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Halifax
STATISTICAL

COUNTY BOROUGH OF
HALIFAX :: HEALTH DEPT.

ANNUAL REPORT

ON THE HEALTH OF THE BOROUGH

FOR THE 52 WEEKS ENDED
DECEMBER 30, 1911.

Printed by Order of
the Health Committee

1912

Messrs. EDWARD MORTIMER, Printers Regent Street
HALIFAX.

With the

Medical Officer of Health's

Compliments.

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Health Committee.

Mayor.

ALDERMAN GEORGE TAYLOR RAMSDEN, J.P.

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

COUNCILLOR J. ASQUITH, *Vice-Chairman.*

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,,	R. HODGSON.	,,	C. H. SMITHSON.
,,	J. REDMAN.	,,	A. TAYLOR, J.P.

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ALDERMAN WHITLEY THOMSON.
ALDERMAN COE.
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,, SMITHSON.

Staff of the Health Department.

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

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

Deputy Medical Officers of Health.

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

Public Analyst.

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

Chief Sanitary Inspector and Scavenging Superintendent.

DAVID TRAVIS, A.R.S.I., F.S.I.A.

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, C.M.B.

Assistant Scavenging Superintendent.

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CHARLES CARLTON. ERNEST JUBB.

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M. ROBISON.

Laundry Engineer & Disinfector.

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Porter.

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Goux Department.

Yard Foreman.

D. TYSON.

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Clerk.

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Assistant Clerk.

A. G. CRAVEN.

COUNTY BOROUGH OF HALIFAX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

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

FOR THE YEAR 1911.

INTRODUCTION.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour of presenting to you the Thirty-ninth Annual Report on the Health of the Borough of Halifax, which is the Annual Report of the Medical Officer of Health for the year 1911.

Owing to the fall in the population of the Borough, the various death-rates of the previous years were not quite correct. In the report which follows, these death-rates have been corrected for each year since the census of 1901.

In consequence of the very hot and dry summer of last year, the death-rates generally for the year under review are I regret to say rather higher than those of the previous year, but nevertheless, I think, considering the abnormal summer, the report must be considered in every way satisfactory.

Diphtheria was less prevalent during the year. The Phthisis death-rate was the lowest ever recorded, and notwithstanding the large amount of summer Diarrhœa, the Diarrhœa death rate of the Borough compares most favourably with other large towns, being about the lowest of them all.

No changes have taken place in the staff of the department during the year.

I desire in conclusion to acknowledge the assistance rendered me by Mr. Travis and the District Sanitary Inspectors, as well as Messrs. Jackson and Carlton, and I also desire to thank your Committee for its generous support.

I am,
Gentlemen,
Your obedient servant,

Jas. J. Reech M. D., D.P.H.

MEDICAL OFFICER OF HEALTH.

TOWN HALL,
HALIFAX,
June 19th, 1912.

STATISTICAL SUMMARY.

	1911	1910
	ACRES	
Area of County Borough ...	13,650	...
Rateable Value	£490,285	£493,023
Population, estimated to middle of 1910	...	101,894
Population, 1911 Census ...	101,556	...
Persons per Acre	7·4	7·4
Average number of Persons per Inhabited House, 1911 Census...	3·92	
Average number of Persons per House, 1911 Census ...	3·65	... ...
Birth Rate	18·3	18·2
,, Average for previous 10 years	20·1	...
Death Rate	16·0	15·1
,, Average for previous 10 years	15·4	...
,, Corrected for Institutions	15 3	14·0
Death Rate for seven principal Zymotic Diseases ...	1·4	·7
Death Rate, the mean for previous 10 years of Zymotic Diseases	·9	...
Deaths of Infants under 1 year per 1000 Births	123	89
Illegitimate Births... ...	81	102
Average Age at Death, Males	42·2 years	42·3 years
Average Age at Death, Females	45·6 years	47·1 years
Latitude—North	50° 43′	...
Longitude—West	1° 52′	...
Height above Sea Level, feet...	625	...
Total Rainfall, inches ...	29·01	36·62

Area and Population of the Borough.

Since the publication of my last Annual Report, the preliminary figures regarding the Census of 1911 have been published, which show that the population of this Borough had been very much overestimated.

The Registrar General had estimated it at over 113,000. I was satisfied this was too high, but even my estimate of 108,750 was considerably over the mark, as the Census showed the actual population in 1911 to have been 101,556 only.

Now that we have the correct figures for 1911, we are enabled to revise the estimated population for the past 10 years, and the following table serves to compare the revised with the original estimate.

Year	Revised Estimate	Original Estimate
1902	104,598	105,950
1903	104,260	106,800
1904	103,922	107,000
1905	103,584	107,500
1906	103,246	108,000
1907	102,908	108,500
1908	102,570	107,500
1909	102,232	107,750
1910	101,894	108,200
1911	101,556	108,750

Only two wards show an increase in population over the previous census, so that each of the remaining 13 wards added its quota to the decrease, though in two wards, Kingston and Warley, the decrease is very small.

The following table serves to show the population of each of the wards in 1901 and 1911, and the decrease in each case.

Wards	Population in 1901	Population in 1911	Increase	Decrease
Ovenden	7037	6604		433
Akroyden	6537	6079		458
North	8152	7610		542
Central	7833	7104		729
West	9277	8494		783
South	7600	7362		238
East	7001	7154		847
Southowram... ...	7455	6931		524
Skircoat	8817	10676	1859	
Copley	2907	3059	152	
Pellon	9101	8979		122
Kingston	10098	10084		14
Illingworth	7030	6526		504
Northowram... ...	3262	3139		123
Warley	2829	2755		74
	104936	101556	2011	5391
			Nett Decrease ...	3380

With reference to the cause of this decrease in population, the average number of persons per inhabited house has been gradually diminishing, as the following table will show.

Year.	Inhabited Houses.	Population.	Number of Persons per Inhabited House.
1891	18467	95832	4·86
1901	24933	104936	4·20
1911	25895	101556	3·92

The above table shows that there was almost one person less per inhabited house during the recent census, than obtained during the year 1891.

While the birthrate has been gradually falling, this does not account for the decrease in the population of the Borough, because the excess of births over deaths during the past 10 years was 4,560. This number, together with the nett decrease of 3,380, shows that some 7,940 persons must have disappeared from the Borough during the past 10 years, or an average of 794 per annum, which is a very high number.

Migration and Emigration appear to be the only causes to which this decrease can be attributed. Emigration must have been proceeding on a large scale.

It is interesting to note that Kingston Ward, which is the second largest in population, only shows a decrease of 14 persons during the 10 years. This ward is inhabited very largely by the better class, and better paid artisan, and this fact no doubt accounts, to some extent, for the fact that Kingston Ward has shown such a small decrease.

The most populous ward, which is now Skircoat, shows a considerable increase in its population.

According to the recent census, the number of females over males continues to increase, as the following table will show.

Census.	Population.			Excess of Females over Males.
	Males.	Females.	Total.	
1881	34634	38996	73630	4362
1891	41921	47911	89832	5990
1901	48467	56469	104936	8002
1911	46347	55209	101556	8862

In order to show this increase more definitely—For every 1,000 males living during each of the previous four census years, there were the following number of women.

Year.	Number.
1881	1125
1891	1142
1901	1165
1911	1191

From the above table it will be observed that there were 26 more women to every 1,000 men in 1911 than there were in 1901.

The average age of females at death is now five years greater than that of men, while 10 years ago the difference was only 3·4, and this increase in the average age at death of females, will largely account for the comparative increase in the female population.

The Borough has an area of 13,650 acres, and is divided into 15 wards.

The following table gives the acreage and the population of each ward, as shown by the last census, together with the number of houses that were built therein during the year 1911.

WARDS	Population Estimated to Middle of 1911	Acreage	Persons per Acre	Number of Houses Built during 1911
Ovenden	6604	531	12·4	...
Akroydon	6079	582	10·4	...
North	7610	168	45·3	...
Central	7104	82	86·6	...
West	8494	86	98·7	...
South	7362	296	24·8	13
East	6154	191	32·2	...
Southowram... ...	6931	777	8·9	...
Skircoat	10676	513	20·8	28
Copley	3059	532	5·7	12
Pellon	8979	241	37·2	...
Kingston	10084	238	42·3	3
Illingworth	6526	4504	1·4	4
Northowram... ...	3139	1555	2·0	...
Warley	2755	3354	·8	3
Totals	101556	13650	...	63
Average... ...	...	...	7·4	...

Marriages.

The number of marriages solemnised within the Borough during the year 1911 was 1,072, compared with 1,130 during the previous year.

This gives a marriage rate of 10·5 against 10·9 during the previous year, or a decrease of ·4 per 1,000.

The marriage rate of 1910 was the highest in the Borough since 1901, and although the year under review shows a slight fall in that rate, it is, with the exception of 1910, the highest marriage rate since the year 1901.

The marriage rate of Halifax had been falling for a number of years, and although there has been a little improvement recently, it is remarkably low, compared with many other large towns, and with the average of the country generally.

The following table serves to compare the marriage rate of Halifax with that of England and Wales for the past 15 years.

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	9·9	15·9
1903	9·7	15·8
1904	9·9	15·2
1905	10·1	15·2
1906	9·9	15·6
1907	10·4	15·7
1908	9·8	14·9
1909	9·6	14·5
1910	10·9	14·7
1911	10·5	15·1

From the above table it will be observed that the marriage rate of Halifax practically equalled that of England and Wales 15 years ago, while it is now very much below the average generally, and of the country.

The following table shows where the marriages were solemnised.

In Churches of Church of England	598
In Nonconformist places of Worship and at the Registry Office	474
Total	1072

Births.

The number of births registered during the year in Halifax was 1875, but 9 of these belonged to outside districts; also two births occurred outside the Borough belonging thereto. By subtracting the 9 births belonging to outside districts, and adding thereto the 2 belonging to the Borough, there were 1,868 births, or an increase of 8 compared with the previous year.

The overestimation of the population of the Borough during the several previous years, made a greater difference to the birthrate than the deathrate, because there are a larger number of births than deaths, so that the actual birthrate of the Borough was not so low as the estimated population indicated. The following table shows this.

Year.	Birthrate as per Estimated Population.	Birthrate on Corrected Population.
1902	21·0	21·2
1903	21·0	21·5
1904	20·1	20·7
1905	19·2	20·0
1906	19·1	20·0
1907	17·7	18·7
1908	19·7	20·6
1909	17·0	17·9
1910	17·1	18·2

It is so far satisfactory to note that there is a slight increase in the birthrate compared with the previous year.

The 1,868 births give a birthrate for the year of 18·3 per 1,000 compared with 18·2 for the year 1910.

Of the registered births, 972 were males, and 896 were females.

The increased number of deaths during the year under review, has considerably diminished the excess in the number of births over deaths, though the number for 1911 is considerably above 1909, for which year, the excess of births over deaths was the lowest on record.

The following table compares these figures for the past 11 years.

Year	Births	Deaths	Excess of Births over Deaths
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
1909	1840	1552	288
1910	1860	1431	429
1911	1868	1554	314
Average ...	2066	1593	473

The birthrates of the country are on the downgrade, and in many places, including Halifax, the fall has been marked.

The following table serves to compare the birthrate of England and Wales with Halifax, in quinquennial periods, since the year 1875, and shows the marked fall in the Borough rate compared with the country as a whole.

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	21·7	— 6·7
1905-9	26·5	19·4	— 7·1
1910-11	24·6	18·2	— 6·4

There was rather a marked fall in the number of illegitimate births registered during the year, there being only 81 against 102 for the previous year; in fact it is satisfactory to note that the above number is the lowest recorded since the year 1900.

The following table shows the number of illegitimate births registered during the past 21 years, and the rate per cent. which these births bear, to the total number of births registered.

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	2·7
1895	51	2·3	
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	4·1
1903	102	4·5	
1904	113	5·2	
1905	97	4·6	
1906	99	4·7	
1907	84	4·3	
1908	120	5·6	
1909	83	4·5	4·8
1910	102	5·4	
1911	81	4·3	

From the above table it will be observed that the percentage of illegitimate births has considerably increased during recent years.

The average birthrate of the 77 great towns for the year 1911 was 25·6 per 1000, and only three of these had a lower birthrate than Halifax, viz.:—Hastings, 15·7; Hornsey, 17·2; and Bournemouth, 15·2 per 1000 respectively.

The birthrate of Halifax is considerably below that of most of the 33 great provincial towns.

The birthrate of England and Wales for 1911 was 24·4, against 24·8 for the previous year, or a decrease of ·4 per 1000.

