·7	23·6	14·7	18·1
1895... ..	4·0	4·2	18·7	20·4	18·4	17·0
1896... ..	4·9	...	22·9	...	14·7	...

*Diphtheria only.

Table IX. exhibits the removals of patients suffering from scarlet fever, diphtheria, and enteric fever, from their homes to hospitals, in each of the seven years, 1890-6, expressed as percentages of the total number of cases notified.

TABLE IX.—*Percentage Removals to Hospitals.*

	Scarlet Fever.	Diphtheria.	Enteric Fever.
1890	37	20	29
1891	40	15	22
1892	48	27	32
1893	50	41	38
1894	71	58	63
1895	55	62	51
1896	61	56	56

THE WATER SUPPLY OF CHELSEA.

The quality of the water supplied to Chelsea in 1896 was up to the average standard. The examinations of the Official Analyst for the Local Government Board show that about 99·2 per cent. of the bacteria present in the unfiltered Thames water at Hampton are removed by the processes of subsidence and filtration carried out by the Chelsea Water

Works. The largest number of microbes present in a cubic centimetre of the Chelsea water was 348 (in June), and the smallest number (2) in September, the average for the year, excluding June, being only 18.

Constant Supply.—The percentage of house supplies on the constant system in the Chelsea Company's district was 82 at the end of 1886, as against 73 at the end of 1895. The whole of the Parish (home district) should now be receiving a constant supply of water, with the exception of the district to the east of Sloane-street.

SPECIAL REPORTS.

During the past year I have had the honour to present special reports on the undermentioned subjects for the consideration of the Vestry :—

- February 4th.—(1) Scarlet fever and diphtheria in Chelsea in 1895.
(2) Diphtheria at No. 6, Gillray-square.
- March 17th.—Removal of offensive matter in King's-road.
- March 31st.—(1) Refuse Disposal Works, Lots-road. (2) Dung pits in Little Cadogan-place. (3) Dangerous structures. (4) No. 10, Margaretta-terrace.
- April 21st.—The drainage of No. 375, King's-road.
- June 2nd.—The recent census.
- June 16th.—(1) The staff of Sanitary Inspectors. (2) The Chelsea Infirmary and Crooked-usage nuisances.
- June 30th.—The drainage of No. 357, King's-road.
- July 14th.—Failure to notify scarlet fever by a medical practitioner.
- July 28th.—The omnibus yard, Symons-street.
- September 22nd.—(1) Drainage of the Vale, King's-road. (2) The omnibus yard, Symons-street. (3) The laundry, 15, Franklin's-row. (4) Knowles and Co.'s paper factory.
- October 6th.—Diphtheria in Chelsea from 1890 to 1896.
- November 3rd.—(1) The water supply of Redburn-street. (2) Failure of a medical practitioner to notify puerperal fever.
- December 1st.—Removal of fish offal in King's-road.
- December 15th.—(1) The capacity of water waste preventers. (2) Combined drainage—45, 47, 49, Marlborough-road, and The Vale. (3) Removal of offal in King's-road.

WORK OF THE PUBLIC HEALTH DEPARTMENT.

Appended are tabular statements, which give full information as to the detailed work of the department during the year 1896.

I am, my Lord and Gentlemen,

Your obedient Servant,

LOUIS C. PARKES,

Medical Officer of Health.

Section III.

PUBLIC HEALTH DEPARTMENT.

Summary of Nuisances and other matters reported on and Work done during the Year 1896.

HOUSES AND PREMISES :—	Home District.	Kensal Town.	Total.
*Reported on respecting nuisances complained of	1109	285	1394
Reported on with reference to infectious cases	996	232	1228
Cleansed, whitewashed, and repaired	305	176	481
Defective roofs repaired	126	11	137
Disinfected after zymotic diseases	913	135	1048
Cases of overcrowding abated	23	5	28
Dust-bins, new, provided	193	14	207
„ repaired	29	19	48
Underground rooms reported as occupied contrary to Act	6	—	6
Houses closed as unfit for human habitation..	15	1	16
DRAINAGE :—			
Drains opened, cleansed, and made sound ... }	165	120	285
„ trapped with stoneware gullies ... }			
Water-closets cleansed and repaired	118	67	185
„ new pans and traps provided... ..	277	29	306
Spout drains cleansed, repaired, or renewed... ..	128	66	194
Sink, bath, and lavatory waste pipes disconnected	140	9	149
Soil pipes ventilated or repaired	140	7	147
„ new, provided... ..	101	4	105
New drains laid, in accordance with Vestry's regulations... ..	162	7	169
Cesspools abolished	3	—	3
Additional w.c. accommodation provided.....	—	13	13
WATER SUPPLY :—			
For domestic purposes, provided where cut off by Water Company	54	3	57
For water-closets, or check cisterns provided.	311	59	370
Main cisterns cleansed or repaired	33	22	55
„ new, provided	1	5	6
NUISANCES ABATED ARISING FROM :—			
Keeping of animals	14	3	17
Accumulations of manure and other filth.....	54	22	76
Yards cleansed, paved, or drained	150	120	270
Smoke	6	2	8
Dung pits repaired, drained, &c., or cages, &c., provided	14	—	14
Dust shoots abolished	10	—	10

