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County Borough of Halifax.  
Health Department.

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# Report

OF THE

MEDICAL OFFICER OF HEALTH,  
Together with the Report of  
THE SANITARY INSPECTOR  
for the  
Year ended December 31st, 1907.


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*Printed by Order of the Health  
Committee.*

HALIFAX:

Messrs. EDWARD MORTIMER, PRINTERS, REGENT STREET

1908.



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# Health Committee.

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## Mayor.

ALDERMAN W. WALLACE, J.P.

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COUNCILLOR T. S. DODD, *Chairman.*

COUNCILLOR L. GELDER, *Vice-Chairman.*

Alderman J. F. COE, J.P.	Alderman R. MORLEY.
„ J. W. CROSSLAND, J.P.	„ J. WHITAKER, J.P.
Councillor W. H. BANCROFT.	Councillor W. H. INGHAM.
„ J. BROOKS.	„ T. G. LE DIEU.
„ J. T. DALTON.	„ A. NORTH.
„ D. HANSON.	„ E. PINDER.
Councillor A. TAYLOR, J.P.	

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## Sub-Committees

*Appointed by the Health Committee.*

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### Hospital Sub-Committee.

THE CHAIRMAN.	ALDERMAN WHITAKER.
VICE-CHAIRMAN.	COUNCILLOR HANSON.
ALDERMAN COE.	„ LE DIEU.
COUNCILLOR TAYLOR.	

### Cleansing Sub-Committee.

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COUNCILLOR PINDER.	

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COUNCILLOR INGHAM.	

### Accounts Sub-Committee.

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COUNCILLOR INGHAM.	

### Special Sub-Committee.

THE CHAIRMAN.	COUNCILLOR BANCROFT.
VICE-CHAIRMAN.	„ HANSON.
ALDERMAN COE.	„ PINDER.
„ WHITAKER.	„ TAYLOR.

# Staff of the Health Department.

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## Medical Officer of Health and Superintendent of the Borough Fever Hospital.

JAS. T. NEECH, M.D., D.P.H., &c.

## Assistant Medical Officer of Health.

J. F. HODGSON, M.D., D.P.H., &c.

## Public Analyst.

J. A. DEWHIRST, F.I.C., F.C.S.

## Chief Sanitary Inspector and Scavenging Superintendent.

DAVID TRAVIS.

## Meat Inspector.

J. T. MILLINGTON.

## District Sanitary Inspectors.

JAMES ARCHBELL. J. WOOD. J. E. FIRTH.  
R. PICKARD. F. TEAL.

## Assistant Scavenging Superintendent.

R. TRAVIS.

## Chief Clerk.

J. W. JACKSON.

## Assistant Clerks.

CHARLES CARLTON. ERNEST JUBB.

## Matron of the Borough Hospital.

MISS ROBISON.

## Disinfecter.

T. W. BOOTH.

## Laundry Engineer.

W. GUEST.

## Porter.

H. VICKERMAN.

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## Gouy Department.

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## Gouy Inspectors.

J. HEATH. S. MAUDSLEY.

## Clerk.

HARRY ASKE.

# COUNTY BOROUGH OF HALIFAX

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## REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

JAS. T. NEECH, M.D., D.P.H.,

*For the Year 1907.*

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### **INTRODUCTION.**

*To the Chairman and Members of the Health  
Committee.*

GENTLEMEN,

I have the honour of submitting to you my Eighth Annual Report, which is the Thirty-fifth Annual Report of the Medical Officer of Health of the Borough of Halifax.

This Report is made in accordance with the requirements of the Local Government Board, and is for the year ended December 31st, 1907.

As has been the case for a number of years past, I have again to record a fall in the birthrate. While that is so, however, it is satisfactory to note that the general deathrate, the zymotic deathrate, the respiratory deathrate, and the infantile mortality for the year under review have all fallen, and are all the lowest on record for the Borough.

The deathrate of Infants is especially satisfactory, being at the rate of only 102 per 1000 born. I think



this is an indication that parents generally are doing their best to carry out their responsibilities to the newly born.

There have been several changes in the personnel of the staff during the year. It was decided to appoint a Lady Health Visitor, and Miss Watson Wayne was eventually selected for the position. She commenced her duties early in the current year. Another change resulted from the unfortunate illness of Inspector Archbell, an old and valued servant of the Committee. I can testify to the keen interest he always took in his work, and to the conscientious manner in which he always carried it out. His place will be difficult to fill. Inspector J. G. Walshaw has been appointed to his district.

Inspector Wood resigned his position on securing a more lucrative post, and Inspector Teal was appointed in his stead.

I desire to acknowledge the assistance rendered me during the year by Mr. Travis, the District Sanitary Inspectors, and Messrs. Jackson and Carlton, and also to thank your Committee for its continued support.

I am,

Gentlemen,

Your obedient servant,

*Jas. J. Keech M.D. D.P.H.*

MEDICAL OFFICER OF HEALTH.

TOWN HALL,

HALIFAX,

*June 8th, 1908.*

# STATISTICAL SUMMARY.

	1907	1906
	ACRES	
Area of County Borough ...	13,650	...
Rateable Value ...	£495,642	£495,000
Population, estimated to middle of 1907 ...	108,500	108,000
Population, 1901 Census ...	104,936	...
Persons per Acre ...	7·9	7·9
Average number of Persons per Inhabited House, 1901 Census ...	4·2	...
Average number of Persons per House, 1901 Census ...	4·0	...
Birth Rate, 1907 ...	17·7	19·1
„ Average for previous 10 years ...	21·4	21·8
Death Rate, 1907 ...	15·2	16·1
„ Average for previous 10 years ...	16·2	16·4
„ Corrected for Institutions ...	14·3	15·5
Death Rate for seven principal Zymotic Diseases ...	·63	1·3
Death Rate, the mean for previous 10 years of Zymotic Diseases ...	1·2	1·2
Deaths of Infants under 1 year per 1000 Births ...	102	116
Illegitimate Births ...	84	99
Average Age at Death, 1907—		
Males ...	41·4 years	39·0 years
Average Age at Death, 1907—		
Females ...	47·8 years	44·9 years
Latitude—North ...	53° 43'	...
Longitude—West ...	1° 52'	...
Height above Sea Level, feet	625	...
Total Rainfall, inches ...	34	33·84



## Area and Population of the Borough.

The Registrar General estimates the population of the Borough for the year under notice at 110,138. This figure is, in my opinion, much too high. I estimated the population in the middle of 1907 at 108,500, and I have reasons for believing that even that estimate is too high.

The Borough has an area of 13,650 acres, and is divided into fifteen wards, as the following table shows.

WARDS.	Population Estimated to Middle of 1907.	Acreage.	Persons per Acre.	No. of Houses Built during 1907.
Ovenden ...	7325	531	13·7	6
Akroydon ...	6705	582	11·5	1
North ...	8375	168	49·8	0
Central ...	7835	82	95·5	0
West ...	9285	86	107·9	0
South ...	7780	296	26·2	30
East ...	7010	191	36·7	0
Southowram ...	7550	777	9·7	6
Skircoat ...	10015	513	19·5	53
Copley ...	3060	532	5·7	26
Pellon ...	9580	241	39·7	20
Kingston ...	10565	238	44·3	22
Illingworth ...	7255	4504	1·6	9
Northowram ...	3295	1555	2·1	1
Warley ...	2865	3354	0·8	2
Totals ...	108500	13650	...	176
Average ...	...	...	7·9	...

I believe the population of the Borough has diminished rather than increased during the past two or three years, owing to migration of residents to Lancashire and other places.

## Marriages.

There were 1,074 marriages solemnized during the year 1907, within the Borough, and this gives a marriage rate of 9·9 per 1000, against 9·5 during the previous year, or a rise of ·4 per 1000, and it is the highest recorded since the year 1901 when the rate was 10·5 per 1000.

In the year 1897, which is the first year of which we have any records in the Health Office, the marriage rate of Halifax was 15·9 per 1000, almost equal to that of England and Wales. Since then it has seriously and continuously fallen to its present low level, and it is hoped the improvement in the year under notice will be continued in the years to come.

The following table shows where the marriages took place.

In Churches of the Church of England ...	622
In Nonconformist places of worship, and at the Register Office ...	452
Total ...	1074

The following table compares the marriage rate of Halifax with that of England and Wales, during the past eight years.

YEAR.	MARRIAGE RATE.	
	Halifax.	England & Wales.
1900	11·2	16·0
1901	10·5	15·9
1902	9·8	15·9
1903	9·5	15·8
1904	9·7	15·2
1905	9·7	15·2
1906	9·5	15·6
1907	9·9	



## Births.

During 1907 there were 1,927 births registered, which is 143 less than the number registered during the previous year, hence the birthrate for the year was 17·7 per 1000 against 19·1 for the previous year. It is therefore necessary for me to again repeat the sentence which, I believe, has been used in each Annual Report I have had the honour of preparing, and say that "this birthrate is the lowest yet recorded in the Borough." It is hoped, however, that the slight increase in the marriage rate previously referred to, will have at any rate some little influence in preventing a further fall in what is now a very low birthrate.

Of the births registered, 978 were males, and 949 were females.

The excess of births over deaths for the year was 369, against 396 for the year 1906.

The birthrate of the Country generally has fallen considerably when compared with 30 years ago, but that fall has not been so rapid as has been the case with the Borough of Halifax, as the following table will show.

Period.	England and Wales.	Halifax.	Difference.	
1875-9	35·3	35·7	+	0·4
1880-4	33·8	30·7	—	3·1
1885-9	31·4	28·0	—	3·4
1890-4	30·7	25·4	—	5·3
1895-9	29·7	23·1	—	6·6
1900-4	28·4	21·5	—	6·9
1905-7	26·3	18·6	—	8·2

It should be noted, however, that the marriage rate of England and Wales is considerably above that of Halifax, and that the birthrate of Halifax in proportion to the marriage rate, is quite equal to that of the Country generally.

The following table shows the number of illegitimate births registered in the Borough during the past 17 years, together with the rate per cent. which these births bear to the total number of births.

Year.	Number of Illegitimate Births.	Rate per cent, to whole number of Births.
		Average.
1891	51	2·3
1892	78	3·5
1893	73	3·2
1894	73	3·4
1895	51	2·3
1896	65	2·7
1897	44	2·0
1898	58	2·6
		2·7
1899	58	2·5
1900	75	3·2
1901	101	4·2
1902	89	4·0
1903	102	4·5
1904	113	5·2
1905	97	4·6
1906	99	4·7
1907	84	4·3
		4·1

The mean birthrate of the 76 great towns of England and Wales for the year 1907 was 27 per 1000, compared with 27·9 for the previous year, and only three of these towns have a lower birthrate than Halifax, viz:—Hornsey 17; Hastings 16·6; and Bournemouth 17·6

The birthrate for England and Wales for 1907 was 26·3 per 1000, against 27 for the previous year, or a fall of ·8 per 1000.



The number of births and birthrates during each quarter of the year are shown in the following table.

TABLE SHOWING BIRTHS AND BIRTHRATES  
IN EACH QUARTER OF 1907.

Period.	Males.		Females.		Totals.		Birthrate per 1000 living.	
	1907.	1906.	1907.	1906.	1907.	1906.	1907.	1906.
1st Quarter ...	241	257	238	268	479	525	17·6	19·4
2nd     "     ...	269	248	250	261	519	509	19·1	18·8
3rd     "     ...	230	283	233	255	463	538	17·0	19·9
4th     "     ...	238	254	228	244	466	498	17·1	18·4
Whole Years ...	978	1042	949	1028	1927	2070	17·7	19·1

The following table gives the birthrates of the different Wards during the past five years.

WARDS.	BIRTHRATES.					
	1903	1904	1905	1906	1907	Average.
Ovenden ...	21·9	21·4	17·5	19·9	20·2	20·1
Akroydon ...	26·0	25·3	27·0	23·2	24·0	25·1
North ...	27·6	22·9	21·2	25·1	21·1	23·5
Central ...	23·8	21·0	20·2	18·1	18·7	20·3
West ...	16·6	17·7	14·6	17·9	17·0	16·7
South ...	17·2	15·4	13·5	14·3	12·4	14·5
East ...	15·9	14·9	14·6	17·5	13·1	15·2
Southowram ...	23·4	25·1	23·2	22·4	20·3	22·9
Skircoat ...	22·3	22·3	21·2	17·5	18·9	20·4
Copley ...	13·2	14·6	21·5	17·7	22·2	17·8
Pellon ...	20·6	18·6	18·7	17·3	16·8	18·4
Kingston ...	18·9	16·9	17·3	18·3	15·0	17·2
Illingworth ...	21·9	19·3	17·8	18·1	15·0	18·4
Northowram ...	21·4	29·0	27·3	21·5	19·1	23·6
Warley ...	21·0	20·3	22·3	20·2	15·0	19·6



According to information kindly furnished by the caretakers of the cemeteries and burial grounds in the Borough, there were 113 still-born children buried during the year.

The following table shows the number buried in each of the burial grounds during the past two years.

Name of Burial Ground.	Number of Still-born Children Buried therein.	
	1906.	1907.
Moor End Chapel...	1	0
Nursery Lane Wesleyan	0	0
St. George's, Ovenden	1	0
Providence Chapel, Ovenden	1	4
Illingworth Church	3	7
Christ Church, Mount Pellon	7	5
Illingworth Wesleyan Chapel	2	0
Mount Zion, Ovenden	0	3
Borough Cemetery	34	31
Wesleyan Chapel, Northowram	0	0
All Saints' Church	6	3
Heywood Cemetery	1	3
Bradshaw Church	0	1
Mount Tabor Burial Ground...	0	0
King Cross Wesleyan	8	12
St. Paul's Church, King Cross	15	11
All Souls' Cemetery	12	16
Warley Church	1	3
Wesleyan Chapel, Luddenden	0	0
Lister Lane Cemetery	10	6
St. Thomas' Church	10	8
Totals	112	113

The number buried during 1901 was 108; 1902, 86; 1903, 118; 1904, 121; and 1905, 113 respectively.

## Deaths.

During the year 1907 there were 1,655 deaths registered within the Borough. Of these, 145 did not belong to the district, but there also occurred 48 outside the Borough amongst persons belonging thereto, so that excluding the former, and including the latter, the corrected number of deaths for the year was 1,558.

Of the above 1,558 deaths, 732 were males and 826 were females, and this gives a deathrate for the year of 14·3 per 1000, which is 1·2 below that of the previous year, and is the lowest deathrate for the Borough yet on record.

The deathrate of England and Wales for 1907 was 15 per 1000, and the average for the 76 great towns was 15·4 per 1000, 23 of which had a lower deathrate than Halifax.

Taking the 34 great provincial towns of 100,000 population and above, only four have a lower deathrate than Halifax.

The deathrates of the other Yorkshire great towns were as follows :—Leeds, 15·3 ; Sheffield, 17·1 ; Bradford, 14·8 ; Hull, 16·1 ; Huddersfield, 16·9 ; York, 15·1 ; and Rotherham, 16 1 respectively.



It will be thus seen that the deathrate of Halifax is lower than any of the Yorkshire great towns. For the previous year the City of York occupied that position.

The following table gives the average deathrates for the undermentioned periods, and show that there has been a continuous and gradual fall in the deathrate of the Borough.

Period.	Deathrate.
1876-80	23·5
1881-5	21·1
1886-90	21·2
1891-5	17·9
1896-00	17·5
1901-5	15·3
1906-7	14·9

The following table shows the deathrates of the various Wards into which the Borough is divided.

WARDS.	Population.	Acreage.	Persons per Acre.	Total Deaths.	Death-rate per 1000.	Mortality per 1000 living.		
						Zy-moties.	Phthisis.	Other Respiratory Diseases.
Ovenden ...	7325	531	13·7	88	12·0	0·5	0·6	2·8
Akroydon ...	6705	582	11·5	109	16·2	1·3	0·5	2·8
North ...	8375	168	49·8	116	13·8	1·1	0·8	3·7
Central ...	7835	82	95·5	140	17·8	0·7	1·7	2·2
West ...	9285	86	107·9	134	14·4	0·4	0·7	3·1
South ...	7780	296	26·2	116	14·9	0·7	0·8	2·4
East ...	7010	191	36·7	152	21·6	0·5	2·7	4·1
Southowram	7550	777	9·7	114	15·0	0·3	1·0	1·8
Skircoat	10015	513	19·5	102	10·1	0·0	0·7	2·2
Copley ...	3060	532	5·7	51	16·6	0·6	0·9	2·6
Pellon ...	9580	241	39·7	117	12·2	0·7	1·0	1·5
Kingston ..	10565	238	44·3	131	12·3	0·4	1·1	2·0
Illingworth	7255	4504	1·6	98	13·5	0·9	1·5	2·2
Northowram	3295	1555	2·1	45	13·6	0·6	1·2	2·1
Warley ...	2865	3354	0·8	45	15·7	0·0	0·3	3·1
Totals ...	108500	13650	7·9	1558	14·3	0·6	1·1	2·5

As deathrates fluctuate from year to year, the following table is compiled for the purpose of showing the general deathrate of each Ward for a period of five years, so as to arrive at an average general deathrate for each Ward.

WARDS.	DEATH RATES.					
	1903	1904	1905	1906	1907	Average
Ovenden... ..	15·7	14·5	17·0	14·9	12·0	14·8
Akroydon ... ..	15·2	18·5	17·6	14·7	16·2	16·4
North ... ..	16·1	18·6	17·7	17·1	13·8	16·6
Central ... ..	17·7	16·3	17·2	17·6	17·8	17·3
West ... ..	14·0	14·6	14·1	14·5	14·4	14·3
South ... ..	13·8	15·0	13·6	14·0	14·9	14·2
East ... ..	19·1	21·5	19·4	22·6	21·6	20·8
Southowram ... ..	16·1	13·1	14·4	16·9	15·0	15·1
Skircoat ... ..	15·4	16·0	14·0	15·4	10·1	14·1
Copley ... ..	10·5	11·8	14·8	14·0	16·6	13·5
Pellon ... ..	13·0	13·0	11·9	12·0	12·2	12·4
Kingston ... ..	11·7	11·0	10·3	12·4	12·3	11·5
Illingworth ... ..	12·6	15·8	15·6	15·6	13·5	14·6
Northowram ... ..	14·3	16·8	16·1	13·6	13·6	14·8
Warley ... ..	19·2	12·6	16·0	19·5	15·7	16·6

The following table shows the total number of deaths of each sex which have occurred within the Borough, the total ages lived, and the average age at death, during the past 12 years.



