

# Annual Report

ON THE

## HEALTH

OF THE

### BROMLEY RURAL SANITARY DISTRICT

IN

1896.

Census, 1881.					Census, 1891.				
No. of Acres ...	...	...	...	31,751	No. of Acres ...	...	...	...	33,129
Inhabited Houses ...	...	...	...	3,901	Inhabited Houses ...	...	...	...	5,025
Population ...	...	...	...	20,760	Population ...	...	...	...	26,852

At the middle of 1896 the **Population** was **30,155**, having been estimated by the method adopted by the Registrar-General, and showed an increase of 657 since the middle of 1895.

The registered births numbered 738, and included 374 of males and 364 of females.

The **Birth-rate**, estimated per 1,000 persons living in the district, was **24.4**, as against 25.2 in 1895, and 25.3 in 1894.

Three hundred and seventy-five deaths were returned, including 202 of males and 173 of females. Of these 62 occurred in the Workhouse.

The **Death-rate** was low, being only **11.4** per 1,000.

Thirty-four deaths were caused by one or other of the principal Zymotic Diseases, and consisted of 2 from Scarlet Fever, five from Diphtheria (including Membranous Croup), 2 from Enteric Fever, 14 from Measles, 3 from Whooping-cough, and 8 from Diarrhœa.

The **Zymotic Death-rate** was **1.1** as against 0.8 in 1895, and 1.4 in 1894. In Table **A** the deaths from the seven principal zymotic diseases are shown in each quarter, and in Table **B** during each of the past 10 years.

The **Infant Mortality**, ~~224~~ the number of deaths of infants under one year of age, per 1,000 registered births, was **112** as against 121 in 1895.

During the year 1896 the birth-rate throughout England and Wales was 29.7, the general death-rate 17.1, and the zymotic death-rate 2.18 per 1,000 of the population. The rate of mortality among infants under one year of age to each 1,000 births registered was 148.



## NOTIFIABLE DISEASES.

Under the provisions of the Infectious Disease (Notification) Act, 1889, 198 cases of infectious disease were reported, as compared with 133 in 1895. They included two cases of Small-pox, 129 of Scarlet Fever, 22 of Diphtheria and Membranous Croup, 9 of Enteric Fever, 1 of Puerperal Fever, and 35 of Erysipelas.

**Small-pox.** The only two cases of this disease were notified in the parish of Farnborough. The patients were brothers, who were employed in fruit-picking on a farm at Orpington. The elder of the two came to the casual ward of the Bromley Union Workhouse on June 23rd, not feeling well, and was found to be suffering from Small-pox of a mild character.

The younger, who had occupied the same hut, was recognised as suffering from the disease on July 10th, when still at work.

They were both removed to the Isolation Hospital, where they were successfully treated and made good recoveries.

**Scarlet Fever.** This disease was extremely prevalent throughout the District, and the cases were widely distributed :—4 in Chelsfield, 14 in Chislehurst, 1 in Cudham, 9 in Downe, 25 in Farnborough, 37 in Foot's Cray, 1 in Keston, 2 in Knockholt, 1 in Mottingham, 12 in Orpington, 8 in St. Mary Cray, 2 in St. Paul's Cray, 3 in West Wickham, and 10 in the Union Workhouse, Farnborough.

The age distribution was as follows :—

1—5 years.	5—15 years.	15—25 years.	25—65 years.	
18	88	13	10	—129 cases.

The mortality from this large number of cases was very slight, 2 only of the 129 cases proving fatal—a girl aged 8 years, who died in the St. Ann's Orphanage, Orpington in January; and a boy aged 4 years, who died at Sidcup in the month of October.

On account of the prevalence of this disease it became necessary to close the West Wickham Schools from January 7th to January 17th, and the Downe School for 3 weeks, viz., from June 1st to June 19th.

**Diphtheria** (including Membranous Croup). The 22 notified cases were distributed throughout the district as follow :—1 in Chelsfield, 2 in Chislehurst, 7 in Foot's Cray, 2 in Hayes, 3 in Mottingham, 5 in Orpington, one in St. Mary Cray, and 1 in Downe.

The cases and deaths were at the following age periods :—

1—5 years.	5—15 years.	15—25 years.	25—65 years.	
7	8	5	2	—22 cases.
1	3	1	0	—5 deaths.

Three deaths occurred in the Isolation Hospital of patients removed from Mottingham, St. Mary Cray, and Orpington, aged respectively 2, 21, and 7 years. The other two occurred one at Sidcup and one at Downe.

The case-mortality was consequently 22.7 per cent.

**Enteric Fever.** Nine cases were notified—all during the second half of the year—two in July, 1 in August, 3 in September, 2 in November, and 1 in December.