*This does not include re-visits to premises to ascertain works in progress, or premises visited where no nuisances were found to exist, which, if added, would at least treble the number of visits made.

MISCELLANEOUS :—

	Home District.	Kensal Town.	Total.
Dead bodies removed to public mortuary for sanitary reasons	17	2	19
Goods disinfected after infectious cases at station	3778	—	3778
Goods destroyed after infectious cases	23	—	23
Number of samples taken for analysis (Food and Drugs Act)	102	42	144
Unsound Food. Number of boxes of fish, &c., condemned and destroyed	23	—	23

PROCEEDINGS TAKEN :—

Notices issued for sanitary works, &c., including infectious diseases notices	1510	284	1794
Legal proceedings in respect of defective sanitary arrangements, nuisances, &c.	39	2	41
Legal proceedings in respect of food adulteration	7	2	9

CORRESPONDENCE :—

Number of letters written in connection with sanitary matters, including those of Medical Officer of Health	815	245	1060
Daily returns of infectious cases sent to Metropolitan Asylums Board	317	—	317
Notification of infectious cases sent to School Authorities	686	278	964
Entries in Inspectors' Report Books	1109	199	1308
„ Inhabitants' Complaint Book	75	—	75
Certificates of Disinfection given	813	16	829

The cow-houses and slaughter-houses were inspected by a Sub-Committee of the Works and General Purposes Committee and Medical Officer of Health prior to licences being renewed in October last, and a list of the retail bakehouses under inspection in Chelsea forms a separate Appendix.

Sanitary Inspectors,

ALEXANDER GRANT,	} Home District.
WILLIAM CHAS. LIGHTFOOT,	
FREDERICK F. FLINN,	
JAMES JOHN MACKAY,	

Kensal Town.

MAGISTERIAL PROCEEDINGS DURING 1896, UNDER THE SALE OF FOOD AND DRUGS ACT.

Streets where purchased.				Article purchased.	Extent of Adulteration.		Date of Hearing.	Result.
King's-road	...	...	...	Butter	...	56% foreign fat	11th Mar. ...	Fine, £10. Costs, 12s.
Manor-street	...	...	...	Milk	...	10% added water	2nd June ...	Fine, £1. Costs, 10s. 6d.
Queen's-road	...	...	...	Milk	...	17% fat abstracted	2nd June ...	Fine, £1 10s. Costs, 10s. 6d.
Dartrey-road	...	...	...	Milk	...	8% added water	3rd Nov. ...	Fine, £1. Costs, 10s. 6d.
Seaton-street	...	...	...	Milk	...	9% added water	3rd Nov. ...	Fine, £1. Costs, 10s. 6d.
Stayton-street	...	...	...	Milk	...	10% added water	3rd Nov. ...	Fine, £1. Costs, 10s. 6d.
Shawfield-street	...	...	...	Milk	...	22% added water	5th Nov. ...	Fine, £5. Costs, 12s. 6d.
Mozart-street, Kensal Town	...	...	...	Milk	...	20% fat abstracted	13th Nov. ...	Fine, £2. Costs, 12s. 6d.
Kensal-road, Kensal Town	...	...	...	Milk	...	23% fat abstracted	20th Nov. ...	Fine, £1. Costs, 12s. 6d.

Total Fines, £23 10s. Costs, £5 2s.

MAGISTERIAL PROCEEDINGS UNDER THE PUBLIC HEALTH (LONDON) ACT.