MALES.				FEMALES.			
	Deaths.	Total Years.	Average Ages.		Deaths.	Total Years.	Average Ages.
0-1	111	111	...	0-1	84	84	...
1-5	64	141	2.2	1-5	51	113	2.2
5-15	31	280	9.0	5-15	29	277	9.5
15-25	34	671	19.7	15-25	43	843	19.6
25-65	309	15701	50.8	25-65	325	16197	49.8
65 and upwards	183	13448	73.4	65 and upwards	294	21987	74.7
Total... 1907.	732	30352	41.4	Total... 1907.	826	39501	47.8
1907	Average		41.4	1907	Average		47.8
1906	"		39.0	1906	"		44.9
1905	"		38.6	1905	"		44.1
1904	"		37.5	1904	"		41.2
1903	"		40.0	1903	"		43.3
1902	"		36.6	1902	"		40.2
1901	"		36.2	1901	"		40.1
1900	"		38.3	1900	"		41.2
1899	"		35.1	1899	"		38.4
1898	"		34.4	1898	"		38.2
1897	"		35.3	1897	"		37.9
1896	"		35.5	1896	"		38.4

It will be seen from the foregoing table that there was a considerable rise in the average age at death



during the year under review, and that the average age at death during the year 1907 is the highest on record for both males and females. It will also show that females live to a greater age than males, and that the average age of those who died during 1907 was over six years greater than that of the males.

### Zymotic Deathrate.

From the principal Zymotic diseases 69 deaths resulted during the year, which gives a deathrate of '63 per 1000, against 1'31 during the previous year. There was thus a marked fall in the deathrate from the chief infectious diseases during 1907, and the rate is the lowest that has yet been recorded in the Borough.

Of the 33 greatest towns of England and Wales for the year under review Halifax had the lowest Zymotic deathrate, and of the 76 great towns in only three was this rate below that of our own, viz.:—Hornsey, '55; Hastings, '48; and Bournemouth, '23.

The zymotic deathrate of 1907 for the other Yorkshire great towns was as follows:—Leeds, 1'26; Sheffield, 2'64; Bradford, '89; Hull, 1'77; Huddersfield, '77; York 1'21; and Rotherham, 2 per 1000 respectively.

In the following table the average zymotic deathrate of England and Wales, and of the great towns is shown.

	DEATHRATE FROM							
	Small-pox.	Measles	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Zymotic Death-rate.
England and Wales...	0'00	0'36	0'09	0'16	0'29	0'07	0'29	1'26
76 Great Towns ...	0'00	0'43	0'12	0'17	0'35	0'07	0'40	1'54
141 Smaller Towns ...	0'00	0'41	0'08	0'15	0'29	0'07	0'29	1'29
England and Wales, less the 217 towns ...	0'00	0'25	0'06	0'15	0'21	0'06	0'18	0'91
HALIFAX ...	0'00	0'04	0'01	0'25	0'10	0'08	0'12	0'63

It will be seen from the above table that Halifax compares most favourably in its zymotic deathrate with the Country generally, its zymotic deathrate being below the average of what may be regarded as rural England.

In the following table the deaths from the chief zymotic diseases are distributed among the Wards of the Borough.

WARDS.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Zymotic Death-rate per 1000.
Ovenden ...	...	...	...	4	...	...	...	0.5
Akroydon ...	...	...	1	2	...	1	5	1.3
North ...	...	1	...	5	...	1	3	1.1
Central ...	...	1	...	2	...	1	2	0.7
West ...	...	...	...	...	4	...	...	0.4
South ...	...	1	...	1	1	2	1	0.7
East ...	...	...	1	1	...	...	2	0.5
Southowram ...	...	1	...	2	...	...	...	0.3
Skircoat ...	...	...	...	...	...	...	...	0.0
Copley ...	...	1	...	1	...	...	...	0.6
Pellon ...	...	...	...	2	4	1	...	0.7
Kingston ...	...	...	...	2	1	2	...	0.4
Illingworth ...	...	...	...	5	1	1	...	0.9
Northowram ...	...	...	...	1	...	...	1	0.6
Warley ...	...	...	...	...	...	...	...	0.0
Totals ...	...	5	2	28	11	9	14	Av'ge 0.63



On referring to the above table it will be observed that the Wards of Skircoat and Warley had no zymotic deaths during the year under notice. This is remarkable so far as Skircoat is concerned, because 30 cases of infectious disease were reported from that Ward during the year, and in only one Ward, that of Illingworth, were a larger number notified.

The following table gives the zymotic deathrate of the various Wards during the past five years, together with the average for each Ward.

WARDS	ZYMOTIC DEATHRATE					
	1903	1904	1905	1906	1907	Average
Ovenden ... ..	0·6	1·5	1·9	1·9	0·5	1·3
Akroydon ... ..	0·4	2·4	0·6	1·6	1·3	1·2
North ... ..	1·0	2·7	1·3	1·3	1·1	1·5
Central ... ..	0·3	0·6	0·7	1·1	0·7	0·6
West ... ..	0·7	1·4	0·7	0·4	0·4	0·7
South ... ..	0·1	1·3	0·9	1·0	0·7	0·8
East ... ..	0·9	1·5	0·8	1·5	0·5	1·0
Southowram ...	1·8	1·1	1·8	3·0	0·3	1·6
Skircoat ... ..	0·4	1·0	0·5	0·9	0·0	0·5
Copley ... ..	0·0	2·0	2·0	1·6	0·6	1·2
Pellon ... ..	0·5	1·8	0·5	0·9	0·7	0·9
Kingston ... ..	0·4	0·5	0·3	1·1	0·4	0·5
Illingworth ...	0·5	0·8	0·4	0·8	0·9	0·7
Northowram ...	0·3*	2·4	1·8	1·5	0·6	1·3
Warley ... ..	0·3	0·0	0·3	1·7	0·0	0·4

From the above table it will be seen that Warley has had the lowest average zymotic deathrate, Skircoat and Kingston coming next to it in that respect.

The low zymotic deathrate of Central Ward is somewhat astonishing considering its situation, its death-rate being less than half of that of Wards of such a rural character as Northowram and Ovenden.

The average zymotic deathrate of the Borough is less than half what it was 30 years ago. Since that period there has been a gradual fall in this deathrate, as the following table will show.

Period	Deathrate
1877-81	2.50
1882-6	1.55
1887-91	1.43
1892-6	1.33
1897-01	1.40
1902-6	1.02
1907	.63

### Infantile Mortality.

During the year 1907, 195 infants died under one year of age, compared with 242 during the previous year. This gives a mortality of 102 deaths to 1000 births registered.

This is the lowest rate of infant mortality that has ever been recorded in the Borough. The infant mortality for the previous year was 116 deaths to 1000 births registered.

The infantile deathrate for 1906 was lower than any previously recorded, being 14 per 1000 below that of the previous year, and it is strange that a similar fall



of 14 occurred during 1907. If we can only secure a further fall of 14 during the current year, we shall be getting nearer to what ought to be the normal infantile deathrate. This, however, can hardly be expected, and it is quite possible that there may be a rise in this rate before any further marked fall takes place.

The following table gives the number of births, birthrates, the number of deaths of infants, and the mortality per 1000 births for each Ward in the Borough.

WARDS.	Number of Births.	Birthrates.	Number of Deaths under 1 year.	Mortality per 1000 Births.
Ovenden ...	148	20·2	13	87
Akroydon ...	161	24·0	26	161
North ...	176	21·1	18	102
Central ...	147	18·7	18	122
West ...	158	17·0	18	113
South ...	99	12·4	8	80
East ...	91	13·1	20	219
Southowram ...	154	20·3	22	142
Skircoat ...	190	18·9	8	42
Copley ...	68	22·2	7	103
Pellon ...	161	16·8	11	68
Kingston ...	159	15·0	10	62
Illingworth ...	109	15·0	9	82
Northowram ...	63	19·1	7	111
Warley ...	43	15·0	0	0
Totals ...	1927	17·7	195	102

The following table shows the causes of death of infants under one year of age during the year under notice.



CAUSE OF DEATH.					Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks
All Causes.	Certified	...	...	...	40	12	12	5
	Uncertified	...	...	...	2	...	...	1
Common Infectious Diseases.	Measles...	...	...	...	...	...	...	...
	Scarlet Fever...	...	...	...	...	...	...	...
	Diphtheria, Croup	...	...	...	...	...	...	...
	Whooping Cough	...	...	...	...	...	...	...
Diarrhœal Diseases.	Diarrhœa, all forms...	...	...	...	...	...	...	...
	Enteritis <small>Muco-enteritis, Gastro-enteritis</small>	...	...	...	...	...	...	...
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	...
Wasting Diseases.	Premature Birth	...	...	...	15	6	9	1
	Congenital Defects	...	...	...	5	1	1	...
	Injury at Birth	...	...	...	2	2	...	...
	Want of Breast-milk, Starvation	...	...	...	...	...	...	...
Tuberculous Diseases.	Atrophy, Debility, Marasmus	...	...	...	5	3	...	1
	Tuberculous Meningitis	...	...	...	...	...	...	...
	Tuberculous Peritonitis: <i>Tabes Mesenterica</i>	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...
Other Causes	Erysipelas	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...
	Rickets	...	...	...	...	...	...	...
	Meningitis ( <i>not Tuberculous</i> )	...	...	...	...	...	...	...
	Convulsions	...	...	...	8	...	1	2
	Bronchitis	...	...	...	...	...	...	1
	Laryngitis	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	1	...
	Suffocation, overlying	...	...	...	1	...	...	...
	Other Causes	...	...	...	6	...	...	1
					42	12	12	6

Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
69	20	20	9	12	15	5	14	12	4	6	6	192
3	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	1	...	1	2	...	...	1	5
...	...	1	...	...	...	...	...	...	...	1	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	1	...	...	...	...	2	1	1	...	1	6
...	1	...	...	3	2	...	1	3	...	2	...	12
...	...	...	...	1	1	...	1	...	...	...	...	3
...	2	1	1	...	...	...	...	...	...	...	...	4
31	2	...	...	...	...	...	...	...	...	...	...	33
7	...	...	...	...	...	...	...	...	...	...	1	8
4	...	...	...	...	...	...	...	...	...	...	...	4
...	1	...	...	...	...	...	...	...	...	...	...	1
9	3	8	1	3	...	...	...	1	...	...	...	25
...	...	...	...	...	2	1	...	1	1	...	...	5
...	1	1	1	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	1	...	...	...	...	1
...	...	1	...	...	...	...	...	...	...	...	...	1
...	2	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	1	...	2	...	...	...	...	1	...	4
11	2	2	...	2	1	1	...	...	...	...	...	19
1	2	3	...	...	2	1	4	...	...	2	2	17
...	...	...	...	...	...	...	...	...	...	...	...	...
1	2	1	2	3	2	1	2	1	1	...	...	16
1	...	...	...	...	...	...	...	...	...	...	...	1
7	2	1	3	...	2	1	2	3	1	...	1	23
72	20	20	9	12	15	5	14	12	4	6	6	195



The infant mortality of the various Wards varies considerably from year to year, although certain Wards always have a comparatively high infant deathrate, and others a low one. By taking an average of five years a fair comparison can be made between the Wards as far as this deathrate is concerned.

The following table gives the average infant mortality and the birthrates of each Ward during the past five years.

WARDS.	Deaths under 1 Year to 1000 Births Registered.						Average Birthrate during the past five years.
	1903.	1904.	1905.	1906.	1907.	Average.	
Ovenden ...	132	90	132	116	87	111	20·1
Akroydon ...	122	162	167	96	161	141	25·1
North ...	126	162	197	137	102	145	23·5
Central ...	123	145	176	239	122	161	20·3
West ...	135	127	139	89	113	120	16·7
South ...	136	117	115	63	80	102	14·5
East ...	214	228	145	260	219	213	15·2
Southowram	193	127	148	130	142	148	22·9
Skircoat ...	90	61	82	80	42	71	20·4
Copley ...	50	46	93	56	103	69	17·8
Pellon ...	72	126	129	84	68	96	18·4
Kingston ...	126	152	71	62	62	94	17·2
Illingworth	101	158	85	99	82	105	18·4
Northowram	71	136	155	84	111	111	23·6
Warley ...	116	69	78	150	0	82	19·6

East Ward still has the highest infantile deathrate although it has a very low birthrate, viz. :—15·2 per 1000.

There was a marked fall in the infantile deathrate of Central Ward during 1907, though its average rate for the five years, as shown by the above table, is higher than that of any other, except East Ward.

Copley Ward has the lowest average infantile deathrate, and it has always occupied that position in this respect since it was added to the Borough.

With a view to the spread of information and to lower the infantile deathrate of the Borough, I have, during the past two or three years, given lectures illustrated with lantern slides, in various parts of the town, and printed leaflets containing "Hints on how to bring up a baby" have been distributed far and wide, through the medium of the midwives registered in the Borough.

With a view to a possible further reduction in this deathrate, the "Notification of Births Act" of 1907 has been, with the consent of the Local Government Board, put into force in the Borough. A Lady Health Visitor in the person of Miss Watson Wayne has been appointed to visit and instruct mothers in their homes, and a band of voluntary ladies called "The Public Health Union" has been formed to assist the lady visitor in this important work.

With these agencies at work it is hoped that a further reduction in the number of deaths among infants will be brought about, especially in those Wards where infantile mortality is so excessive.



In my Annual Report last year, in dealing with the question of the deathrate among infants, from premature birth, I suggested the use of an incubator, and that such incubators might be provided by the Municipality.

This suggestion raised a considerable amount of criticism in various quarters, both adverse and otherwise.

I mention this because I have recently seen a report in a medical paper, stating that in the treatment of premature infants, at the Maternity Hospital, Paris, incubators are used, also a portable incubator is employed for cases born outside the hospital, and it is stated that the result has been, that the deathrate from this cause among infants, has been diminished from 66 to 36%.

The next table shows the number of deaths which have taken place in the Borough from some of the chief infantile diseases, and gives the deathrate therefrom of each disease per 1000 of the population.

DISEASES.	Number of Deaths under 1 year.					Rate per 1000 of Population.				
	1903	1904	1905	1906	1907	1903.	1904	1905	1906	1907.
From all causes ...	279	282	271	242	195	2·61	2·63	2·52	2·24	1·79
Respirat'ry Diseases	59	61	52	39	33	·55	·57	·48	·36	·30
Premature Birth ...	50	59	62	39	33	·46	·55	·57	·36	·30
Diarrhœa ...	8	22	10	12	12	·07	·20	·09	·11	·11
Whooping Cough	13	4	15	1	6	·12	·03	·14	·009	·07
Convulsions ...	33	22	22	20	19	·30	·20	·20	·18	·17
Scrofula, Tuberculosis ...	20	10	15	8	17	·18	·09	·14	·07	·15
Measles ...	3	16	1	15	5	·02	·14	·009	·13	·04

The following table serves to compare the infantile mortality of England and Wales, the great towns, &c., with that of Halifax.

	Deaths under 1 year per 1000 Births
England and Wales ...	118
76 Great Towns ...	127
141 Smaller Towns ...	122
England and Wales less the 217 Towns ...	106
HALIFAX... ..	102

It will be observed from the above table that the infantile deathrate of Halifax is not only below the average of the 217 towns of England and Wales, but also below the average of the Country, exclusive of those towns.

The infant mortality of the other Yorkshire great towns for 1907 was as follows, viz.:—Leeds, 130 ; Sheffield, 145 ; Bradford, 124 ; Hull, 127 ; Huddersfield, 97 ; York, 125 ; and Rotherham, 148 respectively.

The following table serves to compare the average infant mortality, in quinquennial periods from 1875 to the present time, of the Borough, with that of England and Wales.

Period	Halifax	England and Wales
1875-9	173	145
1880-4	161	141
1885-9	158	142
1890-4	163	148
1895-9	154	157
1900-4	132	143
1905-7	116	126



The following table shows the average infant mortality during the past five years of 34 of the largest towns of the Country, which have a population of 100,000 and upwards, and it will be seen that only three have a lower average infant deathrate than that of Halifax, viz. :—Bristol, Southampton, and Brighton.

34 LARGE TOWNS.	Deaths under 1 year to 1,000 Births Registered.					
	1903.	1904.	1905.	1906.	1907.	Average.
Burnley ...	216	228	173	213	158	197
Stockport ...	183	204	168	186	159	180
Middlesbrough ...	186	170	174	170	158	171
Preston ...	161	183	153	202	158	171
Rhondda ...	157	151	200	173	162	168
Nottingham ...	164	175	155	171	165	166
Liverpool ...	159	196	154	172	144	165
Manchester ...	168	187	157	167	146	165
Birmingham ...	158	195	155	167	147	164
Sheffield ...	182	158	167	158	145	162
Blackburn ...	159	191	146	155	153	162
Salford ...	166	193	150	160	140	161
Norwich ...	149	179	173	172	125	159
Hull ...	162	181	153	158	127	156
Leicester ...	161	163	148	168	131	154
Bolton ...	152	167	166	140	146	154
Gateshead ...	160	175	138	162	136	154
Leeds ...	153	176	152	150	130	152
Oldham ...	160	155	150	145	144	151
Sunderland ...	156	165	143	139	130	146
Newcastle-on-Ty'e	165	156	137	151	123	146
Bradford ...	147	166	144	151	124	146
Birkenhead ...	155	180	127	151	110	144
Plymouth ...	144	173	136	152	110	143
South Shields ...	132	144	145	150	133	141
Wolverhampton ...	141	152	136	139	130	139
Derby ...	128	143	151	115	121	131
Cardiff ...	122	144	118	138	131	130
Portsmouth ...	113	141	133	129	123	128
Huddersfield ...	120	136	119	135	97	121
<b>Halifax ...</b>	<b>122</b>	<b>130</b>	<b>130</b>	<b>116</b>	<b>102</b>	<b>120</b>
Bristol ...	116	133	122	126	100	119
Southampton ...	114	114	133	113	108	116
Brighton ...	110	134	101	110	113	113

### Comparison of Ward Deathrates.

The table below serves to compare the under-mentioned deathrates of the different Wards of the Borough for the year 1907.