The birthrates of the other Yorkshire great towns were:—Leeds, 23·8; Sheffield, 27·8; Bradford, 19·0; Hull, 28·6; Huddersfield, 19·7; York, 23·8; and Rotherham, 29·1 per 1000 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	
	1911	1910	1911	1910	1911	1910	1911	1910
1st Quarter	264	224	210	230	474	454	18·6	17·8
2nd ,, ...	256	253	229	285	485	538	19·1	21·1
3rd ,, ...	232	230	231	233	463	463	18·2	18·1
4th ,, ...	220	219	226	186	446	405	17·5	15·8
Whole Years ...	972	926	896	934	1868	1860	18·3	18·2

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

WARDS	Birthrates					
	1907	1908	1909	1910	1911	Average
Ovenden	20·2	21·6	17·6	18·5	20·4	19·6
Akroydon... ...	24·0	22·3	19·8	18·5	23·3	21·5
North	21·1	25·6	22·9	24·1	23·1	23·3
Central	18·7	22·0	20·9	20·7	20·8	20·6
West	17·0	17·8	16·4	18·4	14·9	16·9
South	12·4	15·6	13·6	12·2	13·0	13·3
East	13·1	16·2	15·8	13·2	14·9	14·6
Southowram ...	20·3	24·7	20·3	25·0	24·0	22·8
Skircoat	18·9	19·5	15·1	17·3	16·6	17·4
Copley	22·2	16·9	21·8	13·0	17·3	18·2
Pellon	16·8	17 7	14·6	15·3	18·0	16·4
Kingston	15·0	17·9	13·1	12·8	16·7	15·1
Illingworth ...	15·0	16·1	15·9	13·2	15·6	15·1
Northowram ...	19·1	25·0	15·5	20·0	21·3	20·1
Warley	15·0	17·9	19·1	15·1	19·6	17·3

From the above table it will be observed that the birthrate varies from 13·0 in South Ward to 24·0 per 1000 in Southowram Ward, while the average for five years varies between 13·3 in South, and 23.3 in North Ward.

From information which has been furnished me by the Sextons and Caretakers of the various burial grounds, it appears there were 93 still-born children buried during the year, against 94 during the previous year.

There were 59 still-births notified, against 48 during the previous year, or an increase of 11. Nevertheless, it still appears that a large number of still-born children are not reported at this office.

The number of still-born children buried in each of the burial grounds during the past two years, is shown in the following table.

Name of Burial Ground	Number of Still-born Children Buried therein	
	1911	1910
Moor End Chapel	0	1
Nursery Lane Wesleyan	0	0
St. George's, Ovenden	0	0
Providence Chapel, Ovenden ...	2	0
Illingworth Church	4	1
Christ Church, Pellon	6	10
Illingworth Wesleyan Chapel ...	1	0
Mount Zion, Ovenden	0	1
Borough Cemetery	27	22
Wesleyan Chapel, Northowram ...	0	0
All Saints' Church	4	3
Heywood Cemetery	2	4
Bradshaw Church	0	0
Mount Tabor Burial Ground ...	0	0
King Cross Wesleyan	6	14
St. Paul's Church, King Cross ...	13	12
All Souls' Cemetery	12	9
Warley Church	1	3
Wesleyan Chapel, Luddenden ...	0	0
Lister Lane Cemetery	4	4
St. Thomas' Church	11	10
Totals	93	94

The total number buried during each of the previous nine years was :—1901, 108 ; 1902, 86 ; 1903, 118 ; 1904, 121 ; 1905, 113 ; 1906, 112 ; 1907, 113 ; 1908, 101 ; 1909, 104.

From these figures it would appear that the number of still-births is on the decline.

Deaths.

During the year under review, there were 1631 deaths registered within the Borough. That number included 130 deaths which occurred in institutions in the Borough, and which belonged to outside districts.

The following table gives the institutions in which these deaths occurred, and the districts to which they belonged.

	Poor Law Hospital	Infirmary	Fever Hospital	Other Places
Sowerby Bridge ...	12	8	...	...
Wadsworth	...	1	...	...
Norwood Green ...	3	2	...	...
Clifton	2	...	...	...
Greetland	3	2	...	...
Stainland	6	4	3	...
Luddenden Foot ...	7	3	...	...
Brighouse	15	6	...	1
Huddersfield... ...	1	...	...	...
Hipperholme ...	2	1	...	...
Elland	5	3	...	...
Leeds	...	2	...	1
Todmorden	...	3	...	2
Southowram	3	1	...	1
Barkisland	2	...	...	...
Waterloo, Liverpool ...	...	...	...	1
Blackpool ...	...	...	...	2
Sowerby	3	...	...	...
Shelf	1	1	...	...
Hull	...	1	...	...
Heptonstall	...	1	...	...
Midgley	2	...	...	...
Queensbury	...	1	...	...
Ripponden	2	2	...	...
Manchester	...	...	...	1
Walton	...	...	...	1
Wombwell, Notts. ...	1	...	...	...
Bailiffe Bridge ...	...	1	...	...
Great Crosby ...	...	...	...	1
Bury St. Edmunds ...	...	...	...	1
Rochdale	1	...	...	...
Norland	...	1	...	...
Totals ...	71	44	3	12

In consequence of the arrangements which have been made by the Registrar General for the proper allocation of institutional deaths to the districts to which they belong, we have, during the year under review, a more complete list of deaths of persons belonging to the Borough which occurred in outside districts, hence there has been a sudden increase in the number of outside deaths, which it is necessary to take into account in arriving at our proper deathrate, the number being 53 against 27 for the previous year.

The following table shows where these deaths occurred.

Where Death occurred	Number
West Riding Asylums ...	33
Keighley	1
Pocklington	1
Colwyn Bay	1
Baildon	1
Filey	1
Blackpool	2
Leeds	4
Southport	2
Stockport	1
Merthyr Tydfil	1
Settle	1
Selby	1
New Hunstanton	1
Bradford	1
Elland	1
Total ...	53

After making the necessary adjustment by excluding the deaths which occurred in the Borough not belonging thereto, and including the outside deaths which belong to the Borough, the corrected number of deaths for the year was 1554, against 1431 during the previous year.

Of the above 1554 deaths, 767 were males, and 787 females, which gives a deathrate for the year of 15·3 per 1000, or an increase in that rate of 1·3 compared with the corrected deathrate of the previous year.

The increase in the number of outside deaths belonging to the Borough, compared with last year, has added ·25 per 1000 to the deathrate, but those only account for a small portion of the increased deathrate.

It is unfortunate that the year 1911 should to a certain extent have interrupted, though it is hoped only temporarily, the gradual fall which had been taking place in the deathrate of the Borough.

The following table shows the deathrates of the Borough during the past 12 years.

Period	Deathrate
1900	18·1
1901	16·2
1902	15·6
1903	15·2
1904	15·8
1905	15 6
1906	16·2
1907	15·1
1908	15·2
1909	15·1
1910	14·0
1911	15·3

Undoubtedly the hot dry summer of last year was the cause of this increase, and Halifax is not alone in this respect. Every Yorkshire great town shows an increase except Huddersfield, and no doubt the fall in the deathrate of Huddersfield was due to the under-estimated population of previous years.

The following table, which gives the deathrates per 1000 for England and Wales during 1910 and 1911, will give an indication of the rise which took place in the general deathrate for 1911 throughout the country.

	1910	1911
England and Wales ...	13·4	14·6
77 Great Towns	13·4	15·5
136 Smaller Towns	12·4	13·8
England and Wales, less the 213 Towns	13·6	13·9

It will be observed that the deathrate of the 77 great towns shows an increase of 2·1 per 1000, and that what may be called rural England, only ·3 per 1000, consequently the increased deathrate has chiefly taken place among the urban population.

The deathrate of Halifax is still below the average of the 77 great towns, although 37 have a lower deathrate, of the latter however 33 have a smaller population.

The other Yorkshire great towns had deathrates as follows:—Leeds, 16·4; Sheffield, 16·1; Bradford, 14·9; Hull, 16·7; Huddersfield, 15·0; York, 13·4; and Rotherham, 16·3 per 1000 respectively.

The following table shows the average deathrate of England and Wales for the undermentioned periods, and compares it with that of Halifax.

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	15·6	16·0
1906-10	15·1	14·6
1911	15·3	14·6

It will be observed from the above table that while the average deathrate of the Country still remains the lower of the two, that of the Borough more nearly approaches it than was the case 30 years ago.

The deathrates of the different wards vary considerably, viz :—from 10·9 in Skircoat to 20·7 per 1000 in East Ward. This variation is shown in the following table, which also gives the density of population in the various wards.

WARDS	Population	Acreage	Persons per Acre	Total Deaths	Death-rate per 1000
Ovenden	6604	531	12·4	102	15·4
Akroydon	6079	582	10·4	109	17·9
North	7610	168	45·3	132	17·3
Central	7104	82	86·6	124	17·4
West	8494	86	98·7	136	16·0
South	7362	296	24·8	110	14·9
East	6154	191	32·2	128	20·7
Southowram ...	6931	777	8·9	120	17·3
Skircoat	10676	513	20·8	117	10·9
Copley	3059	532	5·7	38	12·4
Pellon	8979	241	37·2	112	12·4
Kingston	10084	238	42·3	127	12·5
Illingworth ...	6526	4504	1·4	111	17·0
Northowram ...	3139	1555	2·0	49	15·6
Warley	2755	3354	·8	39	14·1
Totals ...	101556	13650	7·4	1554	15·3

The comparison of the ward deathrates for any particular single year is not of great value, but a comparison extending over say five years is of greater importance in this respect.

The following table serves to compare the average deathrate of each ward during the past five years.

WARDS	Deathrates					
	1907	1908	1909	1910	1911	Average
Ovenden ...	12·0	15·1	14·6	15·4	15·4	14·5
Akroydon ...	16·2	15·8	16·9	12·0	17·9	15·7
North	13·8	20·5	18·1	18·4	17 3	17·6
Central... ...	17·8	15·9	17·8	14·6	17·4	16·7
West	14·4	16·7	15·4	14·8	16·0	15·4
South	14·9	15·4	15·1	14·6	14·9	14·9
East	21·6	17·0	17·1	21·0	20·7	19·4
Southowram ...	15·0	15·2	13·9	13·7	17 3	15·0
Skircoat ...	10·1	11·7	10·8	8·8	10·9	10·4
Copley	16·6	9·0	6·5	11·8	12·4	11·2
Pellon	12·2	10 9	11·2	11·8	12·4	11·7
Kingston ...	12·3	12·0	13·8	9·7	12·5	12·0
Illingworth ...	13·5	13·8	14·4	10·8	17·0	13·9
Northowram ...	13·6	14·6	14·9	12 0	15·6	14·1
Warley	15·7	12·7	12·7	9·4	14·1	12·9

The above table shows that East Ward has the highest average deathrate. Nearly all the common lodging houses are situated in this ward, and it is possible that deaths in connection with these, may to some extent, help to swell the deathrate of this ward. Skircoat has the lowest average deathrate, 10·4 per 1000, and is followed very closely by Copley and Pellon.

The following table shows the total number of deaths of each sex which occurred in the Borough, the total ages lived, and the average age at death, during the past 16 years.

MALES				FEMALES			
	Deaths	Total Years	Average Ages		Deaths	Total Years	Average Ages
0-1	131	131	...	0-1	100	100	...
1-2	21	39	1·8	1·2	30	53	1·7
2-5	29	83	2·8	2-5	25	74	2·9
5-15	24	170	7·0	5-15	32	289	9·0
15-25	33	626	18·9	15-25	35	686	19·6
25-45	88	3135	35·6	25-45	96	3499	36·3
45-65	246	13871	56·3	45-65	189	10432	55·1
65 and upwards	195	14333	73·5	65 and upwards	280	20779	74·2
Total 1911.	767	32388	42·2	Total... 1911.	787	35912	45·6
1910	Average		42·3	1910	Average		47·1
1909	,,		42·0	1909	,,		47·3
1908	,,		40·6	1908	,,		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

Zymotic Deathrate.

The deathrate from the seven principal Zymotic diseases for the year 1911, is considerably above that of the previous year, in fact, it is the highest Zymotic deathrate recorded since the year 1904.

From these diseases there died 144 persons during 1911, against 76 during the previous year. This gives a deathrate of 1·41 per 1000 against ·7 for the previous year, or an increase of 50%, and this increased Zymotic deathrate accounts for about 50% of the increase in the general deathrate.

The Zymotic deathrate was higher throughout the country last year, and in fact, Halifax comes out very favourably in comparison with the 33 great towns of England in this respect, because during 1910, four towns had a lower Zymotic deathrate, but for last year, only one of these towns, viz:—Brighton, had a Zymotic deathrate below that of Halifax.

The Zymotic deathrate for Brighton for 1911 was 1·01 per 1000.

The Zymotic deathrate of other Yorkshire great towns was as follows:—Leeds, 2·23; Sheffield, 3·16; Bradford, 1·40; Huddersfield, 1·53; Hull, 3·04; York, 1·43; and Rotherham, 3·20 per 1,000 respectively.

It will be observed therefore that Halifax had a lower zymotic deathrate than any of the other Yorkshire great towns except Bradford.

The following table compares the deathrates from the principal zymotic diseases during 1911, in England and Wales, and Halifax.

	Deathrate from							
	Small-pox	Measles	Scarlet Fever	Diph-theria	Whoop-ing Cough	Fever	Diarr-hœa	Zymotic Death-rate
England and Wales...	0·00	0 36	0·05	0·13	0·21	0·07	1·06	1·88
77 Great Towns ...	0·00	0·47	0·06	0·15	0·24	0·06	1·31	2·29
136 Smaller Towns ...	0·00	0·41	0·06	0·12	0·18	0·07	1·14	1·98
England and Wales, less the 213 towns...	0·00	0 22	0·04	0·11	0·19	0·07	0·77	1·40
Halifax	0·00	0·06	0·07	0·22	0·25	0·09	0·68	1·41

The above table shows that the zymotic deathrate of the Borough compares very favourably with the average of that of the country generally.

The zymotic deathrate of Halifax is compared with the average rate of the 33 great towns, in the following table.

