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County Borough of Halifax,
Health Department.

Annual Report

on the Health of the Borough

for the year ended December 31st, 1908

Printed by Order of
the Health Committee.

HALIFAX:
Messrs. EDWARD MORTIMER, Printers, Regent Street.

1909.

With the

Medical Officer of Health's

Compliments.

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Health Committee.

Mayor.

ALDERMAN F. WHITLEY THOMSON, J.P.

ALDERMAN T. HEY, J.P., *Chairman.*

COUNCILLOR W. H. INGHAM, *Vice-Chairman.*

Alderman J. F. COE, J.P.	Councillor S. PARK.
,, J. W. CROSSLAND, J.P.	,, J. PICKLES.
Councillor W. H. BANCROFT.	,, W. M. BRANSON, L.R.C.P.
,, J. ASQUITH.	,, T. G. LE DIEU.
,, J. T. DALTON.	,, J. BURKE.
,, D. HANSON.	,, E. PINDER.

Councillor A. TAYLOR, J.P.

Sub-Committees

Appointed by the Health Committee.

Hospital Sub-Committee.

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VICE-CHAIRMAN.
ALDERMAN COE.
ALDERMAN CROSSLAND.
COUNCILLOR ASQUITH.
,, BRANSON
COUNCILLOR TAYLOR.

Cleansing Sub-Committee.

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VICE-CHAIRMAN.
ALDERMAN CROSSLAND.
COUNCILLOR BURKE.
,, LE DIEU.
,, PARK.
COUNCILLOR PINDER.

Buying Sub-Committee.

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VICE-CHAIRMAN.
COUNCILLOR BANCROFT.
,, DALTON.
COUNCILLOR PICKLES.

Accounts Sub-Committee.

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VICE-CHAIRMAN.
COUNCILLOR HANSON.
,, PARK.

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VICE-CHAIRMAN.
ALDERMAN COE.
COUNCILLOR BRANSON.
COUNCILLOR BANCROFT.
,, HANSON.
,, PINDER.
,, TAYLOR.

Housing Sub-Committee.

THE CHAIRMAN.
VICE-CHAIRMAN.
COUNCILLOR HANSON.
,, LE DIEU.
COUNCILLOR PICKLES.

Staff of the Health Department.

Medical Officer of Health, Superintendent of the Borough Fever Hospital, and Superintendent Schools Medical Officer.

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

Assistant Medical Officer of Health.

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

Schools Medical Officer.

T. H. HUNT, M.D., B.S.

Public Analyst.

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

Chief Sanitary Inspector and Scavenging Superintendent.

DAVID TRAVIS.

Veterinary and Meat Inspector.

J. POLLARD, M.R.C.V.S., D.V.S.M.

District Sanitary Inspectors.

J. E. FIRTH. R. PICKARD. F. TEAL.
J. G. WALSHAW.

Lady Health Visitor.

ALICE M. THOMPSON.

Assistant Scavenging Superintendent.

R. TRAVIS.

Chief Clerk.

J. W. JACKSON.

Assistant Clerks.

CHARLES CARLTON. ERNEST JUBB.

Matron of the Borough Hospital.

M. ROBISON.

Disinfector.

T. W. BOOTH.

Laundry Engineer.
W. GUEST.

Porter.
H. VICKERMAN.

Goux Department.

Yard Foreman.

G. LEAPER.

Goux Inspectors.

J. HEATH. S. MAUDSLEY.

Clerk.
HARRY ASKE.

Assistant Clerk.
HERBERT BOOTH.

COUNTY BOROUGH OF HALIFAX

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

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

FOR THE YEAR 1908

INTRODUCTION.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

In accordance with the requirements of the Local Government Board, I have the pleasure of submitting to you my Ninth Annual Report, which is the Thirty-sixth Annual Report of the Medical Officer of Health for this Borough.

There are a number of interesting and important facts recorded in this Report, not the least among which is the improvement which has taken place in the birth-rate of the Borough.

For a number of years past I have had to record a continuous fall in the birthrate, but during the year under review, there has been an actual increase of 2 per 1000 in this rate. The year 1908 is remarkable in having such a large increase in the birthrate, because

we have to go back to the year 1890 to find a similar increase in a single year, but at that time the birthrate was considerably above what it is to-day.

The general deathrate is practically the same as that for the previous year, and is the second year in succession during which a general deathrate has been recorded below 15 per 1000.

There was a slight increase in the Zymotic deathrate, but even this must be considered satisfactory when compared with other great towns.

The deathrate of infants under one year is again the lowest on record for the Borough. This is eminently satisfactory in view of the special efforts which have been made during the year to reduce infant mortality.

Your Committee appointed the first Lady Health Visitor in February, 1908, in the person of Miss Wayne, who resigned that position in August of the same year, she having obtained a more lucrative post. Miss Thompson was appointed in her stead.

Mr. J. T. Millington, the Meat Inspector, also resigned his position during the year, having secured a more important post in the City of Birmingham. In his place your Committee decided to appoint a Veterinary Surgeon, and Mr. J. Pollard, M.R.C.V.S., D.V.S.M., was eventually selected for the post.

There were therefore fewer changes in the personnel of the staff than during the previous year, with the result that there was much less interference in the carrying out of the work of the department.

A great deal of good work was done during the year, as a perusal of the following Report will show.

In conclusion I have to acknowledge the assistance rendered me in carrying out the work of the department by Mr. Travis, the District Sanitary Inspectors, and Messrs. Jackson and Carlton, and also your Committee for its generous support.

I am,
Gentlemen,
Your obedient servant.

Jas. T. Keech M.D. D.P.H.

MEDICAL OFFICER OF HEALTH.

TOWN HALL,
HALIFAX,
May 19th, 1909.

STATISTICAL SUMMARY.

	1908	1907
	ACRES	
Area of County Borough ...	13,650	...
Rateable Value	£498,632	£495,642
Population, estimated to middle of 1908	107,500	108,500
Population, 1901 Census ...	104,936	...
Persons per Acre	7·8	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, 1908	19·7	17·7
,, Average for previous 10 years	20·8	21·4
Death Rate, 1908	15·3	15·2
,, Average for previous 10 years ...	16·0	16·2
,, Corrected for Institutions	14·5	14·3
Death Rate for seven principal Zymotic Diseases ...	1·0	·63
Death Rate, the mean for previous 10 years of Zymotic Diseases	1·1	1·2
Deaths of Infants under 1 year per 1000 Births... ...	101	102
Illegitimate Births ...	120	84
Average Age at Death, 1908—Males	40·6 years	41·4 years
Average Age at Death, 1908—Females	44·8 years	47·8 years
Latitude—North	53° 43′	...
Longitude—West	1° 52′	...
Height above Sea Level, feet	625	...
Total Rainfall, inches ...	30·75	34

Area and Population of the Borough.

The population of the Borough as estimated by the Registrar General for the year 1908 was 111,018. Taking all facts into consideration, the number of voters on the Burgess Roll, etc., I am of opinion that the above figure is much too high.

According to my estimate, the population in the middle of 1908 would be about 107,500, and the death and other rates in this Report are calculated on that basis.

It is very difficult to accurately estimate the population so many years after the Census returns, and consequently, birth, death, and other rates are often to that extent incorrect. The only remedy for this state of matters is a quinquennial census.

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

WARDS.	Population Estimated to Middle of 1908.	Acreage.	Persons per Acre.	No. of Houses Built during 1908.
Ovenden ...	7400	531	13·9	4
Akroydon ...	6700	582	11·5	...
North ...	7830	168	46·6	15
Central ...	7025	82	85·6	...
West ...	8515	86	99·0	...
South ...	7400	296	25·0	12
East ...	7000	191	36·6	...
Southowram ...	7200	777	9·2	5
Skircoat ...	10850	513	21·1	53
Copley ...	3190	532	5·9	3
Pellon ...	10000	241	41·4	6
Kingston ...	10950	238	46·0	13
Illingworth ...	7130	4504	1·5	...
Northowram ...	3350	1555	2·1	...
Warley ...	2960	3354	0·8	3
Totals ...	107500	13650	...	114
Average ...	...	...	7·8	...

Marriages.

During the year under review there was 1,015 marriages solemnised within the Borough, giving a marriage rate of 9·4 per 1000, against 9·9 during the previous year, or a fall of ·5 per 1000.

The above rate is the lowest of any year since 1897, which is the first year of which we have any record in the health office.

It will be observed on referring to the following table that the marriage rate of Halifax during 1897 was 15·9 per 1000, when it was almost equal to that of England and Wales. Since the latter date there has been a serious fall, and evidently the improvement, which occurred during 1907, is not to be maintained.

This table also compares the marriage rate of Halifax with that of England and Wales, and shows the marked fall in the Halifax rate, compared with what has taken place in the general rate of the Country.

YEAR.	Marriage Rate.	
	Halifax.	England & Wales.
1897	15·9	16 0
1898	10·4	16·2
1899	12·3	16·5
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	15·7
1908	9·4	14·9

The next table shows where the marriages were solemnised.

In Churches of the Church of England ...	566
In Nonconformist places of Worship and at the Registry Office	449
Total	1015

Births.

The number of births registered during the year 1908 was **2**,118, which is an increase of 191 when compared with the previous year. This gives a birthrate of 19·7 per 1000, against 17·7 for the year 1907.

I am pleased to be able to record this improvement, because for several years past, in referring to the birthrate, I have had annually to repeat the sentence that "this birthrate is the lowest yet recorded in the Borough."

The above birthrate is the highest recorded for the Borough since the year 1904.

With regard to the sexes of the births registered, 1,057 were males, and 1,061 were females.

The following table shows the excess of births over deaths in the Borough for each year during the past 10 years.

Year	Births	Deaths	Excess of Births over Deaths
1899	2239	1772	467
1900	2316	1809	507
1901	2351	1709	642
1902	2225	1634	591
1903	2248	1592	656
1904	2154	1643	511
1905	2072	1618	454
1906	2070	1674	396
1907	1927	1558	369
1908	2118	1561	557
Average...	2172	1657	515

Birthrates in the Country generally have been, and appear to be, still falling, and this seems to be the case in most civilised countries.

The fall in the birthrate of Halifax, however, has been much more rapid than that of England and Wales, 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
1905-8	26·7	18·9	—	7·8

With a marriage rate of only 9·9 per 1000, which was the figure for Halifax, compared with 14·9 for England and Wales during 1908, we cannot expect to have a birthrate anything like that of the country generally.

The following table shows the number of illegitimate births registered in the Borough during the past 18 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	2·7
1896	65	2·7	
1897	44	2·0	
1898	58	2·6	
1899	58	2·5	
1900	75	3·2	
1901	101	4·2	
1902	89	4·0	
1903	102	4·5	4·1
1904	113	5·2	
1905	97	4·6	
1906	99	4·7	
1907	84	4·3	
1908	120	5·6	4·9

On referring to the above table it will be observed that the percentage of illegitimate births is considerably in excess of any year shown therein, and that the average percentage for 1907 and 1908 is nearly double the average for the years 1891 to 1898.

The mean birthrate for the 76 great towns of England and Wales for the year 1908 was 27 per 1000, and only three of those towns had a lower birthrate than Halifax, viz. :—Hornsey, 16·1 ; Hastings, 16·5 ; Bournemouth, 17·1.

The birthrate for England and Wales for 1908 was 26·5 per 1000, against 26·3 for the previous year, or an increase of ·2 per 1000.

The birthrates of the other Yorkshire great towns were—Leeds, 24·8 ; Sheffield, 30·7 ; Bradford, 20·2 ; Hull, 30·2 ; Huddersfield, 24·4 ; York, 25·1 ; and Rotherham, 32·8 respectively.

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

Period.	Males.		Females.		Totals.		Birthrate per 1000 living.	
	1908.	1907.	1908.	1907.	1908.	1907.	1908.	1907.
1st Quarter ...	274	241	290	238	564	479	20·9	17·6
2nd ,, ...	265	269	271	250	536	519	19·9	19·1
3rd ,, ...	261	230	234	233	495	463	18·4	17·0
4th ,, ...	257	238	266	228	523	466	19·4	17·1
Whole Years ...	1057	978	1061	949	2118	1927	19·7	17·7

The above table shows that each quarter of the year added its quota to the increased birthrate, when compared with the year 1907.

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

WARDS.	Birthrates.					
	1904	1905	1906	1907	1908	Average.
Ovenden ...	21·4	17·5	19·9	20·2	21·6	20·1
Akroydon ...	25·3	27·0	23·2	24·0	22·3	24·3
North ...	22·9	21·2	25·1	21·1	25·6	23·1
Central ...	21·0	20·2	18·1	18·7	22·0	20·0
West ...	17·7	14·6	17·9	17·0	17·8	17·0
South ...	15·4	13 5	14·3	12·4	15·6	14·2
East ...	14·9	14·6	17·5	13·1	16·2	15·2
Southowram ...	25·1	23·2	22·4	20·3	24 7	23·1
Skircoat ...	22·3	21·2	17·5	18·9	19·5	19·8
Copley ...	14·6	21·5	17·7	22·2	16·9	18·5
Pellon ...	18·6	18·7	17·3	16·8	17·7	17·8
Kingston ...	16·9	17·3	18·3	15·0	17·9	17·0
Illingworth ...	19·3	17·8	18·1	15·0	16·1	17·2
Northowram ...	29·0	27·3	21·5	19·1	25·0	24·3
Warley ...	20·3	22·3	20·2	15·0	17·9	19·1

From the above table it will be observed that the birthrate varied from 15·6 in South Ward, to 25 per 1000 in Northowram Ward, and the average for five years varied from 14·2 in South Ward to 24·3 in Akroydon and Northowram Wards.

There were 101 still-born children buried during the year, according to information kindly furnished me by the caretakers of the cemeteries and burial grounds in the Borough.

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.	
	1908.	1907.
Moor End Chapel...	0	0
Nursery Lane Wesleyan	0	0
St. George's, Ovenden	2	0
Providence Chapel, Ovenden ...	2	4
Illingworth Church	5	7
Christ Church, Mount Pellon ...	8	5
Illingworth Wesleyan Chapel ...	1	0
Mount Zion, Ovenden	3	3
Borough Cemetery	35	31
Wesleyan Chapel, Northowram ...	0	0
All Saints' Church	3	3
Heywood Cemetery	4	3
Bradshaw Church	0	1
Mount Tabor Burial Ground... ...	0	0
King Cross Wesleyan	9	12
St. Paul's Church, King Cross ...	12	11
All Souls' Cemetery	7	16
Warley Church	1	3
Wesleyan Chapel, Luddenden ...	0	0
Lister Lane Cemetery	2	6
St. Thomas' Church	7	8
Totals	101	113

The total number buried during the previous six years were—1901, 108; 1902, 86; 1903, 118; 1904, 121; 1905, 113; 1906, 112 respectively.

Deaths.

There were 1,664 deaths registered within the Borough during the year 1908. Of these 139 belonged to outside districts, but there also occurred 36 deaths 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 1,561.

Of the above deaths 773 were males, and 788 were females, which gives a deathrate for the year of 14·5 per 1000, which is ·2 above that of the previous year, and is the lowest on record except that year.

The following table shows the deathrates of the Borough for each year during the past ten years, from which it will be seen that the deathrate has fallen nearly 4 per 1000 during that period.

Period.	Deathrate.
1899	18·1
1900	18·1
1901	16·2
1902	15·4
1903	14·9
1904	15·3
1905	15·0
1906	15·5
1907	14·3
1908	14·5

The deathrate of England and Wales during 1908 was 14·7 per 1000, and the average for the 76 great towns was 15·8 per 1000, thirty-three of which had a lower deathrate than Halifax, but 17 of these have a much smaller population.

The deathrates of the other Yorkshire great towns were as follows:—Leeds, 15·3; Sheffield, 15·8; Bradford, 15·5; Hull, 16·2; Huddersfield, 17·1; York, 12·6; and Rotherham 16·0 per 1000 respectively. Thus the deathrate of Halifax for 1908, with the exception of York, was lower than any of the above towns.

The following table gives the average deathrates for the undermentioned periods, compared with that of England and Wales.

Period	Deathrates	
	Halifax	England and Wales
1876-80	23·5	20·9
1881-5	21·1	19·4
1886-90	21·2	18·9
1891-5	17·9	18·7
1896-00	17·5	17·7
1901-5	15·3	16·0
1906-8	14·7	15·0

The following table serves to compare the deathrates of the various Wards of the Borough.

WARDS.	Population.	Acreage.	Persons per Acre.	Total Deaths.	Death-rate per 1000.	Mortality per 1000 living:		
						Zymotics.	Phthisis.	Other Respiratory Diseases.
Ovenden ...	7400	531	13·9	112	15·1	0·8	1·0	2·1
Akroydon ...	6700	582	11·5	106	15·8	1·9	1·7	2·3
North ...	7830	168	46·6	161	20·5	3·0	2·5	4·3
Central ...	7025	82	85·6	112	15·9	0·4	1·1	2·1
West ...	8515	86	99·0	143	16·7	1·2	1·8	2·7
South ...	7400	296	25·0	114	15·4	0·1	1·3	2·5
East ...	7000	191	36·6	119	17·0	1 7	0·8	3·4
Southowram	7200	777	9·2	110	15·2	1·9	1·2	2·6
Skircoat	10850	513	21·1	128	11·7	·09	1·1	2·1
Copley ...	3190	532	5·9	29	9·0	1·5	1·2	0·9
Pellon ...	10000	241	41·4	109	10·9	0·8	0·9	1·3
Kingston ...	10950	238	46·0	132	12·0	0·2	1·2	1·6
Illingworth	7130	4504	1·5	99	13·8	0·7	0·8	2·1
Northowram	3350	1555	2·1	49	14·6	0·2	2·3	2·6
Warley ...	2960	3354	0·8	38	12·7	0·3	1·3	1·6
Totals ...	107500	13650	7·8	1561	14·5	1·0	1·3	2·3

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

WARDS.	DEATH RATES.					
	1904	1905	1906	1907	1908	Average
Ovenden... ...	14·5	17·0	14·9	12·0	15·1	14·7
Akroydon ...	18 5	17·6	14·7	16·2	15·8	16·5
North	18·6	17·7	17·1	13·8	20 5	17·5
Central	16 3	17·2	17·6	17·8	15·9	16·9
West	14·6	14·1	14·5	14·4	16·7	14·8
South	15·0	13·6	14·0	14·9	15·4	14·5
East	21·5	19·4	22 6	21·6	17·0	20 4
Southowram ...	13·1	14·4	16 9	15·0	15·2	14·9
Skircoat	16·0	14·0	15·4	10·1	11 7	13·4
Copley	11·8	14 8	14·0	16·6	9·0	13·2
Pellon	13·0	11·9	12·0	12·2	10·9	12·0
Kingston	11·0	10·3	12·4	12·3	12·0	11·6
Illingworth ...	15 8	15·6	15·6	13·5	13 8	14·8
Northowram ...	16·8	16·1	13·6	13·6	14 6	14·9
Warley	12·6	16·0	19·5	15·7	12·7	15·3

While the average deathrate of East Ward is still the highest in the Borough, it will be observed that there was a considerable fall in the deathrate of this Ward during the past year. Previously to 1908 it had consistently the highest Ward deathrate, but for the year under notice North Ward occupies that position. Both Kingston and Pellon Wards have very low deathrates.

The following table shows the total number of deaths of each sex which occurred in the Borough, the total age lived, and the average age at death during the past 13 years.

MALES.				FEMALES.			
	Deaths	Total Years	Average Ages		Deaths	Total Years	Average Ages
0-1	130	130	...	0-1	86	86	...
1-5	67	135	2·0	1-5	77	178	2·3
5-15	29	225	7·7	5-15	33	305	9·2
15-25	32	654	20·4	15-25	38	761	20·0
25-65	303	14814	48·8	25-65	298	14890	49·9
65 and upwards	212	15459	72·9	65 and upwards	256	19135	74·7
Total... 1908.	773	31417	40·6	Total... 1908.	788	35355	44·8
1908	Average		40·6	1908	Average		44·8
1907	,,		41·4	1907	,,		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 observed from the foregoing table that the average age at death of males and females during 1908 was less than the previous year, more especially in the case of females. This is accounted for by the fact that a larger number of females died during the year under review under 65 years of age, and a smaller number above that age.

In the case of the age at death of males, while a larger number died under 65, a larger number died over 65, hence the reason of the lessened fall in the average age at death of males compared with females.

The average age at death of females is still about four years greater than that of males.

Zymotic Deathrate.

The principal Zymotic diseases accounted for 108 deaths during the year, against 69 during 1907. This gives a deathrate of 1 per 1000 against ·63 during the previous year. There was thus a slight increase in this deathrate compared with the previous year, but it was considerably below that of 1906.

This increase was due to a larger number of deaths from Measles, compared with the previous year.

Of the 33 great towns of England and Wales, only four had a lower Zymotic deathrate than Halifax, viz. :— Brighton, ·64 ; Portsmouth, ·97 ; Plymouth, ·91 ; Derby, ·95.

The Zymotic deathrate of 1908 for the other Yorkshire great towns was as follows :— Leeds, 1·49 ; Sheffield, 1·85 ; Bradford, 1·36 ; Hull, 2·19 ; Huddersfield, 1·61 ; York, 1·41 ; and Rotherham, 2·8 per 1000 respectively.