WARDS.	General Deathrates	Zymotic Deathrates	Respiratory Deathrates	Phthisis Deathrates	Infantile Mortality
Ovenden ...	12.0	0.5	2.8	0.6	87
Akroydon ...	16.2	1.3	2.8	0.5	161
North ...	13.8	1.1	3.7	0.8	102
Central ...	17.8	0.7	2.2	1.7	122
West ...	14.4	0.4	3.1	0.7	113
South ...	14.9	0.7	2.4	0.8	80
East ...	21.6	0.5	4.1	2.7	219
Southowram ...	15.0	0.3	1.8	1.0	142
Skircoat ...	10.1	0.0	2.2	0.7	42
Copley ...	16.6	0.6	2.6	0.9	103
Pellon ...	12.2	0.7	1.5	1.0	68
Kingston ...	12.3	0.4	2.0	1.1	62
Illingworth ..	13.5	0.9	2.2	1.5	82
Northowram...	13.6	0.6	2.1	1.2	111
Warley ...	15.7	0.0	3.1	0.3	0
Average ...	14.3	0.6	2.5	1.1	102

### Notification of Infectious Disease.

A total of 310 cases of infectious disease were reported during 1907, against a total of 473 during the previous year.

The next table gives the total number of cases of each disease notified, and shows the distribution of the reported cases among the Wards of the Borough, and institutions situated therein.



WARDS.				Typhoid Fever.	Scarlet Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.	Total.
Ovenden	...	...	...	1	12	...	12	6	31
Akroydon	...	...	...	4	12	...	7	4	27
North	...	...	...	2	3	2	9	4	20
Central	...	...	...	8	2	3	4	1	18
West	...	...	...	3	7	...	8	2	20
South	...	...	...	6	9	...	8	...	23
East	...	...	...	1	1	...	4	2	8
Southowram	...	...	...	1	2	...	8	2	13
Skircoat	...	...	...	5	12	...	9	4	30
Copley	...	...	...	2	4	...	5	1	12
Pellon	...	...	...	4	2	...	13	2	21
Kingston	...	...	...	8	8	1	5	...	22
Illingworth	...	...	...	11	11	1	16	6	45
Northowram	...	...	...	3	3	...	4	2	12
Warley	...	...	...	1	1	...	6	...	8
Total, 1907				60	89	7	118	36	310

PUBLIC INSTITUTIONS (which are included in the above).

Royal Infirmary	...	...	...	2	...	1	1	4
Poor Law Hospital	...	...	...	3	...	...	3	6
The Orphanage	...	...	...	1	...	...	...	1

Lists containing the names and addresses of persons notified to be suffering from infectious diseases were

sent each week throughout the year to the chief librarians for their information.

The following table shows the number of cases of the various infectious diseases notified during each month of 1907.

MONTH.	Smallpox.	Typhoid Fever.	Scarlet Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.	Total.
January ...	...	12	11	1	6	4	34
February ...	...	2	4	...	15	1	22
March ...	...	4	5	...	14	3	26
April ...	...	4	9	2	16	3	34
May ...	...	1	9	...	12	3	25
June ...	...	5	8	1	5	5	24
July ...	...	2	10	1	10	2	25
August ...	...	1	4	1	4	3	13
September ...	...	1	11	...	3	1	16
October ...	...	3	4	...	5	4	16
November ...	...	12	8	...	12	2	34
December ...	...	13	6	1	16	5	41
Totals ...	...	60	89	7	118	36	310

The notification of infectious diseases has been in force in the Borough since the year 1883, and the following table shows the number of cases of each disease notified yearly since that date.



YEAR	Small-pox	Cholera	Typhus Fever	Enteric Fever	Scarlet Fever	Continued Fever	Puerperal Fever	Relapsed Fever	Diphtheria	Erysipelas	Chicken-pox	Membranous Croup	Total	Rate percent- age of population
1883	2 ...	2	108	158	43	2	1	14	...	...	...	330	·43	
1884	1 ...	1	69	269	24	4	4	13	...	...	...	385	·50	
1885	7 ...	1	56	214	22	1	...	25	...	...	...	326	·42	
1886	3 1	...	57	124	7	5	...	59	...	...	...	256	·32	
1887	1 ...	1	66	727	8	7	...	26	...	...	...	836	1·05	
1888	1 ...	1	36	440	16	1	...	29	...	...	...	524	·65	
1889	2 ...	...	94	153	18	1	3	31	...	...	...	302	·37	
1890	... ..	...	67	328	8	8	1	62	...	...	...	474	·58	
1891	... 1	...	99	429	14	5	2	23	...	...	...	573	·68	
1892	159 ...	1	56	256	9	4	2	71	...	...	...	558	·66	
1893	346 5	...	69	150	5	6	...	57	...	...	...	638	·69	
1894	16 ...	...	52	114	3	6	...	43	...	...	...	234	·25	
1895	... ..	...	58	52	3	4	...	29	...	...	...	146	·15	
1896	... ..	...	105	44	2	4	...	37	...	...	...	192	·20	
1897	... ..	...	78	476	1	8	...	67	...	...	...	630	·66	
1898	... ..	...	79	626	1	9	...	23	...	...	...	738	·76	
1899	... ..	...	92	762	2	3	...	58	...	...	...	917	·93	
1900	2 ...	5	79	330	1	4	3	41	1	...	...	466	·46	
1901	3 ...	...	67	736	...	1	...	61	15	...	...	883	·83	
1902	1	...	65	452	1	3	...	37	27	...	..	586	·55	
1903	130 ...	...	61	220	2	1	...	50	81	328	1	974	·91	
1904	80 ...	...	47	486	...	9	...	80	73	...	...	775	·72	
1905	49 ...	...	50	338	...	6	...	87	54	...	...	584	·54	
1906	... ..	...	38	214	...	7	...	158	56	...	...	473	·43	
1907	... ..	...	60	89	...	7	...	118	36	...	...	310	·28	

It will be observed from the above table that fewer cases were reported during 1907 than was the case in any year since 1896, and that there has been a gradual fall in the number reported since 1903.

While that is true, there was a considerable increase in the number of cases of Typhoid Fever reported. It is satisfactory however to record that only 89 cases of Scarlet Fever were notified, less than half the number for the previous year, and although Diphtheria was rather prevalent, there was also a considerable fall in

the number of cases of this disease in comparison with the previous year.

### Causes of Death.

The causes of death in the Borough, of persons belonging thereto, during the year 1907, are shown in the following table.

CAUSES OF DEATH.					Number.
Small-pox	...	...	...	...	0
Measles	...	...	...	...	5
Scarlet Fever	...	...	...	...	2
Whooping-cough	...	...	...	...	11
Diphtheria and Membranous Croup	...	...	...	...	28
Enteric Fever	...	...	...	...	9
Epidemic Influenza...	...	...	...	...	11
Croup	...	...	...	...	1
Diarrhœa	...	...	...	...	14
Enteritis	...	...	...	...	5
Puerperal Fever	...	...	...	...	4
Erysipelas	...	...	...	...	1
Other Septic Diseases	...	...	...	...	5
Phthisis	...	...	...	...	120
Other Tubercular Diseases	...	...	...	...	29
Cancer, Malignant Diseases	...	...	...	...	114
Bronchitis	...	...	...	...	152
Pneumonia	...	...	...	...	127
Pleurisy	...	...	...	...	2
Other Diseases of Respiratory Organs	...	...	...	...	21
Alcoholism, Cirrhosis of Liver	...	...	...	...	13
Premature Birth	...	...	...	...	33
Diseases and Accidents of Parturition	...	...	...	...	11
Heart Diseases	...	...	...	...	169
Accidents	...	...	...	...	23
Suicides	...	...	...	...	5
Diseases of Brain and Nervous System	...	...	...	...	167
Diseases of Digestive System	...	...	...	...	54
Diseases of Urinary System	...	...	...	...	60
Congenital Malformation	...	...	...	...	10
Convulsions	...	...	...	...	25
Old Age	...	...	...	...	145
All other causes	...	...	...	...	182
All causes	...	...	...	...	1558



## Smallpox.

No case of this disease occurred during the year.

## Scarlet Fever.

Although Scarlet Fever was so markedly less prevalent than during the previous year, the disease was present in the Borough throughout the year. It was, however, most prevalent during the second and third quarters of the year.

There was a total of 89 cases reported, against 214 during the previous year.

The mortality from this affection has gradually fallen during the past 20 years, and owing to the markedly less prevalence of the disease during the past two years, the attack rate per 1000 of the population, which up to the year 1904 had remained about the same, has considerably fallen, as the following table will show.

Period	Average No. of Cases of Scarlet Fever per annum notified	Average Population	Average attack rate per 1000 population	Average case Mortality per cent. attacked
1885-9	331	79,207	4.1	6.1
1890-4	255	86,808	2.9	5.8
1895-9	392	95,755	4.0	3.4
1900-4	465	105,211	4.4	3.4
1905-7	213	108,000	1.9	2.8

The following table gives the number of cases notified during each month of the year.

Scarlet Fever	January	February	March	April	May	June	July	August	September	October	November	December	Total
Cases notified ...	11	4	5	9	9	8	10	4	11	4	8	6	89

Of the above 89 cases, two died, which gives a deathrate of  $\cdot 01$  per 1000, and a case mortality of two per cent. of those notified. During the previous year the deathrate was  $\cdot 05$ , and the case mortality 2·8 per cent.

### Fever.

No case of Typhus Fever has occurred within the Borough since the year 1900, and no case of Continued Fever has been notified since the year 1903, consequently all the cases reported under the above heading were of Typhoid or Enteric Fever.

This disease was more prevalent in the Borough than had been the case since the year 1903, there being 60 cases reported against a total of 38 during the previous year.

Typhoid Fever was prevalent in the Borough more or less throughout the year, the largest number, viz. 13, being reported during the month of December.



The following table gives the sanitary conditions connected with, and the probable or assigned causes of the notified cases of Typhoid Fever.

Disease	Number of Cases reported	Drainage		Ventilation		Old Middens	Goux Closets	Water Closets	Probable or assigned cause							
		Good	Bad	Good	Bad				No trace	From previous case in same house	From a cold	From Bad Drains	From other cases in the neighbourhood	Contracted away from home	From eating shell fish	Contracted on board ship
Typhoid Fever	60	52	8	60	...	7	46	7	30	19	4	1	2	1	2	1

In connection with the cause of this disease, as will be seen by the above table, only two cases were definitely stated to have arisen from eating shell-fish, yet in a few others this may have been the cause, as in several instances shell-fish had been partaken of within a reasonable time of the onset of the disease.

As will also be observed 19 cases occurred in houses where there had been a previous case reported. In connection with this I may also mention that in two or three instances further cases occurred in the house after the return of a case from hospital. This was found to be more particularly the case where the mother had been treated for this disease in that Institution.

From evidence which has come to light during the past year it appears that a person who has suffered from Typhoid Fever can, in isolated instances, remain infectious for a number of years. Such persons act as

carriers of the disease, and evidence has been adduced which goes to show that individuals of this character retain the infection, and are able to spread it to others, for even two or more years after having suffered from the disease.

If this be true it only adds to the difficulty of tracing the source of infection in these cases, but it may also be an explanation of isolated cases cropping up from time to time amidst good sanitary surroundings, and the origin of which cannot otherwise be accounted for.

The following table gives the number of cases which have been reported since the year 1899, and the number of deaths each year since that date.

YEAR	Number of Cases Reported	Number of Deaths
1899	92	22
1900	79	20
1901	67	15
1902	65	14
1903	61	11
1904	47	10
1905	50	9
1906	38	4
1907	60	9

As will be seen by the above table, nine of the 60 cases reported ended fatally, which gives a deathrate of  $\cdot 08$  and a case mortality of 15 per cent. of those notified, against a deathrate of  $\cdot 03$  per 1000 and a case mortality of 10 per cent. during the previous year.



### Diphtheria.

Diphtheria was less prevalent in the Borough than during the previous year, 40 less cases having been reported. A larger number of cases were however notified than during any year, except 1906, since the notification of infectious diseases was enforced. Although that is the case, this fall in the number reported is so far satisfactory, seeing that there had been a continuous increase in the number of cases in the Borough since the year 1902.

The following table shows the number of cases reported and the number of deaths from the disease each year since the above date.

YEAR	Number of Cases Reported	Number of Deaths
1902	37	8
1903	50	10
1904	80	17
1905	87	17
1906	158	42
1907	118	28

The disease was present throughout the year, and cases cropped up throughout the Borough, but Illingworth, Pellon, and Ovenden Wards suffered the most therefrom. It appears probable that a number of the cases which occurred in Ovenden and Illingworth were spread through school influence, as ten of the children attacked attended Moorside school which is situated in that neighbourhood.

These cases were also of a very virulent type.

A defective drain was found in connection with this school which was remedied, and the schoolrooms were thoroughly disinfected.

The following table gives the sanitary conditions connected with, and the probable or assigned causes of the notified cases of Diphtheria.

Disease	Number of Cases reported	Drainage		Ventilation		Old Middens	Goux Closets	Water Closets	Probable or assigned cause							
		Good	Bad	Good	Bad				No Trace	From previous case in same house	From a cold	From bad drains	From other cases in the neighbourhood	From house visiting	Contracted at School	Contracted away from home
Diph-theria	118	112	6	118	...	10	87	21	92	10	2	2	1	2	8	1

Of the 118 cases reported 28 died, giving a death-rate of .25 per 1000, and a case mortality of 23 per cent., against a deathrate of .38 per 1000, and a case mortality of 26 per cent. during the previous year, so that the disease has been not only less prevalent, but there was also a satisfactory fall in the deathrate.

### Erysipelas.

There were 36 cases of Erysipelas reported, and one death resulted from the disease during the year, against 56 reported, and 5 deaths during the previous year.



## Measles.

The Borough was free from this disease during the first nine months of the year under notice, except perhaps a few sporadic cases, but it broke out in October, and became slightly epidemic during November, especially in Skircoat, Kingston, South, and Copley Wards, and necessitated the closure of the Infants' departments of five schools.

The disease gradually spread to other parts of the Borough, and continued epidemic well into the new year.

The disease caused five deaths, which gives a death rate of .04 per 1000, against .41 and .49 during the previous two years.

## Whooping Cough.

The Borough was free from this disease during the first three months of the year under review. A few cases cropped up in April.

It was less prevalent during May and June, but became rather more so during July, and a few cases continued to occur from time to time throughout the year, September appearing to be the month of greatest prevalence. It, however, at no time assumed a serious epidemic form.

Whooping Cough, like Measles, is a highly infectious disorder, and like that disease is chiefly fatal to children under five years of age. It caused 11 deaths and these, together with the 6 deaths which occurred during the previous year, were of children under that age. The death rate for the year was .1 per 1000, against a death rate of .05 during the previous year.

## Diarrhoea.

The year 1907 did not favour the development of those causes of death which are classified under Diarrhoea, and there was a fall in the deathrate from Diarrhoea throughout the Country generally.

Halifax is remarkable for its freedom from this disease, and there was a marked fall in the deathrate therefrom in the Borough in comparison to the previous year, there being only 14 deaths registered, against 31 during 1906. The period of greatest prevalence was during the end of September and the month of October.

The four-foot earth thermometer did not reach beyond  $54^{\circ}\text{F}$ , which it did on August 11th, and remained at that height until August 29th.

The temperature of the earth has been shown to be related to this disease, and it generally becomes very prevalent when the earth thermometer reaches  $56^{\circ}\text{F}$ .

There was a remarkable freedom from flies, owing undoubtedly to the low temperature of the summer of 1907.

I think it has come more clearly to be shown that flies play a most important part in the causation of this disease, and I quite think that the high earth temperature which has been associated with its prevalence, may act as such through the medium of the fly. An earth temperature of  $56^{\circ}$  and upwards may bring about the conditions most favourable to the development of this insect. As shown above this temperature was not reached in Halifax last year, and the low temperature experienced through the summer would retard the development of even those flies which did appear. They



would therefore make their appearance later in the summer, and this would correspond not only with a less prevalence but also with a later prevalence of Diarrhœa during the year under review.

Diarrhœa is to a great extent a preventable disease, and its seriousness, especially in connection with infantile mortality, is not sufficiently recognised. If it is to be prevented, greater cleanliness will have to be observed, and accumulations of organic matter, filth, horse manure, &c., which are the breeding places of flies, will have to be more frequently attended to and removed.

The following table serves to compare the Diarrhœa deathrate of Halifax, with the average of other towns, and with that of England and Wales.

	Deathrate per 1,000
England and Wales ... ..	0·29
76 Great Towns ... ..	0·40
141 Smaller Towns... ..	0·29
England and Wales, less the 217 Towns ...	0·18
<b>Halifax</b> ... ..	<b>0·12</b>

It will be observed that the Halifax Diarrhœa deathrate compares very favourably with the above rates.

The 14 deaths give a deathrate for the year of ·12, against a deathrate of ·28 during the previous year.

The deathrates from Diarrhœa of the other Yorkshire great towns for 1907 were as follows: Leeds, ·38; Sheffield, ·98; Bradford, ·17; Hull, ·36; Huddersfield, ·22; York, ·40; and Rotherham, ·83 per 1,000 respectively.

## Influenza.

The Borough was fairly free from this disease throughout the year, there being only 11 deaths certified to be due to this cause, against 10 during the previous year.

## Respiratory Diseases.

Bronchitis, Pneumonia, and Pleurisy are the diseases which are included under the above heading, and 281 deaths were caused thereby during the year, against 289 during the previous year.

The number of deaths from each of these diseases respectively was as follows:—Bronchitis, 152; Pneumonia, 127; and Pleurisy, 2; and the deathrate was 2·5 per 1,000, against 2·6 during the previous year.

The Respiratory deathrate for the previous 7 years were 2·6, 2·6, 2·6, 2·8, 3·1, 3·0, and 3·7 per 1,000 respectively.

There was thus a slight fall in this deathrate, which had remained at the same figure, viz:- 2·6 during the previous three years, though before that, there had been a gradual fall in this deathrate.

Children under five years of age contributed no less than 72 deaths to these causes. It seems to me that with greater care on the part of the parents, this number ought to be greatly reduced.

The following table gives the number of deaths from Respiratory diseases during each month of the year under notice, and the five previous years, also the average of those years.



Deaths from Respiratory Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
1907	27	38	25	36	21	12	13	14	8	25	33	29	281
1906	32	28	27	29	29	14	11	18	10	30	28	33	289
1905	48	26	31	24	24	16	7	8	9	29	31	33	286
1904	38	28	25	28	18	20	13	10	13	23	26	13	285
1903	39	29	30	34	29	18	16	15	14	21	24	40	309
1902	35	46	38	30	22	23	21	16	15	15	30	37	328
Average ...	36	32	29	30	24	17	13	13	11	24	28	36	...

