



CITY OF BRADFORD.

REPORT

ON THE

HEALTH OF BRADFORD

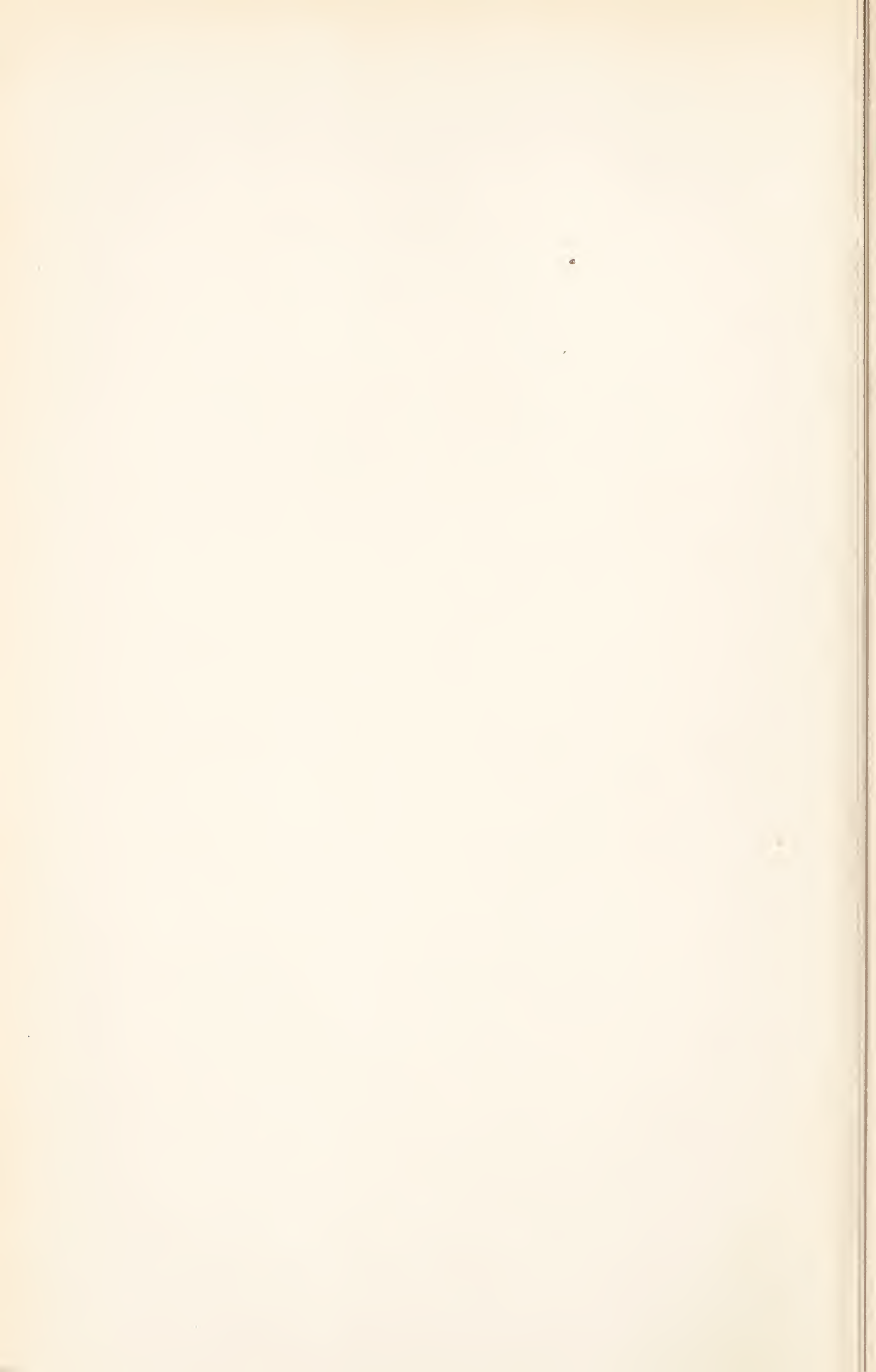
FOR THE YEAR 1899,

BY THE

MEDICAL OFFICER OF HEALTH.

Bradford:

WILLIAM BYLES AND SONS, PRINTERS, PICCADILLY.



Health Committee, 1899.

(Meets every other Wednesday at 5 p.m.)

THE WORSHIPFUL THE MAYOR

MR. ALDERMAN F. W. JOWETT, Chairman

MR. COUNCILLOR P. SMITH, Deputy Chairman

MR. ALDERMAN LISTER

MR. ALDERMAN MILNER

MR. ALDERMAN ROBINSON

MR. COUNCILLOR ACKROYD

MR. COUNCILLOR JOHNSON

„ BURKE

„ MINTY

„ CROSSLAND

„ O'FLYNN

„ DAWSON

„ PEEL

„ FIRTH

„ PRIESTMAN

„ FOSTER

„ S. SMITH

„ GODWIN

„ WATSON

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COUNCILLORS DAWSON, FIRTH, PEEL, P. SMITH, AND WATSON

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HARTLEY, HORSEFALL, MINTY, O'FLYNN, PRIESTMAN,
P. SMITH, S. SMITH, WILKINSON, WILLIAMSON, AND
H. S. WRIGHT

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COUNCILLORS ACKROYD, HARTLEY, HORSEFALL, O'FLYNN,
PRIESTMAN, P. SMITH, S. SMITH, WATSON, AND
WILLIAMSON

(5) *Semon Convalescents' Home Committee :—*

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COUNCILLORS ACKROYD, FOSTER, GRAY, P. SMITH, WILKINSON,
AND WRIGHT

Staff of Health Department.

W. ARNOLD EVANS, M.D., Medical Officer of Health
 JAS. T. KITCHIN, M.D., Superintendent of the City Hospital
 F. W. RICHARDSON, Public Analyst
 JAS. CHAMBERS, Chief Inspector of Nuisances
 J. HEMINGWAY, Meat Inspector
 H. RAISTRICK, Assistant Meat Inspector
 G. H. BRAYSHAW, Food and Drugs Inspector
 T. W. CALVERT, Inspector under Shop Hours Act
 J. P. GREENWOOD, Assistant Inspector of Nuisances
 H. SIMPSON, Divisional Inspector of Nuisances
 H. DRAKE, " " "
 T. H. RAMSDEN, Sub-Inspector of Nuisances
 R. YEADON, " "
 H. E. WYNN, " "
 T. ELLISON, " "
 S. HARRISON, " "
 R. PARKER, " "
 F. HILEY, " "
 H. CORDINGLEY, " "
 H. SPENCER, " "
 J. MACKEE, " "
 C. SUTCLIFFE, Disinfecting Officer
 E. HAILEY, Assistant "
 C. LISLES, " "
 J. CROWTHER, Statistical Clerk
 G. H. BRAMFITT, Clerk
 R. Y. WALTON, Junior Clerk
 W. MARGERISON, Junior Clerk

In addition to the above the Medical Officer of Health is assisted in the Inspection of New Buildings by the following officers under the Building Committee :—

T. PRESTON, Chief Building Inspector
 H. E. CRAVEN, Assistant Building Inspector
 I. INGHAM, " " "
 F. GLEDHILL, " " "



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Statistical Summary.

Situation : Latitude 53·4 N. ; Longitude 1·7 W.

Elevation : 250—1,000 feet.

Area of City : 10,776 acres.

Density of Population : 21·9 persons per acre.

Number of Inhabited Houses : 53,106.

Population : 216,361 (1891).

236,241 (estimated to middle of 1899).

Birth-rate : 23·31 per 1,000.

Death-rate : Recorded 18·38 per 1,000.

Zymotic, 2·43 per 1,000.

Infantile Mortality, 181 per 1,000 births.

Total Rainfall : 28·36 inches.

VITAL STATISTICS.

POPULATION.

The population of the City was estimated by the Registrar-General to be 236,241 persons in the middle of the year 1899; but having regard to the fact that this estimate is based upon the census taken in 1891 it cannot be regarded as possessing any claim to accuracy, and I am looking forward to the census of 1901 for an opportunity of correcting the mortality figures which have been calculated on estimations of population during the past few years.

The tabular statement here appended gives a summary of the probable population and chief mortality rates since 1883.

TABLE I.

Showing corrected Population, Birth-rate, and Mortality Rates from 1883—1899.

YEAR.	Corrected Estimate of Population to middle of each year.	ANNUAL RATE PER 1,000 LIVING.		
		Birth-Rate.	Death-Rate.	Zymotic Rate.
1883	199,214	29·88	18·77	1·5
1884	201,347	30·86	21·13	2·6
1885	203,504	30·55	18·62	1·5
1886	205,684	30·55	20·35	2·3
1887	207,887	29·83	21·44	2·9
1888	210,113	29·82	18·66	1·6
1889	212,364	29·53	21·15	2·9
1890	214,634	29·10	23·21	2·3
1891	216,938	28·64	22·12	2·35
1892	219,262	27·18	17·91	1·46
1893	221,610	27·58	20·90	3·22
1894	223,985	26·60	16·95	1·65
1895	226,384	26·03	19·80	2·47
1896	228,809	25·94	16·77	1·50
1897	231,260	24·55	17·39	2·24
1898	233,737	23·92	17·54	2·20
1899	236,241	23·31	18·38	2·43

The density of the population is shown in Table II. It varies from 3·6 persons per acre in Allerton Ward, to 93·4 in the West Ward.

TABLE II.

WARDS.	Population.	Acreage.	Persons per Acre.
North	13,957	372	37·5
South	14,330	308	46·5
East... ..	17,015	392	43·4
West	15,515	166	93·4
Listerbills	20,415	320	63·8
Great Horton... ..	16,133	1,283	12·6
Little Horton..	16,710	428	39·0
East Bowling	17,540	557	31·5
West Bowling	18,835	1,004	18·8
Exchange	5,292	117	45·2
Bradford Moor	19,132	674	28·4
Manningham	24,536	457	53·7
Bolton	9,200	994	9·3
Heaton	17,588	879	20·0
Allerton	10,043	2,815	3·6
CITY TOTAL ...	236,241	10,776	21·9

MARRIAGES.

The annual return as to marriages kindly supplied to me by Mr. Crowther, Superintendent Registrar for the Bradford district, shows that 2,189 marriages were solemnised in Bradford during the year 1899. The marriage rate is therefore 18·4 per 1,000 of the population, or one marriage per 107 of the population. In London the marriage rate was the same.

TABLE III.

Period.	Number of Marriages.	Proportion of Marriages to Population.
1891	2,171	1 in 99
1892	2,059	1 in 106
1893	1,944	1 in 114
1894	2,035	1 in 110
1895	2,053	1 in 110
1896	2,244	1 in 102
1897	2,149	1 in 107
1898	2,174	1 in 107
1899	2,189	1 in 107

BIRTHS.

The total number of Births registered during the year was 5508, consisting of 2810 males and 2698 females. The birth-rate per 1000 of the population was therefore 23·31, a diminution of ·61 per 1000 on that for the previous year. The comparative birth-rate in several of the largest towns of the country is shown in the following table.

TABLE IV.
Showing Birth-rates in Cities and Towns of England having a population of over 200,000 during the year 1899.