	33 Great Towns	Halifax
Seven Zymotic Diseases ...	2·21	1·41
Smallpox	·00	·00
Measles	·38	·06
Scarlet Fever	·06	·07
Whooping Cough	·23	·25
Typhoid Fever	·06	09
Diarrhœa	1·27	·68
Diphtheria	·17	·22

The following table gives the number of zymotic deaths, and the deathrate of each ward, during the year under review.

WARDS	Small-pox	Measles	Scarlet Fever	Diph-theria	Whooping Cough	Fever	Diarr-hœa	Zymotic Death-rate per 1000
Ovenden ...	...	...	2	2	2	...	2	1·2
Akroydon ...	...	...	...	2	2	3	9	2·6
North ...	...	1		1	3	1	11	2·2
Central ...	...	3	...	1	...	...	7	1·5
West ...	...	1	3	2	3	3	11	2·7
South ...	...	...	...	1	3	2	1	0·9
East ...	...	...	1	1	...	...	6	1·2
Southowram ...	2	...	4	1	1	10	2·5	
Skircoat ...	...	...	...	3	4	...	2	0·8
Copley ...	...	...	...	...	1	...	2	0·9
Pellon ...	...	...	...	...	2	...	2	0·4
Kingston ...	...	...	1	2	...	...	4	0·6
Illingworth ...	...	1	1	3	...	1	0·9	
Northowram ...	...	...	...	2	...	1	0·9	
Warley ...	...	...	...	3	...	...	1	1·4
Totals ...	...	7	8	23	26	10	70	avg1·4

From the above table it will be observed that West had the highest zymotic deathrate, 2·7, and Pellon the lowest, ·4 per 1,000 respectively.

The increased number of deaths from diarrhœa chiefly accounts for the high zymotic deathrate.

The following table gives the zymotic deathrates of the various wards during the past five years, together with the average for each ward.

WARDS	ZYMOTIC DEATHRATE					
	1907	1908	1909	1910	1911	Average
Ovenden ...	0·5	0·8	0·6	2·1	1·2	1·0
Akroydon ...	1·3	1·9	2·6	0·4	2·6	1·7
North	1·1	3·0	1·6	1·4	2·2	1·8
Central	0·7	0·4	0·4	1·0	1·5	0·8
West	0·4	1·2	0·8	0·4	2·7	1·1
South	0·7	0·1	0·1	0·4	0·9	0·4
East	0·5	1·7	0·8	1·0	1·2	1·0
Southowram ...	0·3	1·9	1·2	0·6	2·5	1·3
Skircoat ...	0·0	0·9	0·5	0·1	0 8	0·2
Copley	0·6	1·5	0·0	1·2	0·9	0·8
Pellon	0·7	0·8	0·2	0·4	0·4	0·5
Kingston ...	0·4	0·2	0·6	0·5	0·6	0·4
Illingworth ...	0·9	0·7	0·4	0·0	0·9	0·5
Northowram ...	0·6	0·2	0·2	0·8	0·9	0·5
Warley	0·0	0·3	0·6	0·0	1·4	0·4

From the above table it will be observed that Skircoat has the lowest average zymotic deathrate, and North ward the highest. This is invariably the case.

There has been a marked fall in the avera e zymotic deathrate of the Borough, as the following table will show.

Period	Deathrate
1877-81	2·50
1882-6	1·55
1887-91	1·43
1892-6	1·33
1897-01	1·40
1902-6	1·02
1907-11	·90

Infantile Mortality.

Unfortunately the hot dry summer of last year was not conducive to the continued fall in the deathrate among infants under one year of age, and I regret I have to record rather a marked increase in the infant mortality for the year under review.

There died 231 infants under one year of age against 166 during the previous year, and this corresponds to an infant mortality of 123 deaths per 1,000 births, against 89 for the previous year.

This increased mortality is undoutedly due to the excessive heat and drought which prevailed during the summer months, the like of which had not been experienced for over 40 years.

Summer diarrhœa was responsible for 50% of the above increase, and other diseases which added considerably to the deathroll were Convulsions, Meningitis, and diseases of the respiratory organs.

In view of the above there is no need whatever to be discouraged with the result under such abnormal conditions, because I am sure, had such a summer occurred 10 years ago, before the special efforts had been put forth to reduce infant mortality, the deathrate would have been nearer 200 per 1,000 than 100.

Notwithstanding the abnormal conditions of last summer, and the fact that the infant mortality for the whole Borough had increased by 34 per 1,000, several of the wards actually had a lower mortality than during the previous year. The mortality for Skircoat and South Wards were 44 and 52 per 1,000 respectively.

Tbe average infant deathrate for five years of the different wards of the Borough varies considerably. In Pellon and Skircoat the figures were only 70 and 53 respectively per 1,000 born, whilst in East, North, and Central, the average was as high as 176, 145, and 142 respectively. These latter figures are far too high, and it behoves the Lady Visitors of the Public Health Association to especially direct their attention to these wards, because it is there where the greatest improvement appears to be possible.

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 of the Borough.

WARDS	Number of Births	Birthrates	Number of Deaths under 1 year	Mortality pe 1000 Births
Ovenden ...	135	20·4	14	103
Akroydon ...	142	23·3	11	77
North ...	176	23·1	34	193
Central ...	148	20·8	31	209
West ...	127	14·9	22	173
South ...	96	13·0	5	52
East ...	92	14·9	17	184
Southowram ...	167	24·0	25	149
Skircoat ...	178	16·6	8	44
Copley ...	53	17·3	5	94
Pellon ...	162	18·0	18	111
Kingston ...	169	16·7	19	112
Illingworth ...	102	15·6	12	117
Northowram ...	67	21·3	4	59
Warley ...	54	19·6	6	111
Totals ...	1860	18·3	231	123

The following table shows the causes of deaths of infants under one year of age for the year under review.

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks
All Causes.	Certified	50	11
	Uncertified	1	...
Common Infectious Diseases.	Small-pox	...	...
	Chicken-pox	...	...
	Measles	...	...
	Scarlet Fever	...	...
	Diphtheria (including Membranous Croup) ...	...	...
	Whooping Cough	...	...
Diarrhœal Diseases.	Diarrhœa, all forms ...	...	...
	Enteritis	...	1
Tuberculous Diseases.	Tuberculous Meningitis ...	...	...
	Tuberculous Peritonitis : Tabes Mesenterica ...	...	...
	Other Tuberculous Diseases	...	...
Wasting Diseases.	Congenital Malformations ..	4	1
	Premature Birth	26	3
	Atrophy, Debility, Marasmus	5	1
Other Causes.	Atelectasis	2	...
	Injury at Birth	3	1
	Erysipelas	...	...
	Syphilis	1	...
	Rickets.....	...	...
	Meningitis *(not Tuberculous)*	...	1
	Convulsions	2	...
	Gastritis	...	...
	Laryngitis	...	...
	Bronchitis	...	...
	Pneumonia (all forms) ...	...	...
	Suffocation, overlying ...	1	...
	Other causes	7	3
		51	11

2-3 Weeks	3-4 Weeks	Total under 1 Month	1-3 Months	3-6 Months	6-9 Months	9-12 Months	Total Deaths under One Year
16	9	86	43	41	39	21	230
...	...	1	...	...	...	...	1
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
...	...	...	...	...	2	...	2
...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...
...	2	2	2	2	2	1	9
1	1	2	5	8	9	4	28
...	1	2	4	3	6	2	17
...	...	...	...	1	...	3	4
...	...	...	...	...	1	1	2
...	...	...	...	1	1	1	3
...	...	5	3	1	...	...	9
9	...	38	4	2	...	...	44
1	2	9	7	...	1	...	17
...	...	2	...	...	...	...	2
...	...	4	1	...	...	...	5
...	...	...	...	...	...	...	...
...	...	1	...	1	...	...	2
...	...	...	...	...	1	...	1
...	...	1	2	2	1	2	8
2	...	4	2	2	1	1	10
...	...	...	...	1	...	...	1
...	...	...	...	...	...	...	...
...	...	...	5	5	4	...	14
1	1	2	3	9	7	4	25
...	...	1	...	...	...	...	1
2	2	14	5	3	3	2	27
16	9	87	43	41	39	21	231

I am interested to see that the number of deaths under the heading of Atrophy, Debility, and Marasmus, is four less than during the previous year.

The number of deaths under this heading is now only about half what it was five or six years ago, and these diseases undoubtedly have relation to the feeding of infants. It would seem therefore this improvement is due to the greater care now being exercised in this important matter.

There were 81 illegitimate births, and 7 deaths under one year of age during the year, which gives an illegitimate infant mortality of 86 per 1,000 born, against 127 during the previous year.

The following table shows the causes of death of the illegitimate infants.

Disease	Age at Death
	Under 1 year
Phthisis Pulmonary ...	1
Premature Birth ..	2
Meningitis	1
Enteritis	1
Gastro Enteritis ..	1
Injury at Birth ...	1

I have already pointed out the fact that the infant mortality of the different wards varies considerably. The following table shows this, and also the birthrates of each ward during the past five years.

WARDS	Deaths under 1 Year to 1000 Births Registered						Average Birthrate during the past five years
	1907	1908	1909	1910	1911	Average	
Ovenden ...	87	93	106	57	103	89	19·6
Akroydon ...	161	86	120	39	77	96	21·5
North ...	102	154	127	149	193	145	23·3
Central ...	122	154	114	111	209	142	20·6
West ...	113	138	121	88	173	126	16·9
South ...	80	103	69	54	52	71	13·3
East ...	219	131	126	220	184	176	14·6
Southowram	142	95	108	102	149	119	22·8
Skircoat ...	42	80	66	35	44	53	17·4
Copley ...	103	92	57	93	94	87	18·2
Pellon ...	68	56	61	54	111	70	16·4
Kingston ...	62	81	125	111	112	98	15·1
Illingworth	82	104	87	50	117	88	15·1
Northowram	111	59	76	58	59	72	20·1
Warley ...	0	56	52	177	111	79	17·3

In my Annual Report for 1909 I called attention to the considerable fall which had occurred in the infant deathrate of East ward. The year 1910 however showed a marked increase in this rate, but I am glad to be able to note that notwithstanding the abnormal conditions of last summer, the infant deathrate for East ward was actually 36 per 1,000 lower than during the previous year. It is to be hoped therefore that the infants are

being better looked after in East ward than formerly was the case.

This ward, as will be seen from the above table, still shows the highest average infant mortality, viz. :— 176 per 1,000 births. North comes next with 145, and then Central with 142 per 1,000 respectively.

The following table shows the number of deaths which took place in the Borough from some of the chief infantile diseases, and gives the deathrates therefrom of each disease per 1,000 of the population.

DISEASES	Number of Deaths under 1 year					Rate per 1000 of Population				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
From all causes ...	195	216	183	166	231	1·79	2·00	1·69	1·53	2·27
Respirat'ry Diseas's	33	36	21	23	39	·30	·33	·19	·21	·38
Premature Birth ...	33	36	37	45	44	·30	·33	·34	·41	·43
Diarrhœa and Enteritis	12	7	5	5	45	·11	·06	·04	·04	·44
Whooping Cough	6	10	6	8	9	·07	·09	·05	·07	·08
Convulsions ...	19	18	20	6	10	·17	·16	·18	·05	·09
Scrofula, Tuberculosis ...	17	4	6	7	9	·15	·03	·05	·06	·08
Measles	5	37	1	2	2	·04	·34	·009	·01	·01

The following table serves to compare the average infant mortality of England and Wales, the great towns, etc., with that of Halifax for the past two years.

	Deaths under 1 year per 1000 Births	
	1910	1911
England and Wales	106	130
77 Great Towns	115	140
136 Smaller Towns	104	133
England and Wales less the 213 Towns	96	118
HALIFAX	89	123

From the above table it will be observed that the infant mortality for Halifax compares very favourably with the rest of the country.

The infant mortality of the other Yorkshire great towns was as follows:—Leeds, 158; Sheffield, 140; Bradford, 138; Hull, 155; Huddersfield, 132; York, 113; and Rotherham, 157 respectively.

The following table compares 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
1905-9	109	121
1910-11	106	118

The above table indicates the marked fall which has taken place in Halifax in the infantile deathrate. Thirty-five years ago the Borough deathrate was considerably above that of the average of the country, whereas now the Borough Rate is well below it.

The following table shows the average infant mortality of 36 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 than that of Halifax, viz. :—Croydon.

36 Large Towns	Deaths under 1 year to 1,000 Births Registered.					
	1907	1908	1909	1910	1911	Average
Burnley	158	200	156	168	210	178
Middlesborough ..	158	159	158	144	169	157
Preston	158	154	136	158	172	155
Rhondda	162	183	129	136	164	154
Stockport ...	159	167	132	137	170	153
Nottingham ...	165	145	150	128	162	150
Blackburn ...	153	150	126	136	188	150
Liverpool ...	144	141	144	140	154	144
Birmingham ...	147	145	134	130	164	144
Manchester ...	146	151	134	131	154	143
Salford	140	153	141	130	149	142
Oldham	144	160	119	127	160	142
Bolton	146	149	128	117	163	140
Sunderland ...	130	146	135	129	151	138
Gateshead ...	136	149	112	151	136	136
Leeds	130	138	122	132	158	136
Hull	127	145	114	135	155	135
Sheffield	145	140	118	127	140	134
South Shields ...	133	134	137	113	147	132
Leicester... ...	131	131	127	126	132	129
Bradford	124	143	116	127	138	129
Wolverhampton ...	130	132	138	107	135	128
Newcastle ...	123	136	119	121	136	127
Birkenhead ...	110	135	123	135	134	127
Plymouth ...	110	129	131	114	145	125
Cardiff	131	125	103	111	135	121
Norwich	125	115	119	103	135	119
London	115	113	107	102	128	113
Derby	121	112	123	85	123	112
Bristol	100	126	100	90	141	111
Portsmouth	123	98	96	104	126	109
Southampton ...	108	113	106	79	134	108
Huddersfield ...	97	111	95	99	132	106
Brighton	113	104	96	109	98	104
Halifax	**102**	**101**	**99**	**89**	**123**	**102**
Croydon	94	99	80	88	106	93

Comparison of Ward Deathrates.