They occurred : 1 at Chislehurst, 1 at Cudham, 4 at Foot's Cray, 2 at Mottingham, and one at St. Paul's Cray. Two adults succumbed to the disease—1 at Sidcup in September, and one at Mottingham in October.

## NON-NOTIFIABLE DISEASES.

**Measles** was very prevalent especially during the spring and autumn and necessitated the closure of four schools at different periods, viz. : Farnborough Board School, from April 14th to May 4th. Keston School, from May 22nd to June 22nd. St. Nicholas National School, Chislehurst, from November 16th to November 30th, and Orpington School, from December 10th to December 31st.



Measles broke out in the Union Workhouse, Farnborough, in February, and during that and the two following months caused 8 deaths among inmates aged 4 years and under.

In addition to these, 1 child died from Measles at Farnborough, 3 at Orpington, 1 at Chislehurst, and 1 at Keston, making a total of 14 fatal cases throughout the district, whilst the deaths from all the other zymotic diseases put together only numbered 20.

**Whooping-cough.** Three deaths occurred at the beginning of the year, 2 at Sidcup and 1 at Chislehurst, all being those of children under 5 years of age.

The numerous cases among children attending Lady Sidney's School, Chislehurst, necessitated that School being closed from January 7th to February 16th.

**Diarrhoea.** The mortality (8) from Diarrhoea was not excessive, and was confined to the Crays (3 cases), Chislehurst (2), Mottingham (1), and Orpington (2). Six were among children under 1 year of age, and all occurred between the months of June and December.

**Influenza.** There were 6 deaths from this disease, 1 in the parish of Chislehurst, 2 in Chelsfield, 1 in St. Mary Cray, 1 in Keston, and 1 in Foot's Cray. The patients were all grown up persons, and the deaths occurred 1 in January, 1 in February, 2 in March, and 1 in September.

**Isolation.** The Joint Hospital again did good service ; 103 cases, *i.e.*, 51 per cent. of notified cases from the Bromley Rural District having been admitted during the year, as follows :—

January	...	2	August	...	18
February	...	1	September	...	21
April	...	1	October	...	16
May	...	5	November	...	13
June	...	2	December	...	12
July	...	12			
		<hr/> 23			<hr/> 80 — 103

Of those so treated, 47 were males and 56 females.

The ages of the patients varied from 1 to 56 years. The longest stay in hospital was 148 days, the shortest 24, and the average 69 days.

The diseases treated were Small-pox 2 cases, Scarlet Fever 88, Diphtheria 10, Enteric Fever 2, Erysipelas 1.

Four deaths occurred among patients from this District, *viz.*, 3 from Diphtheria, and 1 from Scarlet Fever.

**Diseased Meat.** A considerable amount of tuberculous meat was seized by your Inspector on November 16th, at Foot's Cray. It was examined by me and condemned by a Magistrate. The case was brought before the Bromley Bench on December 7th, and fines were inflicted to the amount of £30.

I have had occasion to inspect and condemn several blocks of houses as being unfit for human habitation, notably at Orpington, Farnborough, and St. Mary Cray, and there are many more in these and other parts of the District requiring similar attention. It is most essential that the rebuilding or alteration of such buildings, the laying of the drains connected with them, and the connections with the sewers should be strictly supervised, and I am glad to find that you have recognised this by considering the question of the appointment of an additional Inspector.

Building operations are going on in all parts of the District, more especially perhaps at Sidcup and Mottingham, and good inspection of these new buildings will obviate nuisances in the future.

The large record of work done by Mr. Powell, is appended to this Report, as are also the customary tables and returns required by the Local Government Board.

I have the honour to be, Gentlemen,

Your obedient Servant,

March 3rd, 1897.

JAMES SCOTT TEW, M.D., D.P.H.



# Bromley Rural District Council.

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TO THE CHAIRMAN AND MEMBERS OF THE BROMLEY

RURAL DISTRICT COUNCIL.

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GENTLEMEN,

I have the honour to present to you my first report (March 25th to Dec. 31st, 1896).

The numbers of inspections made in the several Parishes during this period were as follows :—

Chelsfield 33, Chislehurst 65, Cudham 24, Downe 32, Farnborough 46, Foots Cray 69, Hayes 25, Keston 29, Knockholt 21, Mottingham 41, North Cray 25, Orpington 59, St. Mary Cray 40, St. Paul's Cray 22, West Wickham 34.

**Complaints.** Sixty-nine complaints were received and investigated. Of these 17 related to accumulations of house refuse; 20 to defective drainage; 2 to water supply; 5 to damp houses; 2 to slaughter houses; 6 to smell from sewer gratings; 3 to pigs kept in a filthy condition; 13 to offensive accumulations; and 1 to a smoke nuisance.