Towns in order of magnitude of rates.	Birth-rate per 1000.
Liverpool	35·6
Sheffield	34·6
Birmingham	34·3
Hull	34·3
Salford	33·9
Manchester	32·6
Newcastle... ..	31·4
Leeds	30·6
33 Large Towns	30·2
West Ham	29·7
Leicester	29·4
London	29·4
Bristol	29·2
Nottingham	28·9
Bradford	23·3

Table V. shows the distribution of births in the municipal Wards ; the rate per 1000 of the population varies from 15·8 in Bolton to 27·2 in the South Ward.

TABLE V.

Showing the Births and Birth-rate in the City of Bradford in each of the Fifteen Wards in 1899.

WARDS.	MALES.			FEMALES.			MALES AND FEMALES.			Birth-rate per 1000.
	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.	
North	162	13	175	151	11	162	313	24	337	24.1
South	175	21	196	183	12	195	358	33	391	27.2
East	210	1	211	211	6	217	421	7	428	25.2
West	155	9	164	164	15	179	319	24	343	22.1
Listerhills ...	169	9	178	168	8	176	337	17	354	17.3
Great Horton	202	3	205	186	3	189	388	6	394	24.4
Little Horton	193	24	217	184	21	205	377	45	422	25.3
East Bowling	234	7	241	218	10	228	452	17	469	26.7
West Bowling	223	16	239	223	12	235	446	28	474	25.2
Exchange ...	49	11	60	41	10	51	90	21	111	21.0
Bradford Moor	241	7	248	239	10	249	480	17	497	26.0
Manningham	291	11	302	263	11	274	554	22	576	23.5
Bolton	81	1	82	60	3	63	141	4	145	15.8
Heaton	197	6	203	168	5	173	365	11	376	21.4
Allerton ...	87	2	89	100	2	102	187	4	191	19.0
CITY TOTAL...	2669	141	2810	2559	139	2698	5228	280	5508	23.31

DEATHS.

The total number of deaths recorded in 1899 was 4343, of which 2181 were of males and 2162 of females, being a slight increase on the total for the previous year.

The death-rate per 1000 of the population is 18·38, an increase of ·94 per thousand on the rate for 1898. The death-rate for the whole of England and Wales was 18·3, for London 19·8, and for the thirty-three large towns 20·2 per 1000.

TABLE VI.

YEAR.	Estimated Population in the middle of each year.	Births.	Deaths.	Annual Rate per 1000 living.	
				Births.	Deaths.
1882	197,103	6225	4142	31·59	21·01
*1883	199,214	5953	3741	29·88	18·77
1884	201,347	6216	4255	30·86	21·13
1885	203,604	6218	3791	30·65	18·62
1886	205,684	6285	4187	30·55	20·35
1887	207,887	6202	4458	29·83	21·44
1888	210,113	6266	3922	29·82	18·66
1889	212,364	6272	4492	29·53	21·15
*1890	214,634	6247	4982	29·10	23·21
1891	216,938	6214	4800	28·64	22·12
1892	219,262	5959	3927	27·18	17·91
1893	221,610	6112	4632	27·58	20·90
1894	223,985	5960	3797	26·60	16·95
1895	226,384	5894	4483	26·03	19·80
*1896	228,809	5945	3838	25·94	16·77
1897	231,260	5678	4023	24·55	17·39
1898	233,737	5593	4102	23·92	17·54
1899	236,241	5508	4343	23·31	18·38

* In these years, the births and deaths are those registered in 53 weeks.

The increase in the death-rate was accounted for by the larger number of deaths from several classes of disease.

A comparison of the mortality from the principal groups of diseases during 1899 and the average for the five years preceding is given in Table VII.

TABLE VII.

	Deaths in 1899.	Average Number of Deaths 1894-1898.	Increase or Decrease.
Bronchitis, Pneumonia, and Pleurisy ...	824	734	+ 90
Scarlet Fever	106	28	+ 78
Cancer	226	181	+ 45
Diarrhœa	261	219	+ 42
Enteritis	91	62	+ 29
Atrophy and Debility	181	154	+ 27
Old Age	226	209	+ 17
Phthisis, & other Tuberculous Diseases	468	453	+ 15
Diphtheria	25	14	+ 11
Enteric Fever... .. .	43	35	+ 8
Smallpox... .. .	...	5	- 5
Measles	74	83	- 9
Nervous Diseases	532	542	- 10
Whooping Cough	64	75	- 11
Premature Birth	105	119	- 14
Heart Disease... .. .	262	288	- 26

The Table following allows a comparison in the chief vital statistics to be made between Bradford and twelve other large towns. It will be seen that whilst Bradford is by far the lowest on the list in the birth-rate column, yet two other towns, viz., Bristol and Leicester, record a lower death-rate. In the infantile mortality rate, however, Bradford takes a fairly good place, four only of the other towns having a lower death-rate amongst infants under one year of age.

TABLE VIII.

Comparative Table showing the Estimated Population, Birth-rate, Death-rate, and Infantile Death-rate in each of the Thirteen largest towns of England and Wales (those having a population of over 200,000) for the year 1899.

	Estimated Population in middle of 1899.	Birth- rate.	Death- rate.	Zymotic Rate.	Deaths of Infants to 1000 Births.	Persons to an Acre.
London ...	4,546,752	29·4	19·8	2·48	167	60·9
Liverpool ...	634,212	35·6	26·4	3·77	198	47·9
Manchester...	543,902	32·6	24·6	3·92	206	42·1
Birmingham	514,956	34·3	20·8	2·96	191	40·5
Leeds ...	423,889	30·6	19·1	2·79	171	19·6
Sheffield ...	361,169	34·6	22·2	4·39	194	18·4
Bristol ...	320,911	29·2	18·2	1·86	158	27·5
Nottingham	239,384	28·9	20·0	3·33	210	21·8
Bradford	236,241	23·31	18·38	2·43	181	21·9
Hull	234,270	34·3	19·3	3·66	175	26·0
Newcastle ...	228,625	31·4	20·6	1·82	193	42·6
Salford ...	218,244	33·9	23·8	4·32	209	42·2
Leicester ...	213,851	29·4	17·7	3·31	195	24·9

MORTALITY IN WARDS.

The death-rates in the Wards vary from 13·1 and 13·5 per 1000 in Bolton and Heaton Wards to 21·9 and 22·7 in the South and Exchange Wards.

TABLE IX.

Showing the Mortality Rates in the various Wards.

WARDS.	Total death-rate per 1000 living.
North	21·4
South	22·7
East	17·1
West	20·8
Listerhills	18·2
Great Horton	19·8
Little Horton	18·8
East Bowling	19·9
West Bowling	17·7
Exchange	21·9
Bradford Moor	21·4
Manningham	15·3
Bolton	13·1
Heaton	14·7
Allerton	13·5
CITY TOTAL	18·38

AGES AT DEATH.

INFANTILE MORTALITY.—The deaths of infants under one year of age was 998, equivalent to a rate of 181 per 1000 of the children born, a decrease of 3 per 1000 on the rate for the previous year. This rate amongst the 33 large towns varied from 152 per 1000 births in Huddersfield, to 269 in Burnley.

The following table gives the principal causes of infant mortality.

TABLE X.

Rates of Mortality of Children under 1 year of age, from Chief Infantile Diseases per 1000 Births.

	1896.		1897.		1898.		1899.	
	Deaths.	Rate per 1000 Births.	Deaths.	Rate per 1000 Births.	Deaths.	Rate per 1000 Births.	Deaths.	Rate per 1000 Births.
From all Causes .	849	142	1019	179	1033	184	998	181
Lung Diseases ...	159	26	143	25	190	34	157	28
Convulsions ...	121	20	110	19	130	23	131	24
Atrophy and Debility ...	125	21	121	21	119	21	159	29
Premature Birth .	106	17	122	21	118	21	105	19
Diarrhœa	50	8	248	43	204	36	200	36
Whooping Cough	49	8	21	4	36	6	24	4
Tuberculous Disease ...	39	6	31	5	31	5	25	4
Measles	23	3	18	3	14	2	13	2

In the wards the infant mortality varies from 115 per 1000 births in Allerton Ward to 289 in the West Ward.

TABLE XI.

Showing number of Deaths of Infants under 1 year of age and the Death-rate per 1000 Births in each Ward.

WARDS.	Deaths of Infants under 1 year of age.	Death-rate per 1000 Births.
North	73	217
*South	90	230
East	65	152
*West	99	289
Listerhills	62	175
Great Horton	54	137
*Little Horton	98	232
East Bowling	86	183
West Bowling	70	148
Exchange	28	252
Bradford Moor	97	195
Manningham... ..	78	135
Bolton	21	145
*Heaton	55	146
Allerton	22	115
CITY TOTAL	998	181

* In these Wards Public Institutions are included.

Table XII. shows the mortality at the different times of the year. It is seen that the largest number of deaths occurred in the first quarter. This is chiefly due to climatic causes, the cold weather in the early part of the

year causing a large number of deaths from diseases of the respiratory organs.

TABLE XII.
*Seasonal and Infantile Mortality.**

WARDS.	QUARTERS.				Total Deaths.	Deaths under 5 years of age.	Percentage of Deaths under 5 years to total Deaths.	Percentage of Deaths under 1 year to total Births.
	Mar.	June.	Sept.	Dec.				
North	58	61	73	60	252	101	40·1	21·7
South	59	58	86	72	275	129	46·9	22·5
East	74	51	57	64	246	98	39·8	15·2
West	56	72	85	59	272	117	43·0	24·5
Listerhills	81	75	82	75	313	109	34·8	17·5
Great Horton ...	87	59	59	65	270	87	32·2	13·7
Little Horton ...	74	41	80	70	265	111	41·9	19·7
East Bowling ...	81	65	73	76	295	114	38·6	18·3
West Bowling ...	79	70	65	68	282	99	35·1	14·8
Exchange	31	14	22	31	98	36	36·7	25·2
Bradford Moor ...	90	74	82	100	346	164	47·4	19·5
Manningham ...	79	71	88	78	316	118	37·3	13·5
Bolton	22	32	21	27	102	27	26·5	14·5
Heaton	71	54	46	47	218	56	25·8	11·7
Allerton	43	23	18	30	114	36	31·6	11·5
Public Institutions	149	198	161	171	679	117	17·2	...
CITY TOTAL...	1134	1018	1098	1093	4343	1519	34·9	18·1

* In this table the deaths occurring in the Public Institutions have been deducted from the Wards in which the Institutions are situate and classified together.

TABLE XIII.

Showing the proportion of Deaths of Children under 1 year and under 5 in the City of Bradford, during the 20 years 1880-99.

YEARS.	Deaths under 1 year per 1000 Births.	Deaths under 1 year per 100 Deaths at all ages.	Death-rate under 5 years per 1000 living at that age.	Death-rate under 5 years per 100 Deaths at all ages.
1880	176	27·2	82·2	48·0
1881	154	25·8	56·4	40·7
1882	174	27·0	71·4	45·9
1883	147	23·4	50·5	36·8
1884	181	34·2	62·1	41·2
1885	144	23·6	49·9	37·7
1886	168	25·1	59·4	41·5
1887	179	24·9	62·0	41·6
1888	153	24·6	50·0	39·0
1889	181	25·3	60·8	42·6
1890	169	21·2	55·8	35·9
1891	181	23·4	57·2	39·0
1892	155	23·5	44·8	37·4
1893	198	26·1	79·5	39·7
1894	144	22·6	59·2	36·1
1895	203	26·6	75·9	39·2
1896	143	22·1	56·2	38·8
1897	179	25·3	64·2	36·9
1898	184	25·1	67·4	38·0
1899	181	22·9	65·7	34·9

DEATHS IN PUBLIC INSTITUTIONS.