In connection with the number of deaths of children under five years of age, the following table, which gives the average number of such deaths during the past three years, is interesting.

Average number of deaths of children under five years of age, from Respiratory Diseases in each month during the past three years.												
Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
5·3	5·3	4·6	6·0	6·0	5·6	6·3	2·0	2·0	9·6	12·0	11·0	

On comparing it with the table immediately preceding, it will be observed that while the largest number of deaths from these diseases occur during January, February, and March, after which there is a gradual fall till August is reached, and then during the last quarter of the year an increase, though not

approaching to the number of deaths which occur during the first quarter of the year. In the case of children under five years of age, the average number of deaths remain practically the same during the first seven months of the year, then there is a sudden fall during August and September, and a marked increase during October, November, and December. Thus the period of the highest Respiratory deathrate in children under five years of age, does not correspond with the period of the highest deathrate of these affections in older people.

### Phthisis.

Consumption of the lungs accounted for 120 deaths during the year, against 122, 135, and 134, during the previous three years. This gives a deathrate of 1·1, against 1·12 for 1906, which is slightly below the average of the previous seven years, though not quite so low as the deathrate for 1902, which was the lowest on record for the Borough.

There were 55 deaths registered during the year from other forms of tubercular disease, and these, added to the above, make a total of 175 deaths due to the various forms of tubercular disease. This gives a total deathrate from all tubercular diseases of 1·6 per 1,000, against 1·5 during the previous year.

Deaths from other forms of tubercular disease included in the following:—

Tubercular Meningitis	...	15
Tuberculous* Peritonitis	}	11
Tabes Mesenterica		
Other Tubercular Diseases		29



The deathrate of the Country generally has been steadily declining during the past fifty years. No doubt several causes have been in operation in the production of this result, chief among which I think are: the improved housing of the working classes, and the better sanitary conditions which now obtain; the improved social conditions and better feeding of the people; the decline of Pauperism in the Country, and I hope also a greater enlightenment among the people regarding the nature and infectious character of this dread disease.

The following table shows the decline which has taken place in the Phthisis deathrate of Halifax during the past 27 years.

	Average Deathrate from Phthisis
Ten Years - 1881-1890	2.00
Ten Years - 1891-1900	1.50
Seven Years - 1901-1907	1.20

It is estimated that there are about 360 persons in the Borough suffering from this disease, and the number of fresh cases reported during the year was 107, against 86 during the previous year, and of which 75 were males and 32 were females.

In five of the houses in which the above 107 cases occurred, there had been a previous case within a recent period, and in another, 2 previous cases.

On enquiring into the family history in connection with this disease, it was found that in four families there had been 1 previous case, in two families 2 previous cases, and in another family 4 previous cases.

In order to do what we can with a view to the prevention of the spread of this disease, leaflets are distributed, of which the following is a copy.

## COUNTY BOROUGH OF HALIFAX

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### Prevention of Consumption.

1. Consumption has been proved to be an infectious disease.

2. It is usually spread from one person to another by means of the sputum which is coughed up by a person suffering from the disease.

3. A consumptive person should therefore be most careful in dealing with his expectoration.

4. He should spit into a piece of paper or rag, and immediately burn the same, or when out, he should carry a pocket sputum flask containing some disinfectant, into which he should spit. This flask should be thoroughly cleansed and the contents burned or otherwise destroyed.

5. The clothing of a consumptive person should be washed separately from that of other persons.



6. The bowel discharges of a consumptive person should be disinfected, and soiled linen at once boiled.

7. A consumptive person should as far as possible occupy a separate room or rooms, and the windows should be opened night and day.

8. The walls, floors, and ceilings of the living and sleeping rooms of persons suffering from consumption should be cleaned and disinfected at least once every two months.

9. A mother suffering from consumption should not suckle her child.

10. All cows milk, especially that for the use of children, should be boiled before being drunk.

11. All meat should be thoroughly well cooked, and not eaten underdone.

12. The rooms, after the death of a consumptive patient, should be disinfected.

Pocket sputum flasks are supplied, free of charge, and any room or house will be disinfected free of cost, on applying to the Medical Officer of Health.

Health Department,

Town Hall,

May 30th, 1907.

Pocket spittoons are supplied free of charge, and disinfection is offered in the case of death or removal to hospital or elsewhere of persons suffering from the disease. During the year, there were 68 houses dis-

infected after death, and 4 after removal to hospital, and in 30 cases disinfection was refused.

### **Anthrax.**

2 cases of this disease were reported during the year, against 1 during the year 1906. Both cases were in families employed in the manipulation of wool.

On investigating these cases at the particular factory concerned, we found that every known precaution is taken for the prevention of this disease. Wash-basins, nail brushes, and respirators are provided for the wool sorters, duellers, and washers, and also air fans are fixed for the wool sorters. No death was registered during the year as having resulted from this disease.

### **Cancer.**

All forms of malignant disease are included under this heading, and 114 deaths were registered as due to these causes, against 102 during the previous year, giving a deathrate of 1·0 per 1,000, against ·94 for 1906.

Though the Cancer deathrate is slightly above that of the previous year, it has not varied very much during the past 16 years, as the following table will show.

YEAR	1892	1893	1894	1895	1896	1897	1898	1899
Deathrate ...	·8	·7	·8	·8	1·1	·6	·6	·7
YEAR	1900	1901	1902	1903	1904	1905	1906	1907
Deathrate ...	·7	·8	·8	1·0	·8	·9	·9	1·0



### Inquests and Uncertified Deaths.

There were 101 inquests held by the Coroner during the year, including 20 of persons non-resident in the Borough.

The 81 certified by the Coroner after inquests are equal to 5·1 of the total deaths in the Borough, and the 15 deaths which were neither certified by a medical practitioner nor the Coroner is equal to ·9 of the total deaths.

There was thus a slight increase in the number of uncertified deaths, though the percentage of these deaths had markedly fallen since the year 1901, as the following table will show.

Years	1901	1902	1903	1904	1905	1906	1907
Percentage certified by Coroner ...	2·6	2·9	3·1	2·8	3·5	4·7	5·1
Percentage uncertified ...	3·4	2·6	1·5	1·0	0·7	0·7	0·9

### Sewerage and Drainage.

The sewers generally in the main portions of the Borough are in a satisfactory condition, and are flushed from time to time as required.

The scheme for the drainage of Copley Ward has been partially completed, and that for the drainage of Northowram is still under the consideration of the Council. There are certain other portions of the Borough not yet sewered.

With regard to the sewage scheme of Warley. There are still quite a number of houses not yet connected up to the sewers.

The first portion of the filter beds which have been constructed at the outfall works, Salterhebble, have been completed, are filled with broken clinker, and are almost ready for dealing with the effluent from the septic tanks.

### **Scavenging, Disposal of Night Soil and House Refuse.**

The Health Committee is responsible for the scavenging and cleansing of all the paved roads, as well as the watering of all roads and streets.

This is a very important work, and its due performance undoubtedly has a direct bearing on the maintainence of the health of the Borough.

So far as the present methods are concerned, I believe the work has been satisfactorily carried out during the year. Now, however, that we have at our disposal such an excellent and abundant supply of water, it should, in my opinion, be used more freely in the future than has been in the past for this purpose.

The streets, and especially the back streets, courts, alleys, and back yards, should be flushed and cleansed from time to time, especially during summer weather, so as to remove filth and thoroughly cleanse the surroundings of more especially the lower class property in the town. Not only would such procedure serve that end, but would also act as an object lesson in cleanliness to many of the inhabitants who live amidst filthy surroundings.



To thoroughly cleanse the town in this way, would in my opinion add greatly to the health of the people, and the water which has cost, and is costing the town so much, would be better utilised than by allowing it to run down the stream.

Pure water, used in this way, would be of greater value than all the much vaunted disinfectants that are on the market.

The greater part of the night soil is dealt with under the goux system. There are 17,920 goux closets in the Borough, and the emptying of the goux tubs varies from three to ten days, according to circumstances. The tubs, when changed, are brought to the Depot and washed out before being returned.

A re-arrangement of the method of collecting these tubs has been effected, which will result in a more frequent renewal and cleansing of these tubs.

The increase in the number of goux tubs during the year was 97, against 162 during the previous year.

The Corporation now compel the provision of water closets in all new houses, and in all conversions, where there is a sewer and water supply sufficient for the purpose. The consequence is that the goux closets are not increasing in number at the rate which obtained two or three years ago, and there is a corresponding increase in the number of water closets.

The following table gives the number of water closets in the Borough, and shows the increase that has taken place since the year 1893,

Year	Number of W.C's. in the Borough
1893	3796
1894	3837
1895	3880
1896	3921
1897	3962
1898	4003
1899	4166
1900	4331
1901	4496
1902	4661
1903	4826
1904	4991
1905	5157
1906	5317
1907	5566

There are now 869 privy middens in the Borough, a decrease of 9 during the year, and 456 dry ashpits, against 454 a year ago, an increase of 2 for the year.

A number of these privy middens being near houses are a nuisance, especially during the process of emptying them. As soon as some of the contemplated sewers are constructed, as many as possible of these should be converted to water closets.

The removal of house refuse is also undertaken by the Health Committee, in most cases tubs being provided by the Corporation for its reception at the houses.

The average number of horses and carts used in dealing with the contents of these tubs is 14; 28 men being engaged in this work.

The refuse is removed to tips, which is not a satisfactory way of dealing therewith, as tips are a



nuisance. Some method of destroying this refuse should be substituted.

Garbage from the markets and fish refuse is removed to a field hired for the purpose, in which a trench is dug and it is there buried. A number of complaints of offensive smells arising therefrom have been made during the past year or two, the remedy for which will be some better method of destroying or otherwise dealing with this refuse.

### **Water Supply.**

The Summer of 1907 having been of a wet character, there was a plentiful supply of water throughout the year, which was of excellent quality.

The three new reservoirs at Walshaw Dean have been completed, and were opened by the Chairman of the Waterworks Committee during the year.

With the increased storage capacity secured to the town by these reservoirs, there is not likely to be any shortage of water for many years to come.

The gathering grounds from which the water supply is obtained being of a moorland character, the water is liable to contain an excessive amount of peaty acids. It has now however been satisfactorily treated for several years, and the following table shows the average acidity of the samples of Ogden and Ramsden Wood reservoirs, taken before and after treatment. The figures obtained are the result of the analyses of Mr. Dewhirst, the Borough Analyst.

Month	Average Acidity of Sample of Water			
	Ogden Reservoir		Ramsden Wood Reservoir	
	Before Treatment	After Treatment	Before Treatment	After Treatment
January ...	.85	.14	.27	.22
February ...	No estimation	.19	.40	.21
March ...	.90	.10	.35	.20
April ...	No estimation	No estimation	No estimation	.25
May ...	No estimation	No estimation	No estimation	No estimation
June ...	.90	.17	No estimation	.25
July ...	No estimation	.20	.32	.28
August ...	No estimation	No estimation	.30	.22
September ...	.65	.17	No estimation	No estimation
October ...	No estimation	No estimation	.37	.13
November ...	No estimation	No estimation	No estimation	No estimation
December ...	.95	.18	No estimation	.22

From the above table it will be observed that the treatment applied has had a much more beneficial effect on the water supplied from Ogden reservoir in reducing its acidity than that supplied from Ramsden Wood reservoir.



The water of Ogden reservoir it is true contains much more acid than that in Ramsden Wood, but still there should be no difficulty I think in neutralising the acid of the latter in the same proportion as the former. I consider that the water should be as near neutral as possible, and should err slightly on the side of alkalinity rather than acidity.

I have received no complaints of lead poisoning during the year within the Borough, nor from any of the districts outside which are supplied by Halifax water.

### **Common Lodging Houses.**

The number of Common Lodging Houses situate within the Borough is 13, the same number as was in existence during 1906, but they are registered to accommodate 803 lodgers, against 657 for the previous year.

These Lodging Houses are under the control of the Police, and I am informed by the Chief Constable that the regulations have been duly observed during the year, and that there has been no necessity for any prosecution in connection therewith.

### **Dairies, Cowsheds, and Milkshops.**

The Dairies, Cowsheds, and Milkshops were under the supervision of Meat Inspector J. T. Millington and District Inspector R. Pickard, during the year under review.

The number at present on the register is as follows :—

Cowsheds	...	...	...	500
Milkshops	...	...	...	69
Total ...				<u>569</u>

The total for the previous year was 579, being a decrease of 10.

The number of Dairy Farmers and Purveyors of Milk on the register is 387, against 418 for the previous year, a decrease of 31.

The progress made in securing the alterations and re-construction of the older cowsheds in the Borough is slow. We, however, continue to press for these improvements, and were enabled to secure the alteration and re-construction of nine cowsheds during the year, which, together with 74 previously reported on, make a total of 83 cowsheds dealt with since the present regulations came into force.

I have frequently, and year after year, both in my Annual Reports and elsewhere, called attention to the want of greater cleanliness on the part of the cow keepers in dealing with the milk they supply, and I must say that some progress in this direction has been made, but there is still great room for further improvement.

I am glad to be able to report, however, that one farmer has taken the matter in hand in earnest and has established a model dairy. He has a new cowshed, properly drained, which he keeps scrupulously clean. He regularly grooms his cows, and cleans their udders before he milks them. The milk is then taken as quickly as possible and passed through a refrigerator, and filtered,



and put up into sealed bottles or cans, in which it is delivered to the customer. His milk is produced under as clean conditions as is possible, and being delivered as above, there is no possibility of contamination during its transit. This milk, even in the heat of summer, if kept in a cool place will remain sweet for 28 or even 48 hours.

It will at once be apparent to the most casual observer, that milk produced and delivered under these conditions must be freer from dirt and contamination than that which is produced, as so much is, among filthy surroundings, and ladled out in its delivery from a dirty cart. By continually having to remove the lid and dip the measure into the stock can, not only must the measure under such conditions of necessity be constantly contaminating the milk, but the milk, being so frequently uncovered, is exposed to the dust and germs of the atmosphere.

Now that one farmer has led the way, it is hoped that more will follow in his footsteps.

If the public would only take the matter up and demand a clean milk, such would have to be the case. I cannot think that the public relish drinking milk contaminated with hairs, dirt, and cow dung. If clean milk is to be produced, the cows and their surroundings must be clean, because if dirt and cow dung once gain admission to the milk no amount of filtering can possibly remove it therefrom.

There has been a great deal of discussion in recent years upon the wholesomeness and nutritious value of sterilised and boiled milk. There is no doubt that the sterilisation of milk not only interferes with the flavour thereof, but also so alters the milk that its digestibility

and nutritious value is to some extent interfered with ; but under present conditions this question must be looked at from the standpoint of the lesser of two evils, and until the public are able to procure a clean and pure milk the only safe course is to sterilise it before use.

The Inspectors between them paid 1,175 visits to the cowsheds, and 204 visits to the various milkshops in the Borough.

In connection with the above visits, the undermentioned 108 defects were discovered and reported, and 133 were remedied.

The following table shows the number and nature of the defects reported and remedied.

Nature of Defects	Number Reported	Number Remedied
Want of Light ... ..	5	10
Do. Airspace ... ..	3	6
Do. Ventilation ... ..	8	12
Defective, Made-up, and Untrapped Drains ... ..	15	20
Defective Floors... ..	7	12
Dirty Floors and Stands ... ..	13	13
Cowsheds requiring Limewashing ... ..	28	28
Improper position of Middenstead ... ..	3	3
Pigs kept in Cowshed ... ..	8	8
Accumulations of Manure ... ..	7	7
Manure Tanks built ... ..	...	3
Cowsheds Overcrowded ... ..	4	4
Overflowing Liquid Manure Tanks ... ..	7	7
Total for 1907 ... ..	108	133
No. of Defects on books Jan. 1st, 1907	214	...
Total ... ..	322	...
No. of Defects on books Dec. 31st, 1907	189	...



It will be observed that the number remedied was in excess of that reported, and so consequently the number remaining on the books at the end of the year, was to that extent diminished.

This is the first time for a number of years that such has been the case, and as the cowsheds are being gradually brought into a better state of repair and sanitary condition, it is expected that not only will the number of new defects diminish, but those on the books will be gradually dealt with and reduced in number.

During the year, 1,060 cows were individually examined, against 893 during the previous year. Seven were found to have diseased udders. In two or three cases, which were found to be tubercular, the Veterinary Surgeon was called in, and the cases were dealt with under the milk clauses which are in force in this Borough.

Details of the above inspections are set out in the following table.