In the following table the average Zymotic death-rate of England and Wales and of the great towns is shown.

	DEATHRATE FROM							
	Small-pox.	Measles	Scarlet Fever.	Diph-theria.	Whooping Cough.	Fever.	Diarr-hœa.	Zymotic Death-rate.
England and Wales...	0·00	0·22	0·08	0·15	0·27	0·07	0·50	1·29
76 Great Towns ...	0·00	0·31	0·10	0·16	0·29	0·08	0·65	1·59
142 Smaller Towns ...	0·00	0·20	0·06	0·15	0·25	0·08	0·52	1·26
England and Wales, less the 218 towns ...	0·00	0·13	0·06	0·15	0·25	0·07	0·33	0·99
HALIFAX	0·00	0·34	0·03	0·10	0·28	0·09	0·13	1·00

From the above table it will be observed that the Zymotic deathrate of Halifax compares very favourably with the average of that of the country generally.

In the next table the deaths from the chief Zymotic diseases are distributed among the Wards of the Borough.

WARDS.	Small-pox.	Measles.	Scarlet Fever.	Diph-theria.	Whooping Cough.	Fever.	Diarr-hœa.	Zymotic Death-rate per 1000.
Ovenden ...	...	...	1	2	1	1	1	0·8
Akroydon...	...	9	...	...	2	...	2	1·9
North ...	...	11	..	2	6	...	5	3·0
Central ..	...	1	...	...	2	...	...	0·4
West ...	...	3	1	3	2	1	1	1·2
South ...	...	...	...	...	...	...	1	0·1
East ...	...	3	...	...	4	2	3	1·7
Southowram	...	2	...	2	6	3	1	1·9
Skircoat ...	...	...	...	...	...	...	1	·09
Copley ...	...	2	1	...	2	...	...	1·5
Pellon ...	...	3	1	1	2	1	...	0·8
Kingston ...	...	1	...	...	2	...	...	0·2
Illingworth	...	2	...	1	1	1	...	0·7
Northowram	...	...	...	...	1	...	...	0·2
Warley ...	...	...	...	...	...	1	...	0·3
Totals ...	...	37	4	11	31	10	15	avg1·0

From the above table it will be noticed that North Ward had the highest Zymotic deathrate, and Skircoat Ward the lowest.

The high Zymotic deathrate in North Ward was chiefly due to the large number of deaths from Measles which occurred therein.

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

WARDS	ZYMOTIC DEATHRATE					
	1904	1905	1906	1907	1908	Average
Ovenden	1·5	1·9	1·9	0·5	0·8	1·3
Akroydon	2·4	0·6	1·6	1·3	1·9	1·5
North	2·7	1·3	1·3	1·1	3·0	1·8
Central	0·6	0·7	1·1	0·7	0·4	0·7
West	1·4	0·7	0·4	0·4	1·2	0·8
South	1·3	0·9	1·0	0·7	0·1	0·8
East	1·5	0·8	1·5	0·5	1·7	1·2
Southowram ...	1·1	1·8	3·0	0·3	1·9	1·6
Skircoat	1·0	0·5	0·9	0·0	·09	0·4
Copley	2·0	2·0	1·6	0·6	1·5	1·5
Pellon	1·8	0·5	0·9	0·7	0·8	0·9
Kingston	0·5	0·3	1·1	0·4	0·2	0·5
Illingworth ...	0·8	0·4	0·8	0·9	0·7	0·7
Northowram ...	2·4	1·8	1·5	0·6	0·2	1·3
Warley	0·0	0·3	1·7	0·0	0·3	0·4

It will be observed that even the average Zymotic deathrate of the Wards for a period of five years varies considerably, Warley usually having the lowest rate. During the past five years the average rate for Skircoat and Warley were equal and the lowest; while North Ward, which invariably has a high Zymotic deathrate, is the highest.

Halifax has invariably a very low zymotic deathrate, and the following table shows the gradual and continuous fall which has taken place in this deathrate during the past 30 years

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
1907-8	·81

Infantile Mortality.

During the year 1908, 216 infants died under one year of age, compared with 195 during the previous year.

Although the number of infant deaths shows a slight increase, the rate of infant mortality is slightly less, owing to the increased birthrate.

The mortality for the year was at the rate of 101 deaths to 1,000 births registered. This is the lowest rate of infant mortality that has ever been recorded in the Borough, though only slightly below the previous year, when the rate was 102 deaths to 1,000 births.

The above infantile deathrate, when compared with that of other manufacturing centres in the country, must be considered very satisfactory.

There has now been a continuous fall in this rate during the past three years, and if this state of things could be maintained for four or five further years, we should be getting nearer to what ought to be the normal infantile deathrate.

We can however hardly expect this, as it is quite possible that there might be a rise in this rate before any further marked fall takes place. That this death-rate can be further reduced is evidently quite possible when we find wards like Skircoat and Warley have an average rate for five years of 69 and 70 respectively per 1,000 born. It is in East ward where the average rate is 196, Central ward where it is 167, and North ward where it is 150 per 1,000 respectively that we must look for improvement.

The infantile deathrate in the above wards is still very excessive, and if in them it were materially reduced, we should then have a highly satisfactory infantile mortality.

The following table gives the number of births, birthrates, the number of deaths of infants, and the mortality per 1,000 births, for each ward in the Borough.

WARDS.	Number of Births.	Birthrates.	Number of Deaths under 1 year.	Mortality per 1000 Births.
Ovenden ...	160	21·6	15	93
Akroydon ...	150	22·3	13	86
North	201	25·6	31	154
Central ...	155	22·0	24	154
West	152	17·8	21	138
South	116	15·6	12	103
East	114	16·2	15	131
Southowram ...	178	24·7	17	95
Skircoat ...	212	19·5	17	80
Copley ...	54	16·9	5	92
Pellon... ...	177	17·7	10	56
Kingston ...	197	17·9	16	81
Illingworth ...	115	16·1	12	104
Northowram ...	84	25·0	5	59
Warley ...	53	17·9	3	56
Totals ...	2118	19·6	216	101

It will be observed from the above table that during the year under review, there was a marked fall in the infantile deathrate of East ward. This is considerably the lowest rate of mortality which has been recorded in this ward, at any rate since the year 1900, which was the first year when figures were got out separately for each ward, and it is extremely likely that it is the lowest that has yet been recorded for that ward.

East ward since 1900 has had invariably the highest infantile deathrate, but for the year 1908, North, Central, and West wards show a higher rate than the former.

This is highly satisfactory, and it is hoped that the improvement will continue, especially in view of the efforts that are now being made to spread information among the mothers with regard to the treatment of infants.

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

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks
All Causes.	Certified	53	9	7	7
	Uncertified	1	...	...	...
Common Infectious Diseases.	Measles	...	...	...	...
	Scarlet Fever	...	...	...	...
	Diphtheria, Croup	...	...	...	...
	Whooping Cough	...	...	...	...
Diarrhœal Diseases.	Diarrhœa, all forms	...	...	...	...
	Enteritis Muco-enteritis, Gastro-enteritis	...	...	...	...
	Gastritis, Gastro-intestinal Catarrh	...	1	1	...
Wasting Diseases.	Premature Birth	23	2	2	4
	Congenital Defects	6	1	...	...
	Injury at Birth	2	...	...	...
	Want of Breast-milk, Starvation	...	...	...	...
	Atrophy, Debility, Marasmus	8	1	2	...
Tuberculous Diseases.	Tuberculous Meningitis	...	...	...	...
	Tuberculous Peritonitis: Tabes Mesenterica	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...
Other Causes	Erysipelas	...	...	...	...
	Syphilis	...	1	...	1
	Rickets	...	...	...	...
	Meningitis *(not Tuberculous)*	...	...	...	...
	Convulsions	10	2	1	1
	Bronchitis	...	...	...	1
	Laryngitis	...	...	...	...
	Pneumonia	...	...	...	...
	Suffocation, overlying	...	...	...	...
	Other Causes	5	1	1	...
		54	9	7	7

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
76	26	23	14	9	12	17	5	11	8	5	8	214
1	1	...	...	...	...	...	...	...	...	...	...	2
...	...	1	...	...	1	2	...	3	2	...	...	9
...	...	...	..	...	...	...	...	...	...	...	...	..
...	...	...	...	...	...	...	...	...	...	1	...	1
...	1	...	2	...	1	...	1	2	...	1	2	10
...	...	1	1	2	2	...	...	...	...	...	1	7
...	...	...	2	...	...	...	...	1	...	...	...	4
2	1	...	...	...	1	3	...	...	...	...	...	7
31	3	2	...	...	...	...	...	...	...	...	...	36
7	2	2	...	...	...	1	1	...	...	...	...	13
2	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	1	...	...	...	...	...	...	1
11	9	6	5	2	1	...	...	1	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	1	...	...	...	...	...	2
...	...	...	...	...	1	...	...	...	1	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...
2	2	2	1	1	...	1	...	...	...	...	...	9
...	...	...	...	...	...	...	...	1	...	...	...	1
...	...	1	...	1	...	...	...	1	1	1	1	6
14	...	1	...	...	...	1	...	...	1	...	1	18
1	5	2	1	2	1	3	1	...	...	1	1	18
...	...	...	...	...	1	...	...	...	...	...	...	1
...	3	3	2	...	2	3	2	1	1	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	2	...	1	...	2	...	1	2	...	2	17
77	27	23	14	9	12	17	5	11	8	5	8	216

A rather larger number of infantile deaths occurred from zymotic diseases than during the previous year, also three more as a result of premature birth, though the number of deaths from this cause in now considerably less than was the case a few years ago. Atrophy, Debility, and Marasmus claim 10 more deaths than during the previous year. With greater attention to infants immediately after birth, there should be less deaths from these causes.

On referring to the above table it will be observed that there were 120 illegitimate births during the year, while 11 illegitimate infants only died. This gives a deathrate among illegitimate infants of only 91 per 1,000, which it will be observed is lower than the average infantile mortality of the Borough.

I was rather astonished to find this to be the case, as generally speaking, the deathrate among illegitimate infants is considerably higher than among those born in wedlock.

The following table shows the causes of death of illegitimate children during the year 1908.

Disease	Age at Death			Total
	Under 1 Year	1 to 5	5 and upwards	
Premature Birth ...	1	...	...	1
Syphilis	1	...	...	1
Congenital Defects ...	2	...	...	2
Atrophy	2	2	...	4
Convulsions	...	1	...	1
Bronchitis	2	...	1	3
Tuberculous Meningitis	...	1	...	1
Diphtheria	...	1	...	1
Measles	...	2	...	2
Dentition	...	1	...	1
Gastro Enteritis ...	2	...	...	2
Pneumonia	1	...	...	1
Total... ...	11	8	1	20

I have already referred to the fact that certain wards of the Borough always have a comparatively high infant deathrate compared with others. While that is so, this deathrate varies considerably from year to year in the various wards of the Borough, and the following table gives the average infant mortality and the birth-rates of each ward during the past five years.

WARDS.	Deaths under 1 Year to 1000 Births Registered.						Average Birthrate during the past five years.
	1904.	1905.	1906.	1907.	1908.	Average.	
Ovenden ...	90	132	116	87	93	103	20·1
Akroydon ...	162	167	96	161	86	134	24·3
North ...	162	197	137	102	154	150	23·1
Central ...	145	176	239	122	154	167	20·0
West ...	127	139	89	113	138	121	17·0
South ...	117	115	63	80	103	95	14·2
East ...	228	145	260	219	131	196	15·2
Southowram	127	148	130	142	95	128	23·1
Skircoat ...	61	82	80	42	80	69	19·8
Copley ...	46	93	56	103	92	78	18·5
Pellon ...	126	129	84	68	56	92	17·8
Kingston ...	152	71	62	62	81	85	17·0
Illingworth	158	85	99	82	104	105	17·2
Northowram	136	155	84	111	59	109	24·3
Warley ...	69	78	150	0	56	70	19·1

Although there was such a marked improvement in the infantile deathrate for East ward during the year 1908, it still has the highest average for the past five years, viz. — 196 deaths per 1,000 births. Central ward comes next with 167 deaths per 1,000 births.

With a view to a further reduction in the infant mortality of the Borough, the "Notification of Births Act" was put into force in the beginning of the year 1908. A Lady Health Visitor was appointed, and a band of voluntary ladies, called the "Halifax Public Health Association" was called into existence to assist the Lady Health Visitor in this important work.

The work carried out during the year by these agencies will be referred to in detail further on in this report.

The lectures, illustrated with lantern slides, referred to in my previous report, were continued during the year, and leaflets containing "Hints on how to bring up a baby" were widely distributed through the medium of the midwives and the Lady Visitors.

If the greatest amount of benefit is to be secured from the work of the Lady Visitors, it will be necessary for them to concentrate their efforts more especially upon North, Central, West, and East wards, because it is these districts which show an excessively high infantile deathrate.

The following 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 1,000 of the population.

DISEASES	Number of Deaths under 1 year.					Rate per 1000 of Population.				
	1904	1905	1906	1907	1908	1904	1905	1906	1907.	1908.
From all causes ...	282	271	242	195	216	2·63	2·52	2·24	1·79	2·00
Respirat'ry Diseas's	61	52	39	33	36	·57	·48	·36	·30	·33
Premature Birth ...	59	62	39	33	36	·55	·57	·36	·30	·33
Diarrhœa ...	22	10	12	12	7	·20	·09	·11	·11	·06
Whooping Cough	4	15	1	6	10	·03	·14	·009	·07	·09
Convulsions ...	22	22	20	19	18	20	·20	·18	·17	·16
Scrofula, Tuberculosis ...	10	15	8	17	4	·09	·14	·07	·15	·03
Measles	16	1	15	5	37	·14	·009	·13	·04	·34

The next table serves to compare the average infantile mortality of England and Wales, the great towns, &c., with that of Halifax for the years 1907 and 1908.

	Deaths under 1 year per 1000 Births	
	1907	1908
England and Wales ...	118	121
76 Great Towns	127	128
142 Smaller Towns ...	122	124
England and Wales less the 218 Towns	106	110
Halifax	102	101

It will be observed that the infantile deathrate of Halifax compares very favourably with the above, being even lower than the average of England and Wales excluding the 218 towns. It will also be noticed that while the average deathrate in each of the above cases for 1908 was above that of the previous year, that of Halifax was slightly lower.

The infant mortality of the other Yorkshire great towns for 1908 was as follows:—Leeds, 137; Sheffield, 140; Bradford, 143; Hull, 145; Huddersfield, 111; York, 104; 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
1905-8	112	125

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

34 Large Towns.	Deaths under 1 year to 1,000 Births Registered.					
	1904.	1905.	1906.	1907.	1908.	Average.
Burnley	228	173	213	158	200	194
Stockport ...	204	168	186	159	167	176
Rhondda	151	200	173	162	183	173
Preston	183	153	202	158	154	170
Middlesbrough ...	170	174	170	158	159	166
Nottingham ...	175	155	171	165	145	162
Liverpool... ...	196	154	172	144	141	161
Manchester ...	187	157	167	146	151	161
Birmingham ...	195	155	167	147	145	161
Blackburn ...	191	146	155	153	150	159
Salford	193	150	160	140	153	159
Sheffield	158	167	158	145	140	153
Bolton	167	166	140	146	149	153
Norwich	179	173	172	125	115	152
Hull	181	153	158	127	145	152
Gateshead ...	175	138	162	136	149	152
Oldham	155	150	145	144	160	150
Leeds	176	152	150	130	138	149
Leicester	163	148	168	131	131	148
Bradford	166	144	151	124	143	145
Sunderland ...	165	143	139	130	146	144
South Shields ...	144	145	150	133	134	141
Newcastle-on-Ty'e	156	137	151	123	136	140
Birkenhead ...	180	127	151	110	135	140
Plymouth... ...	173	136	152	110	129	140
Wolverhampton...	152	136	139	130	132	137
Cardiff	144	118	138	131	125	131
Derby	143	151	115	121	112	128
Portsmouth ...	141	133	129	123	98	124
Bristol	133	122	126	100	126	121
Huddersfield ...	136	119	135	97	111	119
Southampton ...	114	133	113	108	113	116
Halifax	**130**	**130**	**116**	**102**	**101**	**115**
Brighton	134	101	110	113	104	112

On January 1st, 1908, the then Mayor, Alderman Wallace, having been impressed with the importance of infant life, and with the object of bringing the question more forcibly to the notice of the public, announced in the Council Chamber that he would give £1 to each of the first hundred infants born in the Borough in that year, provided they attained the age of one year, and that the birth was notified to the Medical Officer of Health within 48 hours.

Soon after the registration of the first hundred notified, Promissory Notes were prepared for each one, but of the 100 parents of babies, only 98 applied for these promissory notes.

Of the 98 who received the promissory notes, 87 babies lived a year and beyond, and duly received the sovereign offered by Alderman Wallace.

There had been 11 deaths, which number calculated on the 98 registered, gives an infant mortality of 112 per 1,000, which, seeing that these infants belonged entirely to the working classes, must be considered a very satisfactory deathrate.

Comparison of Ward Deathrates.

The table below compares the undermentioned deathrates of the different wards of the Borough for the year 1908.

WARDS.	General Deathrates	Zymotic Deathrates	Respiratory Deathrates	Phthisis Deathrates	Infantile Mortality
Ovenden ...	15·1	0·8	2·1	1·0	93
Akroydon ...	15·8	1·9	2·3	1·7	86
North ...	20·5	3·0	4·3	2·5	154
Central ...	15·9	0·4	2·1	1·1	154
West ...	16·7	1·2	2·7	1·8	138
South ...	15·4	0·1	2·5	1·3	103
East ...	17·0	1·7	3·4	0·8	131
Southowram ...	15·2	1·9	2·6	1·2	95
Skircoat ...	11·7	·09	2·1	1·1	80
Copley ...	9·0	1·5	0·9	1·2	92
Pellon ...	10·9	0·8	1·3	0·9	56
Kingston ...	12·0	0·2	1·6	1·2	81
Illingworth ..	13·8	0·7	2·1	0·8	104
Northowram ...	14·6	0·2	2·6	2·3	59
Warley ...	12·7	0·3	1·6	1·3	56
Average ...	14·5	1·0	2·3	1·3	101

The following table shows the average deathrate from the undermentioned causes for the past 10 years, in each ward, and serves to compare the same.

Wards	Average Deathrates, 10 years			
	General	Zymotic	Phthisis	Respiratory
Ovenden ...	14·8	1·0	1·1	2·2
Akroydon ...	15·7	1·2	·6	2·7
North ...	17·7	1·7	1·4	3·6
Central ...	17·4	1·2	1·4	3·1
West	15·3	·8	1·0	3·0
South	14·5	·6	·8	2·3
East	19·6	1·1	2·0	3·8
Southowram ...	15·6	1·6	1·1	2·7
Skircoat ...	13·7	·6	1·1	2·5
Copley ...	12·3	1·2	1·1	2·0
Pellon ...	13·1	·8	1·0	2·0
Kingston ...	12·0	·5	·9	2·2
Illingworth ...	14·8	·7	·9	2·4
Northowram ...	15·8	1·0	1·5	2·3
Warley ...	15·6	·5	1·5	2·6

On referring to the above table it will be observed that East has an average deathrate very much higher than that of any other ward, being nearly 2 per 1,000 above the next highest, viz. :—North ward.

While the average zymotic deathrate of East ward is very little above the average, and not near so high as some of the other wards, this ward has a much higher deathrate from Phthisis and Respiratory diseases.

The average general deathrate for the whole Borough during the past eight years may be taken at 15 per 1,000. It will thus be seen that eight wards have a higher average deathrate than that of the Borough.

Kingston ward has the lowest average general deathrate, and on the whole, judging from the death-rates, appears to be the healthiest ward.

Copley comes next, and really, in so far as the deathrate from respiratory diseases is concerned, is slightly better than Kingston.

North ward has considerably the highest deathrate from zymotic diseases.

Both Northowram and Warley wards, considering their rural character, have a high deathrate, especially when compared with Kingston and Pellon.

It will also be seen by the above table, that East, Central, and North wards have the highest general deathrates, and that they are considerably higher than any of the other wards, also that Kingston, Copley, and Pellon have the lowest deathrates, and that they are considerably below the other ward deathrates.

The following table serves to compare the deathrates from some of the chief diseases of the above three wards, having respectively the highest and lowest deathrates during the past five years.

WARDS	Average Deathrate per 1000 for 5 years, 1904 to 1908						Total of Average
	Zymotic Diseases	Respiratory Diseases	Phthisis	Heart Diseases	Diseases Brain and Nervous System	Other Tubercular Diseases	
Copley ...	1·4	1·9	1·2	1·3	1·5	·2	7 5
Pellon ...	·9	1·8	·9	1·3	1·2	·4	6·5
Kingston ...	·5	2·0	1·1	1·2	1·3	·2	6 3
Average ...	·93	1·9	1·06	1·26	1·33	·26	...
East ...	1·2	3·5	2·0	2·1	1·7	·5	11·0
North ...	1·9	3·3	1 3	1·6	1·5	·5	10·1
Central ...	·7	3·0	1·4	1·9	1·6	·5	9·1
Average ...	1·26	3·26	1·56	1·86	1·6	·5	...

The above table shows that the average deathrates from the above-mentioned diseases in the group of wards having the lowest deathrates, varies from 6.2 to 7.5 per 1,000, while that in the group having the highest deathrates, varies from 9.1 to 11 per 1,000. It will also be noticed that the average deathrates in each disease named, is lower in one group than in the other.