The deaths in the Public Institutions amounted to 679, distributed as follows:—

			Males.	Females.	Total.
Eye and Ear Hospital	...	...	1	2	3
St. Catherine's Home	..	...	...	14	14
Children's Hospital	...	...	15	18	33
City Hospital for Infectious Diseases			58	44	102
Infirmary ...	...	...	130	77	207
Workhouse	...	...	175	145	320
			<u>379</u>	<u>300</u>	<u>679</u>

INFECTIOUS DISEASES.

The number of deaths attributed to this class of diseases was 574, giving a zymotic death rate of 2.43 per 1000 of the population. In Table XIV. are given the figures for the past ten years.

TABLE XIV.

Showing number of Deaths from Zymotic Diseases in Bradford during the years 1890-99.

DISEASES.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	Total for each Disease in Ten Years.
Small-pox ...	...	...	4	113	27	...	1	...	...	...	145
Measles ..	208	81	62	68	111	17	105	77	104	74	907
Scarlet Fever ...	46	143	45	71	72	25	24	9	12	106	553
Diphtheria ...	8	13	10	19	13	18	12	10	16	25	144
Whooping Cough ..	50	133	90	97	63	98	105	42	67	64	809
Typhus Fever ...	...	2	...	...	...	...	...	...	2	...	4
Typhoid Fever ...	31	27	18	48	31	39	28	30	47	43	342
Other or doubtful Fevers	3	5	1	5	1	3	...	1	1	1	21
Diarrhoea ...	154	106	91	292	53	361	69	349	267	261	2003
Total Zymotic Diseases } each year... }	500	510	321	713	371	561	344	518	516	574	4928

The prevalence of Infectious Disease in Bradford as compared with the thirty-three great towns is shown in the following table.

TABLE XV.

1899.	No. of Deaths.	Death-rates per 1000 living.	
		Bradford.	Thirty-three Large Towns.
Small-pox ... ..	...	0·00	0·01
Measles	74	0·31	0·46
Scarlatina	106	0·44	0·13
Diphtheria and Croup	28	0·11	0·40
Whooping Cough ...	64	0·27	0·38
“Fever”	44	0·18	0·22
Diarrhœa	261	1·10	1·21
Seven Zymotic Diseases	577	2·44	2·81

The mortality from the chief diseases of the infective order is seen in the tables following:—

TABLE XVI.

Deaths from Measles.

WARDS.	QUARTERS.								Year 1899.		
	March.		June.		Sept.		Dec.		M.	F.	Total.
	M.	F.	M.	F.	M.	F.	M.	F.			
North	1	1	...	...	1	1	2
South	1	1	1	3	2	4	6
East ...	1	...	...	2	...	...	...	...	1	2	3
West	1	1	3	4	4	5	9
Listerhills	1	...	3	...	2	4	6	4	10
Great Horton	1	...	1	1	...	1	2	2	4	6
Little Horton	1	...	...	...	1	...	2	2
East Bowling	1	...	...	1	1	1	2	3
West Bowling	1	1	1	1	2	3
Exchange	1	...	...	...	1	...	...	...	2	2
Bradford Moor	8	6	8	6	14
Manningham ...	1	2	1	1	...	1	2	4	4	8	12
Bolton
Heaton	1	...	...	...	1	1
Allerton	1	...	...	...	...	...	...	...	1	1
CITY TOTAL ...	2	5	2	6	7	7	19	26	30	44	74

Ages at Death.

Under 1 Year.	1—	2—	3—	4—	5—	10—	15—	20—	30—	40—	50—	All Ages.
13	29	12	6	5	7	1	1	...	...	...	...	74

TABLE XVII.
Deaths from Diphtheria.*

WARDS.	QUARTERS.								Year 1899.			
	March.		June.		Sept.		Dec.		M.	F.	Total.	
	M.	F.	M.	F.	M.	F.	M.	F.				
North ...	...	...	...	...	...	...	...	1	1	1	1	2
South ...	...	1	...	...	...	...	...	...	...	...	1	1
East ...	...	...	...	...	...	...	...	...	...	...	...	...
West ...	...	...	...	...	...	...	...	...	1	...	1	1
Listerhills ...	...	1	...	...	...	...	...	1	1	1	2	3
Great Horton ...	...	1	...	...	...	2	...	...	...	...	3	3
Little Horton ...	...	1	1	...	...	...	...	...	...	1	1	2
East Bowling ...	...	...	1	...	...	...	...	1	...	2	...	2
West Bowling ...	...	...	...	1	...	...	...	2	1	2	2	4
Exchange ...	...	...	...	...	...	...	...	...	...	...	...	...
Bradford Moor...	...	...	2	...	1	...	...	...	...	3	...	3
Manningham ...	1	...	...	1	...	...	...	...	...	1	1	2
Bolton ...	...	...	...	...	...	...	1	...	...	...	1	1
Heaton ...	...	...	...	...	...	...	...	...	...	...	...	...
Allerton ...	1	...	...	...	...	...	...	...	...	1	...	1
CITY TOTAL ...	2	4	4	2	1	3	5	4	12	13	25	
<i>Ages at Death.</i>												
Under 1 Year.	1—	2—	3—	4—	5—	10—	15—	20—	30—	40—	50—	All Ages.
...	5	5	4	3	5	1	1	1	...	...	...	25

* Deaths in Public Institutions are referred to in the Wards from whence the patients came.

TABLE XVIII.
Deaths from Scarlet Fever.*

WARDS.	QUARTERS.								Year 1899.			
	March.		June.		Sept.		Dec.		M.	F.	Total.	
	M.	F.	M.	F.	M.	F.	M.	F.				
North ... ..	...	1	1	1	...	...	...	1	1	3	4
South ... ..	...	1	1	1	...	...	2	2	3	4	7
East	1	1	...	1	...	...	1	1	2	3	5
West ... ..	...	...	...	...	...	1	...	1	...	2	2
Listerhills	1	1	1	...	1	1	1	1	4	3	7	
Great Horton ... ..	...	2	2	1	...	1	...	...	2	4	6
Little Horton ... ..	...	3	1	...	...	2	1	...	2	5	7
East Bowling ... ..	...	1	3	1	2	2	4	1	9	5	14
West Bowling	1	...	4	4	3	2	4	3	12	9	21	
Exchange ... ..	...	...	...	1	1	...	...	...	1	1	2
Bradford Moor... ..	2	...	...	...	2	1	1	...	5	1	6
Manningham ... ..	...	1	5	...	2	4	1	...	8	5	13
Bolton ... ..	...	...	1	2	...	...	...	...	1	2	3
Heaton ... ..	...	...	1	3	...	...	...	...	1	3	4
Allerton ... ..	...	...	1	...	1	...	3	...	5	...	5
CITY TOTAL	5	11	21	15	12	14	18	10	56	50	106	
<i>Ages at Death.</i>												
Under 1 Year.	1—	2—	3—	4—	5—	10—	15—	20—	30—	40—	50—	All Ages.
3	8	20	12	5	38	12	6	1	1	106

* Deaths in Public Institutions are referred to in the Wards from whence the patients came.

TABLE XIX.
Deaths from Diarrhœa.*

WARDS.	QUARTERS.								Year 1899.			
	March.		June.		Sept.		Dec.		M.	F.	Total.	
	M.	F.	M.	F.	M.	F.	M.	F.				
North ... ..	...	1	...	...	11	6	1	2	12	9	21
South ... ..	...	...	...	...	13	13	1	...	14	13	27
East	1	...	...	...	8	6	...	1	9	7	16
West ... ..	...	...	2	1	8	11	1	...	11	12	23
Listerhills ... ..	...	...	2	1	8	11	1	1	11	13	24
Great Horton ... ..	...	...	1	...	2	5	1	...	4	5	9
Little Horton	1	2	...	...	15	12	...	...	16	14	30
East Bowling ... ..	...	...	...	1	11	8	2	...	13	9	22
West Bowling ... ..	...	2	...	...	7	10	...	...	7	12	19
Exchange ... ..	...	...	...	...	6	2	1	...	7	2	9
Bradford Moor... ..	1	...	...	...	10	13	1	...	12	13	25
Manningham ... ..	...	2	...	1	6	11	1	2	7	16	23
Bolton ... ..	...	...	...	...	3	2	...	...	3	2	5
Heaton... ..	...	...	...	...	4	2	...	...	4	2	6
Allerton ... ..	...	1	...	...	1	...	...	...	1	1	2
CITY TOTAL	3	8	5	4	113	112	10	6	131	130	261	
<i>Ages at Death.</i>												
Under 1 Year.	1—	2—	3—	4—	5—	10—	15—	20—	30—	40—	50—	All Ages.
200	34	2	2	1	3	1	1	...	17	261

* Deaths in Public Institutions are referred to in the Wards from whence the patients came.

TABLE XX.

Deaths from other Zymotic Diseases.

WARDS.	Erysipelas.		Influenza.		Syphilis.		Rheumatic Fever.		Puerperal Fever.		1899.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	TOTAL.
North ... ..	...	...	...	...	...	1	...	...	...	...	1
South	1	...	1	2	...	...	1	...	...	1	6
East ... ..	...	...	1	1	1	...	...	1	...	1	5
West ... ..	...	1	...	...	...	1	2	2	...	2	8
Listerhills ...	...	...	2	1	2	...	1	1	...	...	7
Great Horton ...	1	...	2	1	...	...	1	...	...	...	5
Little Horton ...	1	1	1	2	...	1	...	1	...	1	8
East Bowling ...	...	...	...	2	...	1	1	1	...	1	6
West Bowling ...	...	1	4	1	...	1	1	...	...	2	10
Exchange ... ..	...	...	...	1	1	...	...	...	...	1	3
Bradford Moor	1	3	2	4	...	...	...	...	...	...	10
Manningham ...	...	...	2	2	...	1	1	1	...	1	8
Bolton ... ..	...	...	...	...	...	1	1	...	...	...	2
Heaton ... ..	...	...	4	5	...	...	...	...	...	...	9
Allerton ... ..	...	...	...	...	...	...	1	...	...	...	1
CITY TOTAL ...	4	6	19	22	4	7	10	7	...	10	89

* Deaths in Public Institutions are referred to in the Wards from whence they come.

ENTERIC OR TYPHOID FEVER.—During the year 256 cases were reported to me in accordance with the provisions of the Infectious Diseases Notification Act, of which 43 had a fatal termination. Of these cases 133 were removed to the Leeds Road Hospital for isolation and treatment.

TABLE XXI.

Showing number of cases, deaths, and case-mortality from Typhoid Fever during the year 1899.

AGE.	CASES.		DEATHS.		Death-rate per cent.
	Males.	Females.	Males.	Females.	
Under 5	4	8	1	...	11·1
5—10	15	15	4	2	20·0
10—20	47	24	6	5	15·4
20—30	35	34	7	4	15·9
30—40	29	16	6	1	15·5
40—50	13	3	2	2	25·0
50 and upwards	7	6	2	1	23·0
ALL AGES	150	106	28	15	16·8

TABLE XXII.

Showing number of deaths and percentage mortality from Typhoid Fever during each of the last 10 years.

YEARS.	No. of Deaths.	Deaths per 100 cases notified.
1890	31	21·5
1891	27	17·2
1892	18	22·5
1893	48	22·3
1894	31	22·0
1895	39	22·0
1896	29	19·0
1897	30	20·1
1898	47	16·3
1899	43	16·8

TABLE XXIII.