## INSPECTION OF CATTLE.

Cattle and Condition				Condition of Shed	Remarks
Date of Inspection	No. of Folio	Number Examined	Udders diseased		
1907.					
Jan. 3	248	14		2 Good Sheds	
" 3	248	12		1 Good Shed and 1 poor one	
" 3	248	5		Poor Shed	1 Cow with touch of cold
" 4	249	20		Fairly Good	
" 4	249	6		Very Clean	
" 4	249	12		Good	
" 4	249	17		Moderate	
" 9	253	13		1 Good Shed and 2 poor ones	1 Cow with slight chill after calving, but improving nicely
" 9	253	15		4 Poor Sheds	
" 9	253	9		Good	
" 9	253	17		2 Good Sheds	
" 9	253	8		Good	
" 10	254	20		Fair	1 Cow with "Foul Foot"; recovered shortly
" 10	254	5		Poor Shed	
" 10	254	17		Fair	
" 10	254	6		"	
" 24	266	12		1 Good Shed; 2 poor ones	1 Cow with slight inflammation (lungs); milk not used
" 24	266	6		Poor	
" 24	266	6		Moderate	
" 24	266	12		"	
" 25	267	13		Poor	1 Cow with "Whites"
" 25	267	4		2 Good Sheds	
" 25	267	13		Very Fair	
" 25	267	11		Moderate	
" 28	269	4			



# Inspection of Cattle—continued.

Cattle and Condition				Condition of Shed	Remarks
Date of Inspection	No. of Folio	General Conditions			
		Number Examined	Udders diseased		
Jan. 28	269	4		2 Poor Sheds	7 Pigs in one shed with one Cow; Cow removed
"	30	271	2	Moderate	
"	30	271	11	Good	Udder certified to be tubercular; Cow slaughtered Feb. 6th, 1907
"	30	271	8	Very Fair	
Feb. 5	276	2		"	
"	5	276	6	"	
"	8	279	20	Fair	1 Cow down with Eclampsia; another very thin (Liver affection); milk not used from either cow
"	9	280	1	Ill; went down after calving; slaughtered Feb. 23rd; affected with Suppurative Arthritis	
"	14	284	12	Fair	1 Fairly Good Shed; 1 poor one
"	14	284	9	"	Moderate
"	14	284	7	"	New Mistal
"	14	284	4	"	Very Fair
"	19	288	5	"	"
"	21	290	11	Good	Good
"	21	290	11	"	Very Fair
"	21	290	12	Cattle in fair condition but very dirty	Moderate
"	27	299	11	Very Fair	Fair
Mar. 1	301	11		"	"
"	8	5	9	"	Moderate

Mar. 11	7 5	Very Fair	Poor Shed; has been altered since	Udder certified to be tubercular. Owner sold cow away out of Borough same day; destination unknown
" 11	7 13	Good	Good	
" 11	7 4	Moderate	Fair	
" 11	7 16	Fair	"	
" 12	8 14	Very Fair	Moderate; rather dirty	
" 12	8 4	Very Fair	Moderate	
" 14	10 10	"	"	
" 14	10 5	"	Fairly Good	
" 14	10 7	"	"	
" 18	13 14	"	"	
" 18	13 4	"	Poor	Cow reported with Eclampsia on Feb. 8th has quite recovered, but has lost 1 hind quarter of udder
" 18	13 4	"	Moderate	
" 18	13 7	"	Good	
" 18	13 16	Good	"	
" 18	13 8	Very Fair	"	
" 18	13 3	"	Bad Shed	
" 18	13 3	"	Very Fair	
" 18	13 3	"	"	
" 20	15 18	"	Good Shed, but troubled with condensation of moisture; roof wants underdrawing	
" 22	17 12	Good	2 Poor Sheds	
" 26	20 10	Very Fair	Very Fair	1 Cow affected with Mastitis in right hind quarter of udder
" 27	21 5	"	1 Good Shed; 1 moderate	
" 27	21 11	Good	Moderate	
" 27	21 3	Moderate	"	
" 28	22 11	Very Fair	Good	
" 28	22 5	Very Fair; 4 cows are dry	Moderate	
" 28	22 8	Fair	1 Poor Shed; 1 fair	
April 3	24 8	"		
" 3	24 6	"		



## Inspection of Cattle—continued.

Date of Inspection	No. of Folio	Cattle and Condition		Condition of Shed	Remarks
		General Condition	Udders Examined		
April 3	24	Fair	4	Poor	Cow extruded uterus after calving and was slaughtered
" 3	24	Moderate	3	Very Fair	
" 4	25	Good	6	Moderate	
" 4	25	"	22	Very Fair	
" 8	28	"	11	"	1 Cow slow in cleansing after calving
" 8	28	Very Fair	17	1 Good Mistal and 1 moderate	
" 8	28	"	5	Fairly Good	
" 18	37	8 Fairly Good; 5 Moderate	13	Moderate Sheds and dirty	
" 18	37	Very Fair	9	Poor Mistal; altered since	1 Cow has Mastitis in right hind quarter of udder
" 18	37	"	9	Good	
" 18	37	"	2	Bad Shed	
" 18	37	"	3	Good; recently altered	
" 18	37	"	2	Good	3 Moderate Sheds
" 18	37	Moderate	2	Moderate	
" 25	43	Good	4	Bad Shed	
" 25	43	"	20	Very Fair	
" 25	43	Very Fair	4	"	1 Cow slow in cleansing after calving
" 25	43	"	7	Good	
" 25	43	Good	10	"	
" 25	43	"	4	"	
" 29	46	"	28	3 Moderate Sheds	Cow has Mastitis in right hind quarter of udder
" 29	46	Moderate	10	Fair	
" 29	46	Good	21	3 Moderate Sheds	
" 29	46	"	21	Moderate	
May 16	61	1 Very Fair	4	Fairly Good	
" 16	61	"	4	"	

May 16	61 10	Very Fair	Fairly Good	Offensive accumulation of manure; sent notice
" 17	61 13	Moderate	3 Moderate Sheds; very dirty	
" 24	66 2	Fair	Very Poor Shed	Milk Fever; is recovering but has quite lost her milk
" 30	71 1	Poor	Fair	One quarter of udder amputated for Mammitis; made good recovery
June 26	96 1	"	Moderate	Pus discharging from swellings on hind quarters; after-effects of injury during calving. Had it slaughtered
July 12	109 1	Emaciated	Fair	Served notice
Nov. 5	195 13	Very Dirty	Very Dirty	
" 6	196 16	Good	Good	
" 6	196 4	Fair	Poor	
" 6	196 3	"	Good	
" 6	196 3	Good	Poor	
" 6	197 13	"	Moderate	
" 11	200 16	Fair	"	
" 14	203 3	2 in good condition; 1 poor and ill	Good	Persuaded owner to have poorly cow slaughtered; badly tuberculous
" 22	210 5	Good	Poor	
" 29	216 13	Fair	Moderate	Udder certified to be tubercular; Cow was isolated and milk ordered not to be used
Dec. 5	221 29	Good	Moderate and rather overcrowded	
" 11	226 3	Fair	Fair	
" 11	226 9	Good	Moderate	
" 11	226 6	Fair	Good	
" 11	226 12	Good	Fair	
" 11	226 11	"	Good	



## Slaughterhouses.

There are nine registered private slaughterhouses in the Borough, the same number as has existed since the Borough was enlarged.

They have been under the supervision of Meat Inspector J. T. Millington, who paid 163 visits thereto during the year. They were all found to have been kept in a fairly satisfactory condition.

The Meat Inspector paid 1,131 visits to the public slaughterhouses during the year.

The number of animals slaughtered there during the year ended December 31st, 1907, being as follows.

Cattle	Calves	Pigs	Sheep	Total
6,080	4,183	6,989	16,855	34,107

There were 350 separate seizures of meat during the year, and the following table shows the number of carcasses condemned, and the total weight of the same.

	Cattle.	Calves.	Pigs.	Sheep.	Total.
Number of Animals killed	6080	4183	6989	16855	34107
Do. condemned	17	21	36	4	78
Weight of those condemned in lbs. ...	7960	1199	4391	365	13915

The following table gives the diseases and other conditions which led to the condemnation of meat during the year.

	Tuberculosis	Inflammatory Affections	Parturition	Jaundice	Septicæmia	Immaturity	Swine Fever	Uremia	Peritonitis	Worried to Death	Cadavers	Unwholesome	"Slink"	Decomposition
Cattle	9	4	1	...	1	...	...	...	...	...	1	...	...	...
Calves	...	...	...	1	5	7	...	...	1	...	...	6	1	...
Pigs	17	5	3	7	...	...	1	1	...	2	1	...	...	...
Sheep	...	2	...	...	...	...	...	...	...	...	2	...	...	...
Rabbits	...	...	...	...	...	...	...	...	...	...	...	...	...	55
Totals	26	11	4	8	6	7	1	1	1	2	4	6	1	55

Besides the above, the following were also destroyed, there being 85 seizures of fish and fruit.

	lbs.
Fish ...	15,555
Fruit ...	1,344
Offals ...	5,974
Other Foods ...	3,816

The total amount of meat destroyed on account of tuberculosis was rather greater than the previous year, and this condition, as heretofore, was the chief cause of the seizure and destruction of meat, as the following table will show.

	lbs.
Total amount destroyed ...	22,351
Total amount of Meat destroyed	
on account of Tuberculosis ...	8,511
Total amount of Offals destroyed	
on account of Tuberculosis ...	4,173
Total amount destroyed on account	—
of Tuberculosis ...	12,684
Total amount destroyed from other causes...	<u>9,667</u>



The greater part of the meat, fish, &c., destroyed as shown above, was so destroyed with the consent of the owner, and in only five cases was a Magistrate's order obtained.

No prosecutions were instituted during the year in connection with the seizure of meat. There were two prosecutions and convictions however, in the case of the seizure of fish.

The following table shows the number of animals slaughtered in the public slaughterhouse during the past nine years.

Year ended	Cattle	Calves	Sheep	Pigs	Total.
June 30th, 1899	5333	4208	20270	7019	36830
„ 1900	5530	4395	17245	7896	35066
„ 1901	4859	4089	16479	6924	32351
„ 1902	5312	5018	17802	5702	33834
„ 1903	4991	4422	17776	6599	33788
„ 1904	4290	3916	16788	6678	31672
„ 1905	4601	3558	17126	6696	31981
„ 1906	4191	3942	16785	6129	31047
Dec. 31st, 1907	6080	4183	16855	6989	34107

### **Factories and Workshops.**

Owing to the changes that have taken place in the staff during the year, and the regrettable illness and absence of Inspector Archbell, it was not possible to give the usual attention to the administration of the Factory and Workshops Act, 1901.

Notwithstanding that fact, some good work has been done during the year, in the way of improving the sanitary accommodation of several factories and workshops, by substituting more efficient and up-to-date water closets, for insanitary conveniences and tub closets, and also by securing sufficient sanitary conveniences, in several instances, where this accommodation was previously insufficient.

These improvements have been obtained without the necessity of resorting to legal proceedings.

The register of workshops has been kept up-to-date, and all new workshops discovered by the Inspectors were reported to the Factory Inspector.

The workshops have been supervised as well as possible, under the conditions which existed, and on the whole there was not much fault to find at the manner in which they were kept.

With regard to cleanliness, as usual, the largest number of complaints reported had reference to lime-washing. Occupiers do not seem to always give this matter the prompt attention required by the Act.

With regard to air-space, two complaints of overcrowding, and five cases of defective ventilation were reported, all of which were remedied.

The following table gives the number of visits that were made to Factories and Workshops, and to shops under the Shop Hours Act, by the District Sanitary Inspectors.



District	Number of Visits made to Factories	Number of Visits made to Workshops	Number of Visits made under Shop Hours Act
A *	11	95	111
B †	61	289	305
C	24	352	422
D	28	150	23
Total	124	886	861

\* 3 months.      † To November.

The tables which follow indicate the amount of work which was done during the year in connection with factories and workshops, as in them is set out in detail, the sanitary defects which were discovered and dealt with.

For the purpose of this work, and sanitary inspection generally, the town is divided into four districts, each of which is under the supervision of a Sanitary Inspector, and the following tables indicate the work done in the respective districts.

The District Inspectors in carrying out this work made a total of 1,010 visits to the factories and workshops, and 13 visits were paid during the year by myself, for the purposes of inspection, and for the giving of advice in special cases.

## DISTRICT A.

INSPECTOR JAMES ARCHBELL.

Number of Workshops on Register, 203.

Nature of Defects	Number Registered
IN FACTORIES.	
Limewashing required ... ..	2
Insufficient closet accommodation ... ..	2
Closet to limewash ... ..	1
IN WORKSHOPS.	
Abstract not provided ... ..	17
Limewashing required ... ..	12
Defective soil pipe ... ..	1
Insufficient closet accommodation ... ..	1
Want of ventilation ... ..	1
Defective water closet ... ..	1
Total ... ..	38

NOTE.—In consequence of the illness of Inspector Archbell, the above table represents only three months' work in the above district.



## DISTRICT B.

INSPECTOR JOHN WOOD.

Number of Workshops on Register, 317.

Nature of Defects				Number Registered
IN FACTORIES.				
Insufficient flush to water closets	...	...		1
Want of light to water closets	...	...		8
Want of urinal accommodation	...	...		2
Defective closets and drainage	...	...		3
Want of doors to closets	...	...	...	3
Insanitary closets	...	...	...	2
Doors of closets not labelled	...	...	...	2
IN WORKSHOPS.				
Rooms requiring limewashing	...	...		15
Insufficient privy accommodation	...	...		7
Defective troughing	...	...	...	2
Defective Urinals	...	...	...	3
Bad smells	...	...	...	3
Dilapidated closets	...	...	...	3
Defective water closets	...	...	...	4
Dirty floors, staircases, and closets	...	...		4
Overcrowded workrooms	...	...	...	2
Total				64

## DISTRICT C.

INSPECTOR JAMES EDWARD FIRTH.

Number of Workshops on Register, 176.

Nature of Defects	Number Registered
IN FACTORIES.	
Made-up water closets ... ..	19
Made-up and defective drains ... ..	4
Defective fall pipe drain ... ..	1
Stonewalled drain ... ..	1
Privies to convert to water closets ... ..	4
IN WORKSHOPS	
Insufficient closet accommodation ... ..	1
Offensive fumes from gas fires ... ..	2
Dirty floors ... ..	2
Insufficient ventilation ... ..	4
Untrapped lavatory waste ... ..	1
Workrooms requiring limewashing ... ..	12
Closets not screened for females ... ..	1
Dirty closets ... ..	1
Made-up drain ... ..	1
Total ... ..	54



## DISTRICT D.

INSPECTOR ROBERT PICKARD.

Number of Workshops on Register, 80.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive urinal ... ..	1
Offensive accumulations ... ..	2
Insufficient closet accommodation ... ..	1
Made-up drains ... ..	2
Offensive closets ... ..	13
IN WORKSHOPS.	
Made-up sink pipe ... ..	1
Workrooms requiring limewashing ... ..	6
Defective drain ... ..	1
Insufficient closet accommodation ... ..	1
Dirty floor ... ..	1
Made-up Drain ... ..	1
Total ... ..	30

In consequence of the changes in the staff, and other reasons referred to in a previous paragraph, there was a falling off in the number of nuisances and

sanitary defects dealt with during the year, the number shown in the foregoing tables being 186, against 366 for the previous year.

Of these 186 nuisances and defects, 163 were remedied, and 23 remained unabated at the end of the year.

The Factory Inspector reported a number of sanitary defects in connection with factories, workshops, and bakehouses, under Section 5 of the Factory and Workshops Act. Attention was given to these matters, and a formal notice of abatement sent to the Factory Inspector, upon completion of the work, which included the following.

Factories	...	8
Workshops	...	8
Laundry	...	1
Bakehouses	...	4

In connection with Section 107 of the Factory and Workshops Act, occupiers were more punctual in sending in their lists of outworkers than previously, and a larger number of lists came to hand than was the case during the previous year, though the number of out-workers reported was actually less than during the year 1906.

This requirement not having appeared to be well understood by many of the occupiers of factories and workshops, the District Sanitary Inspectors were instructed to call their attention to the above section, with the result as shown above.

In all 17 lists were sent in, and the number of out-workers notified was as follows.



	Tailors.	Shoe-makers.	Seam-stresses.	Total.
No. of Outworkers ...	31	3	3	37

A large majority of the above out-workers are themselves occupiers of workshops and were visited in that capacity. The remainder, who work in their own houses, were also visited, and no cases of infectious disease were discovered in connection therewith, and the premises were otherwise satisfactory.

All the out-workers reported during the year resided in the Borough.

The following is a detailed list of all the workshops on the register in the Borough.

Boot, Shoe, and Clog Makers ...	151	Fibrous Plaster Works	3
Dress & Mantle Makers	97	Joiners and Cabinet Makers ...	59
Saddlers ...	12	Brush Makers ...	11
Milliners ...	60	Provision Merchants...	4
Cotton Doubler ...	1	Rag Sorters ...	6
Coopers ...	2	French Polishers ...	13
Bakehouses...	168	Tailors ...	60
Flock Merchant ...	1	Marine Store Dealers	3
Silversmiths ...	4	Blacksmiths ...	22
Whitesmiths ...	5	Upholsterers ...	12
Coach Builders ...	2	Umbrella Makers ...	1
Rope Makers ...	1	Box Makers...	1
Wood Carvers ...	4	Surgical Inst'm't M'ker	1
Wool Sorters ...	1	Fruit Boilers ...	1
Cork Cutters ...	2	Paper Maker ...	1
Gun Makers ...	2	Hosiers and Knitters	20
Carpet Repairers ...	4	Wheelwrights ...	11
Picture Frame Makers	5	Painters ...	12
Wire Worker ...	1	Plumbers ...	26
Basket Makers ...	5	Printers ...	10
Tinners ...	16	Sweet Boilers ...	3
Locksmiths...	1	Tripe Dealer ...	2
Cutlers ...	1	Clog Sole Makers ...	3
Underclothing Makers	12	Belt and Brace Makers	2
Blind Makers ...	3	Sewing Machine Maker	1
Electrical Engineers	2	Shirt Maker ...	1
Piano Makers ...	6	Watch Makers ...	11
Soap Maker ...	1	Old Clothes Dealers...	2
Drysalter ...	4	Pattern Makers ...	2
Boot Upper Maker ...	2	Leather Cutters ...	2
Cycle Works ...	2	Sugar Packer ...	1
Tea Packers ...	5	Designers ...	4
Brass Works ...	2	Metal Engraver ...	1
Laundries ...	11	Beer Bottling ...	1
Hair Pad Makers ...	3	Hair Dressers ...	7
Machine Makers ...	3	Metal Polish Maker ...	1
Machine Broker ...	2	Herbal Brewery ...	1
Marble Masons ...	2	Carpet Beater ...	1
Shoeing Smiths ...	7	Chair Maker ...	1
Firewood Cutters ...	2	Photographers ...	3
Paper Bag Maker ...	2		

Total number of Workshops, 944.



## Bakehouses.

The number of bakehouses on the register was 168, against 167 for the previous year, and of these, the number underground remains the same, viz., 26.

The number of visits paid to the bakehouses during the year was 375, as the following table will show.

Description of Premises	Number on Register	Number of visits made
Wheat bread and muffin bakers, including confectioners ...	140	375
Oat bread and muffin bakers ...	28	

The condition of the bakehouses in the Borough is now very much better than was the case a few years ago. Several of those which were in an insanitary condition, and also several of those that were underground, have been replaced by new buildings, or by the conversion of more suitable premises into bakehouses.

The largest number of complaints made during the year, as usual, had reference to limewashing, and the number of complaints under this heading was almost double during the year under review, than for the previous year.

In two cases there was an insufficiency in sanitary conveniences; in three cases dirty floors were complained of, and in two cases dirty utensils.

The number of defects reported during the year was 33, and 6 were brought forward from the previous year, making a total of 39, of which 36 were remedied, and three remained unabated at the end of the year,

The following table shows the number and character of the defects reported, with the number remedied.