The following table compares the undermentioned deathrates of the different wards of the Borough for the year 1911.

WARDS	General Deathrates	Zymotic Deathrates	Respiratory Deathrates	Phthisis Deathrates	Infantile Mortality
Ovenden ...	15·4	1·2	3·4	·6	103
Akroydon ...	17·9	2·6	3·1	1·4	77
North ...	17·3	2·2	2·6	1·3	193
Central ...	17·4	1·5	3·3	·7	209
West ...	16·0	2·7	2·1	1·1	173
South ...	14·9	·9	2·4	·2	52
East ...	20·7	1·2	3·8	1·7	184
Southowram ...	17·3	2·5	3·3	1·5	149
Skircoat ...	10·9	·8	1·4	·5	44
Copley ...	12·4	·9	2·2	1·3	94
Pellon ...	12·4	·4	1·8	·7	111
Kingston ...	12·5	·6	2·4	·5	112
Illingworth ...	17·0	·9	2·2	·7	117
Northowram ...	15·6	·9	3·5	·6	59
Warley ..	14·1	1·4	·7	·7	111
Average ...	15·3	1·4	2·5	9	123

From the above table it will be observed that East ward had considerably the highest general deathrate, and also the highest respiratory deathrate, while strange to say its Zymotic deathrate was below the average of the Borough.

The next table shows the average deathrates from the undermentioned causes for the past 10 years in each ward.

WARDS	Average Deathrates, 10 years			
	General	Zymotic	Phthisis	Respiratory
Ovenden ...	14·9	1·1	1·0	2·3
Akroydon ...	15·6	1·3	·7	2·6
North ...	17·7	1·7	1·4	3·3
Central ...	16·9	·9	1·3	3·1
West ...	15·2	·9	1·1	2·8
South ...	14·5	·6	·7	2·4
East ...	20·2	1·0	1·8	3·8
Southowram ...	15·2	1·5	1·1	2·7
Skircoat ...	12·6	·5	1·0	2·2
Copley ...	11·7	1·1	·9	1·8
Pellon ...	12·0	·6	·8	1·9
Kingston ...	11·7	·5	·8	2·1
Illingworth ...	14·3	·6	·9	2·4
Northowram ...	15·1	·9	1·3	2·4
Warley ...	14·5	·4	1·2	2·1

The above table shows that East ward, as usual, has the highest average general deathrate, Phthisis deathrate, and Respiratory deathrate.

The average general deathrate of the whole Borough for the past 10 years was 15·3 per 1000, consequently the above table shows that four wards had a higher average rate than that of the Borough. Copley and Kingston had the lowest average rates, while the averages for Pellon and Skircoat must be considered very satisfactory.

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

WARDS	Average Deathrate per 1000 for 5 years, 1906 to 1910						Total of Average
	Zymotic Diseases	Respiratory Diseases	Phthisis	Heart Diseases	Diseases Brain and Nervous System	Other Tubercular Diseases	
Skircoat ...	2	1·6	·8	1·0	1·2	·1	4·9
Pellon ...	·5	1·6	·7	1·1	1·2	·3	5·4
Copley ..	·8	1·8	·8	1·3	·9	·1	5·7
Average ...	·5	1·7	·7	1·1	1·1	·1	...
East ...	1·0	4·0	1·6	1·9	1·6	·3	10·4
Central ...	1·0	3·5	1·6	1·9	1 7	·5	10·2
North ...	1·8	3·3	1·6	1·4	1·5	·2	9·8
Average ...	1·2	3·6	1·6	1·7	1·6	·3	...

Notification of Infectious Diseases.

The notification of certain of the more important infectious diseases was made compulsory in the Borough under a local act, as far back as the year 1882.

Notifiable infectious disease was rather more prevalent in the Borough than during the previous year, there being 501 cases notified, against a total of 464 during the previous year.

In the following table, the total number of cases notified, and the distribution of those cases among the wards of the Borough, and institutions situated therein, is shown.

WARDS	Typhus Fever	Typhoid Fever	Continued Fever	Scarlet Fever	Puerperal Fever	Diphtheria	Erysipelas	Total
Ovenden ...	...	...	...	58	...	7	8	73
Akroydon ...	...	3	1	20	...	8	8	40
North	...	2	...	23	...	7	3	35
Central... ...	...	3	...	13	...	6	4	26
West	...	5	...	34	...	9	6	54
South	...	6	...	9	...	11	2	28
East	...	2	...	6	...	6	1	15
Southowram ...	...	6	...	8	...	8	1	23
Skircoat ...	...	3	...	18	...	16	14	51
Copley	...	...	...	3	...	1	...	4
Pellon	...	...	...	31	...	12	5	48
Kingston ...	1	2	...	20	2	9	6	40
Illingworth ...	...	2	...	22	...	3	2	29
Northowram ...	...	...	...	2	...	1	3	6
Warley	...	1	...	20	...	6	2	29
Total, 1911	1	35	1	287	2	110	65	501

PUBLIC INSTITUTIONS (which are included in the above).

Royal Infirmary...	...	2	...	5	...	9	1	17
Poor Law Hospital	...	2	...	...	...	...	16	18
The Orphanage...	...	...	...	...	...	12	...	12
Blue Coats School	...	...	...	1	...	...	...	1
Girls' Home ...	...	...	...	1	...	...	...	1

The chief librarian was kept informed as to the localities in which infectious diseases occurred, throughout the year, and all books found in infected houses

were disinfected by the sanitary inspectors before being returned to the libraries.

The following table shows the number of cases of each disease notified during each month of the year under review.

MONTH	Typhus Fever	Continued Fever	Typhoid Fever	Scarlet Fever	Puerperal Fever	Diphtheria	Erysipelas	Total
January	1	...	2	34	...	8	7	52
February	...	...	1	26	...	13	2	42
March	...	...	3	33	1	24	9	70
April	...	...	2	13	...	1	6	22
May	...	...	...	24	...	6	6	36
June	...	...	2	20	...	7	6	35
July	...	...	1	18	...	10	3	32
August	...	...	4	24	...	7	6	41
September	...	1	7	21	...	7	3	39
October	...	...	7	25	...	11	6	49
November	...	...	4	27	...	7	7	45
December	...	...	2	22	1	9	4	38
Totals	1	1	35	287	2	110	65	501

It will be observed from the above table that cases of typhoid fever occurred in the Borough during each month of the year except May, and that the period of greatest prevalance was during September and October.

Scarlet Fever was most prevalent during January and March, though the number of cases which occurred during each month of the year did not vary very much.

In the case of Diphtheria, March was the period of greatest incidence, the disease being much more prevalent during that month than any other; in fact, more than one-fifth of the whole cases notified were reported in March.

The following table shows the number of cases of each disease notified yearly since the year 1883, when compulsory notification was put in force.

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	·56
1903	130	...	..	61	320	2	1	...	50	81	328	1	974	93
1904	80	..	...	47	486	...	9	...	80	73	...	...	775	·74
1905	49	...	...	50	338	...	6	...	87	54	...	...	584	·56
1906	...		...	38	214	...	7	...	158	56	...	...	473	·45
1907	...	...	...	60	89	...	7	...	118	36	...	...	310	·30
1908	.	...	...	53	186	1	6	...	72	44	...	...	362	·35
1909	..	...	...	44	545	...	4	...	128	45	...	...	766	·74
1910	...	...	...	33	237	...	7	...	137	50	...	...	464	·45
1911	...		1	35	287	1	2	...	110	65	..	...	501	·49

From the above table it will be observed that the number of cases of Typhoid Fever is diminishing, and although last summer was so hot and dry, only two more cases of this disease were reported than during the previous year, and the number notified during the year under review, with the exception of that of the previous year, was less than for any year since notification became compulsory.

Scarlet Fever was rather more prevalent, while fewer cases of Diphtheria were reported.

The following table shows the average number of notifications of the chief notifiable diseases in each ward of the Borough during the past 10 years.

Wards	Averages, 10 years—1902 to 1911							
	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	1·7	46·6	·2	11 8	61·8	6798	9·0
Akroydon ...	·6	3·1	22·7	·3	7·6	34·3	6285	5·4
North	1·6	3·2	24 9	1·0	5·1	35·8	7853	4·5
Central	4·4	3·4	17·3	·6	5·1	30·8	7432	4·1
West	2·5	4·1	23·8	·3	7·9	38 6	8845	4·3
South	·9	3·2	16·8	...	7·0	27·9	7469	3·7
East	7·5	3·4	12·6	·6	4·2	28·3	6527	4·3
Southowram ...	·7	5·3	18·7	·4	6 7	31·8	7166	4·4
Skircoat ...	1·9	7·7	26·3	·4	12·1	48·4	9839	4·9
Copley	·4	1·6	8·4	·1	4·3	14·8	2991	4·9
Pellon	1·0	2·7	24·7	·5	10·2	39·1	9033	4·3
Kingston ..	·6	3·1	32 5	·6	6·3	43·1	10089	4·2
Illingworth ..	1·1	3·6	19·1	·1	4·5	28·4	6752	4·2
Northowram ...	...	1·6	12·1	...	1·7	15·4	3193	4·8
Warley ...	1·3	·9	8 9	·1	3·3	14·5	2787	5·0

From the above table it will be observed that the attack rate per 1000 from the notifiable infectious diseases is greatest in Ovenden ward. This has been so now for some years past, while in South ward the attack rate is lowest.

In East ward, where the deathrates are the highest in the Borough, the attack rate from infectious diseases is less than half that of Ovenden ward.

I have no doubt that the fact that there are fewer children in South and East wards accounts to some extent for these figures.

Causes of Death.

The following table serves to classify the causes of death in the Borough of persons belonging thereto during 1911.

CAUSES OF DEATH	Number
Whooping Cough	26
Small-pox	0
Measles	7
Scarlet Fever	8
Diphtheria and Membranous Croup	23
Diarrhœa	47
Typhoid Fever	10
Epidemic Influenza	7
Croup	1
Enteritis	23
Puerperal Fever	0
Erysipelas	1
Other Septic Diseases	7
Phthisis	94
Other Tuberculous Diseases	15
Cancer, Malignant Diseases	119
Bronchitis	128
Pneumonia	127
Pleurisy	7
Other Diseases, Respiratory Organs	20
Alcoholism, Cirrhosis of Liver	7
Venereal Diseases	0
Diseases and Accidents of Parturition	9
Heart Diseases	161
Other Diseases, Circulatory System	17
Accidents	26
Suicides	14
Appendicitis	15
Diseases of Brain and Nervous System	182
Diseases of Digestive System...	46
Diseases of Urinary System	19
Old Age	108
Acute Rheumatism	3
Rheumatoid Arthritis	6
Nephritis and Bright's Disease	47
Starvation	0
Diseases of Reproductive System	4
Diseases of Locomotive System	1
Atelectasis	2
Premature Birth	44
Congenital Defects	10
Convulsions	13
Chicken Pox	0
Gastritis, Gastro Intestinal Catarrh	2
Injury at Birth	5
Want of Breast Milk	0
Atrophy, Debility, &c.	23
Tubercular Meningitis	13
Tuberculous Peritonitis, Tabes Mesenterica	8
Syphilis	4
Rickets...	1
Meningitis (not Tuberculous)	26
Laryngitis	4
Suffocation, Overlaying	1
Diabetes Mellitus	14
Diseases of Bone	3
Diseases, Organs of Special Sense	5
Anthrax	2
Other Causes	39
All Causes	1,554

Smallpox.

The Borough continued free from this disease during the year.

Information was received from certain Port Authorities, that five persons who had been in contact with the disease landed in the country, whose ultimate destination was Halifax. These contacts were all visited for the regulation period.

Scarlet Fever.

I regret that I have to report an increased prevalence of this disease within the Borough during the year under review. There were 287 cases notified, against 237 during the previous year.

The mortality from Scarlet Fever below the age of one year is practically a negligable quantity, and the disease is most prevalent between the ages of 5 and 15 years, as the following table will show.

Age Period...	0-1	1-5	5-15	15-25	25-45	45-65	65 upwds
Cases	—	54	191	28	14	—	—
Deaths ...	—	3	2	2	1	—	—

In accordance with the above figures, the case mortality under 5 years of age was 5·5 per cent., while over that age it was 2·1 per cent. only, or less than half. This fact shows the importance of doing everything possible to protect children under 5 from contracting the disease, because if this could only be effectually done, the deathrate therefrom would be very much diminished.

The following table shows the average number of cases notified and the average attack rate, in quinquennial periods since the year 1885.