*Showing the different Streets in which Cases of Typhoid Fever
have occurred during 1899.*

NORTH WARD.

1, Barkerend Road	1, North Street
4, Bolton Road	2, North Wing
1, Chatham Street	1, Sun Street
1, Cross Wellington Street	1, Springfield Place
1, Green Grove Terrace	1, Stott Hill Place
1, Jermyn Street	1, Wapping Road
1, Lingard Street	

SOUTH WARD.

1, Æolus Place	2, Peter's Court
1, Æolus Street	1, Seaton Street
1, Birksland Street	2, Thryberg Street
1, Clyde Terrace	1, Thursby Street
3, Hubert Street	1, Webster Street
1, Mount Street	

EAST WARD.

2, Airedale Crescent	1, Fryston Place
1, Barkerend Road	1, Idle Road
1, Byron Street	2, Maperton Road
1, Cordingley Street	1, Otley Road
2, Cowper Place	1, Southey Place
1, Dallam Street	1, Wingfield Street

WEST WARD.

1, Abbey Street	1, Victoria Street
2, Dyson Street	1, Westend Lane
6, Infirmary	1, Worthington Street
1, Queen Street	1, Wynne Street
1, Thornton Street	

LISTERHILLS WARD.

3, Ashgrove	1, Merton Road
1, Ashley Street	1, St. Andrew's Vicarage
1, Fitzgerald Street	1, Sterling Street
1, Grove Terrace	1, Thorpe Street
1, Handel Street	1, Tumbling Hill Street
1, Lumby Street	1, Woodhead Road

GREAT HORTON WARD.

- | | |
|------------------|-----------------------------|
| 1, Bakes Street | 1, Hollingwood Avenue |
| 1, Beacon Lane | 1, Jer Lane |
| 1, Beldon Hill | 1, Lawrence Street |
| 1, Beldon Road | 1, Liversedge Row |
| 1, Clayton Road | 1, Lucy Street |
| 1, Clive Place | 1, North Park, Lidget Green |
| 1, Fenton Street | 1, Pickles Hill |
| 1, Frank Street | 2, Southfield Lane |
| 1, High Street | |

LITTLE HORTON WARD.

- | | |
|---------------------|------------------------|
| 1, Belloe Street | 1, Lower Thomas Street |
| 1, Berwick Street | 5, Manchester Road |
| 1, Bramley Street | 1, Newall Street |
| 1, Charlotte Street | 1, Osborne Street |
| 1, Chester Street | 1, St. James Street |
| 1, Clayton Street | 2, Tudor Street |
| 1, Crowther Street | 1, Woodville Terrace |
| 1, Greaves Street | 4, Workhouse |
| 2, Horton Lane | |

EAST BOWLING WARD.

- | | |
|----------------------|-------------------|
| 2, Bowling Back Lane | 1, Newark Street |
| 1, Caledonia Street | 4, Sloane Street |
| 1, Gas Street | 1, Sticker Lane |
| 1, Hardy Street | 1, Sturges Street |
| 1, Lancaster Street | 2, Wakefield Road |
| 1, Lavinia Street | |

WEST BOWLING WARD.

- | | |
|-----------------------|-----------------------|
| 1, Baird Street | 1, Pembroke Street |
| 1, Bengal Street | 2, Raymond Street |
| 2, Boynton Street | 2, St. Stephen's Road |
| 1, Clough Street | 1, Springmill Street |
| 1, Donnithorpe Street | 5, Springwood Avenue |
| 1, Ellis Street | 1, Surrey Street |
| 1, Lowfield Street | 8, Tennant Street |
| 1, Moulson Street | 1, Thirkill Street |
| 8, Newby Street | 1, Tichborne Road |
| 1, New Cross Street | 1, Woodroyd Road |
| 1, Parkside Road | 1, Wootton Street |

EXCHANGE WARD.

- | | |
|-------------------|------------------|
| 2, Bridge Street | 1, East Parade |
| 1, Chandos Street | 1, Edward Street |
| 1, Diamond Street | 1, George Street |

BRADFORD MOOR WARD.

- | | |
|---------------------|-----------------------|
| 1, Battye Street | 1, Lower Rushton Road |
| 1, Cartmel Street | 1, Marsland Place |
| 3, Dick Lane | 1, Mortimer Row |
| 1, Garibaldi Street | 3, New Lane |
| 2, Harewood Street | 1, Sticker Lane |
| 1, Hawthorn Street | 1, Stone Street |
| 1, Kershaw Street | 1, Thornhill Terrace |
| 1, Leeds Road | |

MANNINGHAM WARD.

- | | |
|----------------------|---------------------|
| 1, Cemetery Road | 1, Rosse Street |
| 1, Fraser Terrace | 1, Salt Street |
| 1, Kensington Street | 1, Saplin Street |
| 1, Montgomery Street | 1, Spring Row |
| 1, Naples Street | 1, Whitefield Place |
| 1, Picton Street | |

BOLTON WARD.

- | | |
|---------------------|------------------------|
| 1, Bolton Hall Road | 1, Stanley Road |
| 1, Lupton Street | 1, Thorncliffe Terrace |
| 1, Lythorne Terrace | 4, Valley Place |
| 4, Oakwood Avenue | 1, Walter Street |

HEATON WARD.

- | | |
|--------------------|--------------------|
| 1, Chassum Street | 1, St. Mary's Road |
| 1, Farfield Street | 1, Silk Street |
| 1, Heidelberg Road | 1, Sunderland Road |
| 1, Park Drive | 2, Victor Terrace |

ALLERTON WARD.

- | | |
|--------------------|--------------------------|
| 1, Agar Street | 1, Hoxton Street |
| 1, Chapel Terrace | 1, New Row, Daisy Hill |
| 1, Copy Street | 1, Prospect Terrace |
| 1, Four Lane Ends | 1, Shaftesbury Avenue |
| 1, Girlington Road | 1, Shuttleworth Lane |
| 1, Grape Street | 1, Upper Green |
| 1, Green Top Farm | 1, Washington Street |
| 1, Hammond Street | 1, West View, Daisy Hill |

SMALLPOX.—During the year there were two outbreaks of Smallpox, the cases in both instances having been imported from Hull, where an epidemic of the disease was in existence.

The first case occurred on November 4th, and was that of J. H. T., from Leamington Street. J. H. T., who was a carpenter, had been working in Hull, and sickened with the disease on the tenth day after his arrival in Bradford. The second case in this outbreak was that of J. H. T.'s sister, who was infected by him before his removal to Hospital had been effected.

The second outbreak was the case of F. B., of Usher Street, who carried on his work in Hull, but spent the end of the week with his mother in Bradford.

These cases were removed to and isolated in the Bierley Hall Hospital immediately they came under my notice. The infected houses were disinfected, and so many of their occupants as would consent were revaccinated. They were also kept under surveillance by the officers of the Sanitary Department for a period of eighteen days from the occurrence of the last case.

I am convinced that these measures, which were promptly taken, prevented any further spread of the disease.

TYPHUS.—There was no outbreak of this disease during the year.

NOTIFICATION OF INFECTIOUS DISEASES.

During the year the exceptionally large number of 2872 cases of infectious disease were notified in accordance with the Infectious Diseases Notification Act; this is a tremendous increase upon the number for the previous year, and, as the following tabular statements show, is mainly due to an increase in the prevalence of Scarlatina.

TABLE XXIV.

MONTH.	1894.	1895.	1896.	1897.	1898.	1899.
January	241	103	79	52	85	229
February	175	60	65	56	72	219
March	130	48	60	61	69	271
April	126	42	43	41	56	230
May	173	64	50	58	80	239
June	117	36	76	62	63	289
July	118	72	75	60	73	268
August	112	57	71	50	91	169
September	108	66	91	68	161	235
October	104	113	85	80	230	258
November	119	18	72	62	192	245
December	74	62	66	60	162	220
TOTAL	1597	805	833	710	1334	2872
<i>The diseases were constituted as follows :</i>						
	1894.	1895.	1896.	1897.	1898.	1899.
Scarlet Fever ...	1035	379	397	331	796	2287
Typhoid Fever ...	141	177	152	149	288	256
Typhus Fever ...	...	...	...	...	7	...
Smallpox	196	...	1	...	1	3
Continued Fever ...	2	...	2	1	2	2
Relapsing Fever ...	...	...	...	...	...	...
Puerperal Fever ...	22	22	18	18	19	17
Diphtheria	49	39	41	28	35	87
Membranous Croup...	8	17	12	11	2	6
Erysipelas	144	169	210	171	184	214
English Cholera ...	...	2	...	1	...	...
TOTAL	1597	805	833	710	1334	2872

The table following shows the prevalence of Scarlet Fever in Bradford since 1870.

TABLE XXV.—Scarlet Fever.

YEAR.	No. of Deaths.	No. of Notifications.	Death-rate per 10,000 living.
1870	241	...	16·93
1871	144	...	9·79
1872	81	...	5·53
1873	47	...	3·00
1874	289	...	17·72
1875	458	...	27·21
1876	143	...	8·23
1877	110	...	6·13
1878	156	...	8·42
1879	184	...	9·45
1880	190	...	9·64
*1881	118	(6 mos) 424	6·41
1882	66	408	3·29
1883	36	352	1·75
1884	33	493	1·54
1885	46	786	2·15
1886	89	1118	4·06
1887	98	1308	4·37
1888	33	407	1·43
1889	63	543	2·68
1890	46	546	1·91
1891	143	1163	6·59
1892	45	944	2·05
1893	71	1445	3·20
1894	72	1035	3·21
1895	25	379	0·11
1896	24	397	1·04
1897	9	331	0·38
1898	12	796	0·51
1899	106	2287	4·38

* First year of Notification.

TABLE XXVI.

Notifications, Deaths, and Death-rate from Scarlet Fever at different Age Periods during 1899.

AGES.	Notifications.	Deaths.	Death-rate per 100 notified.
Under 1 year	24	3	12·5
1 year and under 2	49	8	16·3
2 years ,, ,, 3	112	20	17·8
3 years ,, ,, 4	175	12	6·8
4 years ,, ,, 5	201	5	2·4
5 years ,, ,, 10	995	38	3·8
10 years ,, ,, 15	481	12	2·4
15 years and upwards	250	8	3·2
TOTALS... ..	2287	106	4·6

TABLE XXVII.

Showing the number of Notifications from each Disease during 1899 in the different Wards.

WARDS.	Smallpox.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Diphtheria	* Erysipelas	* Puerperal Fever.	* M'branus Croup.	* Continued Fever.	TOTAL.
North	86	17	...	4	12	...	...	...	119
South	95	15	...	3	14	3	...	...	130
East	167	15	...	6	14	1	...	...	203
West	95	15	...	6	18	2	...	...	136
Listerhills	148	14	...	8	16	1	...	1	188
Great Horton	275	18	...	8	11	...	1	...	313
Little Horton	155	26	...	4	18	3	...	...	206
East Bowling	1	217	16	...	10	19	1	1	1	266
West Bowling	311	43	...	15	21	3	...	...	393
Exchange	40	7	...	2	3	1	...	...	53
Bradford Moor	100	20	...	5	15	...	2	...	142
Manningham	213	11	...	7	16	2	1	...	250
Bolton	93	14	...	4	4	...	...	...	115
Heaton	2	154	9	...	2	10	...	...	...	177
Allerton	138	16	...	3	23	...	1	...	181
CITY TOTALS	3	2287	256	...	87	214	17	6	2	2872

TABLE XXVIII.