Nature of Defects.				Number Reported.	Number Remedied.
Brought forward from last year	...			6	
Bakehouses requiring limewashing	...			22	22
Insufficient closet accommodation	...			2	2
Damp walls	...	...	...	1	4
Accumulation of rubbish	...	...	...	1	1
Dirty floors	...	...	...	3	3
Made-up drain	...	...	...	1	1
Dirty utensils	...	...	...	2	2
Defective sink pipe...	...	...	...	1	1
Total	...	...	...	39	36

### Ice Cream Makers and Vendors.

The manufacture of this article is now chiefly carried out by Confectioners, and is carried out under more cleanly conditions than was the case when it was in the hands of the itinerant dealer.

### Public Health Laboratory.

I have again to report an increase in the amount of work done in the Public Health Laboratory during the year. 95 specimens were examined, against 82 during the previous year.

The following table gives details of the work done.

DISEASE.		Number of Specimens.	Results of Examination.	
			Positive.	Negative.
Diphtheria (Swabs)	...	44	15	29
Do. (Membrane)	...	1	1	0
Tuberculosis (Sputum)	...	27	11	16
Do (Milk from Udder of cow)	...	11	9	2
Typhoid (Widals)	...	1	0	1
Anthrax (Cows Spleen)	...	1	0	1
Total	...	85	36	49



Besides the above, ten specimens of meat, fish, &c., were examined in connection with the inspection of food.

In connection with the examination for Diphtheria, a much larger proportion of swabs were found to give positive results, in comparison to the previous year. The same was also true with regard to sputum in the case of consumption.

### **Midwives Act.**

The administration of the Midwives Act devolves upon the Health Committee, and in the absence of a Lady Visitor it was found impossible during the year to thoroughly supervise the work of the Midwives.

The time that I was able to devote to this work being limited, I found it difficult to catch them at home when my visits were made, and was thus only able during the year to examine the registers, &c., of eleven midwives. Now, however, that the appointment of a properly qualified lady has been made, this work will be more efficiently carried out than has been the case since this Act came into force.

There are 34 Midwives in the Borough, and it is incumbent upon them to have their names entered in the local register at the beginning of each year, but only 31 sought such registration, consequently there were three who failed to carry out the law in this respect.

One Midwife died, one left the country during the year, and there was one new registration, which gives a nett reduction of one midwife within the Borough.

The following is a list of the Midwives who were registered at the Health Office during 1907.

Name.	Address.
Buckley Mary Ann...	8, Wainhouse Terrace
Firth Margaret ...	7, Concrete Street, Lee Mount
Crowther Hannah Elizabeth...	39, Hammond Street
Ogden Emma ...	6, Ingram Street
Firth S. A. ...	5, Prince Street
Crabtree Isabella ...	31, Bright Street
Connew Sarah ...	23, Clay Street, Hanson Lane
Marsland Emma ...	16, Cherry Street
Shelley Emelina ...	67, New Bank
Fielden Louisa ...	33, Commercial Road
Haslem Sarah Ann...	59, Bath Place, Woodside
Halstead Frances Ellen ...	3, Aspinall Street East
Aaron Hannah ...	7, Lane Ends, Wheatley
Haigh Matilda ...	142, Southowram Bank
Sutcliffe Ellen ...	8, Brickfields, Holmfield
Lake Lucy ...	14, Kell Lane, Shibden
Wade Hannah ...	21, Clog Yard
Edwards Sarah ...	47, St. Stephen St., Copley
Jowett Sarah Alice...	27, New Bank
Milner Mary Hannah ...	18, Malt Shovel Yard
Crossley Hannah Holroyd ...	25, Fairview Terrace
Smith Clara ...	34, Beech Hill Terrace
Smith Emma ...	21, Causeway Foot
Wood Mary Elizabeth ...	10, Fern Street, Boothtown
Robinson Mary Ann ...	14, Ashbourne Grove
Birrell Agnes ...	24, Gladstone Road
Horsfall Frances Ann ...	8, Dunkirk Street
Greenwood Mary Louisa ...	13, Kingston Street
Turner Elizabeth ...	7, High Road Well Square
Wilkinson Ann ...	18, Elephant Terrace
McRae Elizabeth ...	30, Boothtown Road



## **Disinfection.**

Owing to the fact that infectious disease was much less prevalent in the Borough during the year under review, the amount of work done under this heading was considerably less than had been the case during the previous year.

The steam disinfecting apparatus is situated at the fever hospital, Stoney Royd, and there were 4,935 different articles of bedding, clothing, &c., disinfected therein.

The number of rooms in private houses fumigated with sulphur or formalin, and disinfected, was 327, against 844 during the previous year, and in connection with the elementary day schools, it was only necessary to disinfect three rooms, in the case of Holy Trinity, Infants' Department, in November last, against 152 rooms, in 19 elementary schools during the previous year.

There were also a number of books from the public and school libraries disinfected in a special apparatus which is provided for the purpose.

There was also a considerably less quantity of disinfecting fluid given out during the year. This is supplied free of charge on application to the Health Office.

## **Schools and Infectious Disease.**

In consequence of the fact that the Borough was much freer from the prevalence of infectious disease during the year under review, there was considerably less interference with the work of the Elementary Day Schools from this cause.

It was found necessary to close only one school for a short period, and the infants' department of four others. This closure was rendered necessary by an outbreak of Measles during the last quarter of the year.

The following table indicates the schools that were affected, and their period of closure.

Disease.	Name of School.	Date of Closure.	Period of Closure.
Measles ...	Haugh Shaw (Infants)	Nov. 18	3 weeks
„ ...	Warley Road „ ...	„ 18	3 „
„ ...	Parkinson Lane „ ...	„ 18	3 „
„ ...	Holy Trinity „ ...	„ 25	4 „
„ ...	Copley ...	Dec. 16	1 week

It is an undoubted fact that the day schools offer facilities for the spread of infectious diseases, and its influence in this direction during 1907, appears to have been more marked in connection with Diphtheria, than was the case during the previous year, for out of 118 cases reported, 58 were of school age, or about one half the number notified. During the previous year less than one-third of the cases of this disease were of school age.

In the case of Scarlet Fever, out of 89 cases reported, 41 were children of school age, which is also about 50 per cent., and in this respect corresponds with previous years.



The following table gives a list of the schools affected with Scarlet Fever and Diphtheria, and shows the number of cases reported in connection with each school.

Name of School.	Scarlet Fever.	Diphtheria.	Total.
Parish Church ...	...	1	1
Boothtown ...	3	3	6
Haugh Shaw ...	4	2	6
Bradshaw ...	4	1	5
Sunnyside ...	2	2	4
St. Marie's ...	...	6	6
Moorside ...	3	10	13
Holy Trinity ...	...	6	6
Salterhebble ...	...	1	1
Battinson Road ...	...	2	2
St. Joseph's ...	...	1	1
Ackroyd Place ...	2	3	5
Parkinson Lane ...	1	...	1
Lee Mount ...	4	2	6
Copley ...	3	1	4
Portland Road ...	...	3	3
Luddenden ...	...	2	2
Parkinson Lane ...	5	...	5
Queen's Road ...	1	2	3
Warley Road ...	1	1	2
Pellon Lane ...	1	3	4
Caddy Field ...	2	...	2
Christ Church, Pellon ...	...	4	4
St. Augustine's ...	2	1	3
Wainstalls ...	1	1	2
Heath Grammar School ...	1	...	1
Salterlee ...	1	...	1
Total ...	41	58	99

The Officials of the Education Department have as usual kept in touch with this department, and regularly given us information of children they suspected to be suffering from some form of infectious disease. These cases are all visited, and in this way we sometimes discover cases which otherwise would escape detection.

We shall no doubt be able to obtain even more reliable and extensive information from this source, when section 13 of the Education (Administrative Provisions) Act of 1907 comes into full operation.

### **Offensive Trades.**

The offensive trades under section 112 of the Public Health Act, established in the Borough, are shown in the following table.

Bone Boilers	...	2
Blood Boiler	...	1
Soap Boiler	...	1
Tripe Boilers	...	9

All the premises in which the above trades are carried on have been regularly visited and kept under supervision, and we found no cause for complaint during the year, as to the manner in which the owners of these premises conducted their business, except in one case, that of one of the bone boilers.

In this case complaints were made by the occupiers of certain houses situated some distance below the premises concerned. These complaints were to the effect that offensive smells arose from the sewers and



drains in the neighbourhood, which received the drainage from the premises referred to above.

This nuisance was remedied by the construction of a new drain from the works affected, and the owner ceased to turn into the sewer certain offensive material, and dealt with it in another way. There appears now to be no cause for complaint.

### **Miscellaneous Matters.**

Besides the regular daily visits paid by me to the Borough Hospital and the Goux Depot, and from time to time during the year to the Smallpox Hospital, and many others for various purposes, I made 19 visits in various parts of the Borough, in connection with suspicious cases of infectious disease.

I made 16 special visits to inspect nuisances that were reported, for the purpose of giving advice thereon. They were remedied in due course.

I visited five houses which were found to be overcrowded, and this overcrowding was subsequently abated.

In nine special visits to Northowram, I made a thorough inspection of that ward, and made a report to the Health Committee, at their request, on the condition of the drainage of that portion of the Borough.

An application was received during the year for the establishment of a Knackers Yard at Higher Sunderland. I visited and inspected the premises concerned, and the Health Committee granted permission for their use as such.

I paid several visits to certain furnished rooms, which were found to be in a dilapidated and filthy condition. The Committee instructed proceedings to be taken before the Magistrates in connection therewith, and a Magistrates Order was obtained for their closure until they were made fit for habitation.

The Notification of Births Act has been adopted in the Borough, and its adoption in the first instance met with some opposition from the medical profession. It was pointed out however that the responsibility of notification rested upon the parent, and that if the medical man informed his patients of their legal obligation thereunder, he thereby relieved himself of any responsibility under the Act.

Formal Notices, intimating the adoption of the Act were sent to every member of the Medical Profession, and all Midwives practising in the Borough, and books of notification forms were sent to all Midwives.

The Act is working very satisfactorily under these conditions, and quite 95% of the births are now being reported to the Medical Officer of Health.

The adoption of this Act has necessitated the employment of a Lady Health Visitor, and Miss Watson Wayne has been appointed in that capacity.

In order to assist her in carrying out the work, a voluntary Public Health Union has been formed, under the following constitution and Rules.



# CONSTITUTION AND RULES

## OF THE

### Halifax Public Health Union.

No. 1.—The name of the organisation shall be "HALIFAX PUBLIC HEALTH UNION."

No. 2.—The membership shall be open to those who are suitable and are willing to work in sympathy with the aims and objects of the Union.

No. 3.—The aims of the Union shall be:—

- (1) To further the scheme adopted by the Corporation of Halifax to prevent infantile mortality, and to ameliorate the conditions of infant life and health, by the formation in districts of the Borough, of committees of ladies, who, by personal visitation at the homes, will endeavour to induce Mothers to nourish their infants in the manner nature intended, or where for any reason this is impossible, assist in spreading a knowledge of the best methods of artificial feeding, and generally give advice, on the care and nurture of children.
- (2) To co-operate with, and assist, the Educational and Health Authorities of the town, in all matters relating to public health.
- (3) To awaken the interest of the people in questions affecting the health of the community; to promote attention to the laws of health, including if possible, the special requirements of consumptive cases.
- (4) To report to the Citizens' Guild of Help, such cases as seem to call for financial or other help.

No. 4.—The control of the Public Health Union shall be vested in an Executive Committee consisting of the Chairman of the Health Committee, the Medical Officer and Lady Health Visitor, and the Lady Superintendents, *ex-officio*, and seven members who shall be elected at the Annual Meeting of the Union, subject to the approval of the Health Committee. The Committee shall choose its own Chairman and as many Secretaries as may be required. Casual vacancies shall be filled by the Committee as they arise.

No. 5.—The Executive Committee shall meet at such times as may be necessary, and five members shall form a quorum.

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**SUGGESTIONS AS TO THE  
WORK OF THE LADY SUPERINTENDENTS  
AND LADY HELPERS**

**OF THE HALIFAX PUBLIC HEALTH UNION.**

For the purpose of carrying out Rule 3 (1), the Borough, excluding Illingworth, Warley, Copley, and Northowram Wards, has, for the present, been divided into five districts, viz. :—

- 1.—Ovenden, Pellon, and Kingston Wards.
- 2.—Akroydon and North Wards.
- 3.—Central and West Wards.
- 4.—South and East Wards.
- 5.—Skircoat and Southowram Wards.

To each of these districts, a Lady Superintendent has been appointed, who will nominate for the approval of the Executive Committee as many Lady Helpers as may be necessary, thus forming the District Committees.

The plan of working is simple. There is one official Lady Health Visitor appointed by the Corporation, and she will be the source from which the Lady Superintendents



will receive their information. All the notifications of birth will in the first instance go to the Health Office and come into the hands of the official Lady Health Visitor. She will in each case pay a first visit to the home where the birth is notified, and leave a card of direction and advice. It will, however, be impossible for her to pay repeat visits, and here will come in the co-operation of the Public Health Union and the Lady Superintendents and Helpers. To bring this into operation it is proposed that the official Visitor shall, week by week, sort out the notifications and divide them according to the Districts arranged by the Public Health Union Committee.

She will then send to the Superintendent of each of the Districts a list of all the notifications in her District. The Lady Superintendent on receiving her list will allocate to her Lady Helpers the babies whom she may know or consider to come best under the care of one particular Helper. Then it will be the care of the Helper to visit the babies allotted to her. Every Lady Helper will be expected to report her first visit promptly, and other visits from time to time as may be required to her Lady Superintendent. The Lady Superintendent will forward these Reports as received to the Lady Health Visitor. Some infants will be so well placed and cared for, that a very occasional visit just to enquire "How is baby" will be ample. In other cases mothers, whose training has left them ignorant, not only of how to discharge their duties, but even of what maternal duties really are, will need more help and sympathy than the former, and only regular visitation can produce the best effect. Again, ignorance of long standing (perhaps unconscious of itself) in some rare cases will have bred inveterate carelessness. In such cases, if help and sympathy fail, recourse must be had to other agencies than the Public Health Union, and a reference should be made by the Lady Helper to her Lady Superintendent who will report forward to the proper authority. In fact, in every case where the baby fails to thrive, and is not under the care of a private medical man, the aid of the Public Health Department should be invoked promptly.

The Committee of the Public Health Union is constituted as follows.

Counc. T. S. Dodd, Chairman, Health Committee	
Dr. J. T. Neech ... Medical Officer of Health	
Miss Watson Wayne ... Lady Health Visitor	
Mrs. E. N. Whitley ... Lady Superintendents	
„ C. Smithson ... „ „	
„ Haddon ... „ „	
„ E. H. Hill ... „ „	
Miss Thompson ... „ „	
Miss Wright	Mrs. Fred Lee
Mrs. Whitley Thomson	Mr. Tillotson
Mrs. Joseph Collinson	Mr. A. W. Whitley
Mrs. Ward	

The following Ladies have undertaken to act as Superintendents.

DISTRICT.	Name of Lady Superintendent.
Ovenden, Pellon & Kingston Wards ... ..	Mrs. E. N. Whitley
Akroydon and North Wards...	„ C. Smithson
Central and West Wards ...	„ Haddon
South and East Wards ...	„ E. H. Hill
Skircoat & Southowram Wards	Miss Thompson

The Ladies of the Committee have decided to meet monthly, to transact the business of the Association.



## Meteorological Observations.

The meteorological station is situated at Belle Vue, which is 625 feet above sea level, and is under the charge of Mr. Green, Chief Librarian of the Public Library.

In November last, Dr. H. R. Mill, President of the Royal Meteorological Society, in making a tour of the Provinces, for the purpose of inspecting the efficiency or otherwise, of the instruments employed in determining climatic conditions, visited our station at Belle Vue. He expressed general satisfaction with the manner in which the observations are conducted, and found all the instruments quite efficient, with the exception of the Rain Gauge, which he recommended should be replaced with a new one. This has since been done.

I may mention that in connection with our station, we have no Sunshine Recorder, nor have we an Anemometer, for registering the velocity of the wind.

The general summary of the observations taken during the year, is given on the next page.

The summer was a wet and cold one, rain fell on a larger number of days, and the amount of rainfall was the largest since the year 1903.

# General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1907, to December 31st, 1907.

By E. GREEN, LIBRARIAN.

LATITUDE OF STATION = 53° 43' N.

LONGITUDE = 1° 52' W.

HEIGHT ABOVE SEA LEVEL = 625 FEET.

1907.	Pressure of Atmosphere in Month.		Temperature of Month.							Mean Temperature.		Vapour.			Mean degree of Humidity.	Mean Weight of a cubic foot of Air.	Mean Readings of Thermometer.			Wind at 10 a.m. and 4 p.m.										Rain.		REMARKS.
	Month.	Mean for 24 h. at Sea Level.	Range.	Highest.	Lowest.	Range.	Mean.			Air.	Dew Point.	Electric Force.	In a cubic foot of Air.				Maximum on Rays of Sun.	Minimum on Grass.	Estimated Strength.	Relative proportion of												
							Of all Highest.	Of all Lowest.	Daily Range.				Mass.	Short of Saturation.						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.				
in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
January	30.353	1.918	48.5	18.5	30.0	42.1	33.0	9.1	38.2	32.0	0.180	2.1	0.7	77	551.0	53.5	29.6	4.0	4	2	0	4	1	6	18	15	1	5.8	17	1.55	The observations have been reduced to mean values by Glaisher's Barometrical & Diurnal Range Tables, and the Hygrometrical results have been deduced from the seventh edition of Hygrometrical Tables, after corrections for index errors of the Instruments employed.	
February	29.959	1.706	60.7	20.2	40.5	42.3	31.1	11.2	36.1	33.5	0.193	2.2	0.2	93	549.1	62.6	26.9	2.8	2	2	3	1	2	14	4	14	4	5.5	13	2.31		
March	30.080	1.022	65.3	25.8	39.5	48.8	34.1	14.7	41.7	36.0	0.213	2.4	0.7	80	544.2	82.5	29.0	2.9	1	3	1	3	2	5	11	13	13	5.3	16	2.86		
April	29.861	1.008	63.2	29.7	33.5	49.9	33.2	16.7	41.5	38.1	0.230	2.7	0.4	89	539.2	81.0	32.6	2.2	4	14	1	4	2	7	1	8	9	7.0	18	2.33		
May	29.907	1.087	73.2	34.4	38.8	51.7	40.5	11.2	47.0	45.8	0.297	3.4	0.4	89	533.0	89.5	37.0	2.4	0	14	2	4	6	3	1	6	13	7.5	18	3.09		
June	29.844	0.616	71.7	40.0	31.7	56.5	44.5	12.0	50.3	46.7	0.319	3.6	0.5	88	529.1	92.7	41.4	3.4	0	1	0	3	3	13	16	7	3	8.2	24	4.73		
July	30.016	0.982	69.8	38.8	31.0	58.7	46.9	11.8	53.4	47.7	0.329	3.7	1.0	79	530.0	97.9	42.7	2.1	1	11	2	0	5	6	9	5	7	6.0	16	2.0		
August	30.009	0.688	67.4	42.0	25.4	59.7	48.4	11.3	54.5	48.2	0.339	3.8	1.1	78	527.1	100.1	45.7	3.0	0	0	0	0	9	29	10	5	5.7	15	2.83			
September	30.087	1.086	70.8	33.1	37.7	62.6	45.6	17.0	54.2	49.2	0.349	4.0	0.8	82	530.6	94.7	39.9	1.3	2	2	1	6	0	8	8	6	18	5.2	6	0.61		
October	29.597	0.912	68.4	32.5	35.9	52.9	42.2	10.7	47.6	45.0	0.291	3.3	0.5	89	529.0	74.7	36.7	1.8	1	9	7	9	3	8	0	4	12	6.6	22	4.92		
November	29.953	1.474	54.0	27.8	26.2	46.7	37.9	8.8	42.4	39.8	0.241	2.8	0.3	91	541.2	58.3	32.9	1.0	5	5	0	3	1	2	6	5	24	6.6	19	3.03		
December	29.724	1.490	51.9	29.4	22.5	42.5	35.4	7.1	39.1	36.3	0.215	2.5	0.3	90	540.6	47.7	31.8	1.7	1	3	12	7	1	10	5	1	12	7.5	24	4.34		
Annual Means	29.949	1.166	63.7	31.0	32.7	51.2	39.4	11.8	45.5	41.5	0.266	3.0	0.6	85	537.0	77.9	35.5	2.4	2	6	2	4	2	8	9	8	10	6.4	...	...		