Situation of Premises.	Nature of Nuisance or Complaint.	Date of Hearing.	Result.
		1896.	
2, Stayton-street ...	Defective w.c. and drains, and want of water to premises	7th Jan. ...	Order for work to be done in 7 days.
1, Slaidburn-street...	Dirty and dilapidated state of premises, defective rain water pipe, roof, w.c., &c.	14th Jan. .. 21st Jan. ...	Fine £1 and costs. Premises closed as unfit for habitation. Re-opened after work completed, April 28th.
10, Margaretta-terrace	Defective drains	4th Feb. ...	Order for work to be done, and £5 fine.
98, Arthur-street ...	Want of water to the premises	11th Feb. ...	Withdrawn. Water on, on day of hearing.
44, Lamont-road ...	" " " " " " " "	18th Feb. ...	" " " "
441, Fulham-road ...	" " " " " " " "	18th Feb. ...	" " " "
16, Bramerton-street	" " " " " " " "	18th Feb. ...	" " " "
56, Rawlings-street..	Defective roof and premises dilapidated	18th Feb. ...	Order for work in 7 days.
" " " "	Failing to comply with Magistrate's order	31st Mar. ...	1s. per day for 35 days, and £1 1s. costs.
423, Fulham-road ...	Want of water to the premises	25th Feb. ...	Closing order.
61, Elm Park-gardens	" " " " " " " "	31st Mar. ...	Withdrawn. Water on, on day of hearing.
35, Cheyne-walk ...	" " " " " " " "	31st Mar. ...	Closing order, and £1 1s. costs.
31, Riley-street ...	Underground room occupied contrary to regulations ...	7th April ...	Order made prohibiting use of front room basement as a separate dwelling.
King's-road... ..	Removing offal during prohibited hours	12th May ...	Fined £2 2s. and £1 1s. costs.
119, Cheyne-walk ...	Filthy and dilapidated state of the premises	12th May ...	Closing order.
1, Munroe-terrace ...	Dirty state of the premises	12th May ...	Order for works in 7 days, and £1 1s. fine.
3, " " " "	" " " " " " " "	12th May ...	" " " "
" " " "	Penalties for non-compliance with Magistrate's order...	2nd June ...	3s. per day for 20 days. Total £3.
" " " "	Failing to comply with Magistrate's order	13th Oct. ...	2s. per day for 74 days. Total £7 8s.
Vacant land, Basil-street	Accumulation of filth and other refuse	9th June ...	Withdrawn. Work done on day of hearing.
357, King's-road ...	Foul and defective drains	9th June ...	Order for works in 14 days.
Sydney-street ...	Removing offal during prohibited hours	30th June ...	Fined 10s.
Manor-street ...	" " " " " " " "	30th June ...	Fined 10s.
King's-road... ..	" " " " " " " "	30th June ...	Fined 10s.
43, Church-street ...	Non-removal of manure	30th June ...	Fined 1s.
53, College-street ...	Want of water to the premises	30th June ...	Adjourned to 7th July, when withdrawn on account of premises being closed.
King's-road... ..	Removing hogwash during prohibited hours	7th July ...	Fined 10s.
Tedworth-square ...	Failing to notify two infectious cases	27th July ...	Fined 20s. and 6s. costs.
55A, Symons-street ..	Non-removal of manure	27th July ...	Fined 20s. and 23s. costs.
Smith's Stables, Crooked-usage	" " " " " " " "	27th July ...	Fined 40s. and 21s. costs.
98, Arthur-street ...	Want of water to the premises	26th Aug. ...	Withdrawn. Work done on day of hearing.
42, College-street ...	Defective sink waste, dust bin, roof, rain-water, pipe and dirty premises; front room basement occupied contrary to regulations	26th Oct. ...	Adjourned <i>sine die</i> on payment of £1 1s. costs, to allow of work being done.
42A, " " " "	Defective w.c. and roof, dirty state of room	26th Oct. ...	" " " "
1 and 2, Munroe-terrace	Dirty and dilapidated state of premises	5th Nov. ...	Fined 1s. in each case, and 23s. costs in each case.
King's-road... ..	Failing to notify infectious case	11th Nov. ...	Fined 40s. and 2s. costs.
Underground bakehouse, 67, Manor-street	Bakehouse not occupied as bakehouse on Jan. 1st, and being again used as bakehouse	11th Nov. ...	Adjourned to 17th. Adjourned <i>sine die</i> on 17th, the bakehouse being closed.
Manor-street ...	Removing fish offal during prohibited hours, &c. ...	15th Dec. ...	Fined 20s. and 2s. 6d. costs.
42, College-street ...	Removing offal in unsuitable vehicle	15th Dec. ...	Fined 10s. and 2s. 6d. costs.
32, Mozart-street, Kensal Town	Depositing faecal matter in street	15th Dec. ...	Fined 5s.
306, Kensal-road, Kensal Town	Dilapidated state of premises, roof defective, no water to w.c.	12th June ...	Closing order.
	Filthy state of premises, defective dustbin, no water to w.c.	12th June ...	Adjourned for 14 days to allow work to be done.