Showing the Death-rate per 1000 in Bradford, and in each of its 15 Wards, from Zymotic Diseases, and from all causes during 1890--1899.

WARDS.	Seven Principal Zymotic Diseases.										All Causes.									
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
North ...	3.5	1.7	2.2	3.4	1.4	2.1	1.1	2.6	2.3	2.6	24.9	25.1	21.6	23.4	19.0	17.1	20.7	18.8	19.9	21.4
South ...	2.6	2.0	2.1	4.4	2.0	3.7	3.3	6.2	4.5	3.3	25.9	25.3	20.6	25.1	18.9	25.2	19.6	23.5	20.1	22.7
East... ..	1.4	1.8	1.9	1.6	1.2	1.3	1.0	1.2	1.4	1.6	18.9	21.6	16.6	17.8	15.5	19.3	16.5	15.2	14.7	17.1
West ...	3.5	2.3	1.5	4.9	2.0	3.6	0.8	2.8	1.7	2.9	27.0	24.8	20.0	23.7	18.6	24.1	18.1	17.6	19.3	20.8
Listerhills ...	1.2	1.3	0.7	1.0	1.4	1.9	0.9	0.7	1.8	3.0	21.2	22.4	18.1	18.6	15.8	17.1	14.3	13.5	17.8	18.2
Great Horton...	0.7	2.7	1.3	2.7	1.5	1.9	1.6	1.7	1.6	2.5	19.0	20.4	17.9	17.5	16.9	19.2	17.2	16.0	17.1	19.8
Little Horton...	2.0	1.5	1.8	2.8	1.8	2.6	2.2	2.3	2.9	2.5	19.2	21.1	19.0	20.3	16.8	18.6	18.3	17.1	19.0	18.8
East Bowling...	4.0	2.5	1.4	3.9	2.9	3.2	2.4	2.3	3.5	2.5	24.1	24.5	17.6	20.3	18.7	22.6	19.9	20.2	20.4	19.9
West Bowling...	1.4	2.0	1.8	4.5	1.8	2.4	1.6	2.1	2.7	2.6	18.8	21.9	11.4	21.4	18.3	21.3	18.0	18.0	18.9	17.7
Exchange ...	3.2	1.1	2.5	3.0	1.9	2.3	1.3	3.6	1.7	3.1	28.3	19.4	20.8	22.2	16.0	19.3	19.8	25.5	18.0	21.9
Bradford Moor	2.0	2.1	1.1	2.8	2.1	3.6	1.6	2.6	1.6	3.4	20.4	24.6	17.2	20.3	17.4	20.3	16.6	19.2	19.2	21.4
Manningham ...	1.9	3.1	0.9	3.3	1.8	3.0	1.4	2.4	2.2	2.4	18.7	22.1	17.6	20.2	18.9	19.8	16.3	17.8	16.1	15.3
Bolton ...	1.9	0.7	2.0	2.6	1.0	1.5	0.4	1.3	0.7	1.1	17.9	15.3	14.3	19.7	14.5	14.8	11.8	12.8	12.5	13.1
Heaton ...	1.0	2.3	1.1	2.7	0.9	1.2	0.5	1.2	1.3	0.7	15.8	19.1	14.3	17.4	12.9	15.3	11.8	13.0	12.8	14.7
Allerton ...	1.1	1.7	1.0	3.2	1.3	1.9	1.3	1.0	1.6	1.2	16.6	18.4	15.7	21.2	12.4	16.4	14.1	15.6	14.4	13.5
CITY TOTAL ...	2.08	2.35	1.46	3.22	1.65	2.47	1.50	2.24	2.20	2.43	20.14	22.12	17.91	20.90	16.95	19.80	16.77	17.39	17.54	18.38

PHTHISIS.—In the Table following is shown the number of deaths from Consumption; they amount to 331 in comparison with 382 for the previous year.

TABLE XXIX.
*Deaths from Phthisis.**

WARDS.	QUARTERS.								Year 1899.			
	March.		June.		Sept.		Dec.		M.	F.	Total.	
	M.	F.	M.	F.	M.	F.	M.	F.				
North	4	3	3	3	5	5	4	4	16	15	31	
South	7	2	6	2	3	3	2	3	18	10	28	
East	1	2	2	2	...	...	3	5	6	9	15
West	7	2	5	4	3	1	5	7	20	14	34	
Listerhills... ..	3	2	3	7	6	1	6	3	18	13	31	
Great Horton ...	1	3	1	...	1	2	2	1	5	6	11	
Little Horton ...	4	1	...	2	6	7	2	3	12	13	25	
East Bowling ...	2	7	3	6	5	2	5	7	15	22	37	
West Bowling ...	1	3	4	2	5	1	2	5	12	11	23	
Exchange	3	1	...	1	...	1	2	3	5	6	11	
Bradford Moor...	1	2	3	2	2	2	2	5	8	11	19	
Manningham ...	3	5	2	3	2	3	5	5	12	16	28	
Bolton	1	2	5	2	...	1	2	2	8	7	15	
Heaton	5	1	1	1	2	2	1	4	9	8	17	
Allerton	1	1	...	...	...	2	...	2	1	5	6
CITY TOTAL...	44	37	38	37	40	33	43	59	165	166	331	
<i>Ages at Death.</i>												
Under 1 Year.	1—	2—	3—	4—	5—	10—	15—	20—	30—	40—	50—	All Ages.
...	1	1	1	...	3	6	44	84	79	61	51	331

* Deaths in Public Institutions are referred to in the Wards from whence the patients came.

TABLE XXX.

*Deaths from other Tuberculous Diseases.**

WARDS.	Tuberculous Diseases.†		Tabes Mesenterica.		Hydrocephalus.		1899.		
	M.	F.	M.	F.	M.	F.	M.	F.	Total.
North	3	6	2	...	...	...	5	6	11
South	4	3	...	1	...	...	4	4	8
East	5	5	1	3	...	...	6	8	14
West	7	6	...	1	1	...	8	7	15
Listerhills	6	7	2	...	...	...	8	7	15
Great Horton	3	4	...	...	...	...	3	4	7
Little Horton	2	6	1	1	...	...	3	7	10
East Bowling	5	7	3	1	1	...	9	8	17
West Bowling	6	2	...	1	1	...	7	3	10
Exchange ... ..	...	1	1	1	...	...	1	2	3
Bradford Moor	7	2	2	...	...	...	9	2	11
Manningham	6	4	1	...	...	...	7	4	11
Bolton	2	1	...	...	...	...	2	1	3
Heaton	2	1	...	...	...	...	2	1	3
Allerton	2	...	...	...	...	...	2	...	2
CITY TOTAL	60	55	13	9	3	...	76	64	140

* Deaths in Public Institutions are referred to in the Wards from whence the patients came.

† Includes Scrofula, Tuberculous Meningitis, and Tuberculosis.

BRONCHITIS, PNEUMONIA, AND PLEURISY.—These three chief diseases of the respiratory organs accounted for 826 deaths, 281 of which were those of children under 5 years of age. The respiratory death-rate was equal to 3.50 per 1000 of the population.

CANCER.—Table XXXI. gives the number of deaths attributed to cancerous or other forms of malignant growths.

TABLE XXXI.

Synopsis of Deaths from Cancer during the Years 1889-99.

	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Total No. of Deaths	137	129	142	159	129	146	182	182	188	208	226
Males	50	52	44	52	40	44	60	64	58	73	61
Females	87	77	98	107	89	102	122	118	130	135	165

INQUESTS.

Two hundred and seventy (270) inquests were held by the City Coroner during the year, 71 of which were on children under five years of age.

UNCERTIFIED DEATHS.

The deaths of 41 persons were registered without certification by a Medical Practitioner or Coroner, being 0·9 per cent. of the total deaths, the average percentage of uncertified deaths for the thirty-three great towns being 1·2.

DISINFECTING STATION.

The following table sets forth the work done in connection with the Disinfecting Station during 1899 :—

HOUSES FUMIGATED 1996				
ARTICLES DISINFECTED :—				
Beds	1222	Trousers	86
Mattresses	500	Drawers	28
Pillows	1800	Dresses	109
Bolsters	1103	Petticoats	133
Blankets	1655	Hose	93
Counterpanes	1560	Dressing Gowns	30
Curtains	21	Shawls	249
Carpets	56	Cushions	149
Rugs	90	Mats and Sundries	2307
Coats	182		
Waistcoats	48	TOTAL	11,430
Flannel Vests	9		

Table A shows that 1031 new houses have been built during the year and certified as fit for habitation in accordance with the Bradford Waterworks and Improvement Act, 1875.

TABLE A.

Showing number of New Buildings certified as fit for habitation in each of the Wards, and in the whole City, during the years 1890-99.

WARDS.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
North	9	...	64	43	8	11	2	17	16	46
South	104	104	69	35	16	1	6	11	79	134
East	77	20	49	98	54	45	26	66	138	96
West	3	...	3	4	9	...	...	6	2	4
Listerhills ...	173	72	30	17	13	3	48	31	11	10
Great Horton ...	67	59	37	53	106	134	70	173	196	354
Little Horton ...	15	40	42	4	19	21	33	1	12	10
East Bowling ...	31	61	48	60	78	15	18	45	114	71
West Bowling ...	187	98	59	103	115	58	72	49	78	35
Exchange ...	2	1	...	...	1	...	7	...	1	...
Bradford Moor...	85	98	76	110	87	47	55	63	93	147
Manningham ...	130	125	116	148	44	67	94	55	14	...
Bolton	41	48	30	20	24	13	7	3	9	28
Heaton... ..	98	31	35	65	18	31	10	36	31	35
Allerton ...	48	69	16	22	49	47	42	22	57	61
CITY TOTAL ...	1070	826	674	782	641	498	490	578	851	1031

INSANITARY DWELLINGS.

The houses in the List herewith attached were examined by me and certified to be unfit for habitation, and ordered by the Council to be closed, in pursuance of powers vested in the Corporation by a private Act of Parliament :—

DWELLING-HOUSES :—

William Street, 3, 7, 9, 11, 15, and 17.

Back Hubert Street, 30, 32, 34, 50, 52, 54, 56, 58, and 60.

Wentworth Street, 31, 33, and 35.

Banner Street, 42 and 44.

Wapping Street, 11 and 13.

Back Ebenezer Street, 21.

Hardy Street, 45, 47, 49, and 51.

CELLAR DWELLINGS :—

Acre Street, 33.

Duncan Street, 13.

Loom Street, 22A, 24A, and 26A.

Earl Street, 14 and 34.

PREVENTION OF TUBERCULOSIS.

A further step in the direction of the prevention of Tuberculosis has been taken by the acquisition of powers under Part V. of the Bradford Corporation (Tramways, Gas, and Various Powers) Act, 1900. These "Model Clauses," if thoroughly carried out, should make the sale of milk infected with Tuberculosis a difficult matter. Their provisions apply to all milk consumed within the City boundaries, no matter whether it has been produced within or beyond the City. The clauses provide for notification to the Medical Officer of Health of Tuberculous cows from which such milk is obtained: they also give power of inspection, and, under certain circumstances, the prohibition of the sale of suspected milk.

REPORT OF THE CHIEF INSPECTOR OF NUISANCES.

TO THE MEDICAL OFFICER OF HEALTH.