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	103,780	4·4	3·4
1905-9	274	102,908	2·6	2·9
1910-11	262	101,725	2·5	2·2

The above table shows that the attack rate per 1,000 of the population from this disease remained about the same up to the period ending 1904, while there has been an improvement in this direction since then. It is hoped that this favourable result will continue in the future.

The above table also serves to show what a marked decrease has taken place in the average case mortality from this disease. The average mortality per cent. is only now about one-third what it was 25 years ago.

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...	34	26	33	13	24	20	18	24	21	25	27	22	287

Of the above 287 cases, 8 died, which gives a deathrate of ·07, and a case mortality of 2·7 per cent. of those notified, against a deathrate of ·03, and a case mortality of 1·6 per cent. during the previous year.

Fever.

Under the term fever are included Enteric or Typhoid, Typhus, and Continued Fevers.

Very few cases of so-called continued fever are now reported, only one case having been notified during the year under review. There was however one case of Typhus Fever reported, a very unusual occurrence, as no cases of this disease had been notified in the Borough since the year 1900. There were 35 cases of Typhoid Fever reported. Thus there were 37 cases of fever notified during the year, against a total of 33 during the previous year.

The victim of typhus fever was a man aged 46 years, who commenced to be ill on January 1st with sickness, vomiting, and severe headache. He was notified to be suffering from typhus fever on January 14th, on which date he was removed to Birks Hall for isolation and treatment.

This man was a mechanic, and was at the time working from home for a firm at Milnrow, near Rochdale.

From the correspondence which I had with the local Medical Officer of Health, I ascertained that no cases of this disease had occurred to his knowledge in his district, and the only possible clue to the source of infection which I could obtain, was the fact that at his lodgings this man slept in the same bed with a man from Leeds,

whose son had been ill for some weeks, but from what he was suffering I was unable to ascertain, as the Leeds man evidently refused to give his address to the Medical Officer of Health. No further cases of the disease occurred.

Typhoid Fever was most prevalent during the months of September and October, seven cases being notified during each of those months, and May was the only month throughout the year when the Borough was free from the disease.

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				Old Middens	Goux Closets	Water Closets	Probable or assigned cause		
		Good	Bad	Fair	None				No trace	From a previous case in same house	From Eating Mussels
Typhoid Fever...	35	30	3	1	1	2	22	11	26	7	2

It is probable that at least two cases were due to eating shell-fish, as one patient who ate raw mussels and oysters on March 13th was reported on the 20th of that month to be suffering from typhoid fever, and another patient ate a quantity of raw mussels a fortnight previous to being taken ill.

Owing to the scare created two years ago however, a much less quantity of shell-fish is now consumed than formerly was the case.

The following table gives the number of cases of typhoid fever notified since the year 1899, and the number of deaths each year since that date.

Year	Number of Cases Reported	Number of Deaths
1899	92	22
1900	79	20
1901	67	15
1902	65	14
1903	61	11
1904	47	10
1905	50	9
1906	38	4
1907	60	9
1908	53	10
1909	44	8
1910	33	9
1911	35	10

Of the 37 cases of fever reported during the year, 10 died, giving a deathrate of ·09, and a case mortality of 27 per cent,. against a deathrate of ·08 per 1,000, and a case mortality of 27 per cent. during the previous year.

Diphtheria.

It is so far satisfactory to me to have to report that diphtheria was less prevalent in the Borough than during the previous year, and that fewer cases were reported than since the year 1908. It is still a fact however that a much larger number of cases of this disease occur yearly now than was the case some years ago, but Halifax is not alone in this respect.

The disease was present in the Borough more or less throughout the year, and cases were notified from every ward.

The period of greatest prevalence however was during the months of February and March. In the latter month 24 cases were notified.

Skircoat Ward suffered most, there being 16 cases reported therein.

Up to the year 1903 the borough appeared to have remained comparatively speaking free from this disease. There was an increase in the notifications during 1904, and the disease has continued very much more prevalent since, as the following table will show.

Year	Number of Cases Reported	Number of Deaths
1904	80	17
1905	87	27
1906	158	42
1907	118	28
1908	72	11
1909	128	27
1910	137	23
1911	110	23

As above stated the disease was most prevalent in Skircoat Ward. Next to Skircoat the other wards chiefly affected were Pellon and South.

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				Old Middens	Goux Closets	Water Closets	Probable or assigned cause						
		Good	Bad	None	Fair				No Trace	From other cases in the neighbourhood	From a cold	From bad drains	From previous case in same house	Contracted away from home	Contracted at school
Diphtheria	110	91	14	1	4	2	77	31	80	2	5	4	6	1	12

In connection with the Order for the supply of anti-diphtheritic serum to poor persons, 25 doses were supplied to 15 medical practitioners during the year, the cost of which was about £5.

Of the 110 cases reported 23 died, giving a death-rate of ·22 and a case mortality of 20 per cent., against a deathrate of ·22 per 1000, and a case mortality of 16 per cent. during the previous year.

The following table gives the deathrate per 1,000, and case mortality from the disease during the past seven years.

Year	Deathrate per 1000	Mortality per cent
1905	·26	31
1906	·40	26
1907	·27	23
1908	·10	15
1909	·26	21
1910	·22	16
1911	·22	20

It will be observed from the above table that there has been a slight improvement in the deathrate, and a satisfactory fall in the case mortality from this disease.

Erysipelas.

There were 65 cases reported, and one death occurred therefrom, against 50 notified, with three deaths during the previous year.

Measles.

This disease was more or less present in the Borough during the first five months of the year, but

from June onwards to the end of the year it was practically free therefrom.

The disease caused 7 deaths, against 14 during the previous year, and all the deaths were of children under 5 years of age.

The deathrate for the year of this disease was ·06 per 1,000, against ·13 during the previous year.

Whooping Cough.

This disease was more prevalent in the Borough than during the previous year, more especially during the first six months. The period of maximum prevalence being the month of May.

The disease caused 26 deaths, against 14 during the previous year. Of these 24 were under 5, and 2 over 5 years of age, showing the importance of endeavouring to protect all children from the infection of this disease, as well as measles, until after they reach 5 years of age.

The above deaths give a deathrate for the year of ·25 per 1,000, against ·13 during the previous year.

Diarrhoea.

The hot dry summer of last year very much favoured the development of diarrhœal diseases, and diarrhœa was more prevalent in the Borough than for many years past, and as a result the deathrate from those causes which are classified under diarrhœa was comparatively high, as 70 deaths were registered in the Borough, against 12 during the previous year.

The temperature, as indicated by the 4′ earth thermometer, has been shown to be related to the

prevalence of diarrhœa, and when the temperature of this thermometer reaches 56°F, diarrhœa becomes very prevalent.

I don't think it is the earth temperature *per se* which is the cause of this disease, but the earth temperature, when it reaches 56° and above, is in such a condition as to favour the development of those causes which give rise to the disease, *i.e.*, the rapid breeding of flies, &c.

During last summer the 4′ earth thermometer at Belle Vue reached 58°, and remained at that point from August 21st to the 27th. This is the highest ground temperature which has been recorded since observations were taken in Belle Vue grounds.

During the fortnight which ended on September 2nd last, and it included the period of the highest earth temperature, there was the maximum prevalence of diarrhœal diseases, and during that fortnight 25 deaths occurred therefrom.

It was during August and September that the disease was chiefly prevalent, and 38 out of the 70 deaths occurred during those two months.

Owing to the drought, street watering had to cease on August 9th, and it was necessary to curtail the water supply to the Borough on September 1st, when the water was shut off from 9 p.m. to 5 a.m. A further curtailment took place on September 25th, when it was shut off from 6 p.m. to 5 a.m.

In consequence of the prevalence of summer diarrhœa the following handbill was issued, and distributed by the ladies of the Public Health Association.

County Borough of Halifax.

PREVALENCE OF Summer DIARRHŒA

Owing to the very hot and dry Summer, Diarrhœa has become very prevalent within the Borough.

Flies are undoubtedly the main cause of the spread of this disease, consequently great care should be exercised in preventing milk and other food from being contaminated by these insects. All food should be kept carefully covered and milk should be boiled

Strict cleanliness should be observed.

In all cases of Diarrhœa in infants Medical advice should be at once sought.

JAS. T. NEECH, M.D. D.P.H.,
Medical Officer of Health.

These ladies also paid extra and special visits to infants during August and September, and urged upon mothers the necessity of protecting the milk and food generally from contamination by flies, and gave other inform tion and instruction calculated to prevent the occurrence of this disease.

Greater attention was also paid to manure middens. Owners were compelled to remove the manure frequently and not allow it to accumulate in the middens, and manure was sprayed with kerosine in order to prevent flies from breeding therein.

In order to show the effect which a hot dry summer bears in the way of increasing the number of deaths from summer diarrhœa, I have selected two wet summers for comparison with two hot dry ones.

The years 1903 and 1910 were wet summers, while 1901 and last summer were exceptionally hot and dry ones. The number of deaths from Diarrhœa which occurred during these years compare as follows.

Dry Seasons	1901	41
	1911	70
		—111
Wet Seasons	1903	20
	1910	20
		—40
	Difference	71

It will be observed that during the above dry seasons, almost three times as many deaths occurred from summer Diarrhœa as during the two wet ones.

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

	Deathrate per 1,000
England and Wales	1·06
77 Great Towns	1·31
136 Smaller Towns	1·14
England and Wales, less the 213 Towns ...	0·77
Halifax	0·68

In order to show how marked the increase in the deathrate from these diseases was throughout the country, the following table gives the corresponding figures for the year 1910.

	Deathrate per 1,000
England and Wales	0·29
77 Great Towns	0·38
136 Smaller Towns	0·26
England and Wales, less the 213 Towns ...	0·20
Halifax	**0.11**

It will be observed from the above table that Halifax occupies a very favourable position in regard to its deathrate from this disease, as the deathrate of the Borough is not only lower than the average of the small towns, but also compares very favourably with the average of rural England.

The above 70 deaths give a deathrate of ·68 per 1000, against ·11 for the previous year.

The deathrate from Diarrhœa of the other Yorkshire great towns for the year under review were as follows: Leeds, 1·27; Sheffield, 1·17; Bradford, ·68; Hull, 1·98;

Huddersfield, ·83; York, ·81; and Rotherham, 1·78 per 1000 respectively.

Influenza.

This disease has been less prevalent in the Borough during the past two or three years, and seven deaths were registered therefrom, against eight during 1910. The majority of the deaths occurred during the months of January and February.

Respiratory Diseases.

Bronchitis, Pneumonia and Pleurisy are the diseases included under the above heading, and there were 262 deaths registered therefrom, against 240 during the previous year.

Of the above 262 deaths, 128 were due to Bronchitis, 127 to Pneumonia, and seven to Pleurisy, and they give a deathrate of 2·5 per 1000, against 2·3 during the previous year.

The Respiratory deathrates for the previous 10 years were 2·3, 2·8, 2·4, 2·7, 2·7, 2·7, 2·7, 2·9, 3·1, and 3·0 respectively.

Although the Respiratory deathrate is a fraction higher than during the previous year, this deathrate has been a gradually diminishing quantity, and the deathrate for the year under review must be considered very satisfactory.

Respiratory diseases among children under five years of age account for rather more deaths than during the previous year, the number being 65, against 51 in the latter year.

The following table gives the number of deaths from Respiratory disease during each month of the year under notice, and the nine 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
1911	26	27	27	20	32	18	15	9	20	22	22	24	262
1910	27	17	22	27	28	16	15	18	15	15	12	28	240
1909	29	30	58	23	25	18	7	6	8	16	24	46	290
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 ...	32	30	32	27	24	16	12	12	11	20	25	35	...

The above table shows that diseases of the Respiratory organs are most fatal during the month of December, and that next to this month, during the first quarter of the year.

Phthisis.

Phthisis Pulmonalis caused 94 deaths during the year, against 103 for the previous year.

This gives a deathrate of ·92 per 1000, against 1·01 for the previous year.

In certain parts of the Borough the disease was more prevalent as shown by the deathrate than in others, consequently I have got out the average deathrate from this disease, in each ward of the Borough for the past 10 years.

WARD	No. of Deaths—Phthisis Pulmonary										Average No. of Deaths	Average Pop'lation	Death-rate per 1,000
	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911			
Ovenden ...	9	10	10	12	10	5	8	6	5	4	7·9	6820	1·1
Akroydon ...	2	4	4	4	2	4	12	4	8	9	5·3	6308	·8
North ...	9	17	10	11	7	7	20	22	8	10	12.1	7881	1·5
Central ..	8	14	9	8	16	14	8	9	11	5	10·2	7468	1·3
West ...	12	8	13	9	7	7	16	11	14	10	10·7	8885	1·2
South ...	9	6	4	6	5	7	10	7	4	2	6·0	7481	·8
East ...	7	15	14	18	17	19	6	12	9	11	12·8	6577	1·9
Southowram	9	4	6	10	10	8	9	9	9	11	8·5	7193	1·1
Skircoat ...	7	13	20	12	9	8	12	12	7	6	10·6	9746	1·0
Copley ...	4	1	5	5	2	3	4	...	2	4	3·0	2983	1·0
Pellon ...	11	11	10	8	10	10	9	6	8	7	9·0	9040	·9
Kingston ...	5	11	12	12	11	12	14	9	5	6	9·7	10091	·9
Illingworth .	7	4	10	11	3	11	6	6	9	5	7·2	6778	1·6
Northowram	8	6	3	4	5	4	8	3	4	2	4·7	3200	1·4
Warley ...	1	9	4	5	8	1	4	4	...	2	3·8	2792	1·3
Totals	108	133	134	135	122	120	146	120	103	94	121·5	103243	1·18

From the above table it will be observed that East ward has considerably the highest Phthisis deathrate, nearly twice that of the Borough for the year under review, while only four wards, viz.:—Pellon, Kingston, Akroydon, and South, were below the deathrate of last year.