**Water Supply.** Several premises being found without a wholesome supply of water within a reasonable distance, the owners were written to, with a result that 13 cottages have now a constant supply from the mains. The supply to four cottages has been improved by deepening the existing well; and a further 18 were being dealt with at the close of the year.

**Infectious Disease.** One hundred and ninety-eight cases of Infectious Disease have been dealt with during the year, of which 165 occurred since I took up my appointment. It was found necessary to fumigate 135 houses, the fumigation being carried out with liquified Sulphur Dioxide, the clothing, etc., being disinfected with a solution of Perchloride of Mercury.

**Drainage and Drain Testing.** The drains to 80 premises have been examined and found defective; many imperfect and dangerous systems have been discovered, and in all cases it was found necessary to re-construct the drains.

With regard to 37 premises this has been completed, and in the case of the other 43, the work is either in hand or orders have been given to commence.

In addition to the above, 18 pit-privies have been abolished and water-closets substituted.

One important feature in connection with the new drainage is the willingness of the owners to fall in with my suggestions to provide inspection chambers to the drains with air-tight covers. This will, I hope, prevent the usual practice of "tapping" drains to remove obstructions.

17 premises were re-drained by verbal notice.

15     "             "             by preliminary notice.

2       "             "             by legal notice; and

3       "             "             by writing letters to the owners.

The following illustrate a few of the systems found :—

In a group of seven cottages the sockets of pipes were laid the reverse way and the drain was leaking. Whole of drainage found bad.

Thirteen cottages: scarcely any jointing to pipes, which were found to be leaking badly and the water pipe in close proximity to drain. One cottage was built over the drain which takes the sewage of the other twelve, and from this cottage two cases of Typhoid Fever have been notified, both of which proved fatal, and one case of Diphtheria.

Eight business premises: Drains found with insufficient fall and in a very bad condition. In one case the drain passed *under* the house, and was in direct communication with the sewer, and had no outlet vent shaft. A case of Diphtheria was notified from this house and proved fatal.



Six villas : Drains with open joints, sewage having apparently been soaking into the soil for years. In two or three instances the drains appeared to be laid to act as a subsoil drain as well as for the carriage of sewage. The cesspools of these villas were found water-logged.

Four cottages : Drains with insufficient fall and leaking badly, and the water pipes of sink discharging into the soil pans.

Fourteen cottages : Drain "tapped" in no less than 29 places, apparently to remove obstructions in the drains. Thirteen of the water pipes to the sink were connected with the drains.

**Factory and Workshops Act.** Eight dress making establishments have been inspected, two of which were found to be overcrowded, and two with defective sanitary arrangements. The overcrowding in one case was abated by the erection of a new work-room, and in the other a room has been temporarily taken pending the erection of a suitable building.

The work referred to above was done by verbal notice.

Fourteen laundries have also been inspected. In three cases overcrowding was found to exist, and was abated by verbal notice.

Three very offensive pit-privies were found to three of the laundries, and they have been abolished and water closets substituted.

Two new wash-houses have been erected to take the place of unsuitable structures.

At one other work-room no sanitary convenience for the female employées was provided, and a water-closet was constructed.

In no case was it found necessary to serve a notice.

### Summary of Work done.

Number of complaints received and investigated	...	...	...	69
Nuisances discovered	...	...	...	215
Nuisances abated without report	..	...	...	187
Ditto            after report	...	...	...	6
Preliminary notices served	...	...	...	88
Legal notices served	...	...	...	12
Notices served dealing with insufficient water-closets	...	...	...	34

### Character of Work done.

Houses cleansed and generally repaired	...	...	...	9
Cow-sheds, slaughter-houses and bake-houses cleansed	...	...	...	41
Overcrowding abated	...	...	...	5
Houses underpinned and damp-proof course inserted	...	...	...	4
Ventilation of houses improved	...	...	...	4
Defective roofs and gutters repaired	...	...	...	15
Indoor soil pipes abolished and new ones provided outside and ventilated	...	...	...	4
D-traps abolished	...	...	...	4
Privies or earth closets converted into water closets	...	...	...	19
Privies constructed with small moveable receptacles or converted into earth closets	...	...	...	8
Bath, lavatory and sink waste pipes disconnected from drains and caused to discharge over gully traps	...	...	...	7
Houses supplied with water from main	...	...	...	13
Dust bins provided	...	...	...	36
Water laid on to water closets	...	...	...	12
Cesspools cleansed	...	...	...	14
Privies cleansed	...	...	...	26
Houses at which drains were examined and tested	...	...	...	80
Houses at which drains were found defective	...	...	...	80
Houses at which drains were re-constructed or new ones provided	...	...	...	37
Houses at which drains were cleansed, ventilated, trapped and repaired	...	...	...	21



Number of drain tests made in course of work done under the two previous headings ... ..	109
Cow-sheds re-drained ... ..	2
Urinals cleansed and repaired ... ..	4
Offensive accumulations removed ... ..	23
Premises from which animals, improperly kept, were removed ...	3
Paving of piggeries repaired ... ..	3
Infected houses fumigated and cleansed ... ..	135
Dangerous structures demolished ... ..	1

I have the honour to remain,

Gentlemen,

Your obedient servant,

**William George Powell,**

(Assoc. & Cert. San. Inst.)