SIR,—The following statement shows the nature and amount of work done in the Sanitary Department during the year 1899, including an abstract of work carried out in the previous nine years :—

<i>Particulars of Work done.</i>	<i>No. of Cases.</i>									
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Drains opened and cleansed ...	1298	1429	1178	1236	1518	1573	1710	1757	1466	2004
Drains provided for premises which had been previously without drainage ...	13	17	32	16	87	29	50	31	18	30
Sink Drains disconnected from the sewer or otherwise effectually trapped ...	871	632	508	365	565	341	377	275	278	687
Street Gullies cleansed ...	2867	3648	3602	4064	4831	4237	3927	5011	5247	4137
Water Conductors provided and Down Spouts connected with the drain ...	1251	1143	1127	947	1977	2105	1980	1856	1691	2025
Swine and Swine Styres removed from objectionable situations ...	30	29	13	31	20	35	41	18	24	20
Fowls, &c., removed from dwelling-houses ...	219	114	127	87	144	113	90	70	83	87
Accumulations of Offensive Matter removed ...	596	689	399	257	317	409	497	513	509	553
Filthy Yards and Passages cleansed ...	578	1099	561	481	955	753	808	560	559	377

<i>Particulars of Work done.</i>	<i>No. of Cases.</i>									
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Surface of Back Yards and Defective Pavement repaired	270	191	199	287	395	335	433	432	330	479
Defective Water Closets repaired	100	111	137	216	310	549	763	534	460	493
Stagnant Water removed from Ashpits	376	345	286	285	419	292	295	335	231	267
Privies and Ashpits repaired and provided with suitable doors and covers	957	779	924	964	1623	1698	1505	1428	1444	2178
Foul Urinals repaired	35	20	13	46	32	47	73	33	33	17
Filthy Cellar Areas cleansed ...	81	84	74	57	85	79	80	53	57	38
Offensive Manure Pits removed...	48	26	27	27	29	39	29	22	26	35
Defective Baths and Wash-basins repaired and disconnected from the drains ...	54	25	59	51	77	49	55	48	23	45
Privies and Ashpits removed from objectionable situations and Water Closets erected in lieu thereof	391	265	196	2	291	40	67	...	305	405
New Water Closets erected ...	179	242	321	507	378	425	492	706	575	498
Stagnant Water drained off premises	132	92	83	132	190	238	166	195	147	128
Filthy Privies cleansed and lime-washed	1167	1148	1026	1063	1365	1129	922	705	645	495
Houses and Cellar Dwellings cleansed and whitewashed ...	283	237	258	254	341	203	165	220	170	137
Houses and Cellar Dwellings disinfected	532	1081	779	1979	1015	451	392	414	816	1959
Houses Closed as unfit for human habitation	16	13	8	1	20	1	61	37	9	27
Cellar Dwellings closed as unfit for human habitation	11	18	9	1	16	...	2	4	14	7
Workshops closed as unfit for human habitation ... ..	...	...	...	...	...	3	...	...	1	...
General repairs of houses ...	34	29	42	36	78	149	56	61	79	56
Improvement and ventilation of premises by the removal of out-buildings, &c., from back yards	127	81	92	20	54	91	65	72	48	89

<i>Particulars of Work done.</i>	<i>No. of Cases.</i>									
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Abatement of Nuisances from overcrowding of houses, &c. ...	41	26	24	24	24	12	18	12	12	19
Foul Wells closed ...	...	...	2	...	2	2	6	2	1	2
Offensive businesses discontinued ...	...	2	2	1	...	...	...	...	...	2
Foul Mill Dams cleansed ...	2	1	1	4	...	2	2	1	1	1
Rag Warehouses cleansed ...	6	...	4	2	2	2	4	4	6	8
Tripe Boilers' premises inspected	88	107	86	112	243	44	475	431	388	351
Fellmongers' premises inspected	10	24	34	12	20	12	21	14	16	24
Houses inspected where infectious diseases have occurred ...	522	1148	1031	2606	2670	709	724	637	1139	2384
Bakehouses inspected ...	33	62	43	34	25	28	24	347	359	321
Mill and Workshops' Closets inspected ...	...	1613	269	140	509	349	357	534	790	642

The above particulars represent only those cases where Statutory Notices have been served, and do not include nuisances prevented or abated on the verbal request of the Inspector.

The number of persons summoned for non-abatement of nuisances after notices given is 26, as against 15 the previous year.

BURIAL GROUNDS.

During the year 187 visits have been made by the Sanitary Officers to the various graveyards within the City, but no irregularities have been observed.

Owing to further alterations which have been made to the Bradford Parish Church the remains of 802 persons have been removed from the graveyard adjacent thereto, and have been re-interred at Undercliffe Cemetery.

The operations have been conducted under the Medical Officer of Health and the Sanitary Officers.

DANGEROUS AND UNFENCED PLACES.

Three hundred and seventy-three places, including houses and other buildings, have been reported by the Sanitary Officers

as being in a dangerous condition. These have been dealt with and made secure from personal danger either under the direction of the City Surveyor or the Chief Inspector of Nuisances.

PUBLIC URINALS.

The number of Public Urinals within the City is 44, as against 40 last year.

Four Public Urinals have been erected, viz., one at Hamerton Street on land belonging to the Street and Drainage Committee, one at Green Lane on land belonging to the Street Improvement Committee, one at Park Lane on land belonging to the Great Northern Railway Company, and one at Horton Bank Top by permission of the Waterworks Committee.

The Underground Lavatories at Town Hall Square have been well appreciated, and so far the returns fully justify the action of the Health Committee in making such desirable and much needed provision, and arrangements are being made for the erection of similar accommodation in other parts of the City.

The rest of the urinals are in a good state of repair.

CANAL BOATS.

There is only one Canal Boat registered within the City, and this, along with 141 others registered with other authorities, but plying on the Canal within the City, has been examined by the Chief Inspector of Nuisances or by his Assistant, Mr. Brayshaw, and their condition, having regard to ventilation, storage of water, and overcrowding, has been found to be satisfactory.

In eighteen cases the boats were found to be defective, and water leaking into the cabins; three boats required painting; two boats were found to be without certificates of registration as required by the Act, and notices were served on the owners and masters of the boats calling their attention to the fact, and warning them not to repeat the offence.

The owners of the other boats enumerated above were served with notices to carry out the requisite repairs, and in every instance this has been duly carried out, and certificates of registration have been provided for the boats which were found to be without.

COMMON LODGING HOUSES.

The number of Common Lodging Houses within the City is 41, the same as last year.

The houses contain 195 rooms for sleeping purposes, and are registered to accommodate 1913 persons nightly.

The number of persons who have been accommodated during the year is 430,863, the nightly average being 1180.

The number of visits paid by the Sanitary Officers to these houses during the year is 1805, and their reports show the houses to have been fairly well conducted.

ADULTERATION OF FOOD AND DRUGS.

During the year ending December, 1899, 337 samples of food, drugs, &c., have been submitted to the City Analyst by the Food and Drugs Inspector. Of these 303 have been certified by the Analyst as pure, and thirty-four have been found to be adulterated.

Eight of the offenders were summoned before the justices, and penalties amounting in the aggregate to £18 12s. were inflicted.

In the other cases the amount of adulteration was considered by the Health Committee too small to warrant proceedings before the justices, and the offenders were accordingly cautioned as to their future conduct.

The Food Inspector seized and destroyed 51 bags of mussels, 8 bags of cockles, 93 stones of haddock, 20 stones of halibut, 34 couples of rabbits, and 35 brace of pigeons.

The following table shows the nature of articles submitted for analyses:—

Samples submitted for Analysis.

NATURE OF SAMPLE.	Number submitted.	Pure.	Adulterated.	Proceedings taken.	Cautioned.
Milk	172	167	5	1	2
Butter and Margarine ...	56	40	16	5	2
Lard	1	1	...	...	...
Cream	1	1	...	...	...
Tea	5	5	...	...	...
Coffee	1	1	...	...	...
Cocoa	1	1	...	...	...
Honey	3	3	...	...	...
Golden Syrup	1	...	1	...	1
Vinegar	1	1	...	...	...
Sardines	1	1	...	...	...
Jams	4	4	...	...	...
Sweets	11	10	1	...	...
Condensed Milk	4	4	...	...	...
Yeast	6	6	...	...	...
Bottled Peas	1	1	...	...	...
Pepper	6	6	...	...	...
Spirits	5	5	...	...	...
Ground Ginger	1	1	...	...	...
Sweet Spirits of Nitre ...	11	5	6	...	6
Milk of Sulphur	2	2	...	...	...
Paregoric	2	2	...	...	...
Magnesia (Citrate)	1	1	...	...	...
Seidlitz Powder	3	3	...	...	...
Camphorated Oil	10	9	1	1	...
Sal Volatile	2	2	...	...	...
Tincture of Myrrh	3	3	...	...	...
Tincture of Indian Bark ...	3	3	...	...	...
Lime Waters	4	4	...	...	...
Tartaric Acid	1	1	...	...	...
Comp. Liquorice Powder ...	11	8	3	1	...
Ipecacuanha Wine	1	1	...	...	...
Tincture of Rhubarb	2	2	...	...	...
TOTALS	337	304	33	8	11

DAIRIES, COW-SHEDS, AND MILK SHOPS.

There are at present registered under the Contagious Diseases (Animals) Act, 1871, 231 cow-sheds and 938 milk shops and purveyors of milk, exclusive of the newly-added districts, as against 248 and 1109 respectively last year.

During the year 32 applications have been made for registration of premises for the sale of milk, and, upon inspection by the Medical Officer of Health or the Cow-shed Inspector, 30 of these were registered accordingly.

Inspection has been made as heretofore of the milk and milk vessels coming into the City by rail and otherwise from places beyond the City boundaries, and numerous samples thus delivered have been taken by the Food Inspector for analysis, and the results, with one exception, which was referred by the Medical Officer of Health to the West Riding County Council, show the milk to have been genuine and of good quality.

One milk dealer whose milk vessels were found to be in a dirty condition was formally cautioned by the Committee.

One purveyor of milk was verbally cautioned against the use of colouring matter for the fictitious purpose of improving the milk.

The Committee, as heretofore, have inspected a number of cow-sheds and milk shops, and where the sanitary condition thereof was found to be defective, instructions were given for the issuing of notices requiring the requisite improvements to be carried out, and the same have since been carried out.

Special attention has again been paid to the fried fish shops and ice-cream makers' premises within the City, and many improvements have been effected in regard to cleanliness and general condition of these premises and in the manipulation of the commodities produced thereat.

The number of visits and inspections made to these places by the officers has been as follows:—Cow-sheds, 715; milk shops, 1372; milk vessels, 2941.

INSPECTION OF MEAT, SLAUGHTER-HOUSES, POTTED MEAT AND SAUSAGE MANUFACTORIES.

During the year there have been 45 seizures and 131 surrenders of unsound meat, fish, and fruit.

There have been seized and destroyed 600lbs. of beef, 140lbs. of mutton, 600lbs. of pork, 40lbs. of veal, 24 oxtails, 4 hampers of mushrooms, 60 baskets of strawberries, 19 boxes of haddock, 20 beasts' bags, 2 barrels of ox cheeks, 1 sieve of plums, 26 baskets of shrimps, 20 boxes of smelts, 23 bags of cockles, 10 bags of mussels, 23 barrels of oysters, 5 barrels of herrings, 21 cases of onions, 16 barrels of beasts' offal, 240 quails, 5 boxes of halibut, 3 barrels of whiting, 1 box of trout, 6 bags of sheep's feet, and 1 barrel of apples.