NOTE.—The Annual Means give the Averages for Twelve Months.

The Mean Readings of the Earth Thermometer, four feet below the surface, were as follows:—January, 40°; February, 40°; March, 40°; April, 43°; May, 46°; June, 49°; July, 51°; August, 54°; September, 53°; October, 51°; November, 48°; December, 42°.

Highest Readings of the Earth Thermometer (54°) were from August 11th to August 29th.

Lowest „ „ „ (39°) „ „ February 12th to February 20th, and from February 28th to March 1st.

Rain fell on 208 days, and the amount collected was 34 inches.





The following table gives the rainfall for the past 14 years.

Year.	No. of Days Rain Fell.	Amount of Rainfall.
		inches.
1894	158	30.31
1895	149	33.78
1896	172	32.02
1897	187	29.72
1898	182	29.49
1899	153	35.33
1900	205	39.68
1901	179	29.41
1902	191	28.03
1903	219	44.25
1904	191	29.32
1905	187	25.94
1906	207	33.84
1907	208	34.00

The Halifax Corporation Waterworks Committee has ten stations for measuring rainfall distributed over the area of the gathering grounds, and the following table shows the amount collected in each case.



## HEIGHTS ABOVE SEA LEVEL IN FEET.

	1380	1350	1325	1375	1050	1060	990	815	795	568
1907.	Walshaw Dean.	Midgley Moor.	Warley Moor.	Ovenden Moor.	Widdop.	Castle Carr Lodge.	Ogden.	Ramsden Wood.	Albert.	Gibbet.
January ...	ins. 1·58	ins. 2·04	ins. 2·08	ins. 2·18	ins. 1·92	ins. 2·01	ins. 1·80	ins. 1·80	ins. 1·41	ins. 1·67
February	1·77	2·48	2·76	2·97	2·05	2·83	2·41	2·66	2·39	2·71
March ...	3·28	4·08	3·94	4·22	3·28	4·29	3·57	3·65	3·07	3·10
April ...	2·65	3·03	3·11	3·24	3·39	3·48	2·94	2·59	2·27	2·57
May ...	3·43	3·43	3·71	3·61	3·74	3·58	3·62	3·41	3·40	3·46
June ...	5·95	6·27	6·25	6·51	6·98	5·51	5·94	5·12	4·81	4·44
July ...	3·16	2·82	2·93	3·09	2·95	2·96	2·92	2·73	2·52	2·23
August ...	3·69	3·71	3·62	3·87	4·10	3·22	3·19	2·72	2·51	2·49
September	·67	·93	·86	1·07	·80	·93	1·05	·63	·64	·53
October ...	5·83	5·95	6·51	6·39	7·05	6·88	6·06	5·51	5·32	5·58
November	2·69	3·01	3·00	2·86	2·57	3·31	2·88	2·28	2·65	2·69
December	4·41	4·84	4·72	4·94	3·76	4·71	4·32	3·35	3·34	3·41
Totals ...	39·11	42·59	43·49	44·95	42·59	43·71	40·70	36·45	34·33	34·88

The average rainfall over all the gauges, 1907 ... 40·28

Do. do. 1906 ... 43·19

Difference ... 2·91

From the above table it will be observed that the amount of rainfall on the collecting grounds of the Waterworks was less than that of the previous year, yet at each station the rainfall was greater than in the Borough itself, showing in several cases a fall of 10" above that of the latter.

### Sale of Food and Drugs Acts.

There were 206 samples of food and drugs analysed during the year 1907.

The following table, which is worth studying, gives the number analysed, &c., per 1,000 of the population in some recent years.

YEAR	Number of Samples Analysed	Percentage Adulterated	Estimated Population of the Borough	Number of Samples Analysed per 1,000 of the Population
1896	218	3·2	94·764	2·30
1898	211	3·3	96·729	2·18
1900	210	4·7	101·187	2·07
1902	217	8·7	105·978	2·04
1904	209	9·1	107·000	1·95
1906	230	10·4	108·000	2·13
1907	206	4·8	108·500	1·89

The proportion throughout the country in 1905 was 2·65 per 1,000; therefore, 80 more samples would have to be taken to bring the administration of the Acts in Halifax up to the average, though still below most of the towns.

The following table shows the kind of samples and the number of each dealt with, together with the results of the analysis.



ARTICLE.	Total.	Genuine.	Adulterated	Doubtful	Percentage Adulterated.	Percentage Adulterated in whole Country in 1905
Milk ...	180	165	10	5	5.5	10.5
Butter ...	8	8	0	0	0	6.9
Cheese ...	5	5	0	0	0	2.3
Margarine..	1	1	0	0	0	4.8
Pepper ...	6	6	0	0	0	.9
Beer ...	6	6	0	0	0	2.5
All Articles	206	196	10	5	4.85	8.2

Six classes of food were sampled. No drugs. Last year 11 classes of food were sampled, and 3 of drugs. No water samples have been submitted.

The Select Committee dealing with Butter Adulteration which I referred to last year, issued recommendations resulting in the passing of the "Butter and Margarine Act, 1907."

There has also been passed the "Public Health (Regulation of Foods) Act, 1907." The preamble reads:—"A Bill to enable regulations to be made for the prevention of danger arising to public health from the importation, preparation, storage, or distribution of articles of food."

It gives wide powers to the Local Government Board to make various regulations. These are now being drafted, and it is hoped that amongst other things, standards for preservatives will be incorporated and so give effect to the recommendations of the Departmental Committee of 1900. They will also probably deal with the Milk supply with the object of eliminating tuberculous and uncleanly milk generally.



The Fertilisers and Feeding Stuffs Acts, 1906, came into force January 1st, 1907. This provides for the sampling and analysing of cattle and poultry foods and artificial manures. Each invoice must also contain an analysis of the article, and constitutes a warranty. The Halifax Council have the option of appointing their own Analyst for this work in the Borough, otherwise it is left in the hands of the West Riding County Council.

The Whisky Commission now sitting was instituted in 1907, at the request of the Islington Borough Council who have spent several thousand pounds on prosecuting Patent Still Whiskies.

The result will no doubt be to fix a standard for this article. The formation of a Court of Reference for the purpose of considering and fixing standards and limits, mainly in foods, is likely to become an accomplished fact, in the near future. This is highly desirable, as frequently, in the absence of a standard, it is a costly matter both to prosecute and defend cases in dispute. The whisky case is a notable instance of this.

The Local Government Board Inspector of Foods has commenced issuing reports on various matters of interest. So far we have had them—(1) On the changes in certain meat essences kept in tins. (2) On lead and arsenic in tartaric acid, &c. (3) On imported meat foods of questionable wholesomeness. (4) On the wholesomeness of tripe of home and foreign origin. (5) On vinegar.

These are valuable, and to be highly commended.

With regard to the administration of the Acts the L.G.B. Report says, "The work of detecting offenders is becoming more difficult every year, and efficient sampling



cannot be carried on by the Inspectors without the employment of agents (women and children, men in disguise, and so on.”)

PROSECUTIONS.—Of the ten cases of adulteration only two were proceeded against during the year, both milks. Each defendant fined 10/—, with costs 16/—. These are quite inadequate penalties for deliberate fraud.

### **Borough Fever Hospital.**

There were 15 patients remaining in the hospital at the beginning of the year under review, viz. :—January 1st, 1907, and there were admitted during that year, 131 cases belonging to the Borough, against a total of 160 during the previous year.

The following table shows the number that were admitted for each disease, and the mortality of the same.

Disease		Number Admitted	Deaths	Case Mortality per cent.
Diphtheria ...	...	45	7	15·5
Scarlet Fever ...	...	42	1	2·3
Enteric Fever ...	...	43	7	16·2
Suspect, Isolated ...	...	1	...	...
Total ...	...	131	15	...

During the previous year the case mortality per cent. for Scarlet Fever was 6·3, Diphtheria 26·6, and Typhoid 10 respectively.

It will thus be seen that there has been an increase in the deathrate of Typhoid Fever, although the mortality last year, viz. :—6·2, is not excessive when compared with previous years.

It is also satisfactory to note that there was a marked fall, both in the deathrate of Scarlet Fever and Diphtheria, when compared with the previous year.

One of the deaths from Typhoid Fever included in the number above, did not belong to the Borough, he had recently come from America, and evidently caught the disease on board ship.

The following table shows the number of cases that have been admitted to the Fever Hospital since the year 1881.

Year	Small-pox	Cholera	Typhus Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Others	Total
1881	16			17	34		2	69
1882	13		3	24	15		5	60
1883	2		2	26	8		5	43
1884	1			29	23		2	45
1885	15		1	16	23		4	59
1886	3			18	24		3	48
1887	3			18	54		1	76
1888	5		1	25	28		7	66
1889	4			54	33			91
1890				35	39		7	81
1891		1		47	47		6	101
1892	188		1	17	15		1	222
1893	340			4	1			345
1894	15			15	39		1	70
1895				39	25		7	71
1896				56	30		20	106
1897				32	237		3	272
1898				28	341			369
1899				38	515			553
1900	3			44	250		9	306
1901	3			18	597	12	43	633
1902	1			30	365	7		403
1903	140			24	219	17	4	404
1904	84			22	349	25	6	486
1905	57			29	246	22		354
1906				20	110	30		160
1907				43	42	45	1	131



From the above table it will be observed that during 1907, a smaller number of patients were admitted to the Hospital than during any year since 1896.

I desire to place on record, my appreciation of the manner in which the Matron, Miss Robison, has managed the Institution, and the unremitting care which the Nurses bestowed upon the patients.

COUNTY BOROUGH OF HALIFAX

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THE

Sanitary Inspector's Report

FOR THE

YEAR ENDED 31st DECEMBER, 1907.

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*To the Chairman and Members of the  
Health Committee.*

GENTLEMEN,

I have the honour and pleasure of laying before you for your consideration my Thirty-third Annual Report on the operations of the Health Department for the year ended December 31st, 1907.

TOWN HALL, HALIFAX,

*May, 1908.*



## HEALTH DEPARTMENT.

### Summary of Work done.

Total number of Visits made by the District Inspectors	...	...	...	...	22605
Total number of Visits to Houses	...	...	...	...	12093
"    "    Lodging Houses and Furnished Rooms...	...	...	...	...	581
Number of Visits to Houses with reference to Defective Drainage	...	...	...	...	2737
Number of Visits to Houses with reference to Cleanliness, Overcrowding, &c.	...	...	...	...	740
Number of Visits to Houses with reference to Infectious Diseases	...	...	...	...	1240
Rooms Disinfected	...	...	...	...	400
Cases removed to the Hospital	...	...	...	...	131
Infectious Diseases reported	...	...	...	...	310
Nuisances reported	...	...	...	...	1968
Nuisances abated	...	...	...	...	2089
Notices served	...	...	...	...	660
Letters served (referring to Nuisances, &c.)	...	...	...	...	169
Summonses taken out	...	...	...	...	4
Smoke Observations taken	...	...	...	...	467
Old Ashpits altered to Goux System	...	...	...	...	15
Goux Closets registered	...	...	...	...	97

It must be remembered that many nuisances are frequently included under one notice, and therefore the number of nuisances represent considerably more than the number of notices.

### Removal of Nuisances.

At the commencement of the year 245 complaints remained on the books and in course of removal, since then 1,968 have been registered and 2,089 removed, leaving at the close of the year 124 to be dealt with.

The following table shows the nature of nuisances registered.

Nature of Nuisances.				Number Registered.
Defective Sink Drains	...	...	...	113
„ „ Pipes	...	...	...	64
„ „ Syphon Traps	...	...	...	39
„ Basement Drains	..	...	...	19
„ Yard Drains	...	...	...	36
„ Urinal Drains	...	...	...	6
„ W.C. Drains	...	...	..	29
„ Area Drains	...	...	...	12
„ Private Street Drains	...	...	...	3
Made-up Sink Pipes	..	...	..	29
„ Bath Pipes	..	...	...	1
„ Lavatory Pipes	...	...	...	4
„ Basement Drains	...	...	...	42
„ Water Closets	...	..	...	41
„ Yard Drains	..	...	...	43
„ Urinal Drains	...	...	...	4
„ Gullies	...	...	...	27
„ Private Street Drains	...	...	...	3
Untrapped Basement Drains	...	..	..	2
„ Sink Drains	...	...	...	91
„ Area Drains	...	...	...	5



NUISANCES—*Continued.*

Nature of Nuisances.				Number Registered.
Untrapped Yard Drains	...	...	...	22
„ Urinal Drains	...	..	...	2
„ Bath Pipes	..	...	...	3
„ Lavatory Pipes	...	.	...	5
Drains not efficiently Trapped :				
Sink Drains	..	...	...	5
Cellar Drains	..	...	...	7
Yard Drains	...	...	...	2
Urinal Drains	...	...	...	1
Area Drains	...	...	...	1
Sink Drains requiring Disconnecting	...	...	...	55
Defective Fall-pipe Drains	..	...	...	19
„ Fall-pipes	...	...	...	58
„ Spouting	...	...	...	75
„ Roofing	...	...	...	35
Broken Pot and Iron Traps	...	..	...	5
Insufficient Supply of Water to Closets	..	...	...	1
Nuisances from Water in Cellar	...	...	...	10
„ Want of Drains	...	...	...	43
„ Smoke	...	...	...	6
„ Swine	...	...	...	3

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Houses Overcrowded ... ..	7
„ requiring limewashing .. ..	15
Accumulations of Offensive Matter ... ..	61
Privies requiring Limewashing .. ..	53
Dirty Passages... ..	2
Insufficient Privy Accommodation ... ..	25
Offensive Ashpits and Privies .. ..	37
„ Goux Closets ... ..	131
„ Ash Tubs ... ..	248
Doors off Closets ... ..	58
„ Ashes Tub Places... ..	16
Dilapidated Closets ... ..	45
Ashpits requiring Re-construction ... ..	35
Miscellaneous ... ..	120
Convert Goux Closets to Water Closets... ..	7
Cellar Dwelling unfit for Habitation ... ..	1
COWSHEDS.	
Defective Drains .. ..	18
Want of Light, Room, Air Space, and Ventilation ... ..	21
Dilapidated Cowsheds and Floors ... ..	8
Cesspools requiring Emptying and Defective ... ..	10
Offensive Middensteads ... ..	16
Cowsheds requiring Limewashing ... ..	18



NUISANCES—*Continued.*

Nature of Nuisances.				Number Registered.
FACTORIES AND WORKSHOPS.				
Rooms requiring Limewashing	...	...	...	15
Insufficient Privy Accommodation	...	...	...	1
Want of Ventilation	...	...	...	2
Defective Drains	...	...	...	3
„ Water Closets	...	...	...	16
BAKEHOUSES.				
Defective Drain	...	..	...	1
Rooms requiring Limewashing	..	..	..	6
Untrapped Drains	...	...	...	1
TOTAL	...	...	...	1968

The above list does not include work carried out after mere verbal notice.

### Night Scavenging.

The following table shows the number of ashpits cleansed during the year, and the number of loads of manure and rubbish collected.

Month.		Number of Ashpits Emptied.	Loads of Soil.	Loads of Rubbish.	Total Number of Loads.
January	...	309	120	84	204
February	...	435	120	125	245
March	...	377	172	137	309
April	...	509	153	116	269
May	...	272	103	75	178
June	...	405	181	109	290
July	...	569	149	134	283
August	..	355	137	59	196
September	...	230	103	58	161
October	.	288	99	71	170
November	..	321	96	107	203
December		313	113	58	171
TOTAL	...	4383	1546	1133	2679

The total number of ashpits cleansed during the year was 4,383, as against 4,930 in the previous year.

15 ashpits with privies have been altered to the Goux system, and ashes tubs supplied in the place of 2 dry ashpits. The above includes Ovenden, Illingworth, Copley, Warley, and Northowram Wards.



TABLE SHOWING THE NUMBER OF ASHPITS WITHIN  
THE BOROUGH, DECEMBER 31st, 1907.

District.	Wards.			Ashpits with Privies.	Dry Ashpits.	Total.
1	Akroydon and North ..			41	47	88
2	Ovenden and Illingworth ..			268	26	294
3	Central and East	...	...	32	84	116
4	West and South	...	...	11	191	202
5	Skircoat and Southowram ...			26	19	45
6	Pellon and Kingston ..			5	32	37
7	Copley	...	...	98	35	133
8	Warley	..	...	230	22	252
9	Northowram ...			158	...	158
TOTAL				869	456	1325

### Goux Scavenging.

The following table shows the number of closet tubs and loads of ashes collected during the year.