*Inspector of Nuisances.*



TABLE A.

The number of Deaths from all causes and from the seven principal Zymotic Diseases with their Death Rates; the principal causes of Death and the Infant Mortality in the Bromley Rural District in each Quarter of 1896.

Quarters.	Total Deaths.	Death Rate per 1000	Deaths from 7 principal Zymotic Diseases.	Zymotic Death Rate	Small-pox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Enteric Fever.	Erysipelas.	Measles.	Whooping-cough.	Diarrhœa.	Rheumatic Fever.	Phthisis.	Bronchitis, Pleurisy, and Pneumonia.	Heart Disease.	Influenza.	Injuries.	Other Diseases.	Deaths of Infants under 1 year per 1000 Births.
1st ..	115	13.9	11	1.3	1	...	...	...	...	7	3	...	...	11	22	7	4	3	57	156	
2nd ...	86	11.1	4	0.6	...	...	...	...	...	3	...	1	1	12	7	8	1	1	52	82	
3rd ...	88	10.7	12	1.5	...	4	1	1	...	...	6	...	11	2	9	1	...	53	151		
4th ...	86	10.7	7	0.9	1	...	...	1	...	4	...	1	1	2	11	9	...	3	53	61	
Totals	375	11.4	34	1.1	2	4	1	2	...	14	3	8	2	36	42	33	6	7	215	112	

TABLE B.

Deaths from Zymotic Diseases during the past ten years, and in 1896.

Zymotic Diseases.	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	Average of ten Years.	1896
Small-pox ... ..	6	...	...	...	...	...	1	...	...	...	0.7	...
Scarlet Fever ... ..	1	...	...	2	...	...	1	3	2	2	1.1	2
Diphtheria ... ..	3	5	5	14	6	5	9	16	19	4	8.6	5
Fevers ... ..	...	...	3	1	2	1	2	1	6	...	1.6	2
Measles ... ..	4	7	...	1	8	8	2	7	1	3	4.1	14
Whooping-cough ... ..	4	2	9	5	15	14	2	10	7	5	7.3	3
Diarrhoea ... ..	18	19	8	9	2	1	6	9	6	12	9.0	8
Total seven Zymotics ... ..	36	33	25	32	33	29	23	46	41	26	32.4	34
Other Zymotics ... ..	4	8	4	7	8	6	26	22	11	15	11.1	6
Totals ... ..	40	41	29	39	41	35	49	68	52	41	43.5	40



**TABLE C.**

The number of Deaths from all causes and from the seven principal Zymotic Diseases in each Parish of the Bromley Rural District in 1896. The Parishes are ranged in the order of their general Death Rate during the year 1896.

PARISHES.	Census Population 1891	Total Deaths.	General Death Rate per 1000	Deaths from 7 principal Zymotic Diseases.	Zymotic Death Rate.
Hayes ... ..	804	5	5.8	0	0.0
West Wickham ... ..	1262	10	6.9	0	0.0
Down ... ..	581	5	8.4	1	1.6
Chislehurst ... ..	6557	64	9.5	5	0.6
Mottingham ... ..	1037	13	10.8	3	2.5
Knockholt ... ..	872	9	10.9	0	0.0
Cudham ... ..	1103	11	11.4	0	0.0
Foots Cray ... ..	3487	47	11.4	5	1.0
Orpington ... ..	4099	53	12.3	7	1.3
Farnborough ... ..	1627	16	12.7	1	0.5
St. Paul's Cray ... ..	1028	16	13.5	0	0.0
North Cray ... ..	549	6	14.4	1	2.0
St. Mary Cray ... ..	1988	30	14.8	2	0.9
Keston ... ..	746	8	16.6	1	1.2
Chelsfield ... ..	1122	20	17.5	0	0.0



*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 Rural Sanitary District of BROMLEY ; 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 1891.	Estimated to middle of 1895.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.							Typhus.	Cholera.	Erysipelas.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.							Typhus.	Cholera.	Erysipelas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
									Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Smallpox.	Scarlatina.	Diphtheria.								Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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*TABLE OF DEATHS during the year 1896, in the BROMLEY Rural 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 5 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 up- wards.	FEVERS.										Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Typhus.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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BROMLEY RURAL DISTRICT,  
IN  
**1896,**  
BY  
JAMES SCOTT TEW,  
M.D., D.P.H.,  
MEDICAL OFFICER OF HEALTH.