There have been surrendered and destroyed 19,650lbs. of beef, 1745lbs. of mutton, 994lbs. of veal, and 8366lbs. of pork.

The above seizures and surrenders are exclusive of those made by and specified by the Food and Drugs Inspector.

The number of slaughter-houses under the old regulation is 6, 1 less than last year, and there are 4 others for which licences have to be applied for annually.

The number of places at which potted meat and sausages are made is 92, as against 90 last year, and these, together with the private slaughter-houses, are regularly visited and reported upon by the Inspectors.

The number of visits made during the year has been as follows :—Private slaughter-houses, 447 ; potted meat and sausage works, 2335. The public abattoirs are visited daily.

CATTLE DISEASE.

During the year there have been 3 outbreaks of swine fever within the City, viz. :—One on the premises of John Robinson, 7 Pickles Hill ; 1 on the premises of Squire Yeadon, 8 Vestry Street ; and 1 on the premises of Robert Young, Whetley Lane ; all of which were duly notified by the Sanitary Officers to the Board of Agriculture, whose officers took charge both of the infected animals and premises, and also gave the customary notices to the respective owners and occupiers, as required by the "Orders in Council."

“SHOP HOURS ACT.”

The number of shops visited and investigations made by the Inspector under this Act is 1230. In 920 shops young persons under eighteen years of age were employed. In 195 cases the employers had failed to comply with Section 4 of the “Shop Hours Act” by not exhibiting the necessary notice stating the number of hours which a young person may be employed in a shop.

Twenty-one young persons were found to have been employed for a period exceeding seventy-four hours in one week.

Ten young persons were found to have been employed in shops who had previously on the same day been employed in a factory or workshop for the full number of hours allowed by the “Factory and Workshops Act.”

Eleven persons were summoned before the Justices for offences against the “Shop Hours Act,” with the result that penalties and costs amounting in the aggregate to £12 11s. were imposed. In three cases maximum penalties were imposed.

WORKSHOPS AND BAKEHOUSES.

The Shop Inspector also visited 816 workshops and 321 bakehouses. Special attention has been paid to the cleanliness, ventilation, and closet accommodation of these places.

The following is a summary of work done and sanitary defects remedied :—

Workshops without regulations or not registered (notified to H.M. Inspector of Factories)	168
Dirty workshops limewashed and cleansed ...	102
Dirty bakehouses	26
Workshops without closet accommodation ...	13
Workshops with insufficient closet accommodation	4

Workshops without separate closet accommodation for the sexes	...	...	...	34
Workshops with defective or foul W.C.'s	...			13
Gas stoves in work-rooms or gas ovens in bakehouses without means provided to carry off the fumes	...	...	...	37
Underground bakehouse closed	...	...		1
Gullies removed out of bakehouses	...	..		4

Additional ventilation has been provided in a large number of work-rooms and bakehouses on the instructions of the Inspector.

Yours obediently,

JAS. CHAMBERS,

Chief Inspector.

CITY HOSPITAL
REPORT.

THE CITY HOSPITAL FOR INFECTIOUS DISEASES.

The year ended December 30th, 1899, has been the busiest on record during the history of the Institution.

The total number of patients admitted during the year was 1813, which together with 162 remaining in the Hospital at the end of the previous year, make a total of 1975 that have been under treatment.

The number of Scarlet Fever cases admitted amounted to 1658, of which 74 proved fatal, giving a fatality rate of 4.46 per cent.

There were 131 cases of Enteric Fever admitted, of which 16 had a fatal termination, equivalent to a death-rate of 12.21 per cent.

Cases of other diseases were admitted to the number of 24, of which 11 ended fatally. These included 6 cases of Diphtheria, 2 of Measles, and 1 of Erysipelas.

During the year, material from the throat in 25 patients has been examined by the City Analyst.

TABLE A.—General Statement.

Remaining in Hospital, 31st December, 1898	...	162
Admitted during 1899	... ..	1813
		<u>1975</u>
Discharged, relieved, or cured	... ..	1717
Died	... ..	103
Remaining in Hospital, 31st December, 1899	...	155
		<u>1975</u>

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS,

COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH, DURING THE YEAR 1899, IN THE CITY OF BRADFORD DISTRICT,

CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

Names of Localities adopted for the purpose of these Statistics.	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.														
	Last Census.	Estimated to middle of 1899.			FEVERS.												FEVERS.														
					Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Typhoid.			Cholera.	Erysipelas.	TOTALS.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Typhoid.			Cholera.	Erysipelas.	TOTALS.					
										Enteric or	Typhoid.	Continued.									Relapsing.	Puerteral.	Enteric or				Typhoid.	Continued.	Relapsing.	Puerteral.	
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12			
North	12783	13957	337	Under 5 ... 5 upwards	...	19 67	...	4	17	12	19 100	...	13 57	...	2	11	13 70
South (H)	13124	14330	391	Under 5 ... 5 upwards	...	27 68	3	...	...	15	...	...	3	...	13	31 99	...	17 49	3	...	...	10	...	...	...	...	...	...	...	20 59
East	15583	17015	428	Under 5 ... 5 upwards	...	42 125	1 5	...	...	14	...	...	1	...	13	45 158	...	28 82	4	...	...	8	...	...	...	...	...	...	...	28 94
West	14216	15515	343	Under 5 ... 5 upwards	...	29 66	4 2	...	...	14	...	...	2	...	16	36 100	...	19 54	3	...	...	10	...	...	...	...	...	...	1	22 65
Listerhills	18696	20415	354	Under 5 ... 5 upwards	...	32 116	2 6	...	...	14	1	...	1	...	15	35 153	...	17 88	1 3	...	...	8	...	...	...	...	...	...	1	18 100
Great Horton	14768	16133	394	Under 5 ... 5 upwards	...	60 215	6 2	1	...	18	...	...	...	...	9	69 244	...	29 124	1	...	...	4	...	...	...	...	...	...	...	30 129
Little Horton	15306	16710	422	Under 5 ... 5 upwards	...	39 116	2 2	...	...	24	...	...	3	...	18	43 163	...	31 90	...	...	...	11	...	...	...	...	...	...	...	31 101
East Bowling	16068	17540	469	Under 5 ... 5 upwards	...	55 162	2 8	1	...	16	1	...	1	...	18	58 208	1	34 124	2	...	...	6	1	...	...	...	...	...	...	35 131
West Bowling	17250	18835	474	Under 5 ... 5 upwards	...	79 232	4 11	...	...	37	...	...	3	...	21	89 394	...	56 185	2 3	...	...	24	...	...	...	...	...	...	...	60 212
Exchange	4846	5292	111	Under 5 ... 5 upwards	...	14 26	2	...	...	7	...	...	1	...	3	14 39	...	11 21	2	...	...	6	...	...	...	...	...	...	...	11 29
Bradford Moor	17520	19132	497	Under 5 ... 5 upwards	...	24 76	4 1	2	...	20	...	...	...	...	13	32 110	...	16 55	...	...	...	13	...	...	...	...	...	...	...	16 68
Manningham	22469	24536	576	Under 5 ... 5 upwards	...	62 151	2 5	1	...	10	...	...	2	...	14	68 182	...	41 110	1 3	...	...	4	...	...	...	...	...	...	...	42 117
Bolton	8425	9200	145	Under 5 ... 5 upwards	...	22 71	3 1	...	...	13	...	...	...	...	4	26 89	...	11 51	2	...	...	10	...	...	...	...	...	...	...	13 61
Heaton	16108	17588	376	Under 5 ... 5 upwards	...	29 125	1 2	...	...	9	...	...	...	...	10	29 148	...	21 89	...	...	...	2	...	...	...	...	...	...	...	21 93
Allerton	9199	10043	191	Under 5 ... 5 upwards	...	28 110	1 2	1	...	15	...	...	...	...	22	31 150	...	21 81	1	...	...	4	...	...	...	...	...	...	...	21 86
CITY TOTALS	216361	236241	5508	Under 5 ... 5 upwards	...	561 1726	34 53	4 2	...	13 243	...	...	2	...	17	625 2247	...	365 1257	14 21	...	...	2 131	...	1	...	...	...	...	381 1415	

(H) Indicates Locality of Hospitals for Infectious Diseases.

TABLE OF DEATHS DURING THE YEAR 1899,

IN THE CITY OF BRADFORD, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

(a)	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.								(i)	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 60.	60 and upwards.				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22								
																																	FEVERS.							
																																	Small-pox.	Scarlatina.	Diphtheria.	Membranous Group.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.
North	252	73	28	4	12	86	49	Under 5 ...																																
South (H)	377	90	77	55	30	78	47	Under 5 ...																																
East	246	65	33	6	10	66	66	Under 5 ...																																
West (H)	482	99	48	37	34	186	78	Under 5 ...																																
Listerhills	313	62	47	12	18	88	86	Under 5 ...																																
Great Horton...	270	54	33	6	11	66	100	Under 5 ...																																
Little Horton (H)	585	98	36	14	19	202	216	Under 5 ...																																
East Bowling...	295	86	28	18	12	91	60	Under 5 ...																																
West Bowling	282	70	29	13	12	79	79	Under 5 ...																																
Exchange	98	28	8	5	3	33	21	Under 5 ...																																
Bradford Moor	346	97	67	11	12	73	86	Under 5 ...																																
Manningham	316	78	40	18	14	80	86	Under 5 ...																																
Bolton	102	21	6	2	4	25	44	Under 5 ...																																
Heaton (H)	265	55	27	10	13	76	84	Under 5 ...																																
Allerton	114	22	14	3	5	27	43	Under 5 ...																																
TOTALS	4343	998	521	214	209	1256	1145	Under 5 ...																																
PUBLIC INSTITUTIONS.																																								
Eye and Ear Hospital (W.)	3			2		1		Under 5 ...																																
St. Catherine's Home (H.)	14				3	10	1	Under 5 ...																																
Children's Hospital (H.)	33	11	15	7				Under 5 ...																																
Fever Hospital (S.)	102	2	36	44	13	7		Under 5 ...																																
Infirmary (W.)	207	15	15	18	27	113	19	Under 5 ...																																
Workhouse (L. Hor.)	320	15	8	1	14	133	149	Under 5 ...																																
TOTAL DEATHS IN PUBLIC INSTITUTIONS.	679	43	74	72	57	264	169	Under 5 ...																																
THE SUBJOINED NUMBERS HAVE ALSO TO BE TAKEN INTO ACCOUNT IN JUDGING OF THE ABOVE RECORDS OF MORTALITY.																																								
Deaths occurring outside the district among persons belonging thereto.	54				1	40	13	Under 5 ...																																
Deaths occurring within the district among persons not belonging thereto.	63	1	2	9	6	37	8	Under 5 ...																																

(H) Indicates Public Institutions included.

TABLE B.—SCARLET FEVER.
Showing Admissions, Deaths, and Percentage Mortality
for the year 1899.