While that is so, the most marked difference occurs in the diseases of the respiratory organs, which is nearly double in the one case, when compared with the other.

In Phthisis and other tubercular diseases also, there is a considerable difference, as well as in the case of heart diseases.

I have no doubt that the increased deathrate ascribed to heart disease is accounted for by chest complications such as bronchitis and congestion of the lungs, which are frequent complications thereof, and therefore I think these figures point to the conclusion that the houses of the group of wards having the highest deathrates, are generally ill-ventilated.

No doubt the situation and arrangement of the houses in these wards do not admit of the freedom of ventilation which is possible in many other parts of the town, yet I feel sure that there would be an improvement in these deathrates in the wards concerned, did the inhabitants resort to sleeping with open bedroom windows.

Notification of Infectious Diseases.

The total number of cases of infectious disease reported during 1908 was 363, against a total of 310 during the previous year, and the following table shows the total number of cases of each disease notified, the distribution of the reported cases among the wards of the Borough and the institutions situated therein.

WARDS.	Typhoid Fever.	Scarlet Fever.	Continued Fever	Puerperal Fever.	Diphtheria.	Erysipelas.	Cerebro Spinal Meningitis	Total.
Ovenden ...	1	38	...	...	7	8	...	54
Akroydon ...	6	6	1	1	3	2	...	19
North	6	8	...	1	13	1	...	29
Central ...	4	11	...	1	3	...	...	19
West	9	28	...	1	5	3	...	46
South	3	12	...	...	3	...	...	18
East	3	11	...	...	4	...	...	18
Southowram ...	6	8	...	...	5	2	...	21
Skircoat ...	7	13	...	...	10	7	1	38
Copley ...	...	2	. .	...	...	...	...	2
Pellon ...	1	21	...	2	7	8	...	39
Kingston ...	4	12	...	...	3	1	...	20
Illingworth ...	2	12	...	...	2	9	...	25
Northowram ...	...	...	...	...	...	3	...	3
Warley ...	1	4	...	...	7	...	...	12
Total, 1908	53	186	1	6	72	44	1	363

PUBLIC INSTITUTIONS (which are included in the above).

Royal Infirmary	...	3	...	...	4	..	...	7
Poor Law Hospital	3	2	...	...	1	4	...	10
The Workhouse	...	8	...	...	...	..	...	8
Nursing Institute	...	1	...	...	...	...	...	1

During each week throughout the year, lists containing the names and addresses of persons notified to be suffering from infectious diseases were sent to the chief librarians for their information, and all books found in infected houses belonging to the libraries were taken charge of by the sanitary inspectors, and disinfected before being again put into circulation.

The following table shows the number of cases of the various infectious diseases notified during each month of 1908.

MONTH.	Typhoid Fever.	Scarlet Fever.	Continued Fever.	Puerperal Fever.	Diphtheria.	Erysipelas.	Cerebro Spinal Meningitis.	Total.
January	6	22	...	1	9	4	...	42
February	6	20	...	1	5	3	...	35
March	2	8	...	...	2	5	...	17
April	5	18	...	...	5	7	...	35
May	...	16	...	1	8	5	...	30
June	2	9	...	...	5	2	...	18
July	...	12	...	1	3	1	...	17
August	2	7	...	...	13	3	...	25
September ...	2	14	...	...	8	4	...	28
October	6	7	...	1	2	2	1	19
November ...	6	27	1	1	4	5	...	44
December ...	16	26	...	...	8	3	...	53
Totals	53	186	1	6	72	44	1	363

It will be seen on referring to the above table that the Borough was free from Typhoid Fever during only two months of the year, and that the period of greatest prevalence was during December. That Scarlet Fever was most prevalent during January, February, November and December. That Diphtheria was present throughout the year, and that the period of greatest prevalence was during the month of August.

Powers for the compulsory notification of infectious diseases were obtained in a local act in the year 1882, 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 percentage 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	320	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
1908	...	.	..	53	186	1	6	...	72	44	...	...	362	·33

It will be observed from the above table that there was an increased number of cases notified during 1908 compared with the previous year, but with the exception of that year a much smaller number was reported than during any year since 1896. This increase in the number of reported cases was chiefly due to the greater prevalence of Scarlet Fever, as the number of cases of Typhoid reported were less, and the number of cases of Diphtheria considerably less, while a few more cases of Erysipelas were notified.

The following table is interesting, inasmuch as it shows the average number of notifications of the chief notifiable infectious diseases in each Ward of the Borough, during the past 10 years.

Wards	Averages, 10 years—1899 to 1908							
	Notifications					Total Average of Notifications	Average Population	Average attack rate per 1000 population per annum
	Small-pox	Typhoid	Scarlet Fever	Puerperal Fever	Diphtheria			
Ovenden ...	1·5	3·6	50·2	·1	6·5	61·9	7270	·8
Akroydon ...	·6	3·4	22·9	·3	4·5	31·7	6560	·4
North ...	1·6	5·0	26·9	1·1	5·2	39·8	8310	·4
Central ...	4·4	5·3	22·3	·5	5·3	37·8	7835	·4
West ...	2·5	5·5	29·1	·2	6·4	43·7	9285	·4
South ...	·9	3·1	20·3	...	5·9	30·2	7690	·3
East ...	7·6	4·4	15·1	·5	3·2	30·8	7010	·4
Southowram	·7	7·2	30·9	·4	4·2	43·4	7525	·5
Skircoat ...	2·1	7·1	36·6	·4	9·8	56·0	9505	·5
Copley ...	·4	1·5	10·9	·2	4·0	17·0	2945	·5
Pellon ...	1·0	4·1	36·5	·5	8·6	50·7	9350	·5
Kingston ...	·6	4·3	44·9	·3	5·0	55·1	10415	·5
Illingworth	1·1	3·6	28·1	·2	4·0	37·0	7180	·5
Northowram	...	2·2	13·5	...	1·8	17·5	3270	·5
Warley ...	1·7	1·7	8·6	...	3·2	14·2	2850	·4

On referring to the above table, it will be noticed that the attack rate of the diseases, referred to therein, was much greater in Ovenden Ward, and was more than

double that of South Ward, which had the lowest average attack rate.

Excluding Ovenden, South and Warley Wards, there was not a great deal of difference in the attack rate of the remaining Wards.

Causes of Death.

The causes of death in the Borough, of persons belonging thereto, during the year 1908, are shown in the following table.

CAUSES OF DEATH.	Number.
Small-pox	0
Measles	37
Scarlet Fever	4
Whooping-cough	31
Diphtheria and Membranous Croup	11
Enteric Fever	10
Epidemic Influenza...	18
Croup	0
Diarrhœa	15
Enteritis	5
Puerperal Fever	3
Erysipelas	2
Other Septic Diseases	0
Phthisis	146
Other Tubercular Diseases	31
Cancer, Malignant Diseases	110
Bronchitis	145
Pneumonia	103
Pleurisy	4
Other Diseases of Respiratory Organs	16
Alcoholism, Cirrhosis of Liver	13
Premature Birth	36
Diseases and Accidents of Parturition	11
Heart Diseases	186
Accidents	30
Suicides	16
Diseases of Brain and Nervous System	147
Diseases of Digestive System	46
Diseases of Urinary System	50
Old Age	106
Congenital Defects	13
Convulsions	24
All other causes	192
All causes	1561

Smallpox.

The Borough remained free from this disease throughout the year.

Scarlet Fever.

The year 1907 was remarkable for the freedom which the Borough enjoyed from this disease. During the previous 10 years widespread epidemics had occurred from time to time, and no year since 1896 can be compared, so far as the prevalence of Scarlet Fever is concerned, with 1907.

January, 1908, however, showed an increase of the disease in the Borough, and a total of 186 cases were reported during the year, against 89 during 1907.

There has been a gradual and marked fall in the mortality from Scarlet Fever during the past 20 years, so much so, that the average case mortality to-day is considerably less than half what obtained at that date.

While that is so, the attack rate per 1000 of the population of the Borough had remained about the same up to the year 1904. During the last four years the average attack rate appears to have 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
1905-8	206	107,875	1·8	2·5

The diminished mortality from this affection is chiefly due to the mild nature of the disease which now obtains. In fact it frequently happens that the disease is so mild that it is most difficult to diagnose its true nature No doubt many cases are in consequence overlooked, and the disease is thus spread.

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 ...	22	20	8	18	16	9	12	7	14	7	27	26	186

Of the above 186 cases, 4 died, which gives a deathrate of ·03, and a case mortality of 2 per cent. of those notified. During the previous year the deathrate was ·01, and the case mortality 2 per cent.

Fever.

Under the above heading are included Typhus, Typhoid, and Continued Fevers. No case of Typhus Fever has occurred, however, in the Borough since the year 1900.

During 1908, 53 cases of Typhoid, and 1 of Continued Fever were reported, against a total of 60 cases during the previous year.

Although this is an improvement upon the previous year, there were more cases reported within the Borough, with that exception, than during any year since 1903.

The disease was prevalent in the Borough more or less throughout the year, May and July being the only months during which no notifications were received. The disease was most prevalent during December, when 16 cases were reported.

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 a previous case in same house	From eating shell fish	From a cold	From other cases in the neighbourhood	Contracted at school	Washing soiled linen
Typhoid Fever...	53	44	9	53	...	3	36	14	26	3	11	9	2	1	1

With regard to the cause of this disease, only three cases occurred during the year, in houses in which a previous case had been notified, compared with 19 during the year 1907.

No fresh cases occurred during the year in houses after the return home of a patient from hospital, compared with three during the previous year. This seems to point to the fact that "carrier" cases did not have much influence in the spread of this disease during the year under review.

It is a remarkable fact, however, that no less than 11 cases of this disease occurred within a short period after the consumption of shell fish—chiefly mussels eaten in a raw state. This works out at 20 per cent. of the total number of cases reported.

In all my experience I have never before been able to associate such a large percentage of cases of this disease with the consumption of shell fish.

I have noticed that during the year quite a number of outbreaks, in different parts of the country, have been traced to this source, and the conclusion which suggests itself is the fear that the mussel beds around the coasts are becoming more polluted with sewage than was previously the case.

The following is a list, and a short history, of the cases, which on enquiry were found to have been associated with the consumption of shell fish.

List of cases of Typhoid Fever suspected to have been caused by eating Shell Fish.

H.B., aged 38, ate raw Mussels on October 3rd ; also on October 10th. First complained of being unwell on October 14th. Removed to hospital on October 21st.

J.H.C., aged 23, frequently eats Oysters. On November 30th, he and a friend had a dozen each ; the friend was very ill during the night but recovered after vomiting. J.H.C. was not sick, but in about a week developed Typhoid Fever.

A.S., aged 35, ate raw Mussels on December 4th. Began to be ill on or about December 10th, and was removed to hospital, on December 15th, suffering from Typhoid Fever.

E.C., aged 40, with her three children, partook of Mussels on November 5th. She was taken ill in about a week and was removed to hospital, on November 22nd, suffering from Typhoid Fever. One of the children, aged 14, was also taken very ill during the night, but recovered after having vomited the Mussels after an emetic of salt and water.

M.M., aged 16; W.M., aged 30; M.M., aged 28, all living in the same house. These persons ate raw Mussels on or about December 7th, and within a week M.M. was taken ill and removed to hospital, on December 14th, suffering from Typhoid Fever. Within 10 days W.M. and M.M. were also taken ill with the same disease, and both removed to hospital on December 18th.

F.B., aged 38, a Greengrocer, commenced to be ill on December 12th. Had often eaten Mussels, raw, but did not remember having done so within a fortnight of the onset of his illness. He was notified on December 30th and removed to hospital.

N.G., aged 24, had been ill since about December 10th. Had eaten raw Mussels on November 30th, and on December 2nd. She was notified on December 23rd to be suffering from Typhoid Fever, and was removed to hospital on that date.

T.C., aged 36, had some of the same lot of Mussels on November 30th as N.G. He had been feeling unwell since the early part of December, and became very ill on Christmas Day, when he was certified to be suffering from Typhoid Fever, and was removed to hospital.

G.H.G. ate a quantity of Mussels on October 27th. Commenced to be ill with Typhoid Fever on November 6th.

The following table gives the number of cases which have been reported since the year 1899, and the number of deaths 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
1908	53	10

As will be seen by the above table, 10 of the 53 cases reported ended fatally, which gives a deathrate of ·09, and a case mortality of 18 per cent. of those notified, against a deathrate of ·08 per 1000, and a case mortality of 15 per cent. during the previous year.

Diphtheria.

I have again to record a less prevalence of this disease in the Borough than during the previous year. 1907 also showed considerable improvement in this respect compared with 1906, 40 less cases being reported, and there were 46 cases less reported during the year under consideration when compared with 1907.

The year 1906 showed a marked increase in the prevalence of this disease, by far the largest number of cases having been reported in that year than during any year since the notification act has been in force.

There had been a gradual increase in the number of cases notified since the year 1902, and during the past two years a diminution has taken place, so much so, that the number of notifications during the past year compare favourably with the average yearly number reported immediately previous to 1906.

The following table shows the number of cases reported, and the number of deaths from the disease each year since 1902.

Year	Number of Cases Reported	Number of Deaths
1902	37	8
1903	50	10
1904	80	17
1905	87	27
1906	158	42
1907	118	28
1908	72	11

The disease was present in the Borough throughout the year, and each month added its quota to the total number of cases reported. During August, however, the disease attained its greatest prevalence, and 13 cases were notified during the month.

Five Wards remained entirely free from the disease throughout the year, viz. :—Central, South, East, Copley and Warley, whilst those Wards which suffered most therefrom were Illingworth, Ovenden, and Pellon. These latter Wards also contributed the largest number of cases during the previous year.

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 other cases in the neighbourhood	From a cold	From bad drains	From previous case in same house	Contracted away from home
Diphtheria	72	63	9	72	...	3	51	18	57	3	4	2	5	1

Of the 72 cases reported 11 died, giving a deathrate of ·1 per 1000, and a case mortality of 15 per cent., against a deathrate of ·25 per 1000, and a case mortality of 23 per cent. during the previous year.

Not only has the disease been less prevalent in the Borough, but it has also been of a less virulent type.

The following table shows the mortality from the disease during the past four years.

Year	Deathrate per 1000	Mortality per cent.
1905	·25	31
1906	·38	26
1907	·25	23
1908	·10	15

It will be observed that the deathrate from this disease has considerably fallen. This is especially noticeable in the column above giving the percentage mortality of the cases reported for each year. This column shows that the mortality has gradually fallen, and that for the year under review it was only about half what it was four years ago.

Erysipelas.

The compulsory notification of this disease is of very doubtful value. In fact the only use such notifications appear to be is that they give an opportunity for the testing of drains, and otherwise inspecting the houses in which these cases occur, and in that way sometimes defects are discovered.

There were 44 cases of Erysipelas reported, and two deaths resulted from the disease during the year, against 36 cases reported, and one death during the previous year.

Measles.

This disease was prevalent in the Borough almost throughout the year, June and August being the only months during which the town remained practically free from the disease.

This disease had been epidemic during the latter part of the previous year, especially in Skircoat, Kingston, South and Copley Wards. It gradually spread from these to other parts of the Borough, and continued epidemic well into the year under review, the period of greatest prevalence in the latter being during the month of March. After May the disease became much less prevalent, and continued so throughout the summer months, but in December it again assumed a more marked epidemic form.

From information I have been able to gather from certain quarters, I am glad to say that I believe that medical aid is now more frequently called in, in this disease, than was formerly the case.

The disease caused 37 deaths during the year, compared with five during the previous year, and this increase in the deathrate from Measles is in itself sufficient to account for the increased Zymotic death-rate for the Borough, when compared with the previous year.

These deaths also again illustrate, and confirm the opinion I have frequently expressed in previous years in my Annual Report, that children under five years of age should not be allowed to attend our elementary schools.

It is the babies' classes which are more concerned in the spread of this disease, and it is among the babies that the large number of deaths occur therefrom.

Of the above 37 deaths, no less than 33 were of children under five years of age, and only four of children of that age and upwards.

If children under the age of five were protected from the infection of this complaint, it would not matter very much after that age whether they had it or not, because the deathrate above the age of five is infinitesmal compared with that below that age.

The above 37 deaths give a deathrate of ·34 per 1,000, against ·04 and ·41 during the previous two years.

Whooping Cough.

The above disease was prevalent in the Borough more or less throughout the year, in fact each month contributed its varying quota to the deathroll therefrom.

The disease appears to have attained its maximum prevalence during the month of April, when it assumed a somewhat 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. Of the 31 deaths, no less than 30 occurred among children under the age of five, and only one above that age.

Measles and Whooping Cough together during the year under review, account for nearly two thirds, or to be exact, ·62 of our zymotic deathrate, and nearly the whole of that portion of our zymotic rate, and more than half of the total zymotic deathrate were of children under the age of five, which had they been protected from these diseases until after the fifth year, they would not have lost their lives. Surely a no stronger indictment can be brought against babies attending school.

The 31 deaths resulting from this disease give a deathrate for the year of ·28 per 1,000, against a deathrate of ·1 during the previous year.

Diarrhoea.

The number of deaths occurring in the Borough from those causes which are classified under Diarrhœa was practically the same as the previous year, and this notwithstanding the fact that there was a marked and general rise in the deathrate from these causes throughout the country.

This Borough is remarkable for its freedom from these diseases and its low deathrate therefrom.

The highest point which the four foot earth thermometer reached during the year was 55° on July 28th, and remained at that height until August 25th.

It has been shown that an earth temperature of 56° is most favourable to the prevalence of this disease.

During recent years flies have been shown to be carriers of the germs of this and other diseases, and I quite think that they are the chief cause of the spread of this disease.

It is a preventable disease, and perfect cleanliness will do a great deal towards that end. All accumulations of organic matter, filth, horse manure, &c., which are the breeding places of flies, should be more frequently removed.

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

	Deathrate per 1,000
England and Wales	0·50
76 Great Towns	0·65
142 Smaller Towns...	0·52
England and Wales, less the 218 Towns ...	0·33
Halifax	**0·13**

The above table shows the favourable position which Halifax occupies with reference to this disease.

Not only is our deathrate for 1908 below that of all the towns, but it is less than half of that of England and Wales less the 218 towns, or what may be regarded as rural England.

The 15 deaths give a deathrate for the year of ·13, against a deathrate of ·12 for the previous year.

The deathrates from Diarrhœa of the other Yorkshire great towns for 1908 were as follows:—Leeds, ·68; Sheffield, ·88; Bradford, ·65; Hull, 1·38; Huddersfield, 54; York, ·51; and Rotherham, ·82 per 1,000 respectively.

Cerebro Spinal Fever.

One case of the above disease was reported during the year, which ended fatally.

The patient was an infant aged nine months, and though born in and belonging to the Borough, its parents were Irish.

It appears that sometime during the summer, the father being out of work, the family went over to Belfast, and stayed with friends there for some time. In this way the baby must have come in contact with the disease, because no other cases have occurred anywhere in this Borough or its neighbourhood.

Influenza.

The Borough during the previous two years had remained fairly free from the above disease. It however became more prevalent, especially during February and March of the year under review, and 18 deaths resulted therefrom, against 11 during the previous year.

Respiratory Diseases.

The particular diseases included under the above heading are Bronchitis, Pneumonia, and Pleurisy, and these together caused 252 deaths during the year, against 281 during the previous year.

The number of deaths which each of the above diseases were respectively responsible for was as follows: Bronchitis, 145; Pneumonia, 103; and Pleurisy, 4, and the total of these figures gives a deathrate of 2·3 per 1,000, against 2·5 during the previous year.

The Respiratory deathrates for the previous eight years were:—2·5, 2·6, 2·6, 2·6, 2·8, 3·1, 3·0, and 3·7 respectively.

It will thus be seen that the respiratory deathrate of the Borough is gradually diminishing, and the above deathrate is undoubtedly the lowest respiratory deathrate that has yet been recorded in the Borough.

Children under five years of age contributed no less than 70 deaths to those causes during the year, or nearly one-third of the total deaths.

I feel sure that if parents would only exercise greater care with their children, especially during Autumn, Winter, and Spring months, the number of deaths of young children under this heading would be greatly reduced.

The following table gives the number of deaths from Respiratory diseases during each month of the year under notice, and the six 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
1908	26	31	42	20	18	14	7	15	6	12	24	37	252
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	43	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 ...	35	32	31	28	23	16	12	13	10	22	28	36	...

From the above table it will be observed that taking the average of a number of years, the largest number of deaths from respiratory diseases occur during the months of January and December, and it is also worth noting that on the average, nearly one half the deaths for the year of respiratory diseases occur during the months of January, February, March, and December.

Phthisis.

There were 146 deaths from Phthisis during the year, against 120, 122, and 135 during the previous three years.

This gives a deathrate of 1·35 per 1,000, against 1·1 for 1907. This is the highest deathrate from Phthisis of any year since 1901, and is above the average deathrate of the past eight years. It is hoped that this unsatisfactory state of things is not going to continue, because we appeared to be making consider-

able progress in this respect, and it is rather disappointing that after all the trouble which has been taken to educate the public, distribute leaflets, to freely supply pocket spittoons, and generally disinfect infected houses, to find such a considerable rise in the deathrate from this disease compared with the previous year.