The average Phthisis deathrate of the 15 wards of the Borough during the past 10 years was 1·18 per 1000, and the 10 years average of seven of the wards was above that figure, and eight below it.

In my Annual Report for 1910, the deathrate from this disease was given as ·9, but the diminished population, as shown by the Census, increased this rate to 1·01

per 1000, consequently the deathrate from Phthisis for the year under review, is the lowest on record.

The following table shows the deathrate from this disease during the past 11 years.

Year	Deathrate	Average
1901	1·38	
1902	1·03	
1903	1·27	1·25
1904	1·28	
1905	1·30	
1906	1·18	
1907	1·16	
1908	1·42	1·18
1909	1·17	
1910	1·01	
1911	·92	·92

From the above table it will be observed that the deathrate from this disease is gradually falling, and this decline in the Phthisis deathrate is marked if the figures be shown in decennial periods for the past 30 years, as in the following table.

	Average Deathrate from Phthisis
Ten Years - 1881-1890 ...	2·00
Ten Years - 1891-1900 ...	1·50
Ten Years - 1901-1910 ...	1·22
One Year - 1911	·92

From the above table it will be observed that the average deathrate from this disease has fallen 80% during the past 30 years.

With a view of dealing more efficiently with this disease, the Committee have had under consideration the provision of a Sanatorium for the treatment of the

disease, and steps were taken to secure a site and your Committee had the offer of what was considered an eminently suitable site, but unfortunately the Council subsequently failed to ratify their decision, and we are therefore still without a Sanatorium, and again looking for a site.

Premises have however been taken for a Dispensary, which will be fitted up in a short time, and opened for the treatment of this disease by Tuberculin.

Leaflets have been distributed, and pocket spittoons supplied free to those who required the same, and I have given several public lectures upon the subject during the past year.

There were 36 deaths from other forms of Tubercular disease, which, added to the above, make a total of 130 deaths for the year due to the various forms of Tubercle.

This gives a total deathrate from all Tubercular diseases of 1·2 per 1000, against 1·3 during the previous year.

The causes of death from Tubercular disease other than Phthisis, were as follows :—

Tubercular Meningitis	13
Tuberculous Peritonitis Tabes Mesenterica	8
Other Tubercular Diseases ...	15

Under the regulations of the Local Government Board, which makes the occurrence of phthisis in a poor

person compulsorily notifiable to the Medical Officer of Health, 132 notifications were received during the year.

Notifications were received in respect of 59 persons, of which number 41 referred to primary cases, and 18 to cases which had been reported during the previous year. The remainder were duplicates.

The following table shows the ages of the 41 primary cases above referred to, and the wards to which they belonged.

At all Ages	AGE PERIOD							WARD													
	Under 1 year	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Ovenden	Akroyden	North	Central	West	South	East	Southowram	Skircoat	Copley	Pellon	King-ton	Illingworth	Northowram	Warley
41	...	...	1	4	21	13	2	2	...	5	...	9	3	9	10	1	...	...	1	1	...	...

Of the above 41 cases, 27 were males and 14 females.

The following table shows the number reported more than once, and the number of duplicate notifications received in connection therewith.

Number of Primary Cases	17	11	7	2	2	1	1	41
Cases reported during 1911, which had been notified during the previous year	7	5	3	1	1	1	...	18
Total Cases notified...	24	16	10	3	3	2	1	59
Number of times each case was notified during 1911	1	2	3	4	5	6	7	...
Number of notifications received	24	32	30	12	15	12	7	132

Enquiries were made into the family history of persons reported under the above regulations, and it was found that a previous case had occurred in the same house in one instance only.

In eight families previous cases had occurred, six of which had two, and two, three previous cases respectively.

Disinfection was carried out in 25 instances after removal to hospital or death.

During the year under review the Local Government Board made and issued the Public Health (Tuberculosis in Hospitals) Regulations, 1911. This was really an extension of the 1908 Regulations so as to include any hospital or dispensary, or similar institution for the treatment of the sick, which is partially or wholly supported otherwise than by the contributions of the persons treated thereat, or of their relatives or guardians, and otherwise than from the rates.

These regulations came into operation on May 1st, and the duty of notification rests with the Medical Officer in attendance on the patient at the hospital.

Article 4 (2) provides for the transmission by a Medical Officer of Health of a notification received by him under these regulations, relating to a patient not resident within the district, to the Medical Officer of Health of the district in which such patient's residence is situated.

A total of 21 notifications were received during this period, three of which were in respect of persons not resident within this Borough, and they were duly trans-

mitted in conformity with the requirements of the regulations.

I also received transmission forms in respect of four persons belonging to this Borough who were undergoing treatment in Sanatoria in various parts of the country.

There was therefore a total of 22 notifications received under these regulations in respect of persons residing within the Borough.

Of this number, however, two have been notified previously under the 1908 Regulations, and one has been notified twice under these regulations during the year under review. There was thus a total of 19 primary notifications.

The whole of the cases notified in the Borough were in attendance either as in-patients or as out-patients at the Royal Halifax Infirmary.

Of the three patients residing outside the Borough, one belonged to Stainland, one to Hipperholme, and one to Liverpool.

The four Halifax residents in respect of whom transmission forms were received, were undergoing treatment, in two instances at the Royal National Hospital for Consumption, at Ventnor; in one instance at Withernsea Consumption Hospital; and in the other at the Westmorland Consumption Santorium, Meathop, Grange-over-Sands.

Of the 22 cases notified belonging to the Borough, 15 were males and 7 were females, and the following

table gives the age periods and the wards in which the patients reside.

At all Ages	AGE PERIOD							WARD														
	Under 1 year	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Ovenden	Akroyden	North	Central	West	South	East	Southowram	Skircoat	Copley	Pellon	Kingston	Illingworth	Northowram	Warley
22	...	...	4	6	7	5	...	1	2	3	1	3	1	6	3	1	...	...	...	...	1	...

Two children, included in the above, aged respectively 10 and 12 years, are attending the open-air school at Bermerside.

In four cases there was a history of the disease in the family, viz., in two families, one case ; in one family, two cases ; and in another, number not known.

Disinfection was carried out after removal or death in four cases.

Enquiries were also made in connection with deaths that were registered during the year from this disease, and in four houses a previous case or cases had occurred.

In 17 families a previous case or cases had occurred, viz., in 11 families, one case ; in two families, two cases ; in three families, three cases ; in one family, four cases ; and in another, five cases.

In two families no definite information was obtainable beyond the fact that there was a history of the disease.

In connection with the above disinfection was carried out in 61 instances, while in seven cases it was refused.

In this way a total of 75 cases were investigated, of which 35 were males and 40 females. Therefore enquiries and investigations were carried out into the family history, &c., of 135 cases during the year, but no further steps can be taken, either in the way of treatment, or in the prevention of this disease, unless we have both a dispensary, a sanatorium, and an increased staff available for that purpose.

Anthrax.

Three cases of this disease were reported to me during the year, two of which unfortunately died.

J.M., aged 50, commenced to be ill on January 21st, with a swelling on the side of the face. He saw a doctor on the 23rd, became worse, and died on the 25th.

He was employed as a Card Tenter, and the wool upon which he was working was fawn Persian, which is worked under special schedule, not extraordinary, but medium, this class of wool not being considered particularly dangerous.

Before wool is received in the Carding room, it would have been sorted, duled, and washed.

He was working on the night shift, and took two meals there each shift. The dining room was away from his work.

Wash basins, towels, and clothes brushes are provided for each man to use before getting a meal, the towels being changed three times per week.

There is always a good deal of fluff flying about in this room, which might possibly get on to the towels used by the men, and be inhaled in that way.

Bacteriological examination of this man's blood revealed the presence of the Anthrax bacillus.

The firm were recommended to have the towels changed daily instead of three times per week.

T.L., employed as feeder to wool washing machine, and also assisted to willow and pack Persian wools, contracted Anthrax, and was admitted to the Royal Halifax Infirmary on January 21st. He, however, recovered from the disease.

T.S., aged 25 years, commenced to be ill on August 2nd, with symptoms resembling an attack of Influenza. Medical aid was called in on the 4th, and he died on the 7th.

This man was employed to feed the dyeing machine, and assist at the greasing dule.

Before the wool came to him it had been sorted, duled at the dust dule, and washed with soap and alkali. The wool would be damp when he first handled it, but there was no dust left in it. The wool was pure, with no vegetable matter left therein. After dyeing, the deceased handled it in blending with oil, after which he would hand it to the man in charge of the duleing machine.

The wools he worked amongst were fawn, grey, and brown Persian.

On one occasion he had to handle unwashed wool, viz.:—on July 31st. The wool was grey Persian, had not been through the dust dule, and was fairly dusty.

In the sorting room, very large quantities of wool were often picked out with blood on them. Out of 80 odd bales of Persian wool, weighing about 300 lbs. each, and on which this man had been employed, about 80lbs. had been taken out in that condition. This wool is sent to the Anthrax Investigation Board's laboratory.

Special premises are now being built to receive wool.

Cancer.

Under the above heading is included all the various forms of malignant disease, from which there resulted 119 deaths, against 102 during the previous year.

This gives a deathrate of 1·17 per 1000, against 1·0 for 1910, and is the highest Cancer deathrate recorded for the past 20 years, and is most likely the highest that has ever been recorded in the Borough.

Of the 119 deaths from this disease, 58 were females, and 61 were males.

The following table shows the organs affected, in those who died from the disease.

Oesophagus	Stomach	Bowel	Rectum	Liver	Spleen	Bladder	Testicle	Kidney	Prostate	Penis	Neck	Lower Jaw	Face	Uterus	Ovaries	Breast	Mediastinum	Ventricles	Endocardium	Larynx	Lung	Spine	Other Situations	TOTAL
3	19	17	7	13	1	3	1	1	1	1	3	3	2	19	2	6	1	2	2	3	1	1	7	119

The following table shows the deathrate from malignant disease in Halifax since the year 1892.

Year	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
Deathrate ...	·8	·7	·8	·8	1·1	·6	·6	·7	·7	·8
Year	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Deathrate ...	·9	1·0	·8	1·0	·9	1·1	1·0	·8	1·0	1·1

Inquests and Uncertified Deaths.

The Coroner held 115 Inquests during the year, which included 12 on persons not belonging to the Borough.

The 103 deaths certified by the Coroner after Inquests, form 6·6 per cent. of the total deaths of the Borough.

There were 7 deaths which were neither certified by a Medical Practitioner nor the Coroner, which corresponds to ·4 per cent. of the total deaths.

There were two cases reported to the Coroner in which an Inquest was deemed unnecessary.

The following table shows the percentage of deaths certified by the Coroner, and the percentage of uncertified deaths during the past 11 years.

Years	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Percentage certified by Coroner	2·9	3·1	2·8	3·5	4·7	5·1	6·0	6·7	7·1	6·6
Percentage uncertified ...	2·6	1·5	1·0	0·7	0·7	0·9	1·0	0·7	0·8	0·4

The above table shows that there has been a gradual increase in the number of deaths certified by the Coroner, and a corresponding decrease in the number of uncertified deaths.

Water Supply.

The summer of 1911 was remarkably dry, therefore the rainfall for the year was much less, in fact, the rainfall for the year under review was the smallest since 1905, and rain fell on a smaller number of days than in any year since 1908.

In consequence, there was not an adequate supply of water during the later summer months. Halifax was not alone in this respect, in fact, we were much better situated than many other towns.

The water supply in the Reservoirs got so low, that it was necessary to resort to Walshaw Dean in order to augment the supply.

Owing to the above facts, restrictions had to be imposed, in order to husband, as far as possible, the supply, and the steps taken for this purpose were as follows :—

Date	Steps taken
July 22nd ...	Caution issued.
August 3rd ...	Caution issued requesting consumers to prevent waste or misuse.
August 8th ...	Use of hosepipes for watering gardens, swilling footpaths or roadways prohibited.
August 15th ...	Do. do.
September 1st ...	Water turned off between 9 p.m. & 5 a.m.
September 11th	Swimming Baths closed.
September 25th	Water turned off between 6 p.m. & 5 a.m.
October 31st ...	All restrictions withdrawn.

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 ground or drainage area of the Reservoirs, is chiefly moorland, or high mountain pasture, and of the mill-stone-grit formation.

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 higher portion of the town however is supplied from a service Reservoir at Royles Head, to which water is pumped from Albert Reservoir, the lift being 300 feet.

The water from these gathering grounds, being of a moorland character, is liable to contain an excessive amount of peaty acids. This is more especially so in the case of Ogden Reservoir, hence the water is liable to exercise a solvent action upon lead. That being so, it is necessary that the water should be treated, and all the water now supplied by the Waterworks Committee is treated by the addition of one grain of slaked Buxton Lime, in the form of milk of lime, to each gallon of water, except in the case of Ogden Kirk, where the water is excessively acid, and to this is added eight grains of lime per gallon.