AGE.	MALES.		FEMALES.		TOTAL.		
	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	Death-Rate.
Under 1	4	...	4	1	8	1	12·5
1—2	17	2	10	1	27	3	11·1
2—3	33	9	36	7	69	16	23·1
3—4	66	4	59	5	125	9	7·2
4—5	78	4	74	1	152	5	3·2
Total under 5	198	19	183	15	381	34	8·9
5—10	353	13	376	11	729	24	3·2
10—15	179	3	182	7	361	10	2·7
15—20	57	4	67	1	124	5	4·03
20—25	19	...	19	...	38	...	...
25—30	5	...	10	1	15	1	6·6
30—35	2	...	3	...	5	...	...
35—40	3	...	2	...	5	...	...
TOTAL ...	816	39	842	35	1658	74	4·46

TABLE C.—ENTERIC FEVER.

*Showing Admissions, Deaths, and Percentage Mortality
for the year 1899.*

AGE.	MALES.		FEMALES.		TOTAL.		
	No. Admitted.	No. Died.	No. Admitted.	No. Died.	No. Admitted.	No. Died.	Death-Rate.
Under 5	1	...	...	...	1	...	...
5—10	8	2	8	1	16	3	18·7
10—15	16	3	7	...	23	3	13
15—20	15	1	6	2	21	3	14·2
20—25	15	2	11	1	26	3	11·5
25—30	9	...	8	...	17	...	...
30—35	7	1	1	...	8	1	12·5
35—40	8	1	5	...	13	1	7·6
40—50	3	1	1	1	4	2	50
50—60	1	...	1	...	2	...	...
TOTAL ...	83	11	48	5	131	16	12·21

TABLE D.

Showing Number of Cases admitted during each month of 1899.

1899.	Scarlet Fever.			Enteric Fever.			Other Diseases.			Total Admissions.		
	Months.	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total.
January ...	67	52	119	16	6	22	...	1	1	83	59	142
February ...	55	65	120	8	9	17	1	1	2	64	75	139
March ...	61	57	118	8	4	12	2	...	2	71	61	132
April ...	58	65	123	5	2	7	...	2	2	63	69	132
May ...	77	64	141	4	2	6	...	2	2	81	68	149
June... ..	81	106	187	3	1	4	3	2	5	87	109	196
July	86	89	175	2	3	5	...	1	1	88	93	181
August ...	37	69	106	5	...	5	1	...	1	43	69	112
September	71	72	143	6	6	12	...	2	2	77	80	157
October ...	81	87	168	9	3	12	...	...	...	90	90	180
November	80	63	143	10	5	15	3	1	4	93	69	162
December	62	53	115	7	7	14	...	2	2	69	62	131
TOTAL ...	816	842	1658	83	48	131	10	14	24	909	904	1813

The following deaths occurred from diseases other than those specifically mentioned in the foregoing Tables:—

Diseases.	No. of Deaths.
Diphtheria	6
Measles	2
Erysipelas	1
Phthisis	1
Tubercular Meningitis	1
Total	<u>11</u>

SUMMARY.

YEAR.	SMALLPOX.			ENTERIC FEVER.			SCARLET FEVER.			OTHER DISEASES.			TOTALS.			From 1872 to 1899.	
	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Aggregate No. of days spent in Hospital.	Average No. of days for each Patient.
1872	63	6	9.5	48	9	18.7	14	...	...	37	6	16.2	162	21	13.01	4,546	28
1873	94	15	16.0	54	16	29.7	19	1	5.2	36	7	18.9	203	29	14.28	6,211	30½
1874	249	48	19.27	51	11	21.56	58	6	10.34	53	12	22.6	412	76	18.44	11,715	28½
1875	20	2	10.0	44	6	13.59	103	19	18.4	37	3	8.1	204	30	13.59	6,275	30¾
1876	12	...	...	40	5	12.5	35	9	26.0	26	5	19.2	113	19	18.8	2,876	27¼
1877	19	4	21.05	65	13	20.0	72	9	12.5	27	8	29.6	183	34	18.5	5,579	31½
1878	5	1	20.0	55	13	23.6	148	17	11.5	27	3	11.1	237	34	14.3	9,263	39
1879	8	...	...	24	3	12.5	159	14	8.8	23	4	17.39	214	21	9.8	8,414	39
1880	2	1	50.0	60	8	13.3	248	38	15.3	54	7	12.9	364	54	14.8	13,192	36¼
1881	21	2	9.5	61	7	11.5	317	42	13.2	27	...	...	426	51	11.97	16,073	37¾

1882	26	3	8.8	88	17	19.3	213	31	14.5	39	5	12.8	366	56	15.32	14,766	40
1883	5	...	...	119	17	14.2	233	17	7.2	23	2	8.6	375	36	9.6	15,949	42½
1884	3	...	...	93	17	18.2	237	11	4.6	29	4	13.7	362	32	8.8	14,215	39½
1885	28	2	7.14	89	6	6.74	456	19	4.16	23	8	34.7	596	35	5.89	21,391	36
1886	4	...	...	83	8	9.63	625	29	4.64	14	2	14.3	726	39	5.37	29,305	40½
1887	3	...	...	79	7	8.86	830	21	2.27	9	5	55.5	921	33	3.58	38,609	42¼
1888	16	2	12.5	57	6	10.53	283	12	4.24	11	1	9.9	367	21	5.72	16,479	46
1889	9	1	11.11	90	26	28.89	355	40	11.27	36	6	16.67	490	73	14.90	21,315	43½
1890	...	...	...	59	11	18.64	380	22	5.78	43	12	27.90	484	45	9.30	19,940	41¼
1891	...	...	...	76	15	19.6	780	83	10.6	39	10	25.6	897	108	12.04	39,838	44
1892	25	4	16.6	41	11	26.8	587	27	4.6	32	7	21.8	685	49	7.2	29,191	42½
1893	935	100	10.6	11	4	36.3	228	17	7.8	12	1	8.3	1186	122	10.2	34,203	28.8
1894	...	...	...	42	8	19.0	525	30	5.7	16	...	...	583	38	6.5	27,124	46.5
1895	...	...	...	97	20	20.6	250	16	6.4	28	9	32.14	375	45	12.0	17,331	46.21
1896	...	...	...	77	15	19.4	248	14	5.6	21	6	28.5	346	35	10.1	17,368	50.1
1897	...	...	...	74	11	14.8	226	5	2.21	17	8	47.05	317	24	7.5	14,549	45.8
1898	...	...	...	162	21	12.9	556	7	1.2	42	16	38.09	760	44	5.8	35,112	46.2
1899	...	...	...	131	16	12.2	1658	74	4.4	24	11	45.8	1813	101	5.5	87,024	48

BRADFORD UNION.—Vaccination Report for the Year 1898.

ABSTRACT OF RETURNS made on the 8th day of February, 1900, by the Vaccination Officers of the Bradford Union, respecting the Vaccination of Children whose Births have been Registered from January 1st, 1898, to December 31st, 1898, inclusive.

Registration— Sub-Districts.	Number of Births registered from Jan. 1st, 1898, to Dec. 31st, 1898.	Number of these Births duly entered by 8th February, 1900, in "Vaccination Register."					Percentage of cases finally accounted for to total Births.	Number of these Births which on 8th Feb., 1900, remained unentered in the "Vaccination Register" on account (as shown by Report Book) of			All cases not accounted for in preceding columns.	
		Col. 11.		Col. 13. "Dead Unvaccinated."	Total duly entered in the Register as finally accounted for.	Col. 9. Postponement by Medical Certificate.		Col. 10. Removals and Cases not found.	Col. 11	Col. 12		
		Col. 10. "Successfully Vaccinated."	"Insusceptible of Vaccination."									Conscientious Objections.
1. Bowling ..	999	445	...	44	127	616	61.61	13	41	...	13	329
2. Bradford East	1715	631	...	25	274	930	54.27	27	96	...	662	662
3. Bradford West	1442	741	...	47	213	1001	69.40	4	163	...	274	274
4. Horton ..	1180	432	...	42	146	620	52.60	12	100	...	448	448
TOTAL ...	5336	2249	...	158	760	3167	59.33	56	400	...	1713	1713

APPENDIX I—continued.

DATE.	Ground Temperature in degrees Fahrenheit.		Number of Deaths from Diarrhœa.
	1 Foot.	4 Feet.	
September 21	52½	54½	2
„ 22	52½	54½	1
„ 23	52½	54	1
„ 24	53	54	1
„ 25	53	54	...
„ 26	53	54	2
„ 27	53	54	1
„ 28	52½	54	3
„ 29	52½	54	2
„ 30	52½	54	1
October 1	52½	53½	3
„ 2	52½	53½	2
„ 3	52½	53½	2
„ 4	52½	53½	1
„ 5	52	53½	...
„ 6	51½	53½	1
„ 7	51	53½	...
„ 8	50½	53	...
„ 9	50½	53	...
„ 10	50	53	...
„ 11	50	53	...
„ 12	50	53	...
„ 13	49	53	...
„ 14	49	52½	...

APPENDIX I—continued.

DATE.	Ground Temperature in degrees Fahrenheit.		Number of Deaths from Diarrhœa.
	1 Foot.	4 Feet.	
October 15	48½	52½	...
„ 16	48	52	...
„ 17	48	51½	...
„ 18	50	52	...
„ 19	50	52	...
„ 20	50	52	...
„ 21	50	52	...
„ 22	49½	51½	...
„ 23	49½	51½	...
„ 24	49	51½	...
„ 25	49	51½	...
„ 26	48½	51	...
„ 27	48½	51	..
„ 28	48½	51	...
„ 29	48	51	...
„ 30	48	51	1
„ 31	48	51	...

APPENDIX II.

BRADFORD UNION.—Vaccination Report for the Year 1896.

ABSTRACT OF RETURNS made on the 8th day of February, 1898, by the Vaccination Officers of the Bradford Union, respecting the Vaccination of Children whose Births have been Registered from January 1st, 1896, to December 31st, 1896, inclusive.

Registration— Sub-Districts.	Number of Births registered from 1st Jan., 1896, to 31st Dec., 1896.	Number of these Births duly entered by 8th February, 1898, in "Vaccination Register."				Per centage of cases finally accounted for to total Births.	Number of these Births which on 8th Feb., 1898, remained unentered in the "Vaccination Register" on account (as shewn by Report Book) of		All cases not accounted for in preceding columns.			
		Col. 10. "Successfully Vaccinated."	Col. 11.		Col. 13. "Dead Unvaccinated."		Total duly entered in the Register as finally accounted for.	Postponement by Medical Certificate		Removals and Cases not found.		
			"Insusceptible of Vaccination,"	"Had Small Pox."								
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Bowling ...	1010	653	2	...	92	747	73.96	...	40	...	...	223
2. Bradford East	1760	969	7	...	240	1216	69.09	43	175	...	...	326
3. Bradford West	1483	876	3	...	181	1060	71.48	7	127	...	...	289
4. Horton ...	1267	551	11	...	150	712	56.20	9	86	...	...	460
TOTAL ...	5520	3049	23	...	663	3735	67.66	59	428	—	—	1298

APPENDIX III.

BACTERIOLOGICAL REPORT.

TO THE MEDICAL OFFICER OF HEALTH,

DEAR SIR,—During the year ending December 31st, 1897, I made microscopical and bacteriological examinations in the following cases :—

Scarlatina	...	...	...	...	73 cases.
Diphtheria	...	...	...	6	,,
Enteric Fever (blood)	...	...	...	3	,,
Anthrax	...	..	...	...	3 ,,
Cholera (English)	...	...	...	...	1 case.
Whooping Cough	...	...	...	...	1 ,,
Other diseases of the throat	...		...	...	7 cases.

Yours faithfully,

F. W. RICHARDSON.