Other forms of tubercular disease were responsible for 49 deaths during the year, and these added to the above, make a total of 195 deaths due to the various forms of tubercle. This gives a total deathrate from all tubercular diseases of 1·8 per 1,000, against 1·6 during the previous year.

The above deaths from tubercular disease included the following:—

Tubercular Meningitis	...	14
Tuberculous Peritonitis Tabes Mesenterica	...	5
Other Tubercular Diseases		30

The following table shows the decline which has taken place in the phthisis deathrate of Halifax during the past 28 years.

	Average Deathrate from Phthisis
Ten Years - 1881-1890	2·00
Ten Years - 1891-1900	1·50
Eight Years - 1901-1908	1·21

Compulsory notification not yet being applicable to Phthisis, we can only form an estimate as to the number of persons there are in the Borough likely to be suffering from this disease, and we estimate that these number about 360 persons.

The number of fresh cases which were reported or came to our knowledge during the year was 131, against 107 during the previous year, and of which 79 were males, and 52 were females.

The Regulations of the Local Government Board, with regard to Phthisis, which makes the occurrence of phthisis in a poor person compulsorily notifiable to the Medical Officer of Health, have come into force this year, but I do not think that the operation of these regulations will reveal the existence of any larger number of cases than have been reported or come to our knowledge during the past few years, because during those years we have been in the habit of receiving from the Guardians reports in which were included all these cases.

In three of the houses in which the above 131 cases occurred, there had been a previous case within a recent period, and in another, two previous cases.

Enquiries have been made as far as practicable into the family history of persons suffering from this disease, and it was found in 14 families that there had been a previous case ; in four families two previous cases ; and in two families four previous cases.

In three instances a history was discovered in family connections, though no actual case had occurred in either of those particular families.

It is evident therefore that in 17 per cent. of the families investigated, there was a history of a definite predisposition to the disease.

The time which elapsed between the occurrence of primary and secondary cases in the same family varied between six months and 14 years.

Phthisis is eminently a preventable disease, and in order to do what we can in this direction, leaflets containing simple instructions on the prevention of consumption have been distributed by the Inspectors and Lady Health Visitor.

A copy of this leaflet appeared in my Annual Report of last year, therefore it is not necessary to reproduce it here.

We supply pocket spittoons free of charge, and offer disinfection in case of death or removal to hospital or elsewhere of consumptive persons.

During the year 88 houses were disinfected after death, and in 41 cases disinfection was refused.

Anthrax.

There were no cases of this disease during the year under review.

Cancer.

Under the heading of Cancer are included all the various forms of malignant disease, and the number of deaths registered during the year was 110, against 114 during the previous year. This gives a deathrate of 1 per 1,000, the same as that for 1907.

Cancer appears to be on the increase in many parts of the country, and it would appear that there has been a slight increase in Halifax also during the past five or six years, compared with 15 years ago.

That this increase has not been very serious however will be apparent on referring to the following table, which gives the deathrate for the past 17 years.

Year	1892	1893	1894	1895	1896	1897	1898	1899	1900
Deathrate	·8	·7	·8	·8	1·1	·6	·6	·7	·7
Year	1901	1902	1903	1904	1905	1906	1907	1908	
Deathrate	·8	·8	1·0	·8	·9	·9	1·0	1·0	

Inquests and Uncertified Deaths.

The Coroner held 107 inquests during the year, including 13 of persons not belonging to the Borough.

The 94 deaths certified by the Coroner after inquests form six per cent. of the total deaths in the Borough, and the 16 deaths, which were neither certified by a medical practitioner nor the Coroner, correspond to 1 per cent. of the total deaths.

There were also 3 uncertified deaths during the year in the Borough of persons not belonging thereto.

The following table shows the percentage of deaths certified by the Coroner, and the percentage of uncertified deaths during the past eight years.

Years	1901	1902	1903	1904	1905	1906	1907	1908
Percentage certified by Coroner ...	2·6	2·9	3·1	2·8	3·5	4·7	5·1	6·0
Percentage uncertified	3·4	2·6	1·5	1·0	0·7	0·7	0·9	1·0

From the above table it will be observed that the percentage of deaths certified by the Coroner has greatly increased, and that there has been a marked fall in the percentage of uncertified deaths, except during the past two years, which show a slight increase.

Sewerage and Drainage.

I believe the sewers generally in the Borough are in a satisfactory condition, and the Borough Engineer informs me that they have been flushed regularly, or from time to time as required.

The scheme for the drainage of Copley Ward has not yet been completed, but the work is in progress, while that for the drainage of Northowram has been decided upon by the Council, and is awaiting the sanction of the Local Government Board.

In connection with the Warley scheme, the Council are connecting up the houses with the sewers, and this work will soon be completed.

The construction of the remainder of the filter beds at the Outfall Works, Salterhebble, is in progress, and will be completed in due course.

Scavenging, Disposal of Night Soil, and House Refuse.

The scavenging and cleansing of all paved streets and roads is carried out by the Health Committee—this work being carried out by men employed by the Committee, who also undertake the watering of all roads and streets.

This work has been carried out in a satisfactory manner throughout the year. I have had no serious cause for complaint, and there is no doubt that its due performance favourably affects the public health.

The greater part of the night soil is still dealt with under the goux system, there being 17,975 goux closets in existence, compared with 5,852 water closets.

The goux tubs are renewed at periods varying from three to ten days, according to circumstances.

All tubs brought to the Depôt are washed and partially filled with fresh shoddy before being returned to the closets.

The re-arrangement of the method of collecting these tubs, which was effected about a year ago, has continued to work in a satisfactory manner, and at less cost to the rates.

There is again a slight increase in the number of goux closets to be recorded for the year under review, viz. :—55, against 97 during the previous year. This form of closet, however, is not increasing in number at the rate which obtained a few years ago, and it is hoped that in the course of a short time there will be a yearly diminution instead of an increase, because the goux closet, as a sanitary convenience, cannot be compared in any way with the water closet.

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
1908	5852

There are now 821 privy middens in the Borough, a decrease of 48; and 433 dry ashpits, against 456 a year ago, or a decrease of 23 during the year.

There are still a number of these privy middens situated near houses, and the emptying process constitutes a nuisance. It is expected that a number of these will be converted to water closets as soon as possible, as well as a further number, when certain contemplated sewers are constructed.

With regard to the removal of house refuse, in the majority of cases tubs are provided by the Corporation, and the work is carried out by men employed by the Health Committee.

The average number of horses and carts used for the removal of this refuse was 15, and the number of men engaged in the work was 30.

The refuse is still disposed of on tips, which is not a satisfactory way of dealing therewith.

Another method of dealing with this refuse has during the year been under the consideration of the Committee.

The garbage and fish refuse from the markets is daily removed to a field and there buried.

Occasionally, complaints of offensive smells arising therefrom have been made. This matter has also been under the consideration of the Committee, and no doubt some other means of disposing of this refuse will be decided upon, as soon as circumstances will allow.

Water Supply.

Although the year 1908 showed a less rainfall than that of the previous year, there was a plentiful supply of water of excellent quality.

The reservoirs at Walshaw Dean were completed and opened during 1907, but so far it has not been necessary to utilize them to supply the town.

The waterworks now consist of ten storage and six service reservoirs, having a total capacity of 1,955,222,000 gallons.

The source of supply and the collecting grounds, or drainage area of the reservoirs, is chiefly moorland, or high mountain pasture, and of the mill-stone-grit formation, the best known natural filter.

The water thus collected is conveyed to the town by means of covered conduits, and large iron pipes, and at a high pressure, with a constant supply.

The water from these gathering grounds, which are of a moorland character, is liable to contain an excessive amount of peaty acid. This is more especially so in the case of Ogden reservoir.

The water from the latter has been treated for many years, and the water supplied through Ramsden Wood is now also treated before being supplied for consumption.

The following table, which is prepared from figures obtained from the analyses of Mr. Dewhirst, the Borough Analyst, gives the acidity of the water before and after treatment.

Month	Average Acidity of Sample of Water			
	Ogden Reservoir		Ramsden Wood Reservoir	
	Before Treatment	After Treatment	Before Treatment	After Treatment
January ...	1·1	·20	·32	·18
February ...	1·0	·19	No estimation	No estimation
March ...	No estimation	No estimation	No estimation	·19
April ...	·92	·30	No estimation	No estimation
May	1·1	·20	·37	·24
June	·90	·18	·30	·24
July	·80	·28	No estimation	·27
August ...	·85	·23	No estimation	·29
September ...	No estimation	No estimation	No estimation	No estimation
October ...	No estimation	No estimation	No estimation	·23
November ...	1·0	·30	No estimation	·34
December ...	No estimation	No estimation	No estimation	·28

From the above table it will be observed that the treatment to which the water is submitted, was the means of very much reducing the acidity of the Ogden supply.

I should like, however, to see this acidity further reduced, and the water supplied free from acid, and somewhere near the neutral point.

In the case of Ramsden Wood reservoir, the water of which contains considerably less than half the acidity of the Ogden water, the result of the treatment during the past year was not so satisfactory in reducing the acidity of this water. In fact, during a great part of the year, only a very slight reduction was effected.

This was due to the fact that the apparatus used for mixing the lime with the water, broke down. Another machine has, however, now been added, with the result that the treatment is now very much more efficiently carried out, and I am expecting that at the end of the current year very much better results will be shown.

The figures relative to the treatment of the water refer only to Ogden and Ramsden Wood reservoirs, because all the water not supplied to the Borough from Ogden passes through the Ramsden Wood reservoir.

Common Lodging Houses.

Under a local Act of Parliament, the Common Lodging Houses in the Borough require to be re-registered in May of each year, and there are 13 within the Borough.

Though the number is the same as for the previous year, some extensions have evidently been made, as they are now registered to accommodate 834 lodgers, against 803 for 1907.

So far as the general conduct of these houses is concerned, they are under the control of the Police, and I am informed that there was no cause for complaint regarding the carrying out of the Regulations in force, nor the manner in which these houses were kept during the year under review.

Dairies, Cowsheds and Milkshops.

The supervision of the Dairies, Cowsheds and Milkshops, is performed by the Meat Inspector, and the Inspector for Illingworth District, F. Teal.

The Meat Inspector, J. T. Millington, resigned his position and left the town on May 1st, 1908, and Mr. J. Pollard, M.R.C.V.S., D.V.S.M., Veterinary Surgeon, who had been appointed as his successor, commenced duties on July 13th.

During the interval between May 1st and July 13th, each District Inspector did a certain amount of Cowshed inspection.

The number of Cowsheds and Milkshops on the register are as follows:—

Cowsheds	...	...	...	510
Milkshops	...	...	...	67
			Total ...	577

The total for the previous year was 569, being an increase of 8.

The number of Dairy Farmers and Purveyors of Milk on the register is 393, against 387 for the previous year, an increase of 6

There are still a large number of Cowsheds in the Borough which do not comply with the Regulations in force regarding airspace, lighting, ventilation, etc.

We endeavour each year to secure the alteration and reconstruction of a number of the worst of the above, and during the year under review eight Cowsheds were so dealt with, which together with the 83 which have been previously reported on, make a total of 91 which have been so dealt with since the present Regulations came into force.

It is necessary again to call attention to the question of cleanliness in connection with the milk supply.

In this connection some improvement has taken place during the past eight or nine years, yet there are not more than about six cowkeepers who groom their cows in anything like a thorough manner.

There are also only a small proportion who properly clean the udders of the cows before the milking process begins.

In all cases where these two matters are not attended to, quantities of filth and dirt fall into the pail while the cows are being milked.

I am also satisfied, that generally speaking, the scalding out of the milk vessels is not efficiently done.

I desire here to call attention to the fact that dairymen supplying dirty milk are liable to have the same seized and destroyed, under the Public Health Act, as being unfit for human food. I hope the pro-

ducers of milk, who are not cleanly in their methods, will take this as a warning.

In connection with the delivery of milk to the customer, I should like to see more sealed bottles or cans in use, or, as an alternative, the provision of a tap to the stock can, to save the very frequent opening of the can, so as to insure the least possible amount of contamination during its distribution.

The question of Tuberculosis of the milch cow has been brought prominently to the front: the chief reason for this being that there is greater danger to the human being from the consumption of milk than there is from eating meat, because the former is frequently consumed uncooked, while in the latter this is not the case. This fact was strongly urged at the recent National Conference on Tuberculosis, held in the Caxton Hall, London.

The percentage of milch cows suffering from Tuberculosis no doubt varies in different parts of the country. I have no data from which to form an opinion as to the percentage of the cows so affected within this Borough. I have no reason to suspect, however, that we have a larger proportion of such animals in Halifax than there are in other parts of the country.

This is a preventable disease, and no efforts should be spared by the agriculturalists of this country in their endeavour to stamp out this disease.

Apart from the housing of the cattle in defective and ill-ventilated sheds, the methods pursued by the farmers and cowkeepers of Halifax is not calculated to promote this end, but on the contrary to favour the continuance of this disease. I refer to the very frequent changing of the cows which appears to be the rule here.

A farmer seldom keeps a cow twelve months, and the frequency with which new cows are brought into a herd is liable to re-infect the same, and makes it impossible for such herd to be purged from this disease.

The tuberculin test, in expert hands, is the most satisfactory method of distinguishing the affected and the unaffected cow, and no cow should be admitted to a herd unless she will stand that test.

If a farmer really desires to have a tubercular free herd of cows, he must not be changing them every year, but must keep them for a lengthened period. He must submit them from time to time to the tuberculin test, and he must separate those which do not re-act from those which re-act to the test, and isolate the latter. He must rear his stock of milch cows only from the non-re-acting animals, and if this were done he would in time possess a herd of cows free from tubercular disease.

I would also point out that the cowkeepers do not sufficiently realise the importance and the necessity of throughly cleansing and disinfecting the stands and feeding utensils, more especially after a tubercular animal has been removed therefrom, and before a fresh one is admitted to take its place.

It is quite true that the milk is much more liable to contain tubercle bacilli when the udder is affected, but I would like to draw attention to certain facts which are contained in the Third Interim Report of the Royal Commission on Tuberculosis, as a result of investigations that have been carried out by the Commission.

The above investigations go to prove that while there may be no tubercular disease in the udder, that disease may exist somewhere in connection with the

alimentary canal, and in that case cows would void the tubercle bacilli in their excreta. Such being the fact, the dried excreta on the flanks and udders of the cows is liable to contain living bacilli. The filth and dirt from these surfaces frequently finds its way into the milk pail, and in that way the milk may be indirectly affected with the bacillus. This is a further strong argument for the thorough grooming of the cows.

The Inspectors between them paid 1,184 visits to cowsheds, and 104 visits to the various milkshops in the Borough.

In connection with the above visits, the undermentioned 134 defects were discovered and reported, and 132 were remedied, as the following table will show.

Nature of Defects	Number Reported	Number Remedied
Want of Light	9	12
Do. Airspace	5	5
Do. Ventilation	11	12
Defective, Made-up, and Untrapped Drains	22	24
Defective Floors...	17	13
Dirty Stands and Floors	3	2
Cowsheds requiring Limewashing ...	42	42
Pigs kept in Cowshed	3	3
Accumulations of Manure	6	5
Overflowing Liquid Manure Tanks ...	12	12
Cowsheds Overcrowded	2	2
Defective Middensteads...	2	...
Total for 1908 ...	134	132
No. of Defects on books Jan. 1st, 1908	189	...
Total ...	323	...
No. of Defects on books Dec. 31st, 1908	191	...

From the above table it will be observed that the number of defects remedied was two less than the number reported, consequently the number of defects remaining on the books at the end of the year was increased to that extent.

During the year 1,363 cows were individually examined, against 1,060 during the previous year.

In three cases disease of the udder was found, two of which cows suffered from Mammitis, and one from Tuberculosis. The latter was certified as such by Mr. Wilks, Veterinary Surgeon, was isolated, and afterwards disposed of.

There were five cows also found to be suffering from open tuberculosis. The owners were advised to have them destroyed, with the result that four were sent to the Knackers, and one was disposed of outside the Borough.

The class of cows kept by the farmers and cow-keepers in the Borough are as a whole good, and some are really excellent animals.

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

INSPECTION OF CATTLE.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders diseased	General Condition		
1908.						
Jan. 3	243	16		Fair	Moderate	
,, 3	243	3		2 Fair; 1 poor	Fair	
,, 3	243	7		Good	Good	
,, 3	243	10		,,	,,	
,, 5	244	16		,,	,,	
,, 10	249	4		Fair	,,	
,, 10	249	2		,,	,,	
,, 10	249	6		Good	Fair	
,, 10	249	16		,,	,,	
,, 10	249	20		,,	Good	
,, 14	252	5		Dirty	Dirty	
,, 16	254	3		Fair	Moderate	
,, 16	254	2		,,	Fair	
,, 16	254	5		,,	Very Poor Shed	
,, 16	254	7		,,	1 Poor Shed; 1 moderate shed	
,, 16	254	8		,,	Moderate	
,, 20	257	7		Good	Fair	
,, 20	257	11		,,	1 Good Shed and 1 poor one	
,, 20	257	2		,,	Good Shed	
,, 20	257	8		,,	6 cows in good shed; 2 in poor one	
,, 20	257	1		Very emaciated		With owner's consent had this cow slaughtered; found it affected with Johne's Disease

Jan.	22	259	5		Fair	Moderate	At time of visit 1 cow suffering from Impaction of Rumen
,,	28	264	11		Dirty	Good Shed but dirty	
,,	28	264	8		Good	Good	
,,	28	264	5		Excellent	2 Poor Sheds	
,,	28	264	6		Good	Good	
,,	29	265	16		In good condition but rather dirty	,,	
Feb.	4	270	11		Fair	,,	
,,	13	277	12		Good	,,	
,,	13	277	19		,,	,,	
,,	14	279	13		Fair condition ; 1 very dirty udder	Fair	
,,	14	279	4		Fair condition	Poor	
,,	14	279	1	1	Moderate		This cow is isolated with tubercular affection of udder
,,	19	283	12		In fair condition but dirty	Moderate	
,,	19	283	6		Good	Good	
,,	19	283	12		,,	Moderate	
Mar.	10	302	25		,,	Good	
,,	10	302	7		,,	Moderate	
,,	13	305	6		Fair	Fair	1 Cow down with broken pelvis after calving
April	10	21	8		7 in good condition ; 1 poor	2 Poor Sheds	
,,	16	25	11		Cattle fair condition	Mistals dirty	
,,	27	32	5		Good	Very Poor Shed	
July	16	209	11		In fair condition	Clean	Recently altered
,,	16	194	7		,, ,,	,,	
,,	16	93	5		,, ,,	Dirty	
,,	17	145	7		,, ,,	Clean and Good	

Inspection of Cattle—*continued.*

Date of Inspection	No. of Folio	Cattle and Condition: Number Examined	Cattle and Condition: Udders dissected	Cattle and Condition: General Conditions	Condition of Shed	Remarks
July 20	68	6		In fair condition, except 2	Dirty and deficient in ventilation	Udders of several cows dirty. 1 Cow waster removed; the other suffering from septicæmia due to lacerated vagina after calving
Aug. 4	208	6		,, ,,	Clean	
Sept. 4	74	7		In good condition	Clean and Good	
,, 4	127	9		,, ,,	Clean and Moderate	
,, 4	206	4		In fair condition	Clean and Good	
,, 8	203	12		In good condition	,, ,,	
,, 10	89	12		,, ,,	Clean and Moderate	
,, 10	89	12		,, ,, several udders dirty	,, ,,	
,, 10	89	6		,, ,,	,, ,,	
,, 10	89	23		,, ,,	Clean and Good	
,, 15	93	6		In fair condition	Clean and Moderate	
,, 15	93	5		,, ,,	Good building	Pigs kept in adjoining building having direct communication
,, 15	93	5		In good condition and clean	Clean; floor defective	
,, 15	93	10		In good condition	Clean and Good	
,, 18	96	12		In fair condition	,, ,,	
,, 18	96	7		,, ,,	Clean but structurally poor	1 Cow with atrophied quarter
,, 18	96	11		Good	Clean; deficient in ventilation	
,, 18	96	29		,,	Clean and good condition	
,, 21	98	23		Good, few with dirty udders	,, ,,	
,, 25	102	18		Fair	Clean; 1 moderate and 1 poor	Pigs are kept in a building adjoining the cowsheds having direct commu-

Oct.	1	107	10		Fair	1 Clean and good; 1 Clean but structurally poor	
,,	1	107	8		,,	Clean and Good	
,,	1	107	6		,,	Clean but structurally bad	Deficient in light, ventilation, &c.
,,	1	107	14		Good	Clean but poor shed	
,,	2	108	5		,,	Clean but structurally poor	Deficient in light and ventilation
,,	2	108	8		Fair	Clean and Moderate	
,,	2	108	9		,,	Clean	Deficient in light and ventilation; Horses kept
,,	5	110	10		,,	1 Clean and Good; 1 moderate	
,,	5	110	4		,,	Clean and Moderate	
,,	5	110	9		Excellent	,, ,,	
,,	5	110	15		Good	Clean but requires reconstructing	
,,	9	114	11		,,	Clean and Moderate	
,,	9	114	10	1	,,	Clean but poor sheds	1 Cow with Mastitis affecting one quarter
,,	12	116	16		,,	Clean but Poor	
,,	12	116	14		Excellent	Clean and Good	
,,	12	116	6		Fair	,, ,,	
,,	15	119	3		Good	Clean and Moderate	
,,	15	119	5		Fair	Clean but poor shed	
,,	15	119	5		Good	Clean but Moderate	
,,	15	119	7		,,	Clean but Poor	