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, in parts per 100,000			
	Ogden Reservoir		Ramsden Wood Reservoir	
	Before Treatment	After Treatment	Before Treatment	After Treatment
January ...	·76	·21	No estimation	·16
February ...	·60	·14	,,	·14
March ...	·85	·20	,,	19
April ...	No estimation	No estimation	,,	No estimation
May ...	1·00	·15	,,	·16
June ...	·80	·17	,,	·24
July ...	·85	·10	,,	·10
August ...	No estimation	No estimation	,,	No estimation
September ...	·60	·15	,,	·18
October ...	No estimation	No estimation	,,	·23
November ...	1·10	·19	,,	·22
December ...	1·15	25	,,	·23

From the above table it will be observed that no estimation of the acidity of the water in Ramsden Wood Reservoir was made during the year, before treatment.

I believe the acidity of this mixed water does not vary very much, and that from previous examinations, it appears to usually contain about ·4 parts per 100,000. It would however, I think, be more satisfactory if estimations were made from time to time.

The water in Ogden Reservoir contains more than twice as much acidity as Ramsden Wood Reservoir, yet it will be observed from the above figures, that after treatment, the Water from Ogden Reservoir contains

less acidity than Ramsden Wood. It would therefore appear that the treatment in the one case was more efficient than in the other.

In regard to Ogden water, the treatment must, I think, be considered very satisfactory, though as I have before pointed out, the water might perhaps be brought nearer to the neutral point.

The above figures are averages of the amount of acidity contained in the samples analysed, when found acid in re-action, but on four occasions, Ogden water was found to be either neutral or alkaline, so that the water actually supplied to the consumer was even better than the above figures indicate.

The effect of the treatment upon the water of Ramsden Wood Reservoir must also be considered satisfactory, although its average acidity after treatment was slightly above that of Ogden water. This appears rather strange, because I believe the same amount of lime is added to the water, and the water before treatment, is less acid than Ogden.

Upon 15 occasions, Ramsden Wood water, as finally supplied to the consumer, was found to be neutral or alkaline in re-action.

I am glad to find that Mr. Hartley, the Waterworks Engineer, has succeeded in reducing the average acidity of the water to below ·2 parts per 100,000. This is a great improvement on what obtained a few years ago, and I should be glad if he could manage to reduce it at least another point per 100,000, because I am satisfied that this method of treating the water is of great value from a public health standpoint.

So far as I know there are now no cases of lead poisoning within the Borough, nor within the area supplied by the Waterworks Committee.

Sewerage and Drainage.

Mr. Lord, the Borough Engineer, has supplied me with the following particulars.

The sewers have been regularly flushed, and are generally in a satisfactory condition.

In Northowram district, 2,353 yards of 9-inch pipe sewers have been laid, as well as short lengths of new sewer in various parts of the town where necessary.

Additional percolating filter beds have been constructed at the outfall works, Salterhebble, during the year, and these filters are working satisfactorily.

Scavenging, Disposal of Night Soil and House Refuse.

The scavenging and cleansing of all paved streets, and the watering of all streets, is carried out by the Health Committee.

The scavenging of the macadamised roads is carried out by the Highways Committee. I believe this important work has been satisfactorily performed during the year.

In connection with the disposal of night soil, there are now 18,140 goux closets in the Borough, an increase of 37 during the year.

These closets are not now allowed in connection with new houses, where a sewer and water supply are available, consequently this form of closet is not now

increasing so rapidly as formerly was the case. I consider that an effort should be made to materially reduce the number of these closets, because they cannot now be considered a satisfactory sanitary convenience. In my opinion, it would pay the Corporation in the long run to secure a wholesale conversion of a large number of the above to water closets. I am sure the health of the town would benefit thereby.

There are 6,676 water closets, an increase of 255 during the year.

The goux tubs are renewed at periods varying from 3 to 10 days according to circumstances, the tubs being washed on each occasion on which they are emptied, and re-packed with shoddy. There are 21 horses and vans, and 31 men engaged on this work.

The following table gives the number of water closets in the Borough, and shows the increase which 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
1909	6097
1910	6421
1911	6676

There are still 751 privy middens in the Borough, against 799 during the previous year, or a decrease of 48, and 407 dry ashpits, against 431 a year ago, or a decrease of 24 during the year. These are the largest decreases which have taken place for a number of years.

A large number of the above privy middens are situated in those portions of the Borough which have been more recently added thereto, and where a sewer and water supply are available, they are being converted, as quickly as possible, into water closets.

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

The average number of horses and carts used for the removal of this refuse was 16, and the number of men engaged in the work during the past year was 32.

The house refuse is still disposed of by tipping, which is not the most sanitary way of dealing therewith.

The "Dust Manipulator" which was installed during the previous year, has continued to work satisfactorily throughout the year, and it has dealt with all the garbage from the slaughterhouse, market hall, as well as the fish refuse from certain shops in the town; also a certain amount of house refuse.

The following was the amount of refuse carted to the Manipulator:—

	Loads.
House Refuse	1,963
Market Garbage	388
Fish Garbage	145
Slaughterhouse Garbage ...	175
Sundry Refuse	120
Total ...	2,791

This was passed through the Manipulator and converted into manure, which was disposed of as follows :—

	Tons	Cwts
By Rail	625	6
To Local Farmers	79	11
To Goux Depot	410	16
Ground House Refuse to Goux Depot	951	3
Total	2,066	16

There was no difficulty experienced in getting rid of this manure, except for a few weeks during the summer months, in fact, during the winter time there was a great demand for the manure, and we were unable to supply a number of orders that were received.

The price which the manure realised was 1/- per ton, but it is expected that an enhanced price will be possible next winter.

Common Lodging Houses.

Under the Halifax Corporation Act of 1900, the Common Lodging Houses in the Borough are required to be re-registered in May of each year.

There are now 17 of these Lodging Houses situated within the Borough, against 16 during the previous

year, and they are registered to accommodate 882 lodgers, against 853 previously.

The Police act as Inspectors of the Common Lodging Houses, and are responsible for their general conduct and the carrying out of the Bye-laws in connection therewith.

I am informed by the Chief Constable that there has been no cause for complaint during the year. That these houses have been generally well conducted, and no legal proceedings of any kind have been necessary

Factories and Workshops.

The administration of the Factory and Workshops' Act has been given due attention during the year, and a number of improvements have been carried out.

There are still however, several factories and workshops in which the sanitary conveniences are not of an altogether satisfactory type. These are however, being gradually dealt with, and their number reduced each year.

We have been able to secure all the alterations that were carried out during the year, without having to resort to legal proceedings.

The complaints regarding neglect of the lime-washing of workshops numbered 32, against 29, while dirty closets, floors, staircases, &c. numbered 13, against 19 during the previous year respectively.

Three cases of overcrowding were reported on during the year, and three complaints were made

regarding defective ventilation, which were all remedied in due course.

The following table gives the number of visits that were paid 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	74	356	345
B	93	286	273
C	40	267	307
D	51	62	25
Total ...	258	971	950

The inspection of workshops is carried out by the four District Sanitary Inspectors, each one being responsible for this work in his own district, there being no special workshops Inspector on my staff.

The number of visits paid to the factories and workshops by the Sanitary Inspectors was 1,129, against 1,355 during the previous year, and 6 visits were paid by myself to factories and workshops, in connection with alterations that were required to improve their sanitary condition.

The following four tables indicate the nature and number of the various sanitary defects, and the amount of work done by the Sanitary Inspectors in their respective districts.

DISTRICT A.

INSPECTOR JOHN GEORGE WALSHAW.

Number of Workshops on the Register, 274.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive Smoke	2
Insufficient closet accommodation	1
Defective and made-up drain	4
Nuisance from gas engine exhaust	1
Closets requiring ventilation, or intervening ventilated space	2
IN WORKSHOPS.	
Rooms requiring limewashing	9
Dirty closets	1
Offensive sink	1
Defective water closets	1
Offensive urinal	1
Defective roof	1
Defective ceiling	1
Overcrowded	1
Total	26

DISTRICT B.

INSPECTOR ROBERT PICKARD.

Number of Workshops on the Register, 283.

Nature of Defects	Number Registered
IN FACTORIES.	
Offensive smoke	2
Want of separate water closet for sexes	1
Offensive goux closets	1
Want of screens or separate approaches to water closets...	5
Insufficient light and ventilation to water closets ...	11
Offensive cesspool	1
Insufficient closet accommodation	2
Defective, made-up, and untrapped drains	10
IN WORKSHOPS	
Rooms requiring limewashing	8
Insufficient ventilation	3
Insufficient closet accommodation	2
Defective drains and sink pipes	8
Dilapidated goux closets	2
Sink pipes and drains to disconnect	2
Defective Water closets	2
Insufficient flush to water closets	3
Defective laundry floors	2
Dirty floors, staircases, and closets	4
Workrooms overcrowded	2
Total	71

DISTRICT C.

INSPECTOR JAMES EDWARD FIRTH.

Number of Workshops on the Register, 162.

Nature of Defects	Number Registered
IN FACTORIES.	
Defective roofs to closets	4
Accumulation of rubbish	1
Made-up water closets	28
Made up troughing	1
Offensive goux closets	4
Offensive trough closet	4
Closets insufficiently drained	1
IN WORKSHOPS.	
Made-up water closet	1
No water to water closet	2
Want of drains...	1
Dirty closets	7
Defective closet doors	2
Accumulation of rubbish	1
Offensive smoke	1
Insufficient closet accommodation	1
Workrooms requiring limewashing	13
Broken water closet	1
Total ...	73

DISTRICT D.

INSPECTOR FRED TEAL.

Number of Workshops on the Register, 92.

Nature of Defects	Number Registered
IN FACTORIES.	
Insufficient closet accommodation	1
Closets to limewash	2
Closets requiring ventilating	5
Want of fastenings to closet doors	2
Closets opening direct into workroom	3
Offensive closets	6
Closets not marked for sexes	3
No door to closet	1
IN WORKSHOPS	
Abstracts not provided	2
W.C. opening direct into workroom	1
Dirty closet	1
Damp walls	1
Workrooms requiring limewashing	2
Total ...	30

On referring to the foregoing tables, it will be seen that 200 nuisances and sanitary defects were dealt with, against 225 during the previous year.

There remained 17 defects unabated at the end of the previous year, which, together with the above 200, made a total of 217. Of these, 185 were remedied, and 32 remained unabated at the end of the year.

The Factory Inspector sent to me during the year, through the Town Clerk, 23 notices regarding sanitary defects, under section 5 of the Factory and Workshops Act. Of the above defects 13 were in connection with factories, six in connection with workshops, and four in connection with workshop bakehouses.

All the above were attended to, and most of them completed during the year. After completion the Factory Inspector was duly notified thereof.

The number of notices of abatement sent to the Factory Inspector were as follows :—

Factories	20
Workshops	2
Workshop Bakehouses	6

A larger number of notices of completed work were sent to the Factory Inspector than the number of notices sent by the Factory Inspector to this department. This is accounted for by the fact that a number of outstanding defects from the previous year are included in the above.

Under section 107 of the Factory and Workshops Act, which refers to the outworkers, there was an increase both in the number of lists sent in and in the number of outworkers.

All the outworkers were duly visited during the year by the Sanitary Inspectors, who paid 89 visits for that special purpose.

There were 20 lists sent in, against 14 during the previous year, and the number of outworkers notified was as follows :—

	Tailors	Shoe-makers	Seam-stresses	Total
No. of Outworkers ...	35	7	6	48

The premises of the outworkers who work in their own houses were, with one exception, found to be in a satisfactory condition, and free from infectious diseases.

In the above exception the walls in one of the bed-rooms were damp, and this defect was remedied in due course.

A number of those returned as outworkers occupy workshops of their own and were visited in that respect. In connection with these there was also no cause for complaint.

Quite a number of the outworkers occupy workshops of their own, hence the reason why the number of visits paid to the outworkers purely as such is comparatively small.

Two of the lists sent in contained the names and addresses of three outworkers who resided outside the Borough, viz., two at Lightcliffe, and one at Greetland. Notices in accordance with the Act were therefore sent to the Medical Officers of Health for those districts.

Two firms in Bradford employ two outworkers in Halifax, and notices were duly received thereof from the Bradford sanitary authority.

The following is a detailed list of all the workshops on the workshops register. This register has been kept up-to-date from lists received from the Factory Inspector, and there has been a decrease of 31 during the year.