Month.			Number of Closet Tubs Collected.	Loads of Ashes Collected.
January	...	...	57894	2105
February	...	...	50101	1669
March	...	...	52060	1855
April	...	...	53447	1850
May	...	...	54524	1836
June	...	...	52581	1522
July	...	...	58198	1574
August	...	...	54907	1536
September	...	...	53111	1491
October	...	...	55428	1682
November	...	...	54880	1757
December	...	...	51995	1780
TOTAL			649126	20657

The above represents 30910 loads of night soil (each load containing 21 closet tubs), as against 31621 and 20181 loads of ashes respectively for the preceding year.

The number of additional closets registered is 97, being a decrease of 65 on the number registered during the year 1906.



The following table shows the number of Goux closet tubs registered since the commencement of the Goux system.

YEAR	Number of Closet Tubs	Number Registered during each year
1871	1102	1109 in 15 months
1872	1895	786
1873	2440	545
1874	2820	380
1875	3088	268
1876	3316	228
1877	3769	453
1878	4277	508
1879	5858	576
1880	5071	218
1881	5552	481
1882	6057	505
1883	6506	449
1884	7405	899
1885	8049	644
1886	8727	678
1887	9327	600
1888	9831	504
1889	10446	615
1890	11098	652
1891	11644	546
1892	12068	419
1893	13047	984
1894	13450	403
1895	13797	347
1896	14145	348
1897	14444	299
1898	14881	437
145 Tubs returned in connection with property pulled down.		
1899	15287	551
1900	15974	687
1901	16397	461
38 Tubs returned.		
1902	16808	411
1903	17164	356
1904	17428	264
1905	17662	234
1906	17823	161
1907	17920	97

During the year 48 closets have been erected in connection with new property, and 47 have been altered from the old system, and 2 added where the accommodation was previously insufficient.

### Streets Scavenging.

Table showing number of lineal yards and miles swept during the year in each ward.

Wards			Number of Lineal Yards Swept	Miles	Yards
East ...	...	...	3121946	1773	1466
Central	...	...	1069849	607	1529
South...	...	...	1180564	670	1364
West ...	...	...	773782	439	1142
North...	...	...	683842	388	962
Akroydon	...	...	388436	220	1236
Southowram	...	...	599525	340	1125
Skircoat	...	...	223307	126	1547
Kingston	...	..	190621	108	541
Pellon	...	...	315817	179	777
Ovenden & Illingworth Part swept by Halifax Gang	}		923528	524	1288
Total ...	...	...	9471217	5381	657



### Streets Scavenging.

The subjoined table gives at a glance the work done in this department during 1907.

Number of Streets swept ... ..	40162
Lineal yards swept... ..	9471217
Square yards swept ... ..	75948178
Number of Streets watered ... ..	4065
Loads of Water used for that purpose...	5781
Loads of Sweepings gathered ...	8460
Loads of Snow removed from the Streets	17182
Number of Gullies emptied ... ..	205766
Garbage removed from Market Hall ...	1014
Loads of Ashes and Sand put on Streets	114

During the year 340 loads of garbage have been removed from fishmongers, fried fish shops, and greengrocers.

### Birks Hall Tips.

Table showing the number of loads of ashes and rubbish tipped during the year.

Name.	Number of Loads.
Goux Department ... ..	18564
Highways Committee... ..	400
Private Firms ... ..	2240
Total ... ..	21204

ANALYSIS OF REFUSE COLLECTED IN THE BOROUGH  
OF HALIFAX DURING THE YEAR 1907.

	No. of Loads.
From Wet and Dry Ashpits ...	2679
From Ashes Tubs ...	20657
From Goux Closet Tubs ...	30910
Sweepings gathered from the Streets, and Refuse from Gullies ...	8460
Garbage removed from Market Hall ...	1014
Horse Droppings from Streets ...	265
Garbage from Fried Fish Shops ...	300
Total Number of Loads ...	64285



TABLE SHOWING NUMBER OF VISITS MADE BY  
THE MEAT INSPECTOR.

Description of Premises.	Number of Visits.
Public Slaughterhouses ... ..	1131
Private Slaughterhouses ... ..	163
Borough Market ... ..	528
Wholesale Market ... ..	485
Fasting Sheds ... ..	283
Potted Meat Houses ... ..	353
Tripe Boiling Houses ... ..	111
Butchers' Shops ... ..	3172
Fried Fish Shops ... ..	216
Cowsheds ... ..	510
Dairies and Milkshops ... ..	204
Bakehouses ... ..	298
Other Visits ... ..	364
Total ... ..	7818

TABLE SHOWING MEAT, FISH, FRUIT, ETC.,  
DESTROYED AS UNFIT FOR HUMAN FOOD.

Kinds of Food Destroyed.				Quantity in lbs.
17 Carcases of Beef	...	...	...	7960
Beef not in Carcase	...	...	...	792
36 Carcases of Pigs	...	...	...	4391
Pork not in Carcase	...	...	...	1644
4 Carcases of Mutton	...	...	...	365
21 Carcases of Veal	...	...	...	1199
Veal not in Carcase	...	...	...	26
55 Rabbits	...	...	...	113
Fish	...	...	...	15555
Fruit	...	...	...	1344
Offals	...	...	...	5974
Other Foods	...	...	...	3816
Total ...				43179

Total amount of Meat and Offal destroyed suffering from Tuberculosis, 12,684 lbs.

Total amount of Meat destroyed, 22,351 lbs.

435 Seizures have been made during the year, 5 by Magistrates Order, and 430 by consent of owner.



### Smoke Observations.

The following Table shows the number of Smoke Observations taken during the year, and the average number of minutes of dense smoke emitted.

	Number of Observations taken.	Average Number of min'tes of dense smoke emitted.
Number of Observations taken	467	
Number showing moderate Smoke or <i>nil</i> ...	240	
Number of Observations taken for a period of 60 minutes, each showing Dense Smoke	227	
Number of Observations show- ing Dense Smoke above the Maximum adopted by the Committee ...	8	
Average number of minutes of Dense Smoke emitted from Chimneys...		2·2

The number of observations taken during the year is 467. 8 of these showed dense smoke above the maximum allowed by your Committee.

The average number of minutes of dense smoke emitted from the chimneys is 2·2.

### Canal Boats.

During the year 1907, 44 inspections of Canal Boats were made, as compared with 49 in the preceding year.

These inspections are made periodically by the Chief Sanitary Inspector.

In all cases where females were on board, proper provision was made for the separation of the sexes. Of the 44 boats inspected, only one woman and child was found on board, and five with women only.

The generally satisfactory condition of the boats has been well maintained, and all of them were found to conform with the Acts and Regulations. There has not been a single case of sickness on board during the year.

The Captains have been obliging, and at all times gave full information required.

The boats plying in this district chiefly belong to one company, and are registered either at Goole, Mirfield, or Leeds, consequently no arrangements have been made for registration.

Number of Boats Inspected.	Number Registered to carry.	Number of Males on board.	Number of Females on board.	Total.
44	314	91	6	97



TABLE SHOWING PROSECUTIONS UNDER THE PUBLIC HEALTH ACT  
AND FOOD AND DRUGS ACT.

Date.	Defendant's Name.	Nature of Offence.	Decision of Court.		
			Penalties.	Costs.	Total.
1907			£ s. d.	£ s. d.	£ s. d.
June 18th ...	Thomas Quinn ...	Being in possession of unsound Fish ...	0 10 0	0 5 6	0 15 6
June 18th ...	Thomas Quinn ...	Unsound Prawns ...	0 5 6	including costs	
Dec. 31st ...	John Allcock ...	Selling adulterated Milk with 4½% added water	0 10 0	0 16 0	1 6 0
Dec. 31st ...	Tom Langstreth ...	Selling Milk adulterated with 10% added water	0 10 0	16 0	1 6 0

TABLE SHOWING THE NUMBER OF INFECTIOUS DISEASES REMOVED TO THE BOROUGH FEVER HOSPITAL BY THE DISTRICT INSPECTORS, DURING THE YEAR 1907.

	Suspicious Case	Typhoid Fever	Scarlet Fever	Diphtheria	Total
Ovenden ...			2	7	9
Akroydon ...		2	8	5	15
North ...		1	1	3	5
Central ...		5		1	6
West ...		3	4	3	10
South ...		6	7	1	14
East ...	1	1	1	2	5
Southowram ...		1		3	4
Skircoat ...			6	3	9
Pellon...		3	2	3	8
Kingston ...		6	5	2	13
Illingworth ...		9	3	4	16
Copley ...		2	1		3
Warley ...			1	2	3
Northowram ...		3	1	1	5
Out of Borough...		1		5	6
	1	43	42	45	



The succeeding table shows four prosecutions as against three in the previous year. The total fines, including costs amount to £3 13s. as against £9 11s.

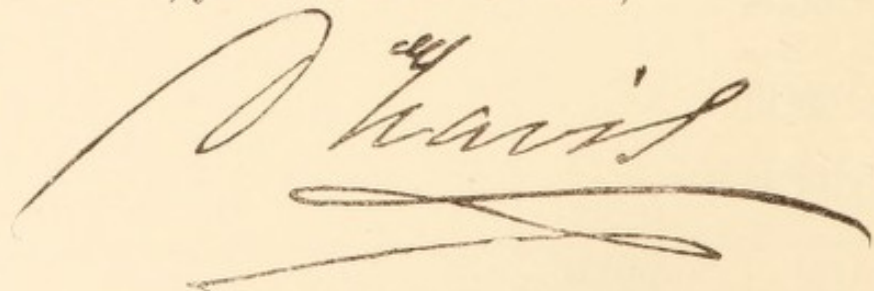
In consequence of the changes which have taken place in the Department, the number of visits are considerably less than in previous years. Mr. James Archbell, the senior amongst our District Inspectors, broke down in health, and has been permanently laid up since. He has been on our staff since 1881.

In October Mr. John Wood, who had been with us since 1898, left us to become Chief Inspector of Nuisances for Southall. Both inspectors were very attentive and painstaking in the performance of their duties.

On the 28th November the Committee appointed Mr. Fred Teal and Mr. H. F. Froes to the above posts. Mr. Froes declined. Both these men were selected from amongst a number of applicants. Mr. J. G. Walshaw, Plumber, was afterwards appointed.

I again take the opportunity of thanking the Inspectors and the Chief Clerk (Mr. J. W. Jackson), and his staff for the manner in which the duties have been carried out, duties which are yearly increasing by the extensive Sanitary improvements in the Borough, and also by the new acts coming into force.

I am, your obedient Servant,



Chief Sanitary Inspector and  
Scavenging Superintendent.

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# APPENDIX.

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# VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1907 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District					Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at All Ages Belonging to the District.	
		Number.	Rate.*	3	Under 1 year of age.		At all ages.						Number.	Rate.*
					Number.	Rate per 1,000 Births Registered	6	7	8					
1	2	3	4	5	6	7	8	9	10	11	12	13		
1897	94,311	2147	22.7	301	140	1603	16.9	220	33	28	1598	16.9		
1898	95,037	2205	23.2	369	167	1751	18.4	235	28	28	1751	18.4		
1899	95,767	2239	23.3	363	162	1806	18.8	258	34	30	1802	18.8		
1900	98,910	2316	23.4	314	135	1874	18.9	277	42	19	1851	18.7		
1901	105,120	2351	22.3	301	128	1726	16.4	294	38	21	1709	16.2		
1902	105,950	2225	21.0	324	145	1645	15.5	282	36	25	1634	15.4		
1903	106,800	2248	21.0	279	124	1610	15.0	308	54	36	1592	14.9		
1904	107,000	2154	20.1	282	130	1662	15.5	303	52	33	1643	15.3		
1905	107,500	2072	19.2	271	130	1651	15.3	319	75	42	1618	15.0		
1906	108,000	2070	19.1	242	116	1741	16.1	420	107	40	1674	15.5		
Averages for years 1897-1906	102,439	2202	21.5	304	137	1706	16.6	291	49	30	1687	16.5		
		1927	17.7	195	102	1655	15.2	377	145	48	1558	14.3		
1907	108,500	1927	17.7	195	102	1655	15.2	377	145	48	1558	14.3		

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

Table showing the number of Infectious Diseases in each locality of the Borough, notified during the year, and classified according to age; also the number of Cases removed from each locality to the Borough Fever Hospital.

NOTIFIABLE DISEASES.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.														NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.																
	At all Ages.	At Ages—Years.						Ordnance Ward.	Albion Ward.	North Ward.	Central Ward.	West Ward (W.).	South Ward.	East Ward.	South-west Ward (H.).	St. Vincent Ward.	Cable Ward.	Pollard Ward.	King's Ward.	Hill Street Ward.	North-west Ward.	Widley Ward.	Ordnance Ward.	Albion Ward.	North Ward.	Central Ward.	West Ward (W.).	South Ward.	East Ward.	South-west Ward (H.).	St. Vincent Ward.	Pollard Ward.	King's Ward.	Hill Street Ward.	Cable Ward.	North-west Ward.	Widley Ward.	Out of Borough.
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria including Membranous Croup ...	118	...	33	68	11	6	...	12	7	9	4	8	8	4	8	9	13	5	16	5	4	6	7	5	3	1	3	1	2	3	3	3	2	4	...	1	2	5
Erysipelas ...	36	...	...	3	6	25	2	6	4	4	1	2	...	2	2	4	2	...	6	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	89	2	24	47	12	4	...	12	12	3	2	7	9	1	2	12	2	8	11	4	3	1	2	8	1	...	4	7	1	...	6	2	5	3	1	1	1	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	60	...	6	15	12	26	1	1	4	2	8	3	6	1	1	5	4	8	11	2	3	1	...	2	1	5	3	6	1	1	...	3	6	9	2	3	...	1
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	7	...	...	...	1	6	...	...	...	2	3	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suspicious Case removed for Isolation...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS...	310	2	63	133	42	67	3	31	27	20	18	20	23	8	13	30	21	22	45	12	12	8	9	15	5	6	10	14	5	4	9	8	13	16	3	5	3	6





Table showing Causes of, and Ages at, Death during the year 1907 in the several localities of the Borough.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT.							DEATHS IN OR BELONGING TO LOCALITIES (AT ALL AGES).														Total Deaths in Public Institutions in the District.		
	AT SPECIFIED AGES.							Over-65 Ward.	Albion Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	South-west Ward (H.C.).	Surrey Ward.	Coker Ward.	Filton Ward.	Kingsland Ward.	Hillgrove Ward.	North-west Ward.		Wesley Ward.	
	At all Ages.	Under 1.	1 to 4.	5 to 14.	15 to 24.	25 to 44.	45 and upwards.																	
Measles ... ..	5	5	...	...	...	...	...	...	...	1	1	...	1	...	1	...	1	...	...	...	...	...	...	...
Scarlet Fever ... ..	2	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	
Whooping Cough ... ..	11	6	5	...	...	...	...	...	...	...	...	4	1	...	...	...	...	4	1	1	...	...	...	
Diphtheria and Membranous Croup ... ..	28	...	13	15	...	...	...	4	2	5	2	...	1	1	2	...	1	2	2	5	1	...	9	
Croup ... ..	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
Enteric Fever ... ..	9	...	...	3	3	3	...	...	1	1	1	...	2	...	...	...	...	1	2	1	...	...	8	
Epidemic Influenza ... ..	11	...	1	...	1	6	3	2	2	...	1	...	...	...	1	...	1	2	...	2	...	...	...	
Diarrhoea ... ..	14	12	...	...	...	1	1	...	5	3	2	...	1	2	...	...	...	...	...	...	1	...	...	
Enteritis ... ..	5	3	1	...	...	1	...	...	...	3	...	...	...	...	1	...	...	...	...	...	1	...	...	
Puerperal Fever... ..	4	...	...	...	1	3	...	...	...	1	1	...	...	1	...	...	...	...	...	1	...	...	...	
Erysipelas ... ..	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	
Other Septic Diseases ... ..	5	...	...	...	1	4	...	...	...	...	...	...	1	2	...	1	...	...	1	...	...	...	1	
Phthisis ... ..	120	...	2	8	23	82	5	5	4	7	14	7	7	19	8	8	3	10	12	11	4	1	35	
Other Tubercular Diseases ... ..	29	1	5	3	7	10	3	...	1	2	1	4	2	4	1	2	...	3	5	2	1	1	8	
Cancer, Malignant Disease ... ..	114	...	...	...	1	82	31	5	10	8	12	4	5	11	9	11	6	8	18	4	2	1	25	
Bronchitis ... ..	152	17	6	1	...	51	77	12	11	19	8	14	16	10	6	15	5	7	13	7	3	6	26	
Pneumonia ... ..	127	16	33	4	4	53	17	8	8	12	10	15	3	18	8	8	3	8	10	9	4	3	23	
Pleurisy ... ..	2	...	...	...	...	2	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	
Other Diseases of Respiratory Organs ... ..	21	3	3	2	2	7	4	1	1	...	3	1	2	5	1	...	2	3	2	...	...	...	3	
Alcoholism, Cirrhosis of Liver ... ..	13	...	...	...	1	9	3	1	1	1	1	1	2	3	1	...	...	...	1	...	...	1	1	
Venereal Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Premature Birth... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diseases and Accidents of Parturition ... ..	11	...	...	...	2	9	...	...	2	...	1	2	...	2	1	1	...	...	...	...	1	1	2	
Heart Diseases ... ..	169	1	...	5	6	94	63	9	17	8	17	17	14	18	12	5	5	14	8	11	6	8	34	
Accidents ... ..	23	1	3	1	3	13	2	1	2	4	2	1	2	1	2	2	2	1	1	1	...	1	27	
Suicides ... ..	5	...	...	...	1	3	1	...	2	...	...	...	...	1	...	1	...	...	...	...	...	...	2	
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" Urinary System ... ..	60	...	2	...	2	42	14	4	2	4	4	9	7	5	4	2	2	5	5	3	4	...	19	
Congenital Malformation ... ..	10	8	...	1	1	...	...	...	...	...	2	...	...	...	1	1	1	3	...	...	1	...	3	
Convulsions ... ..	25	19	6	...	...	...	...	3	5	1	1	2	1	1	3	2	...	2	1	3	...	...	1	
Old Age ... ..	145	...	...	...	...	6	139	4	6	6	20	17	19	13	9	11	4	7	9	8	5	7	44	
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## VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1907 AND PREVIOUS YEARS

[illegible]





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MORTIMERS



DESIGNERS, PRINTERS  
ENGRAVERS.

HALIFAX.