Inspection of Cattle—*continued.*

Date of Inspection	No. of Folio	Cattle and Condition: Number Examined	Cattle and Condition: Udders diseased	Cattle and Condition: General Condition	Condition of Shed	Remarks
Oct. 22	125	9		Good	Moderate	Requires re-limewashing
,, 22	125	9		,,	Poor	
,, 22	125	8		Fair	,,	
,, 29	131	6		,,	Moderate	1 Cow sick, consider tubercular, newly calved
,, 29	131	24		,, 1 udder dirty	,,	
,, 29	131	18		Good	Poor	Overcrowded
,, 29	131	7		,,	,,	
Nov. 5	43	25		,,	,,	Overcrowded; arranged for 2 cows removing
,, 5	56	7		Fair	Good	
,, 5	57	16		,,	1 Good; 1 poor	Requires new middenstead
,, 6	58	8		,,	Moderate	
,, 6	59	1		,,	,,	
,, 6	60	6		,,	1 Moderate; 1 poor	
,, 6	94	6		,,	1 Moderate; 1 poor	
,, 10	141	10		,,	Moderate	
,, 10	141	7		,,	,,	
,, 10	141	12		,,	,,	
,, 12	143	2		Good	,,	
,, 12	163	10		Fair	,,	Not re-limewashed
,, 12	143	6		,,	Good	
,, 12	143	2		Good	Moderate	
,, 12	164	15		,,	Good	
,, 12	165	12		Fair	Moderate	
,, 13	53	11		,,	,,	
,, 13	54	22		Good	Good	

Nov.	16	146	10		Fair	1 Good; 1 poor	
,,	16	146	11		Good	Moderate	
,,	16	146	16		,,	Good	
,,	19	149	5		Fair	,,	
,,	19	169	2		,,	Moderate	
,,	19	168	7		,,	Good	
,,	19	166	8		,,	Moderate	
,,	19	140	11		Good	1 Good; 1 poor	
,,	19	149	1		,,	Moderate	
,,	19	133	14		,,	1 Good; 2 moderate	
,,	23	183	10		,,	1 Good; 1 moderate	
,,	23	192	1		Fair	Moderate	
,,	23	184	13		,,	Good	
,,	23	213	9	1	Good	1 Good; 1 moderate	1 Cow with Mammitis of one quarter
,,	23	160	6		Fair	Moderate	
,,	26	186	9		Good	,,	
,,	26	178	5		,,	,,	
,,	26	177	4		,,	Good	
,,	26	145	7		,,	Moderate	
,,	27	149	3		Fair	Poor	
,,	27	155	4		,,	,,	
,,	27	154	9		Good	Good	
,,	27	190	7		Fair	,,	Requires new tank and middenstead
Dec.	1	161	10		,,	,,	1 Cow isolated, tubercular, afterwards destroyed
	3	91	6		,,	Moderate	
	3	30	11		Good	,,	

Inspection of Cattle—*continued.*

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders diseased	General Condition		
Dec. 3	215	10		Good	Poor	
,, 3	216	3		Fair	Moderate	
,, 4	217	11		,,	Poor	
,, 4	117	13		Excellent	1 Good ; 2 moderate	
,, 4	218	9		Fair	Moderate	
,, 4	118	8		Good	1 Moderate ; 1 good	
,, 4	118	3		,,	Good	
,, 7	74	10		Fair	Moderate	
,, 7	127	9		Good	,,	
,, 7	219	8		,,	Good	
,, 7	212	9		Fair	Poor	
,, 7	78	4		Good	Moderate	
,, 7	66	11		Fair	Good	
,, 11	2	10		,,	Moderate	Middenstead requires emptying
,, 11	68	10		,,	,,	
,, 11	193	11		,,	,,	Middenstead requires emptying
,, 11	211	5		,,	Poor	
,, 11	102	6		,,	Moderate	
,, 14	63	3		Good	Poor	
,, 14	64	3		,,	Moderate	Not re-limewashed
,, 31	95	13		Fair	Good	
,, 31	109	26		Excellent	Moderate	

Slaughterhouses.

The number of private slaughterhouses which exist in the Borough is nine, and they are chiefly situated in those districts which have been more recently added thereto.

During the year under review they were successively under the supervision of Messrs. Millington, Firth, and Pollard. They were all found to be in a generally satisfactory condition, and gave no cause for complaint.

The number of visits paid to the public slaughter-house was 958, and the number of animals slaughtered there during the year ended December 31st was as follows.

Cattle	Calves	Pigs	Sheep	Total
6,102	3,457	7,195	16,309	33,063

There were 360 separate seizures of meat during the year, and the following table shows the number of carcases condemned, and the total weight of the same.

	Cattle.	Calves.	Pigs.	Sheep.	Total.
Number of Animals killed	6102	3457	7195	16309	33063
Do. condemned	7	13	34	12	66
Weight of those condemned in lbs. ...	3344	633	3906	1011	8894

In the following table the diseases and other conditions which led to the condemnation of the meat during the year are shown.

	Tuberculosis	Inflammatory Diseases	Jaundice	Parturition	Septicemia	Rheumatism	Immaturity	Cadavers	Otherwise Unsound	Decomposition
Cattle	3	1	...	1	1	...	...	...	1	...
Calves	1	6	...	...	...	...	4	1	1	...
Pigs	21	3	4	1	...	1	...	2	2	...
Sheep	...	...	...	...	...	...	...	4	8	...
Rabbits	...	...	...	...	...	..	...	...	...	95
Partridges	...	...	...	...	...	...	...	...	...	2
Totals	25	10	4	2	1	1	4	7	12	97

Besides the above there were 53 seizures of fish and fruit, and the following table shows the weight of the various kinds of food destroyed.

Kinds of Food Destroyed	Quantity in lbs
7 Carcases of Beef...	3344
Beef not in Carcase	137
34 Carcases of Pigs	3906
Pork not in Carcase	817
12 Carcases of Mutton	1011
13 Carcases of Veal	633
Veal not in Carcase	12
95 Rabbits	188
1 Brace of Partridges	3
Fish	13204
Fruit	1553
Offals	5154
Other Foods	292
Total... ...	30254

While tuberculosis still continues as here-to-fore to be the chief cause for the seizure of meat, the amount destroyed during the year under review on account of that disease is considerably less than for the previous year.

The following table serves to compare the amount seized on account of tubercular disease, with the total amount destroyed.

		lbs.
Total amount destroyed ...	...	15,141
Total amount of Meat destroyed on account of Tuberculosis ...	4,785	
Total amount of Offals destroyed on account of Tuberculosis ...	4,144	
Total amount destroyed on account of Tuberculosis	...	8,929
Total amount destroyed from other causes...		6,212

There was a less amount destroyed on account of tuberculosis in 1908 than in any year since 1905, as the following table will show.

Year	Total amount destroyed	Amount destroyed on account of Tuberculosis.
	lbs.	lbs.
1903	20,766	15,106
1904	30,654	19,826
1905	17,468	8,929
1906	21,645	11,185
1907	22,351	12,684
1908	15,141	8,928

On referring to the above table it will be observed that during 1908 there was only about half the quantity destroyed on account of tuberculosis, in comparison with 1903 and 1904; and while the years 1906 and 1907 showed an increase, on the average, the amount of tubercular meat destroyed is considerably less than it was.

The greater part of the meat, fish, &c., destroyed during the year, was voluntarily surrendered by the owner for destruction, in fact, of the 413 separate seizures, 407 were so destroyed, and in only six cases was it necessary to obtain a Magistrate's Order.

There were no prosecutions during the year.

The following table shows the number of animals slaughtered in the public slaughterhouse during the past ten 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
,, 1908	6102	3457	16309	7195	33063

The following table shows the number of visits made by the Meat Inspector during the year.

Description of Premises	Number of Visits
Public Slaughterhouse	958
Private Slaughterhouses	147
Borough Market	391
Wholesale Market	366
Fasting Sheds...	330
Potted Meat Houses	378
Tripe Boiling Houses...	91
Butchers' Shops	3172
Fried Fish Shops	102
Cowsheds	383
Dairies and Milkshops	54
Bakehouses	77
Other Visits	247
Total ...	6696

Factories and Workshops.

The administration of the Factories and Workshops Act, 1901, has been satisfactorily carried out during the year, and some good work has been done.

Notwithstanding this fact, there are still several factories and workshops in the Borough, the sanitary conveniences of which are not satisfactory. These, however, are being gradually dealt with each year, and in the course of two or three years it is expected that considerable improvement will have been made in this direction.

The improvements which have been carried out during the year have been secured without the necessity of resorting to legal proceedings.

The Register of Workshops has been kept up to date from lists received through the Factory Inspector, and all new workshops discovered by the inspectors have been reported to the Factory Inspector.

The cleanliness of the Workshops was not so well attended to during the year as it ought to have been.

With regard to limewashing, the complaints reported numbered 56, against 33; and dirty closets, floors, etc., numbered 26, against 6 during the previous year respectively.

With regard to airspace, there were no complaints of overcrowding, but there were 9 cases of defective ventilation reported, which were all 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	48	372	341
B	103	301	290
C	69	239	326
D	36	100	5
Total	256	1012	962

The Borough is divided into four districts for the purposes of inspection, each of which is under the supervision of a Sanitary Inspector, and the amount of work done during the year in connection with Factories and Workshops is set out in the tables which follow. In these, the nature and number of the various Sanitary defects discovered are shown in detail, distinguishing between Factories and Workshops. Each table indicates the amount done in the respective districts.

The District Inspectors made a total of 1,268 visits to Factories and Workshops, against 1,010 during the previous year; and 5 visits were paid by myself in order to inspect the condition of the Sanitary conveniences, and advise regarding alterations that were required thereto.

DISTRICT A.

INSPECTOR JOSEPH GEORGE WALSHAW.

Number of Workshops on Register, 298.

Nature of Defects	Number Registered
IN FACTORIES.	
Defective drainage	4
Insufficient closet accommodation	4
Defective Urinal	1
Want of ventilation to water closets	2
IN WORKSHOPS.	
Rooms requiring limewashing	18
Insufficient closet accommodation	3
Dirty closets	12
Inadequate ventilation	6
Defective water closets	1
Defective drains	3
Total	54

DISTRICT B.

INSPECTOR ROBERT PICKARD.

Number of Workshops on Register, 383.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive smoke	5
Offensive urinals	3
Insufficient flush to water closets	14
Insufficient ventilation to water closets ...	15
Offensive goux closets	2
Insufficient closet accommodation	2
Goux closets converted to water closets ...	6
Want of separate closet accommodation for sexes	2
Defective, made up, and untrapped drains ...	3
Defective fall pipes	2
IN WORKSHOPS.	
Rooms requiring limewashing	27
Insufficient ventilation	2
Insufficient closet accommodation	2
Defective drains	11
Untrapped drains	4
Made up water closets	6
Insufficient flush to water closets	2
Offensive smoke	1
Offensive accumulations	3
Dirty floors, staircases, and closets	9
Total ...	121

DISTRICT C.

INSPECTOR JAMES EDWARD FIRTH.

Number of Workshops on Register, 203

Nature of Defects	Number Registered
IN FACTORIES.	
Made-up water closets	14
Made-up and defective drains	1
Offensive smoke	2
Stonewalled drain	1
Goux closets converted to water closets	4
Offensive fumes from gas engine	3
IN WORKSHOPS.	
Want of intervening ventilated space	2
Offensive fumes from gas fires	1
Dirty floor	1
Insufficient ventilation	1
Untrapped lavatory waste pipe	1
Workrooms requiring limewashing	8
Want of separate closets for sexes	1
Dirty closets	4
Total	44

DISTRICT D.

INSPECTOR FRED TEAL.

Number of Workshops on Register, 88.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive urinal	1
Insufficient closet accommodation	1
Offensive closets	9
IN WORKSHOPS.	
Workrooms requiring limewashing	3
Insufficient closet accommodation	1
Offensive fumes from gas stove	1
Total	16

As will be seen by the foregoing tables, the total number of nuisances and Sanitary defects dealt with numbered 235, against 186 for the previous year.

The number of defects which remained unabated at the end of the previous year was 23, which, together with the above 235, made a total of 258. Of these 238 were remedied, and 20 remained unabated at the end of the year.

Under Section 5 of the Factories and Workshops Act, the Factory Inspector sent 29 notices regarding Sanitary defects, of which 18 were in connection with Factories, and 11 in connection with Workshops.

Attention was given to these matters, the defects, however, had not all been removed at the end of the year, but several of the defects which had been reported during the previous year were abated, and a formal notice of abatement in each case was sent to the Factory Inspector upon completion of the work. The number of notices of abatement included the following:—

Factories	10
Workshops	12
Bakehouses	4

In connection with outworkers, occupiers are not very punctual in sending in their lists, as required by Section 107 of the Factories and Workshops Act. There has been also a decrease both in the number of lists sent in and in the number of outworkers. This possibly may be due to the depressed condition of trade generally.

The Sanitary Inspectors made 33 visits to the premises occupied by outworkers during the year.

In all 12 lists were sent in, against 17 during the previous year, and the number of outworkers notified was as follows.

	Tailors.	Shoe-makers.	Seam-stresses	Total.
No. of Outworkers ...	15	4	1	20

The majority of the above are themselves occupiers of Workshops. The remainder who work in their own houses on being visited their premises were found to be satisfactory.

All the outworkers reported during the year resided in the Borough.

The following is a detailed list of all the Workshops in the Borough, which shows an increase of 160 during the year.

Fibrous Plaster Works	1	Boot, Shoe, and Clog Makers	174
Joiners and Cabinet Makers	82	Dress & Mantle Makers	127
Brush Makers ...	17	Saddlers	11
Provision Merchants...	6	Milliners	79
Rag Sorters ...	3	Cotton Doubler ...	1
French Polishers ...	20	Coopers	5
Tailors	82	Bakehouses... ...	132
Marine Store Dealers	4	Wood Turner ...	1
Blacksmiths ...	26	Drug Packing ...	1
Upholsterers	13	Whitesmiths ...	9
Umbrella Makers ...	3	Coach Builders ...	4
Box Makers... ...	3	Rope Makers ...	2
Surgical Inst'm't M'ker	1	Wood Carvers ...	4
Fruit Boilers ...	1	Wool Sorters ...	6
Plasterers	3	Cork Cutters ...	1
Hosiers and Knitters	20	Gun Makers ...	2
Wheelwrights ...	15	Carpet Repairers ...	5
Painters	10	Picture Frame Makers	7
Plumbers	27	Wire Worker ...	1
Printers	12	Basket Makers ...	4
Sweet Boilers ...	2	Tinners	19
Cistern Maker ...	1	Locksmiths... ...	1
Clog Sole Makers ...	2	Cutlers	1
Belt and Brace Makers	3	Underclothing Makers	21
Oil Merchants ...	2	Blind Makers ...	2
Rug Maker... ...	1	Electrical Engineers	4
Watch Makers and Jewellers ...	14	Piano Makers ...	8
Motor Repairers ...	2	Firelight Maker ...	1
Pattern Makers ...	1	Drysalter	3
Leather Cutters ...	5	Boot Upper Maker ...	2
Sugar Packer ...	1	Cycle Works ...	2
Designers	4	Tea Packers ...	1
Metal Engraver ...	3	Brass Works ...	2
Beer Bottling ...	2	Laundries	9
Hair Dressers ...	7	Hair Pad Makers ...	4
Metal Polish Maker ...	2	Machine Makers ...	9
Herbal Brewery ...	2	Machine Broker ...	2
Carpet Beater ...	1	Marble Masons ..	4
Chair Maker ...	1	Shoeing Smiths ...	4
Photographers ...	7	Firewood Cutters ...	1
Billiard Table Maker...	1	Paper Bag Makers ...	2
Ventilating Engineers	3	Dentists	10

Total number of Workshops, 1,104.

Bakehouses.

The number of Bakehouses on the Register was 132, against 168 for the previous year, being a decrease for the year of 36.

The actual number which has been discontinued is 38, but 2 new Bakehouses have been opened after the premises had been inspected by myself to ascertain their fitness for the purpose.

Although so many have been closed, the number of underground Bakehouses remains the same, viz. :—26.

The inspection of Bakehouses was previously carried out by the Meat Inspector, but since the appointment of a Veterinary Surgeon this work has been transferred to the District Inspectors.

The number of visits paid to the Bakehouses during the year was 312, as the following table will show.

Description of Premises	Number on Register	Number of visits made
Wheat bread and muffin bakers, including confectioners ...	118	312
Oat bread and muffin bakers ...	14	

Greater attention is paid by occupiers to the condition of the Bakehouses than was formerly the case, and there has not been much cause for complaint during the year under review.

Two underground Bakehouses had been illegally occupied as such, and were closed.

With regard to cleanliness the largest number of complaints, as usual, had reference to limewashing, though slightly fewer complaints under this heading occurred than during the previous year.

The number of defects reported during the year was 41, and 3 remained over from the previous year, making a total of 44, of which 41 were remedied, and 3 remained unabated at the end of the year.

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

Nature of Defects.	Number Reported.	Number Remedied.
Brought forward from last year ...	3	
Illegal occupation of underground bakehouse	2	2
Insufficient ventilation	2	2
Dirty sink	1	1
Dirty and defective closets	3	3
Drain opening inside bakehouse ...	1	1
Bakehouses requiring limewashing ...	19	19
Insufficient closet accommodation ...	1	1
Sink pipes to disconnect	3	3
Accumulation of rubbish	1	1
Dirty floors	2	2
Made-up drain	1	1
Defective sink drains	4	4
Defective fall pipes	1	1
Total	44	41

Ice Cream Makers and Vendors.

There are now very few of the itinerant class of ice cream makers, and there has been no complaint to make during the year regarding those engaged in this work.

Offensive Trades.

The number of offensive trades carried on in the Borough, under Section 112 of the Public Health Act, 1875, was 11, against 13 during the previous year. The following table shows the nature of these trades.

Bone Boilers	2
Blood Boiler	1
Soap Boilers	2
Tripe Boilers	6
	11

One new tripe boiling business was commenced in Queen's Road during the year, and the premises were inspected by myself and found to be suitable, before consent was given by the Council to establish the same.

Three businesses of this character were discontinued during the year.

An application was received for permission to boil bones in Copley, but on examination, the building and premises were found to be unsuitable for the purpose, and consequently the necessary consent to establish the business was refused.

An application was also received for permission to establish soap works at Waterside. On visiting the premises I found the same to be suitable for the purpose, and the Committee granted consent for the establishment of the business.

The above premises have been visited and kept under supervision, and on the whole have been well conducted. In only one case was there a complaint

made, and this had reference to offensive smells arising from the boiling of tripe. The occupier's attention was called to this, and the matter was remedied.

Public Health Laboratory.

The specimens examined in the Public Health Laboratory were fewer than during the previous year, the number being 67, against 95.

The following table gives details of the work done.

Disease.	Number of Specimens.	Results of Examination.	
		Positive.	Negative.
Diphtheria (Swabs) ...	29	6	23
Anthrax (Blood)	2	...	2
Tuberculosis (Sputum) ...	21	7	14
Do. (Urine) ...	1	...	1
Do. (Cerebro Spinal Fluid)	1	...	1
Typhoid (Widal's) ..	1	1	...
Cerebro Spinal Meningitis (Cerebro Spinal Fluid)	1	1	...
Total	56	15	41

Besides the above, two samples of urine were examined, as well as six specimens of meat, fish, &c., in connection with the inspection of food, which resulted in the discovery of Actinomycosis in two cases, Carcinoma in the liver of a Halibut, Streptococcal infection of a liver and spleen, Johne's Disease in the small intestine of a cow, and Supperative Mastitis in a cow's udder.

In connection with the examination of throat swabs for diphtheria, a much less proportion gave positive results than during the previous year; also with regard to the sputum examined, the tubercle bacillus was discovered in proportionately fewer number of the samples examined.

Disinfection.

The greater prevalence of infectious disease in the Borough during the year under review, necessitated a larger amount of work under this heading than during the previous year.

The number of different articles of bedding, clothing, &c., disinfected by steam was 6,072, against 4,935 during the previous year.

In the fumigation of rooms, formalin is now generally used, and 549 rooms in private houses were so disinfected, against 327 during the previous year.

In addition, in a few cases, the formalin spray was used, both in private houses and in the disinfection of the elementary day schools.

There were in addition, thirty rooms in four elementary day schools fumigated, against three during the previous year, as the following table will show.

Date.	Name of School.	Number of Rooms Fumigated.
January 28th ...	Moorside, Ovenden	18
,, 29th ...	Christ Church, Pellon ..	9
February 18th ...	Parkinson Lane	2
December 9th ...	Parish Church (Infants) ...	1
	Total ...	30

Greater attention has been paid to Library Books during the year under review, and a much larger number of these books, taken from infected houses, were disin-

fected in the special apparatus provided for that purpose, than in any previous year.

Disinfecting Fluid is supplied, free of charge, to the occupiers of infected houses, and a much larger quantity was distributed than during the previous year.

Schools and Infectious Disease.