Total of Penalties and Costs, £42 1s.

BAKEHOUSES IN USE ON JANUARY 1st, 1897.

Street.	Occupier.	Above Ground.	Below Ground.
74, Arthur-street ...	Solomon Keppler ...	.....	Below.
93, Beaufort-street ...	A. Coventry ...	.....	"
26, Blantyre-street ...	Schuck ...	.....	"
55, Burnaby-street ...	Loe ...	.....	"
1, Cadogan-street ...	Summers ...	.....	"
2, Cale-street ...	Judkins ...	Above.	.....
77, Cheyne-walk ...	Spells ...	.....	Below.
20, Church-street ...	Bauer ...	.....	"
60, College-street ...	E. A. Stead ...	.....	"
17, Coulson-street ...	Rambeau ...	.....	"
3, Dartrey-terrace ...	Knee ...	.....	"
67, Flood-street ...	J. Venner ...	.....	"
95, " ...	Gass ...	.....	"
153, Fulham-road ...	C. M. Nash ...	.....	"
187, " ...	A. Bailey ...	.....	"
323, " ...	Burge ...	.....	"
395, " ...	Gilder ...	.....	"
15, Green-street...	Bott ...	.....	"
53, Godfrey-street ...	Becker ...	.....	"
102, Keppel-street ...	Mellows ...	.....	"
47, King's-road ...	Pennycuick ...	.....	"
83, " ...	J. Humphry ...	.....	"
88, " ...	Akast ...	.....	"
134, " ...	Buckea ...	.....	"
145, " ...	J. Humphry ...	.....	"
302, " ...	Musgrove ...	.....	"
351, " ...	Mardon ...	.....	"
399, " ...	Dohna ...	.....	"
414, " ...	Korle ...	.....	"
488, " ...	Matthiac ...	.....	"
502, " ...	Batchelor ...	.....	"

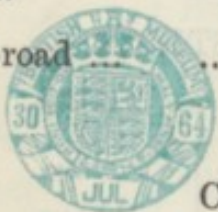
Street.	Occupier.	Above Ground.	Below Ground.
517, King's-road ...	McKay ...	.....	Below.
1, Leader-street ...	H. Southey ...	Above.	.....
48, Lots-road ...	West ...	.....	Below.
83, Lower Sloane-street..	Miles ...	Above.	.....
43, Manor-street ...	Essling ...	.....	Below.
62, Marlborough-road ...	Kremers ...	.....	"
100, " "	Reitze ...	.....	" "
110, " "	Wordley ...	Above.	.....
23, Queen's-road...	Hillton ...	.....	Below.
58, Rawlings-street ...	Hannah ...	.....	"
14, Riley-street ...	Bashford ...	.....	"
150, Sloane-street ...	Pennycuick ...	.....	"
43, Stayton-street ...	Salzmann ...	Above.	.....
117, Sydney-street ...	J. Humphry ...	.....	Below.
25, Walton-street ...	Burrows ...	.....	"
46, " ...	Small ...	.....	"

KENSAL TOWN DISTRICT.

551, Harrow-road ...	J. Cumming ...	Above.	Below.
597, " ...	John Davey ...	.....	"
608, " ...	W. Y. Menzler ...	Above.	.....
690, " ...	Heinrich Geissler...	"	.....
62, Herries-street ...	Fredk. Spohr ...	.....	Below.
83, " ...	A. Royston ...	.....	"
193, Kensal-road ...	A. Webb ...	.....	"
300, " ...	Francis Frost ...	Above.	.....
226, Kilburn-lane ...	James Guscott ...	"	.....
12, Mozart-street ...	Henry Geo. Taylor	"	.....

SLAUGHTER HOUSES.

Street.	Occupier.
Crooked Usage	Cridlan, P. and J. W.
169, Fulham-road... ..	Philp, J.
341, "	Foyer, W.
52, King's-road	Cobb, G. A.
54, "	"
413, "	Rowland, Mrs.
2, Little Smith-street	Clayton, F.
82, Marlborough-road	Iggulden, F.
90, "	"
128, "	Cowlin, F.
273, Kensal-road	Miles, A.



COW HOUSES.

Crooked-usage	Jennings, J.
Church-street	Emerton, J.
406, King's-road	Jordan, G.
3A, Leverett-street	Robinson, F.
10, Stayton-street	Hughes, R.