In consequence of the greater prevalence of infectious disease in the Borough, there was more interference with the work of the elementary day schools than during the previous year.

School closure was rendered necessary in nine cases on account of Measles, in two cases on account of Scarlet Fever, and in one case in consequence of the prevalence of Chicken Pox.

The following table indicates the schools affected, and shows the period during which they were closed.

Disease.	Name of School.	Date of Closure.	Period of Closure.
Measles ...	Lee Mount (Infants)...	Jan. 9	3 weeks
,, ...	Pellon Lane ,, ...	,, 9	3 ,,
Scarlet Fever.	Christ Ch. Sch., Pellon	,, 27	4 ,,
Measles ...	Boothtown (Infants)...	,, 27	3 ,,
Scarlet Fever..	Christ Ch. Sch., Pellon	Feb. 24	4 ,,
Measles ...	Akroyd Place (Infants)	,, 24	4 ,,
,, ...	Sunnyside ,,	,, 24	4 ,,
,, ...	Portland Road ,,	,, 24	4 ,,
,, ...	Moorside ,,	Sept 30	3 ,,
,, ...	Christ Ch. Sch., Pellon	Oct. 5	3 ,,
,, ...	Portland Rd. (Infants)	Nov. 30	4 ,,
Chicken Pox...	Parkinson Lane ...	Dec. 11	2 ,,

It is a well-known fact that the elementary day schools offer facilities for the spread of infectious disease, and 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.
St. Augustine's ...	9	1	10
Battinson Road ...	10	3	13
Parkinson Lane ...	12	3	15
Sunnyside	2	2	4
Christ Church, Pellon ...	14	2	16
Moorside	1	2	3
Queen's Road	2	1	3
Haugh Shaw	3	2	5
Siddal	...	3	3
Portland Road ...	1	2	3
Holy Trinity	3	1	4
Parish Church ...	8	1	9
Salterhebble	...	1	1
St. Joseph's	4	1	5
Council Secondary ...	1	...	1
Boothtown	3	1	4
Wainstalls	2	2	4
Ackroyd Place ...	4	...	4
Warley Road	2	...	2
Salterlee	...	1	1
Lee Mount	11	2	13
Bradshaw	...	1	1
Pellon Lane	...	1	1
Luddenden	2	...	2
St. Marie's	3	...	3
Caddy Field	1	...	1
Total	98	33	131

During the previous year half the cases of Diphtheria reported were of school age, but judging from the above table the school has not had quite so much influence in the spread of this disease, during the year under review, as only 33 out of 72 reported were of school age, or considerably less than one half.

In the case of Scarlet Fever, during the previous year, about 50 per cent. were of school age, while during the year under review 98 out of 186 cases reported were children of school age, hence in this case it would appear that school influence had more to do with the spread of this disease than during the previous year.

The officials of the Education Department have as usual reported a large number of suspicious cases to this department. These were all visited as soon as possible after the information was received, and in this way several cases of infectious disease were discovered, which, no doubt, otherwise would have escaped detection.

Furnished Rooms, Houses Let in Lodgings, House-to-House Inspection.

Under Section 49 of the Halifax Corporation Act, 1905, Section 90 of the Public Health Act, 1875, was extended so as to include among "Houses Let in Lodgings" all rooms that are let off as furnished tenements, and bring the same within the purview of any Bye-laws made with respect to houses let in lodgings.

Bye-laws have been made by the Council with respect to houses let in lodgings, and have been sanctioned by the Local Government Board.

There are 163 of these furnished rooms in the Borough, and they have been kept under supervision, the Sanitary Inspectors having paid 287 visits during the year to these premises.

In four cases proceedings were taken against one of the landlords of these furnished rooms for contravention of the Bye-laws, and the Magistrates inflicted a fine of £2, with 5/- costs in each case, and made a closing order until the rooms were rendered fit for

habitation. The necessary alterations were carried out in due course.

A considerable amount of work was done during the year in the way of house-to-house inspection. There were 2,586 houses so inspected, and the number of defects of various kinds found in connection with this work was 394, therefore the percentage of houses found to have defects of some kind or other in connection with them was 15·2. The number of houses discovered with some defect in connection with their drainage system was 172, or a percentage of 6·6. In only two cases was any overcrowding discovered.

Special attention during the year was paid to cellar dwellings, of which there are a number in the Borough. Several of these were found occupied which did not comply with the requirements of Section 72 of the Public Health Act, 1875.

The requisite notices were served on both the owners and occupiers in each case, and 19 were closed during the year.

In one case it was necessary to take proceedings against the landlord in order to secure its closure. In this case a penalty of £2 and 5/- costs was inflicted.

In four cases cellar dwellings were discovered to be occupied in contravention of Section 71 of the Public Health Act, 1875. These cellars had been converted into dwellings within the previous two years. The requisite notice was served in each case, and the dwellings were closed as such.

While inspecting houses in Pellon I found that one bedroom, in connection with two houses, was situated directly above goux closets and ashtub places, contrary to Section 24 of the Public Health Acts (Amendment) Act, 1890.

The attention of the landlord was called to this state of matters, and the two bedrooms were effectually separated from the houses and ceased to be used as such.

In two cases dwelling houses were discovered to be situated directly above goux closets. Notices were served on the owners to have the closets converted to water closets. This work has been carried out in one case, and in the other is still standing in abeyance.

The question of providing cheap houses, suitable for the class of persons who occupy cellar dwellings, was brought before the Health Committee during the year, and a Housing Sub-Committee was appointed to consider the question. Certain sites were viewed for this purpose, but nothing definite has been done: the matter being still under consideration.

Meteorology.

The Meteorological Station is under the charge of Mr. Green, the Chief Librarian of the Public Library, is situated at Belle Vue, and has an altitude of 625 feet above sea level.

The instruments at this station do not include a sunshine recorder, nor an anemometer for registering the velocity of the wind.

A general summary of the observations by Mr. Green is given on the next page.

The summer of 1908 was an improvement upon that of the previous year. Rain fell on 184 days during the year, compared with 208 during 1907, and the amount collected was 30·65 inches, the lowest amount collected in one year since 1905.

General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1908, to December 31st, 1908.

By E. Green, Librarian.

LATITUDE OF STATION = 53° 43′ N. LONGITUDE = 1° 52′ W. HEIGHT ABOVE SEA LEVEL = 625 FEET.

1908. Month.	Pressure of Atmosphere in Month. Mean 32° & Sea Level.	Range.	Temperature of Month. Highest.	Lowest.	Range.	Mean. Of all Highest.	Of all Lowest.	Daily Range.	Mean Temperature. Air.	Dew Point.	Vapour. Elastic Force.	In a cubic foot of Air. Mean.	Shortf. of Saturation.	Mean degree of Humidity.	Mean Weight of a cubic foot of Air.	Mean Reading of Thermometer. Maximum in Sun. Days of.	Minimum on Grass.	Wind at 10 a.m. and 4 p.m. Estimated Strength.	Relative proportion of N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.	Mean amount of Cloud.	Rain. No. of Days it fell.	Amount Collected.	Remarks
	in.	in	°	°	°	°	°	°	°	°	in.	gr.	gr.		gr.	°	°													in.	
January ...	30·062	1·430	50·9	19·1	31·8	40·0	30·8	9·2	36·7	31·6	0·178	2·0	0·7	77	547·9	70·0	14·0	1·8	4	0	8	1	0	9	12	3	17	7·3	16	2·49	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 ...	29·976	1·646	47·9	27·6	20·3	43·7	35·7	8·0	39·6	36·6	0·219	2·6	0·3	92	544·8	95·2	22·1	3·1	4	0	0	0	1	2	13	23	6	7·3	19	3·11	
March ...	29·793	1·090	51·9	25·3	26·6	42·0	31·3	10·7	36·9	33·9	0·195	2·2	0·4	88	543·9	93·8	21·1	2·0	7	5	4	1	2	9	8	7	10	6·4	21	3·31	
April ...	29·951	1·280	56.8	25·0	31·8	46·3	33·6	12·7	39·7	36·3	0·215	2·5	0·4	88	544·5	96·8	17·2	2·2	7	8	5	5	1	5	4	8	3	6·8	18	2·54	
May ...	29·947	1·278	74·8	39·3	35·5	58·5	44.3	14·2	51·8	45·2	0·292	3·4	0·8	80	531·6	113·3	31·2	1·5	2	3	7	3	5	10	12	3	7	6·9	15	1·95	
June ..	30·056	0 874	74·8	38·6	36·2	62·3	45·9	16·4	54·3	46·0	0·309	3·5	1·3	72	530·4	114·8	29·5	1·9	2	6	1	11	1	7	10	10	4	6 2	10	1 58	
July ...	29·984	1·106	81.3	41·7	39·6	64·2	49·5	14·7	57·2	52·3	0·392	4·4	1·0	82	525·5	118·4	29·0	1·8	5	3	1	6	4	10	4	15	5	4·7	12	3·63	
August ...	29·927	1·094	72·2	42·8	29·4	60·5	48·1	12 4	54·7	52·3	0·390	4·3	0·6	90	527·1	117·9	32·0	2·6	1	3	0	9	1	9	15	17	2	4·5	13	2·45	
September ...	29·922	1·360	76·0	35·5	40·5	59·1	46·8	12·3	53·3	49·5	0·353	4·0	0·7	86	528·5	109·5	27·0	2·0	5	1	0	1	3	13	10	4	11	6·9	16	3·47	
October ...	30·111	0·678	76·3	35 2	41·1	58·3	46·0	12·3	52·1	49·0	0·348	3·9	0·5	89	533·8	109·4	28·5	1·1	0	7	4	8	3	5	3	0	24	6·0	10	2·01	
November ...	29·994	1·044	55·7	25·1	30·6	48·5	38·8	9·7	43 5	40·6	0·253	3·0	0·3	90	541·3	81·3	13·3	1·7	0	5	0	3	5	6	14	2	16	7·8	14	2·25	
December ...	29·887	1·562	49·8	13·9	35·9	42·6	33·7	8·9	38·1	36·1	0·214	2·4	0·3	93	544·7	58·9	7·4	0·9	1	0	2	7	3	9	5	5	18	7·4	20	1·86	
Annual Means	29·967	1·203	64·0	30·7	33·3	52·2	40·4	11 8	46·4	42·4	0·280	3·2	0·6	85	537·0	98·3	22·7	1·9	3	3	3	4	2	8	9	8	10	6·5	...	...	

Note.—The Observations are taken at 10 a.m. and 4 p.m.

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, 40·7°; February, 40°; March, 40°; April, 42°; May, 46°; June, 50·8°; July, 53·8°; August, 54·8°; September, 52·9°; October, 52·5°; November, 48·6°; December, 45·2°.

Highest Readings of the Earth Thermometer (55°) were from July 28th to August 25th.

Lowest ,, ,, (40°) ,, January 15th to February 12th, and from March 6th to March 30th.

Rain fell on 184 days, and the amount collected was 30·65 inches.

The following table gives the rainfall for the past 15 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
1908	184	30·65

The rainfall is also collected at 10 stations distributed over the gathering grounds of the Halifax Corporation Waterworks, and the following table shows the amount collected in each case.

HEIGHTS ABOVE SEA LEVEL IN FEET.

1908.	1380 Walshaw Dean.	1350 Midgley Moor.	1325 Warley Moor.	1375 Ovenden Moor.	1040 Walshaw Dean Lodge.	1050 Widdop.	1060 Castle Carr Lodge.	990 Ogden.	815 Ramsden Wood.	795 Albert.	568 Gibbet.
	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
January	3·17	3·69	3·65	4·36	3·72	2·49	3·67	3 19	2·35	2·76	2·66
February	3·20	3·27	3·35	3·33	3·19	2·21	3·35	2·72	2·48	2·79	3 20
March	3·94	4·21	4·16	4·19	4·10	3·62	4·08	3·93	3·38	3·17	3·39
April	3·13	2·82	2·95	2·94	3·04	2·68	3·02	2·98	2·40	2·19	2·34
May	2 66	2·56	2·50	3·02	2·65	2·44	2·41	2·65	2·09	2·06	1·94
June	2·86	2·31	2·35	2·50	2·87	2·27	2·14	2·02	1·56	1·64	1·55
July	4·87	4·65	4·70	4 54	4·92	5·22	4·75	4 41	4·05	3 61	3·55
August	3·73	3·44	3·29	3·45	4·30	4·51	3·60	3·18	3·02	2·86	2·92
September	3·80	3·45	3·33	3·42	4·24	3·67	3·44	3.16	2·71	3·05	3·16
October	3·10	2·65	2 82	2·88	3 29	2·89	2·78	2·80	2·24	2·12	1·92
November	3·28	3·38	3·48	3·90	3·58	3·05	3·09	2·76	2·14	2·20	2·37
December	3·19	3·07	2·76	3·21	3·80	3·14	3·09	3·14	2·30	2·07	2·21
Totals	40·93	39·50	39·34	41·74	43·70	38·19	39·42	36·94	30·72	30·52	31·21

Average rainfall over all the gauges, 1908	...	37·47
Do. do. 1907	...	40·28
Difference	...	2·81

It will be observed from the above table that while the amount of rainfall collected at these stations was greater, as is always the case, than that collected at the Meteorological Station situated in Halifax, yet, as in the case of the latter, there was a decreased rainfall over these gathering grounds.

I was very much interested in a report I received last year, from Mr. Bolton, the Borough Engineer for the County Borough of Wigan, giving an account of the amount of rainfall over the area of the Wigan Waterworks during the previous 50 years, in which he showed that the average annual rainfall had been steadily and consistently decreasing during the past 30 years, as the following figures given by him indicate.

Years	Amount of Rainfall
	Inches
1858-67	40·63
1868-77	40·80
1878-87	36·18
1888-97	34·72
1898-07	33·91

As Wigan is situated on the opposite side of the Pennine Range from Halifax, I thought it would be interesting to get out the average rainfall for the Borough for a similar period, and this I was enabled to do from the figures in the possession of the Corporation Waterworks.

The following table shows the average rainfall in decennial periods, over four of the waterworks gauges, since the year 1859, a period of 50 years.

Period	Average Rainfall
	Inches
1859-68	47·87
1869-78	46·54
1879-88	47·62
1889-98	45·58
1899-08	43 15

On referring to the above table it will be observed that there has been a decrease in the rainfall during the past 20 years only, but on comparing this table with the previous one, it will be noticed that the decrease has not been near so marked as has been the case in the Wigan District.

Borough Fever Hospital.

On January 1st, 1908, there were 12 cases of Enteric Fever, six of Scarlet Fever, and two of Diphtheria, or a total of 20 patients remaining in the Hospital from the previous year, and there were admitted during the year 208 cases, including 36 from outside districts, against a total of 131, which includes six non-residents, during the previous year.

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

Disease	Number Admitted	Deaths	Case Mortality per cent.
Diphtheria	26	5	19·2
Scarlet Fever ...	145	2	1·3
Enteric Fever ...	36	4	11·1
Spotted Fever ...	1	1	100·0
Total ...	208	12	...

During the previous year the case mortality per cent. of Diphtheria was 15·5, Scarlet Fever 2·3, and Typhoid 16·2 respectively.

It will be observed, therefore, that while the death-rate from Diphtheria was greater during the year under review, that from both Scarlet and Enteric Fevers was considerably less.

The mortality for the year from Typhoid Fever was very low, and therefore highly satisfactory.

One of the deaths in the Hospital resulted from Convulsions, and is not included in the above, and one of the deaths from Typhoid Fever, and one from Diphtheria, which are included. did not belong to the Borough.

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
1908				36	145	26	1	208

It will be seen from the above table that a larger number of cases were admitted to, and treated in the Hospital, than during the two previous years.

In conclusion, I have again to record my appreciation of the manner in which Miss Robison has managed the Institution, and of the unremitting care bestowed upon the patients by the nursing staff generally.

Miscellaneous Matters.

During the year I paid regular daily visits to the Borough Hospital, the Goux Depot, and from time to time the Smallpox Hospital, Hall Street Depot, and Ovenden and Warley Stables.

I paid 13 visits to various parts of the Borough, with reference to suspicious cases of infectious disease, and made 29 special visits to inspect various nuisances, for the purpose of giving advice thereon, which were remedied in due course.

I paid 14 visits to various parts of the Borough, for the purpose of generally inspecting the same, and visited 16 schools, chiefly in connection with infectious disease.

I also visited seven Dairies and Cowsheds, and paid eight visits to inspect the various tips in the Borough.

I made 14 visits to the Slaughterhouse and Wholesale Markets, chiefly for the purpose of inspecting meat, and to give advice as to seizure, &c.

I paid 6 visits in connection with the Notification of Births Act, for the purpose of giving advice in the case of apparently neglected infants.

On May 15th, Dr. Darra Mair, Local Government Board Inspector, visited the town, in order to select a batch of back-to-back houses, and a batch of through houses, which could be reasonably compared with each other, for the purpose of having a census taken of the population in each case, and the deaths extracted for a period of ten years.

The census was taken by the District Sanitary Inspector, and the deaths for the previous ten years were subsequently extracted from the Death Returns.

The houses selected were situated in Fenton Road, and in the neighbourhood of Gladstone Road.

The population of the through houses selected was found to be 596, and of the back-to-back houses 682.

The following table serves to compare the deathrates of the two classes of houses.

Deathrate	Back-to-back Houses	Through Houses
General ...	13·3	15·6
Phthisis ...	1·0	1·6
Respiratory ...	2·4	3·3
Zymotic ...	·5	1·3

I paid a visit to the Brighton Hotel, and made a special report on the sanitary condition thereof for the use of the Watch Committee.

The Work of the Lady Health Visitor. Midwives Act.

In the month of February, 1908, Miss Watson Wayne was appointed Lady Health Visitor, and she held the position until early in the following August, when she resigned owing to her having secured a more lucrative position. The Committee then appointed Miss Alice M. Thompson, who holds the Certificate of the Royal Sanitary Institute, in her stead, and she commenced her duties on August 17th, 1908.

The administration of the Midwives Act devolves upon the Health Committee, and, in consequence of the appointment of a lady visitor, it has been possible to more thoroughly supervise the work of the Midwives during the past year.

Soon after her appointment, Miss Wayne paid a visit to each of the Midwives on the Register. She found that several of them were not provided with a proper case book for their cases, and that they had not provided themselves with a bag, and other articles, in accordance with the Regulations of the Central Midwives Board.

She called their attention to these matters, and told them they must provide themselves with these requisites.

One Midwife objected to do this, and I was instructed by the Committee to write her a strong letter calling her attention to the matter, and to the manner in which she was conducting her practice. This had its desired effect, and Miss Thompson reports that all the practising Midwives in the Borough are now provided with case books, and mostly with the other articles required by the Regulations.

There were 37 Midwives resident in the Borough, including 3 who were registered for the first time, during 1908. Out of that number it appears that 6 have ceased to practice as such, leaving 31 on the Register for the year.

Of the above 31 none hold certificates after examination by the Central Midwives Board, they all being in practice before July, 1901.

The homes of all the above were visited, and 139 visits were made for that purpose during the year.

In 3 cases the Midwives were found to be out doing monthly nursing, and consequently their case books and bags were not inspected. With regard to the remaining 28, the result of the inspections was as follows :—

Number Visited	Case Books			
	Well kept	Fairly well kept	Not up-to-date	No case book
28	10	5	9	4

The above four who had no case books have now been supplied therewith.

Under the better supervision which now obtains, the Midwives now carry out the regulations of the Midwives Board in their practice more efficiently, although, in connection with a few of them, there is still room for improvement. Several mothers have stated that they have never been so well looked after as they are at the present time, and that the Midwives themselves are more careful in every particular.

The clinical thermometer does not appear to be so generally used as it ought to be.

The following is a list of the Midwives who were registered at the Health Office during 1908.

Name.	Address.
Horsfall Frances Ann ...	8, Dunkirk Street
Firth Margaret	7, Concrete Street, Lee Mount
Connew Sarah	23, Clay Street, Hanson Lane
Crowther Hannah Elizabeth ..	39, Hammond Street
Jowett Sarah Alice... ..	27, New Bank
Marsland Emma	16, Cherry Street
Ogden Emma	6, Ingram's Square, Savile Park
Lake Lucy	14, Kell Lane, Shibden
Smith Emma	21, Causeway Foot
Milner Mary Hannah ...	18, Malt Shovel Yard
Robinson Mary Ann ...	14, Ashbourne Grove
Buckley Mary Ann... ...	8, Wainhouse Ter., Burnley Rd
Smith Clara	40, Winding Road
Sutcliffe Ellen	217, Shay Lane, Holmfield
Shelley Emelina	67, New Bank
Wade Hannah	10, Clog Yard, King Cross
Fielden Louisa	33, Commercial Road
Firth S. A.	5, Prince Street, Francis Street
Crabtree Isabella	31, Bright Street
Halstead Frances Ellen ...	3, Aspinall Street East, Siddal
Crossley Hannah Holroyde ..	25, Fairview Terrace, Lee Mount
Greenwood Maria Louise ..	13, Kingston Street
Turner Elizabeth	7, High Road Well Court
Arnold Mary Ann	18, Garside Street, King Cross
Aaron Hannah	7, Lane Ends, Wheatley
Wood Mary Elizabeth ...	9, Fern Street, Boothtown
McRae Elizabeth	30, Boothtown Road
Hargreaves Mary Ann ...	1, Cleveland Avenue, Siddal
Wilson Elizabeth Ann ...	1, Shoesmith's Buildings
Haslem Sarah Ann... ...	10, Fern Street, Boothtown
Hitchen Phœbe Alice	64, St. Peter Street, Boothtown

Notification of Births Act.

The above came into force in the Borough on March 8th, 1908, and from that date to the end of the year, 1,515 births were notified to the Medical Officer of Health. During the same period, 1,666 were registered, so that just 91% of the births were reported in accordance with the provisions of the above Act.

A number of the births were not notified within the prescribed time, and as the above figures show, a certain proportion were not reported at all, both of which are accounted for by the ignorance of the parents with reference to the provisions of the Act.

It is hoped that in the future, now that the law is becoming more generally known, that a larger percentage will comply therewith, and that it will not be necessary to take legal proceedings to enforce the provisions of the Act. Such proceedings have not been deemed advisable up to the present.

During the above period there were 63 still-births reported, and 101 were buried during the year. Allowing for the first two months of the year, when the Act was not in force, it is evident that all the still-born children were not reported during the year.

Of the 1,515 births notified, 786 were attended by medical men, or nearly 52 per cent. A larger proportion than I expected to find.

The Lady Inspector does not visit those cases which are attended by doctors, but to the remainder Miss Wayne and Miss Thompson, between them, paid 1,510 visits to houses in connection with notified births during the year.

As a result of these visits it was ascertained that 516 infants were being breast fed, 18 fed with the breast and bottle, and 42 with the bottle only, in each case upon her first visit

As to whether that large proportion continued for any length of time to breast-feed their infants only, I cannot say, because it is impossible for one lady visitor to pay repeated visits in each case. As the work of the voluntary lady visitors, which will be referred to later on, comes to be better organised, I hope to obtain more definite information in future regarding this point.

Miss Thompson says that she finds most of the mothers wishful to breast-feed their children, unless they are obliged to go out to work, and I must say I was astonished to find so large a proportion of the poorer mothers of Halifax so feeding their infants. There is no doubt that this is one of the causes which has helped to secure the low infantile mortality which Halifax enjoys.

In connection with her work the Lady Health Visitor reports that she found 353 houses clean, 170 fairly clean, and 79 in a dirty condition.

Instructions were given in each case where necessary with regard to the feeding of infants, leaflets were distributed giving directions on the care of infants, and habits of cleanliness were urged upon those mothers who did not pay sufficient attention to those matters.

The long tube bottle is not nearly so much in evidence as formerly, and the boat-shaped bottle is coming into much more general use, many mothers really preferring the latter, on account of the greater

ease with which it is kept clean, and this improvement has been brought about to a great extent through the advice of the lady visitors.

Miss Thompson reports that there are a few definite cases in which good has resulted from the advice given on feeding, and others in which the infants who were found to be emaciated and delicate, were urged to obtain medical advice, and as a result are now thriving.

One of the difficulties met with is the limited amount of nourishment a certain number of the nursing mothers are able to obtain. In these cases bread and tea seem to be their chief diet. Some of such cases have been referred to the citizen's Guild of help for assistance, and in others cocoa, milk, and oatmeal have been supplied by the lady visitor.

There were 54 mothers supplied with this kind of nutriment during the year.

On July 30th of last year, Mrs. G. H. Smith, of the Gleddings, kindly called together a meeting of ladies at her house, with the object of forming a Provident Club for expectant mothers, to be called the "Babies' Welcome," in order that such mothers might be encouraged to make weekly savings of small sums, to be withdrawn at the time of confinement.

After hearing an address by Miss Boilleau, of Wakefield, the matter was discussed, and it was eventually decided to inaugurate the club. Subscriptions were invited for the purpose of forming a small reserve for working expenses. Collectors were appointed to receive members' subscriptions, and Mr. Hebblethwaite kindly undertook to act as Treasurer.

In due course the "Babies' Welcome" was successfully inaugurated by the Public Health Association.

A sum of money was also placed at the disposal of the Committee for the provision of a number of maternity bags, clothes for mother, infant, and any sickroom appliances needed by any of the members.

The sum of one penny is added to each shilling saved by the members.

Twelve members joined the "Babies' Welcome," and sums varying from 3/- to 15/- were paid in.

Four of the members have withdrawn their benefit, which proved to be exceedingly useful to them at this particular time.

We are also greatly indebted to the Ladies Charity for the use of their maternity bags in many cases where the mothers were not members of the "Babies' Welcome."

The Ladies Charity do not lend out their maternity bags in the case of illegitimate births, and these mothers, of course, not being members of the "Babies' Welcome," are not entitled to assistance of this kind from that source. We have, however, these cases to deal with, for which provision of this kind ought to be made. The Lady Visitor suggests that the town should provide two or three maternity bags for use in such cases.

Halifax Public Health Association.

The official Lady Health Visitor has received able and most valuable assistance from the lady members of the above association.

The Committee of the Public Health Association is constituted as follows :—

Alderman T. Hey, Chairman, Health Committee
Dr. J. T. Neech ... Medical Officer of Health
Miss Alice M. Thompson, Lady Health Visitor
Mrs. E. N. Whitley ... Lady Superintendent
,, C. Smithson ... ,, ,,
,, Haddon ... ,, ,,
,, E. H. Hill ... ,, ,,
,, Crabtree ... ,, ,,

Miss Wright	Mrs. Ward
Mrs. Drury	Mr. Tillotson
,, G. Smith	,, A. W. Whitley

The ladies of the Committee meet monthly to transact the business of the Association, to which Miss Thompson acts as Secretary.

In order to facilitate the work of the voluntary helpers, the Borough is divided into five Districts as follows :—

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.

A Lady Superintendent has charge of each District, and she nominates as many assistant visitors as she requires for the purpose of duly carrying out the work in her District.

The following are the Lady Superintendents, and the respective Districts for which they are responsible.

District	Name of Lady Superintendent	Number of Assistant Visitors
Ovenden, Pellon and Kingston Wards	Mrs. E. N. Whitley	6
Akroyden and North Wards	Mrs. C. Smithson	4
Central and West Wards	Mrs. Haddon	6
South and East Wards...	Mrs. E. H. Hill	4
Skircoat and Southowram Wards	Mrs. Crabtree	4

The following are the names of the Assistant Visitors :—

Mrs. Shaw
,, Simpson
,, Buckley
Miss Arnold
Mrs. Lovelace
,, Butterworth
,, Greenwood
,, Branson
,, Hepworth
,, Banks
,, Brenard
,, Watkins

Mrs. Howell
,, Schofield
,, Marshall
,, Mason
Miss Turner
Mrs. Taylor
,, Winks
,, Thomas
,, Dawson
,, Bottomley
,, Snoxall

Mrs. Hill
,, Hamilton
,, Hogg
,, Dawson
,, Collins
,, Broadhead
,, Mortimer
,, Brearley
,, H. Oates
,, Balme
,, Spencer

The official lady health visitor pays the first visit to the homes from which notifications of births are received, and where medical men are not in attendance ;

she then forwards the names and addresses of those cases where she thinks subsequent visits are required, to the respective lady superintendents, who in their turn distribute the cases among their assistant visitors.

The number of visits paid by the assistant visitors in the various districts were as follows :—

Ovenden, Pellon and Kingston Wards	172
Akroyden and North Wards	288
Central and West Wards	200
South and East Wards	132
Skircoat and Southowram Wards ...	146
Total ...	938

The assistant lady visitors, as well as the official visitor have been remarkably well received by the mothers whom they have visited. In fact they state that the mothers look forward with pleasure to their visits, and it is the unanimous opinion of the assistant visitors that their work is doing good. The mothers feel that some one is taking an interest in their welfare, and it has had the effect in a large number of cases of making them more cleanly in their homes and in the care of their children.

Personally, as Medical Officer of Health for the Borough, I feel very much indebted to these ladies for the excellent work they have done. They have worked with energy, with perseverance, and with an enthusiasm which I never dreamed of, and I am satisfied that they are doing a self-sacrificing and praisworthy work.

The Sale of Food and Drugs Acts

The following Report has been submitted by the Borough Analyst, Mr. J. A. Dewhirst, F.I.C.,F.C.S.

There were 213 samples of food analysed during the year 1908.

The following table gives the number analysed, etc., per 1000 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
1908	213	7·5	109,000	1·95

The proportion throughout the country in 1907 averaged 1 to every 347 of the population of 1901, or 2·88 per 1000. In London the rate was 5·3 per 1000. At these rates the samples taken in Halifax would number respectively 302 and 556 per annum.

It will be seen that Halifax is practically dormant in this matter. It was not always so. 13 years ago as many samples were taken as now, although the population was 14,000 less.

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

Article.	Total.	Genuine.	Adulterated	Doubtful	Percentage Adulterated.	Percentage Adulterated in whole Country in 1907
Milk ...	145	132	9	4	6·2	10·5
Butter ...	16	14	2	0	12·5	6·6
Cheese ...	12	11	1	0	8·3	·7
Jam ...	7	4	1	2	14·3	3·1
Beer ...	13	13	0	0	0	5·8
Olive Oil...	6	5	0	1	0	3·0
Lime Juice	6	2	2	2	33·3	33·3
Demerara Sugar	8	7	1	0	12·5	4·0
Total ...	213	188	16	9	7·5	8·1

It will be seen that only 8 classes of food and drinks were sampled. No drugs. There were two water samples.

On thoughtful consideration it must appear remarkable that 8%, or 1 in every 12, of samples taken are adulterated. Surely this is much higher than it should be. Moreover, one must remember that an even higher proportion of fraud goes undetected. A man, and a stranger to the shopkeeper, is not a likely person to be served with margarine instead of butter for instance. A woman or child is frequently employed in some towns.

The Local Government Board report says :—"The practice to which we have referred in previous reports of purchasing samples for analysis without going through the formalities required by the Acts, was extensively followed in 1907. In several districts considerably more than half the samples were thus taken, and many offenders against the Acts have thus been discovered."

The chief article sampled in Halifax (Milk) was less adulterated than the average throughout the country. This is usually the case. The addition to it of preservatives in Halifax is very rare indeed, owing chiefly, no doubt, to the fact that but little of the town's supply comes by train. Of the samples other than Milk, it may be remarked that Beer remains satisfactory as to its content of arsenic. Jam is a strange mystery nowadays, but it is labelled with discretion so as to keep on the right side of the law. Butter is less sophisticated than of late, whilst Demerara Sugar is simulated to some extent by white sugar dyed with aniline colour. Perhaps the most outstanding feature in adulteration of food during the year was that of Flour with talc, stated by the British Medical Journal to be a grave menace to health.

A Royal Commission appointed to inquire as to the composition, manufacture, etc., of Whisky and other potable spirits, still continues its deliberations, though it has issued an interim report.

Under powers conferred on them by the Butter and Margarine Act, 1907, the Local Government Board have issued an order respecting factories of Butter and Milk-blended Butter, and wholesale dealers in Milk-blended Butter.

The Act permits a so called Milk-blended Butter to be sold under a name approved by the Board of Agriculture and Fisheries, containing when so declared on the label, up to 24% of moisture The limit for genuine Butter being 16%.

It is to be regretted that effect has not been given to the recommendation of the Select Committee on the Butter Trade, that powers be given to the Board of Agriculture to fix standards for curd in Butter, and to the L.G.B. to fix standards for preservatives.

The Regulations under the Public Health Act "re" Milk supply are still pending.

The Fertilisers and Feeding Stuffs Act, 1906, which has been in operation over two years now, still remains unenforced in Halifax. The provisions of this Act are very valuable ones in the interests of the farmers, and to my knowledge are not observed by vendors in the town.

There has been four prosecutions during the year. In one case the defendant was fined £10 and 28/6 costs, in two others fined 5/- and 10/-, with 10/6 and 5/6 costs respectively. The fourth case, in regard to Cheese, remained adjourned.

Medical Inspection of School Children.

Under Section 13 of the Education (Administrative Provisions) Act, 1907, there was no regular and systematic inspection of school children carried out during the year.

Dr. Hunt has, however, held the position of School Medical Officer in the Borough for some years, and has devoted part of his time to school work.

The matter of school inspection however has recently been under the consideration of the Education Committee and the Council, and it has been decided that the Medical Inspection of school children shall be carried on in future under the supervision of the Medical Officer of Health. The services of Dr. Hunt to be retained, and that an Assistant be appointed to devote his whole time to the work.

The duties of Dr. Hunt, as laid down by the Education Committee, have been as follows.

(1.) To examine, when required by the Committee or the School Attendance Sub-Committee, children who are said to be physically unfit to attend school, and all children whom it is proposed to send to the "Special" classes, and to make out certificates.

(2.) To examine candidates for Pupil Teachership and Assistant Teachers, and to make out the certificates required by the Board of Education and the Committee.

(3.) To visit and report in writing, when required by the Committee or any of its Sub-Committees, on any Employé who is absent from duty on account of illness.

(4.) To examine candidates for employment under the Committee, or employés when required by the Committee or any of its Sub-Committes, and to make out certificates.

(5.) To examine and report upon cases of Blind and Deaf children, when required, and to make out certificates.

(6.) To visit each department not less than once every three months, or oftener if required, and report in writing on any sanitary defect of the premises to which his attention may be called, and on the general health of the scholars.

(7.) At such periodical visits, examine and test the eyesight, hearing, or other physical condition of any scholar to whom attention may be called by the Head Teacher.

N.B.—In these regulations the Committee have no wish to interfere with the private practice of other doctors.

On the work done during 1908, Dr. Hunt has furnished the following report.

The Schools have suffered in the past year as usual from Epidemic Disease, and I have to report that Measles and Whooping Cough have been exceptionally prevalent, several Schools having had to be closed. Ophthalmia which took its rise over a year ago at Siddal has spread to the central districts of the town, and some thirty cases have come under my notice. Fortunately the epidemic has been of a very mild type not usually causing serious damage to the eyes.

287 children have been examined at the Office as to their fitness for School. Of these 73 were found quite fit; 20 were suffering from slight ailments not incapacitating them for School; 39 were found to be delicate usually suffering from catarrhal affections which made regular attendance, especially in bad weather, inadvisable; 151 were unfit for School altogether; of these 13 had Itch; 25 Ringworm; 20 Verminous Heads; 17 Ophthalmia; 5 Consumption; 3 Epilepsy; 2 Heart Disease; 2 St. Vitus Dance; 2 Blindness; 2 Deafness; 2 Rickets preventing walking. Many of these affections are not under present conditions preventable, but some are simply due to want of cleanliness from which many children suffer more than from lack of food. If it is correct as I was informed by two London visitors that in this respect the children are worse than the slum children of London it is time the matter had attention. In this connection I would urge the further provision of hot water baths and shower baths wherever possible.

With regard to the eyesight and hearing of the children, I have not instituted an examination of the

normal children this year, as I have been expecting every month the system recommended by the Board of Education to be enforced. I have therefore contented myself with going round the Classes and examining those whom the teacher or myself suspected to be deficient. As a result, circulars have been sent to 340 parents, calling attention in 152 cases to Defects of Vision or Inflammation of the Eyes: in 65 to Deafness or Adenoids: in 37 to Squint: in 18 to the presence of Enlarged Tonsils: in 7 to Obstruction in the Nose: in 35 to Discharge from the Ears: and in 36 to Irregular Teeth: 60 other cases of Ophthalmia, Rickets, Ringworm, etc., were dealt with by verbal messages.

As regards the Special Class at Parkinson Lane, 5 new children were admitted during the year, and 8 were discharged. Of these 8, 2 have gone to the mill, 1 to work in a shop, 1 to housework, 3 have left the town, and one was discharged as unsuitable after a good trial. There are now 22 in the Class.

Upon the results of the two more or less experimental ventures promoted by them, I think the Committee are to be congratulated. I refer to the Class for Stammerers and the Open-Air School. In the former, 14 were treated and with the exception of one who has left the town and one who has relapsed, the results have been remarkably good. The only drawback is that the system is not applicable to younger children. With regard to the Bermerside experiment I need say nothing, as a full report has been published, except that the Government Inspector will require a fuller medical examination of the children in future.

COUNTY BOROUGH OF HALIFAX

THE

Sanitary Inspector's Report

FOR THE

YEAR ENDED 31st DECEMBER, 1908.

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-fourth Annual Report on the operations of the Health Department for the year ended December 31st, 1908.

TOWN HALL, HALIFAX,

May, 1909.

HEALTH DEPARTMENT.

Summary of Work done.

Total number of Visits, House-to-House Inspection	2581
„ „ Lodging Houses and Furnished Rooms...	301
Number of Visits to Houses with reference to Defective Drainage	5062
Number of Visits to Houses with reference to Cleanliness, Overcrowding, &c.	499
Number of Visits to Houses with reference to Infectious Diseases	1101
Rooms Disinfected	549
Cases removed to the Hospital	208
Infectious Diseases reported	363
Notices served	846
Letters served (referring to Nuisances, &c.) ...	257
Summonses taken out	16
Smoke Observations taken	641
Old Ashpits altered to Goux System	60
Goux Closets registered	55

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.

The following table shows the nature of nuisances registered, and work carried out after mere verbal notice.

Nature of Nuisances.	Number Registered.
Defective Sink Drains	242
,, ,, Pipes	79
,, ,, Syphon Traps ...	77
,, Basement Drains	103
,, Yard Drains	38
,, Urinal Drains	8
,, W.C. Drains	61
,, Area Drains	34
,, Private Street Drains	2
Made-up Sink Pipes	64
,, Bath Pipes	3
,, Lavatory Pipes	3
,, Basement Drains	50
,, Water Closets	22
,, Yard Drains	63
,, Urinal Drains	11
,, Gullies	82
,, Private Street Drains	9
Untrapped Basement Drains	9
,, Sink Drains	100
,, Area Drains	20
,, Yard Drains	19
,, Urinal Drains	1

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Untrapped Bath Pipes	8
,, Lavatory Pipes	7
Drains not efficiently Trapped :	
Sink Drains	54
Cellar Drains	39
Yard Drains	15
Urinal Drains	4
Area Drains	9
Sink Drains and Pipes requiring Disconnecting	197
Defective Fall-pipe Drains	35
,, Fall-pipes	86
,, Spouting	108
,, Roofing	37
Broken Pot and Iron Traps	57
Insufficient Supply of Water to Closets	8
Nuisances from Water in Cellar	76
,, Want of Drains	44
,, Smoke	15
,, Swine	14
,, Poultry	2
Houses Overcrowded	15
,, requiring limewashing	44
Accumulations of Offensive Matter	73
Privies requiring Limewashing	87
Dirty Passages	28
Insufficient Privy Accommodation	13

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Offensive Ashpits and Privies	64
,, Goux Closets	284
,, Ash Tubs	321
Doors off Closets	24
,, Ashes Tub Places...	51
Dilapidated Closets	75
Ashpits requiring Re-construction	34
Miscellaneous	130
Convert Goux Closets to Water Closets... ...	28
Cellar Dwelling unfit for Habitation	13
Goux Closet under Dwelling	1
COWSHEDS.	
Defective Drains	22
Want of Light, Room, Air Space, and Ventilation	19
Dilapidated Cowsheds and Floors	14
Cesspools requiring Emptying and Defective ...	10
Offensive Middensteads	6
Cowsheds requiring Limewashing	34
FACTORIES AND WORKSHOPS.	
Defective Drains	33
Insufficient Privy Accommodation	17
Defective and Made-up Water Closets	31
Insufficient Ventilation and Light to W.C.'s ...	37
Goux Closets converted to Water Closets ...	6
Dirty Closets	30
Offensive Urinals	5

NUISANCES—*Continued.*

Nature of Nuisances.	Number Registered.
Rooms insufficiently Ventilated	18
Rooms requiring Limewashing	74
Defective Fall Pipes	4
Accumulations	3
Offensive Smoke	8
Want of separate Closets for Sexes	6
BAKEHOUSES.	
Illegal occupation of Underground Bakehouses	2
Insufficient Ventilation	2
Dirty Sink	1
Dirty and Defective Closets	3
Drain opening inside Bakehouse	1
Bakehouses requiring Limewashing	19
Insufficient Closet Accommodation	1
Sink Pipes to disconnect	3
Accumulations of Rubbish	1
Dirty Floors	2
Made up Drain	1
Defective Sink Drains	4
„ Fall Pipes	1

At the close of the year there remained on the books 116 complaints to be dealt with.

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 ..	348	201	101	302
February ..	445	148	100	248
March ..	266	133	58	191
April ...	336	113	136	249
May ...	367	218	54	272
June ...	348	108	109	217
July ...	462	225	45	270
August ..	290	122	57	179
September ...	430	222	54	276
October ..	527	195	77	272
November ...	193	101	18	119
December ..	240	145	26	171
TOTAL ...	4252	1931	835	2766

The total number of ashpits cleansed during the year was 4,252, as against 4,383 in the previous year.

60 ashpits with privies have been altered to the Goux system, and ashes tubs supplied in the place of 24 dry ashpits. The above includes Ovenden, Illingworth, Copley, Warley, and Northowram Wards.

TABLE SHOWING THE NUMBER OF ASHPITS WITHIN THE BOROUGH, DECEMBER 31st, 1908.

District.	Wards.	Ashpits with Privies.	Dry Ashpits.	Total.
1	Akroydon and North ...	38	46	84
2	Ovenden and Illingworth ..	260	26	286
3	Central and East	25	80	105
4	West and South	9	174	183
5	Skircoat and Southowram ...	25	19	44
6	Pellon and Kingston ...	5	31	36
7	Copley	95	35	130
8	Warley	222	22	244
9	Northowram	142	...	142
	TOTAL	821	433	1254

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	56857	2067
February	48686	1661
March	54162	1926
April	52082	1868
May	49273	1742
June	50289	1656
July	54799	1549
August	49238	1518
September	52136	1561
October	53567	1688
November	50187	1734
December	49852	1776
TOTAL	621128	20746

The above represents 29577 loads of night soil (each load containing 21 closet tubs), as against 30910 and 20657 loads of ashes respectively for the preceding year.

The number of additional closets registered is 55, being a decrease of 42 on the number registered during the year 1907.

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
1908	17975	55

During the year 15 closets have been erected in connection with new property, and 38 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	3146014	1787	894
Central	1088786	618	1106
South...	1200811	682	491
West	794568	451	808
North...	722982	410	1382
Akroydon	420844	239	204
Southowram	632905	359	1065
Skircoat	268134	152	614
Kingston	196838	111	1478
Pellon	314967	178	1687
Ovenden & Illingworth } Part swept by Halifax Gang }	67116	38	236
Total	8853965	5030	1165

Streets Scavenging.

The subjoined table gives at a glance the work done in this department during 1908.

Number of Streets swept	39703
Lineal yards swept...	8853965
Square yards swept	73061298
Number of Streets watered	14418
Loads of Water used for that purpose...	22211
Loads of Sweepings gathered ...	8480
Loads of Snow removed from the Streets	857
Number of Gullies emptied	206494
Garbage removed from Market Hall ...	1013
Loads of Ashes and Sand put on Streets	95
Number of Drains flushed ...	223

During the year 156 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	18909
Highways Committee...	240
Private Firms	1840
Improvement Committee	240
Waterworks	260
Total	21489

ANALYSIS OF REFUSE COLLECTED IN THE BOROUGH OF HALIFAX DURING THE YEAR 1908.

	No. of Loads.
From Wet and Dry Ashpits	2766
From Ashes Tubs	20746
From Goux Closet Tubs	29577
Sweepings gathered from the Streets, and Refuse from Gullies	8480
Garbage removed from Market Hall ...	1013
Horse Droppings from Streets ...	265
Garbage from Fried Fish Shops ...	156
Total Number of Loads ...	63003

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	641	
Number showing moderate Smoke or *nil*	362	
Number of Observations taken for a period of 60 minutes, each showing Dense Smoke	279	
Number of Observations showing Dense Smoke above the Maximum adopted by the Committee	26	
Average number of minutes of Dense Smoke emitted from Chimneys... ...		1·1

The number of observations taken during the year is 641. 26 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 1·1.

TABLE SHOWING THE NUMBER OF INFECTIOUS DISEASES REMOVED TO THE BOROUGH FEVER HOSPITAL BY THE DISTRICT INSPECTORS, DURING THE YEAR 1908.

	Spotted Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Total
Ovenden ...			31	4	35
Akroydon ...		4	5		9
North		5	5	1	11
Central ...		3	7	2	12
West		5	25	2	32
South		2	3	1	6
East			4	1	5
Southowram ...		5	5	2	12
Skircoat ...	1	1	8	4	14
Pellon... ...			17	1	18
Kingston ...		4	4		8
Illingworth ...		1	6		7
Warley ...			2	1	3
Out of Borough...		6	23	7	36
	1	36	145	26	208

Disinfection.

THE FOLLOWING TABLE SHOWS THE NUMBER AND DESCRIPTION OF THE ARTICLES DISINFECTED AT THE DISINFECTING HOUSE, STONEY ROYD, DURING THE YEAR.

Description of Articles.	Number of Articles.
Beds	426
Mattresses	307
Pillows...	622
Sheets	631
Bolsters	395
Blankets	1008
Counterpanes	347
Carpets and Rugs	41
Stockings	10
Flannel Vests, Dresses and Petticoats ...	937
Mats and Sundries...	1042
Dressing Gowns and Shawls	123
Coats	14
Cushions	26
Trousers	73
Waistcoats	70
Total	6072

Canal Boats.

During the year 1908, 45 inspections of Canal Boats were made, as compared with 44 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 45 boats inspected, there were five with women and children on board, and 7 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.
45	298	90	12	102

Ages of Children found on Canal Boats:

	Years						Total
	1	2	4	6	8	10	
Number	2	3	2	1	1	1	10

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

Date.	Defendant's Name.	Nature of Offence.	Decision of Court.			Remarks.
			Penalties.	Costs.	Total.	
1908			£ s. d.	£ s. d.	£ s. d.	
Jan 17th ...	John Ogden ...	Letting Cellar Cottage contrary to the provisions of the Public Health Act, 1875.	2 0 0	0 5 0	2 5 0	Failing payment, Distress or 14 days to Prison, and Order was also granted to close the building until made fit for habitation.
Jan. 17th ...	John Ogden ...	Letting Room as living room and sleeping room which did not contain 500 feet of cubic space.	2 0 0	0 5 0	2 5 0	do.

Jan. 17th ...	John Ogden ...	Insufficient Water Supply in some of the rooms let in tenements.	2	0	0	0	5	0	2	5	0	do.
Jan. 17th ...	John Ogden ...	Certain Rooms let in tenements and Staircase being in a dirty condition	2	0	0	0	5	0	2	5	0	do.
Jan. 17th ...	John Ogden ...	Offensive Water Closet in basement, and forcing to remove the same to a more suitable place.	2	0	0	0	5	0	2	5	0	do.
Jan. 24th ...	Luke Lund ...	Milk adulterated with 4 % added water.	0	10	0	0	16	0	1	6	0	
March 3rd ...	George Harrop ...	Milk adulterated with 28 % added water.	10	0	0	0	9	6	10	9	6	
March 3rd ...	George Harrop ..	Milk adulterated with 27 % of added water.		...		0	9	6	0	9	6	

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

Date.	Defendant's Name.	Nature of Offence.	Decision of Court.			Remarks.
			Penalties.	Costs.	Total.	
			£ s. d.	£ s. d.	£ s. d.	
March 3rd ...	George Harrop ...	Milk adulterated with 19 % of added water.	...	0 9 6	0 9 6	
March 31st...	Henry Calvert ...	Selling Butter with 17·63 of water and excess of salt.	0 5 0	0 5 6	0 10 6	
March 31st...	John E. Nicholl ..	Milk adulterated with 5 % of added water.	0 10 0	0 5 6	0 15 6	
June 2nd ...	W. H. Robinson ...	Offensive and Defective Drain, at Hartley Square, Bradshaw.	...	...	...	Nuisance abated. Summons withdrawn, defendent pay costs.

June 5th ...	J. Crossley & Sons	Smoke Nuisance in connection with Hebble Mill Chimney.	...	...	...	Satisfactory explanation having been given the summons was withdrawn.
Sept. 5th ...	Messrs. W. Walker & S. W. Highley, Union Mills, Pellon Lane.	Permitting Dense Smoke to be emitted from the chimney in connection with their Mill in Pellon Lane.	...	...	...	Case adjourned until the 22nd.
Sept. 22nd ...	Messrs. W. Walker & S. W. Highley, Union Mills, Pellon Lane.	Permitting Dense Smoke to be emitted from the chimney in connection with their Mill in Pellon Lane.	...	0 8 0	0 8 0	Case withdrawn upon payment of costs. The owners contending that the cause of black smoke was the fault of the firemen, one of which had been discharged for negligence.
Oct. 8th ...	Mrs A. Oakes, Miss J. Wilson, Miss E. Wilson...	Nuisance caused by an offensive cesspool contiguous to Green Lane, off Burnley Road.	...	0 6 0	0 6 0	An Order to abate and pay costs.

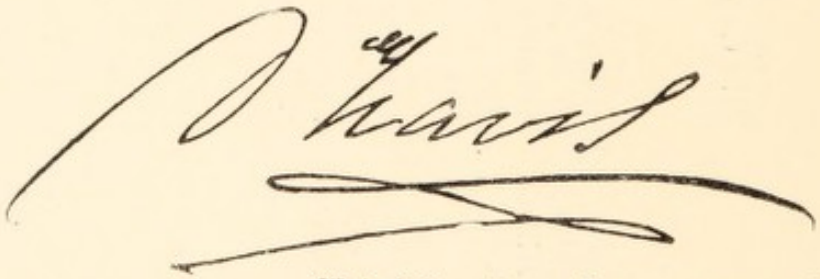
The preceding table shows sixteen prosecutions as against four in the previous year. The total fines, including costs amount to £25 19s. 6d., as against £3 13s.

During the year 208 cases have been removed to the Borough Fever Hospital. 549 rooms have been fumigated where fever cases existed. 6072 articles have been disinfected.

Mr. J. T. Millington left us in May to fulfil a similar post in Birmingham. On June 24th Mr. John Pollard, M.R.C.V.S., D.V.S.M., was appointed General Veterinary and Inspector of Meat.

I desire to acknowledge the assistance rendered me by the District Inspectors and the Chief Clerk (Mr. J. W. Jackson), and his staff during the year.

I am, your obedient Servant,



Chief Sanitary Inspector and
Scavenging Superintendent.

APPENDIX.

VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1908 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.	Nett Deaths at all Ages belonging to the District.	
				Under 1 year of age.		At all ages.						
		Number.	Rate.*	Number.	Rate per 1,000 Births Registered	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
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
1907	108,500	1927	17·7	195	102	1655	15·2	377	145	48	1558	14·3
Averages for years 1898-1907	103,858	2180	21·0	294	133	1712	16·5	307	61	32	1683	16 2
1908	107,500	2118	19·7	216	101	1664	15·4	426	139	36	1561	14·5

* 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.						Ormskirk Ward	Aberdeen Ward	North Ward.	Central Ward.	West Ward (W.)	South Ward.	East Ward.	Southerham Ward (E.)	Skircoat Ward.	Copley Ward.	Pellon Ward	Kingston Ward.	Illingworth Ward.	Northowram Ward	Warley Ward	Ormskirk Ward	Aberdeen Ward	North Ward.	Central Ward.	West Ward (W.)	South Ward.	East Ward.	Southerham Ward (E.)	Skircoat Ward	Copley Ward.	Pellon Ward	Kingston Ward	Illingworth Ward.	Northowram Ward	Warley Ward.	Non-Residents.	Total cases removed to Hospital.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.																														
Small-pox	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	..
Cholera	...	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	...	...	..	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Diphtheria including Membranous Croup ...	72	1	19	43	8	1	...	7	3	13	3	5	3	4	5	10	...	7	3	2	...	7	4	...	1	2	2	1	1	2	4	...	1	...	...	...	1	7	26
Erysipelas	44	...	...	4	7	30	3	8	2	1	...	3	...	...	2	7	...	8	1	9	3	..	...	...	...	...	...	...	...	...	...	...	...	...	..	..	..	...
Scarlet Fever ...	186	1	42	116	20	7	...	38	6	8	11	28	12	11	8	13	2	21	12	12	...	4	31	5	5	7	25	3	4	5	8	...	17	4	6	...	2	23	145
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	53	...	1	6	14	31	1	1	6	6	4	9	3	3	6	7	...	1	4	2	...	1	...	4	5	3	5	2	...	5	1	...	...	4	1	...	...	6	36
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	6	...	...	...	3	3	...	...	1	1	1	1	...	...	...	...	...	2	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	.	..	...	...	...	...	...	...	...	...
Spotted Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
TOTALS	362	2	62	169	52	73	4	54	19	29	19	46	18	18	21	37	2	39	20	25	3	12	35	9	11	12	32	6	5	12	14	...	18	8	7	...	3	36	208

Table showing Causes of, and Ages at, Death during the year 1908 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 Subjoined Ages.																					
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Ovenden Ward.	Akroyden Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	Southowram Ward (E).	Skircoat Ward.	Copley Ward.	Pellon Ward.	Elland Ward.	Illingworth Ward.	Northowram Ward.	Warley Ward.	
Measles	37	9	24	4	...	...	...	...	9	11	1	3	...	3	2	...	2	3	1	2	...	...	2
Scarlet Fever	4	...	...	2	2	...	...	1	...	...	...	1	...	...	...	..	1	1	...	...	...	...	2
Whooping Cough	31	10	20	1	...	...	...	1	2	6	2	2	...	4	6	...	2	2	2	1	1	...	...
Diphtheria and Membranous Croup	11	1	5	5	...	...	...	2	...	2	...	3	...	...	2	...	...	1	...	1	...	...	6
Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	10	...	...	2	1	6	1	1	...	...	...	1	...	2	3	...	...	1	...	1	...	1	6
Epidemic Influenza	18	...	1	...	1	10	6	...	3	...	1	1	2	2	...	1	1	...	2	2	2	1	1
Diarrhœa	15	7	4	...	1	...	3	1	2	5	...	1	1	3	1	1	...	...	...	...	...	...	1
Enteritis	5	4	...	...	1	...	...	...	...	...	1	...	...	1	1	...	...	1	...	...	1	...	..
Puerperal Fever	3	...	...	...	1	2	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...
Erysipelas	2	..	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Phthisis	146	...	5	8	27	97	9	8	12	20	8	16	10	6	9	12	4	9	14	6	8	4	50
Other Tubercular Diseases	31	3	4	5	7	11	1	2	2	3	4	2	...	3	3	2	...	5	2	...	3	...	8
Cancer, Malignant Disease	110	...	...	1	1	76	32	7	8	7	8	11	12	7	2	14	1	8	8	11	2	4	43
Bronchitis	145	18	7	1	1	48	70	9	8	16	8	13	15	14	10	14	2	5	11	11	8	1	35
Pneumonia	103	17	28	3	4	23	28	6	8	18	7	10	3	9	8	9	1	8	7	4	1	4	21
Pleurisy	4	...	...	...	...	3	1	1	...	...	...	...	1	1	1	..	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs	16	1	...	2	...	9	4	3	...	...	...	3	1	..	2	1	1	2	1	1	1	...	1
Alcoholism, Cirrhosis of Liver	13	...	...	...	...	10	3	...	...	...	2	3	1	2	1	1	...	...	..	2	1	...	3
Venereal Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth	36	36	...	...	...	...	...	4	1	5	...	4	4	4	3	4	...	...	1	5	...	1	2
Diseases and Accidents of Parturition	11	...	...	...	...	11	...	1	...	1	1	...	...	2	1	1	...	2	1	...	1	...	4
Heart Diseases	186	1	1	3	4	108	69	12	18	11	14	16	15	9	10	20	4	11	22	15	1	8	37
Accidents	30	...	5	3	1	13	8	1	4	..	4	1	6	2	2	...	2	3	1	2	1	1	19
Suicides	16	...	...	...	...	14	2	...	...	3	...	...	...	3	...	3	...	2	3	...	1	1	4
Diseases—Brain and Nervous System	147	2	4	2	3	71	65	15	5	16	12	12	7	12	9	13	2	8	19	8	5	4	55
,, Digestive System	46	3	...	3	5	19	16	7	2	3	1	5	2	1	3	7	...	5	4	4	...	2	26
,, Urinary System	50	1	1	2	1	31	14	4	2	3	3	7	5	3	3	5	1	6	4	3	1	..	17
Old Age	106	..	...	...	...	1	105	8	4	6	5	13	17	9	7	4	1	9	7	8	5	3	18
Congenital Defects	13	13	...	...	...	...	...	...	2	1	3	2	...	1	1	...	...	1	2	...	...	...	1
Convulsions	24	18	6	...	...	...	...	2	2	3	3	1	1	2	2	1	...	1	2	2	2	...	1
All other Causes	192	72	29	14	8	38	31	15	12	21	24	12	11	14	18	14	4	13	17	10	4	3	63
All Causes	1561	216	144	62	70	601	468	112	106	161	112	143	114	119	110	128	29	109	132	99	49	38	426

VITAL STATISTICS OF THE BOROUGH OF HALIFAX DURING 1908 AND PREVIOUS YEARS.

NAMES OF LOCALITIES.	WHOLE DISTRICT.				OVENDEN WARD.				AKROYDON WARD.				NORTH WARD.			
YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1898 ...					7040	172	97	29	7050	204	105	29	7929	215	131	36
1899 ...					7020	178	103	26	7050	202	131	33	8129	214	140	40
1900 ...					7146	174	97	24	7152	174	94	19	8129	232	129	33
1901 ...					7015	155	113	16	6540	187	104	28	8165	228	167	29
1902 ...	105950	2225	1634	324	7174	149	107	23	6560	185	77	26	8250	208	166	45
1903 ...	106800	2248	1592	279	7250	159	114	21	6560	171	100	21	8295	229	134	29
1904 ...	107000	2154	1643	282	7270	156	106	14	6560	166	122	27	8310	191	155	31
1905 ...	107500	2072	1618	271	7280	128	124	17	6630	179	117	30	8345	177	148	35
1906 ...	108000	2070	1674	242	7310	146	109	17	6700	156	99	15	8375	211	144	29
1907 ...	108500	1927	1558	195	7325	148	88	13	6705	161	109	26	8375	176	116	18
Averages of Years 1898 to 1907	107291	2116	1619	265	7186	156	105	20	6750	178	105	25	8230	208	143	32
1908 ...	107500	2118	1561	216	7400	160	112	15	6700	150	106	13	7830	201	161	31

YEAR.	CENTRAL WARD.				WEST WARD.				SOUTH WARD.				EAST WARD.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1898 ...	8950	237	163	46	9678	174	130	30	8610	130	127	24	8586	136	140	20
1899 ...	8950	196	152	38	9678	191	138	26	8700	160	142	20	8600	125	126	22
1900 ...	8950	206	159	37	9690	200	162	39	8712	148	135	15	8620	131	127	21
1901 ...	7835	171	146	35	9282	173	133	17	7690	139	111	14	7001	106	172	27
1902 ...	7835	164	134	34	9282	195	170	23	7615	117	111	16	7008	109	155	24
1903 ...	7835	187	139	23	9282	155	130	21	7670	132	106	18	7008	112	134	24
1904 ...	7835	165	128	24	9285	165	136	21	7690	119	116	14	7010	105	151	24
1905 ...	7835	159	135	28	9285	136	131	19	7690	104	105	12	7010	103	136	15
1906 ...	7835	142	138	34	9285	167	135	15	7690	110	108	7	7010	125	159	32
1907 ...	7835	147	140	18	9285	158	134	18	7780	99	116	8	7010	91	152	20
Averages of Years 1898 to 1907	8169	177	143	31	9403	171	139	22	7975	125	117	14	7486	114	145	22
1908 ...	7025	155	112	24	8515	152	143	21	7400	116	114	12	7000	114	119	15

YEAR.	SOUTHOWRAM WARD.				SKIRCOAT WARD.				PELLON WARD.				KINGSTON WARD.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1898 ...	7553	240	155	56	7926	177	122	27	7878	179	109	28	8278	184	99	18
1899 ...	7558	226	127	17	8076	177	127	26	8078	203	114	30	8564	188	92	30
1900 ...	7598	236	110	27	8206	167	102	14	8170	207	142	26	8964	225	153	25
1901 ...	7465	202	134	30	8850	187	117	24	9138	217	149	26	10166	218	116	23
1902 ...	7485	217	127	39	9080	163	124	18	9225	185	111	21	10310	181	118	23
1903 ...	7515	176	121	34	9429	211	146	19	9340	193	122	14	10400	197	122	25
1904 ...	7525	189	99	24	9505	212	153	13	9350	174	122	22	10415	177	115	27
1905 ...	7530	175	109	26	9690	206	136	17	9420	177	113	23	10460	181	108	13
1906 ...	7535	169	128	22	9855	173	152	14	9620	165	115	14	10565	193	131	12
1907 ...	7550	154	114	22	10015	190	102	8	9580	161	117	11	10565	159	131	10
Averages of Years 1898 to 1907	7531	198	122	32	9062	186	128	18	8979	186	121	21	9862	190	118	20
1908 ...	7290	178	110	17	10850	212	128	17	10000	177	109	10	10950	197	132	16

YEAR.	ILLINGWORTH WARD.				COPLEY WARD.				NORTHOWRAM WARD.				WARLEY WARD.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1898 ...	7246	143	112	19	Newly added area.				Newly added area.				Newly added area.			
1899 ...	7266	163	122	17												
1900 ...	7280	150	114	26	2570	57	33	4								
1901 ...	7035	150	108	14	2905	69	37	4	3265	78	58	9	2830	60	44	5
1902 ...	7105	144	100	14	2908	41	30	4	3270	95	66	8	2845	52	38	4
1903 ...	7170	157	91	16	2935	39	31	2	3270	70	47	5	2850	60	55	7
1904 ...	7180	139	114	22	2945	43	35	2	3270	95	55	13	2850	58	36	4
1905 ...	7210	129	113	11	2970	64	44	6	3285	90	53	14	2860	64	46	5
1906 ...	7230	131	115	13	2990	53	42	3	3295	71	45	6	2865	60	56	9
1907 ...	7255	109	98	9	3060	68	51	7	3295	63	45	7	2865	43	45	0
Averages of Years 1898 to 1907	7197	141	108	16	2910	54	37	4	3278	80	52	8	2852	56	45	4
1908 ...	7130	115	99	12	3190	54	29	5	3350	84	49	5	2960	53	38	3

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