Pattern Card Maker ...	1	Saddlers	9
Joiners & Cabinet Makers	65	Milliners...	57
Brush Makers	11	Coopers	5
Provision Merchants ...	9	Bakehouses	125
Rag Sorters	2	Drug Packing	2
French Polishers ...	13	Whitesmiths	2
Tailors	68	Coach Builders	4
Marine Store Dealers ..	5	Rope Makers	2
Blacksmiths	20	Wood Carvers	4
Upholsterers	6	Wool Sorters	6
Umbrella Makers ...	2	Cork Cutter ...	1
Box Makers	4	Gun Makers	2
Surgical Instrument Mak'r	1	Carpet Repairers ...	4
Fruit Boiler	1	Picture Frame Makers ...	3
Plasterers	2	Wire Workers	2
Hosiers and Knitters ...	13	Basket Makers	2
Wheelwrights	11	Tinners	12
Painters	10	Locksmiths	3
Plumbers	26	Cutler	1
Printers	6	Underclothing Makers ...	15
Sweet Boiler	1	Electrical Engineers ...	4
Cistern Maker	1	Piano Makers	4
Clog Sole Makers ...	2	Firelight Makers ...	5
Belt and Brace Makers ...	4	Drysalters	4
Oil Merchants	2	Boot Upper Maker ...	1
Rug Makers	2	Cycle Repairer	1
Watch Makers & Jewellers	14	Sign Writer	1
Motor Repairer	1	Brass Works	3
Leather Cutter	1	Laundries	14
Sugar Packer	1	Hair Pad Makers ...	5
Metal Engravers ...	3	Machine Makers ...	6
Hair Dressers	9	Machine Brokers ...	3
Metal Polish Makers ...	4	Marble Masons	4
Chair Maker	1	Shoeing Smiths	8
Photographers	6	Firewood Cutters ...	2
Billiard Table Maker ...	1	Skep Maker	1
Ventilating Engineers ..	2	Dentists	5
Fireplace Maker ...	1	Beer Bottlers	3
Boot, Shoe, and Clog Makers	133	Concreter	1
		Dry Cleaners	2
Weight and Scales Maker	1	Bookbinder	1
Dress and Mantle Makers	98	Mineral Water Manuf'rs.	3
Art Needlework... ...	1	Musical Instrument Maker	1
Tripe Dresser	1	Essential Oil Blenders ...	2
Machine Roller Maker ...	1		

Total number of Workshops, 912.

Bakehouses.

The bakehouses were regularly visited and inspected during the year by the district Sanitary Inspectors, who are responsible for their supervision.

The number of bakehouses on the register, which has been revised, was 126, against 131 during the previous year, a decrease of five for the year.

The number of underground bakehouses remains the same, viz., 26.

The number of visits paid to bakehouses during the year was 310, as the following table will show.

Description of Premises	Number on Register	Number of Visits made
Wheat Bread and Muffin Bakers, including Confectioners	114	310
Oat Bread and Muffin Bakers	11	

The limewashing is an important matter in connection with the cleanliness of bakehouses and ought to be carefully attended to, but as is usual, the largest number of complaints had reference to the neglect of limewashing the bakehouses at the proper time, in fact, there were more complaints on this score during the year under review than for many years past.

The number of defects, including limewa hing, reported during the year, was 58. There remained unabated at the end of the previous year three defects, making a total of 61 for the year, of which 59 were remedied, leaving two 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	...
Bakehouses requiring Limewashing ...	48	49
No Abstract	1	1
Defective Sink Drains	3	3
Made-up Drain	1	1
Defective Ceiling	1	1
Goux Closet converted to W.C.	1	1
Dirty Floors	2	2
Want of Proper Cover for Milk ...	1	1
Total ...	61	59

Ice Cream Makers and Vendors.

The premises used for the making of ice cream have been visited by the Sanitary Inspectors, but no serious cause of complaint was found.

By the Halifax Corporation Act of 1911, the Corporation has obtained increased powers for dealing with the sanitary condition and other matters connected with the premises used by ice cream makers. These powers will be enforced, and ice cream in the future will be manufactured under more healthy conditions than has been the case in the past.

Offensive Trades.

The number of offensive trades carried on in the Borough, under section 112 of the Public Health Act, 1875, were as follows :—

Bone Boilers ...	...	2
Blood Boiler ...	...	1
Soap Boilers ...	...	2
Tripe Boilers	...	9
		14

The above premises were regularly visited, and most of them were found to be fairly well conducted.

Public Health Laboratory.

There were 81 specimens examined in the Public Health Laboratory, against 71 during the previous year.

The following table gives details regarding most of the specimens examined.

Disease	Number of Specimens	Results of examination	
		Positive	Negative
Anthrax (Blood)	7	6	1
,, (Spleen)	1	...	1
Diphtheria (Swabs)	39	11	28
Typhoid (Widal's)	4	...	4
Tuberculosis (Sputum)	21	2	19
,, (Milk)	2	1	1
,, (Pus)	1	1	...
Total	75	21	54

The above number includes five samples of pus, urine, &c., examined for other purposes than the above.

The majority of the specimens examined for anthrax were either from the slaughterhouse, or from cattle under the care of local veterinary surgeons. Only one specimen was of human blood, in the case of a man who died rather suddenly, and the examination showed that the cause of death was anthrax.

With regard to the examination of sputum, only a very small proportion of the specimens examined gave a positive result. Certain patients, more especially those in which the diagnosis is very doubtful, are not always spitting up tubercle bacilli, consequently the sputum from suspected cases should be examined on several

occasions before it be definitely stated that such person does not suffer from tuberculosis.

The proportion of diphtheria swabs found positive was rather less than during the previous year.

Disinfection.

Notifiable infectious disease having been more prevalent in the Borough during the year, a larger amount of work in connection with the disinfection of premises devolved upon this department.

The disinfecting apparatus, which is situated at the Stoney Royd Fever Hospital, is not only used for hospital purposes, but also for disinfecting all the articles of bedding and clothing required to be done throughout the borough. There were 12,521 articles of bedding, clothing, &c., disinfected therein by steam, against 9,121 during the previous year.

There were 764 rooms in private houses fumigated with formaldehyde, sulphur being not now used for that purpose. The number so disinfected during the previous year was 686. The formalin spray was also used upon several occasions where it was required.

Two cabs which had been used for the conveyance of infectious cases were disinfected during the year.

There were 116 library and other books disinfected in the special apparatus provided for that purpose at the Hall Street Depot.

A much larger quantity of disinfecting fluid is now distributed free of charge from the Health Office than formerly was the case. It is distributed in 6oz. and 8oz. bottles to the occupiers of houses in which notifiable infectious disease breaks out, and also where cases of phthisis occur.

Some 200 gallons was given away during the past year, while about 40 gallons was sold, chiefly in pints, at the price of 7½d., at the Hall Street Depôt.

Schools and Infectious Disease.

Although notifiable infectious disease was rather more prevalent in the Borough than during the previous year, it was not found necessary to close any of the elementary schools on this account, but the non-notifiable infectious diseases, Measles, Whooping Cough, and Mumps, were very prevalent in certain parts of the Borough among school children, and it was necessary to close elementary schools upon seven occasions in consequence thereof during the year.

The following table gives the schools dealt with, and the length of the period of closure.

Disease	Name of School	Date of Closure	Period of Closure
Measles and Whooping Cough	Portland Road "Infants"	April 5	3 weeks
,, ...	Sunnyside "Infants"	April 5	3 weeks
,, ...	Warley Road "Infants"	April 5	3 weeks
Measles	St. Augustine's "Infants"	April 5	3 weeks
Measles and Whooping Cough	Haugh Shaw "Infants"	April 6	3 weeks
Mumps	Siddal "Infants" ...	April 6	3 weeks
Measles	Warley Road "Infants"	Nov. 8	2 weeks, 3 days

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	3	1	4
Battinson Road	15	4	19
Parkinson Lane	10	5	15
Sunnyside	8	6	14
Christ Church, Pellon ...	2	...	2
Moorside	10	1	11
Queen's Road	6	3	9
Haugh Shaw	5	...	5
Siddal	1	1	2
Portland Road	6	1	7
Holy Trinity	8	1	9
Parish Church	1	...	1
Salterhebble	1	...	1
Bradshaw	1	1	2
Council Secondary	4	2	6
Boothtown	6	4	10
Mixenden	4	...	4
Akroyd Place	3	...	3
Warley Road	1	2	3
Bermerside	1	...	1
Lee Mount	27	...	27
Copley	2	...	2
Pellon Lane	12	2	14
Luddenden	5	...	5
St. Marie's	3	...	3
Caddy Field	...	1	1
All Saints	1	...	1
Warley St. John's	5	...	5
Total	151	35	186

On referring to the above table it will be observed that only 35 cases of Diphtheria occurred during the year among children of school age. This number compares very favourably with the previous year, when 78 children of school age were attacked thereby.

No school was particularly affected with Diphtheria during the year, and of the 110 cases of this disease reported, 31 per cent. were of school age, against 56 per cent. during the previous year.

Scarlet Fever was rather more prevalent in the schools than during the previous year, and in Lee Mount, no less than 27 cases occurred, but they were, more or less, spread over the year.

Scarlet Fever was more prevalent in the town generally, but the percentage of children of school age attacked thereby was about the same as the previous year, for out of 287 cases reported, 151 were children of school age, or a percentage of 52, against 51 during the previous year.

There were 24 suspicious cases of Fever reported to us by the Education Department. These were visited and inspected, and four cases of Scarlet Fever were discovered among them.

Furnished Rooms. Houses Let in Lodgings.

There was a slight decrease in the number of furnished rooms in the Borough, the number registered being 187, against 190 during the previous year.

Power to inspect and regulate these houses was obtained in the Halifax Corporation Act of 1905. By that Act, these houses were included amongst houses let in lodgings, to which the Bye-laws with respect to houses let in lodgings apply.

To these furnished rooms the Sanitary Inspectors paid 589 visits, and found no serious cause of complaint. The Bye-laws appear to be fairly well carried out.

House to House Inspection under the Housing and Town Planning Act.

In connection with the house to house inspection required by the above Act, 582 houses were inspected.

This is a large decrease when compared with the number of houses inspected during the previous year, which were 2,450. This decrease in the number of houses inspected has arisen in consequence of the more detailed inspection which is required to be made under the above Act.

The number of defects of various kinds found in connection with the houses inspected was 169, and the percentage of houses found to have defects of some kind or other was 29, against 19·7 during the previous year. These included 92 defects in connection with drainage, or a percentage of 15·8, against 12·8 during 1910.

The following is a list of the chief defects found

Nature of Defects	Number Reported
Defective Drainage and Sanitary Fittings	92
Defective Flagging in yards ...	14
Structural Defects	22
W.C. and Ashes-tub-place accommodation — Defective ...	7
W.C. and Ashes-tub-place accommodation — Insanitary ..	7
W.C. and Ashes-tub-place accommodation — Insufficient ...	...
Overcrowded	6
Defective Light or Ventilation ...	9
Want of Cleanliness	2
Dampness	6
Others	4
Total	169

In six cases, overcrowded houses were found.

Meteorology.

The Meteorological Station is situated in the grounds of Belle Vue Library, and is under the charge of Mr. Green, the Chief Librarian.

The altitude of the station is 625 feet above sea level.

There is no sunshine recorder at this station, and it is highly desirable that an instrument of that kind should be added thereto.

Mr. Green has supplied me with a general summary of his observations which will be found on the next page.

General Summary of Meteorological Observations taken at the Public Library, Belle Vue, from January 1st, 1911, to December 31st, 1911.

By E. Green, Librarian.

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

1911. Month.	Pressure of Atmosphere in Month. Mean of 24h 0m Mid-Day Level.	Pressure of Atmosphere in Month. Range.	Temperature of Air in Month. Highest.	Lowest.	Range.	Mean. Of all Highest.	Mean. Of all Lowest.	Mean. Daily Range.	Mean Temperature. Air.	Dew Point.	Vapour. Elastic Force.	Vapour. In a cubic foot of Air. Mean.	Vapour. In a cubic foot of Air. Mean degree of Humidity to Saturation=100.	Mean Weight of a cubic foot of Air.	Mean Reading of Thermometer. Maximum in Rays of Sun.	Mean Reading of Thermometer. Minimum on Grass.	Wind. Estimated Strength.	Wind. 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.	Rain. Amount Collected.	Remarks
	in.	in.	°	°	°	°	°	°	°	°	in.	gr.	gr.	gr.	°	°													in.	
January ...	30·304	1·106	50·8	26·1	24·7	41·7	34·7	7·0	38·1	35·3	0·206	2·4	0·3	90	552·5	50·6	29·3	1·4	4	4	0	4	2	9	8	13	8	6·8	17	1·45	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 ...	30·024	1·792	51·2	21·1	30·1	44·3	32·0	12·3	38·6	35·5	0·208	2·4	0·4	88	546·7	63·2	28·9	2·0	0	6	0	0	6	14	4	11	7	7·7	15	4·05	
March ...	29·959	0·788	51·8	30·8	21·0	43·0	34·1	8·9	38·6	30·6	0·171	2·0	0·8	73	545·9	68·1	29·8	1·5	8	16	8	0	0	6	4	7	4	7·5	20	1·36	
April ...	29·959	1·206	57·6	27·0	30·6	48·7	37·0	11·7	42·7	37·9	0·228	2·6	0·5	80	541·4	85·8	32·6	1·9	5	12	1	3	2	13	6	7	2	6·9	15	1·53	
May ...	29·978	0·682	74·4	35·1	39·3	60·1	44·7	15·4	52·9	43·8	0·287	3·3	1·1	72	530·8	99·7	41·4	1·4	2	18	2	3	3	9	4	9	2	5·2	13	1·25	
June ...	29·957	1·202	78·3	37·4	40·9	62·5	46·6	15·9	54·9	44·9	0·298	3·3	1·6	69	528·1	106·5	42·5	1·6	0	15	1	5	0	11	4	12	2	6·3	13	2·88	
July ...	30·126	1·202	81·9	41·9	40·0	70·1	51·6	18·5	60·9	50·5	0·368	4·0	1·9	69	525·2	111·8	47·3	1·4	0	4	3	2	5	7	7	21	6	4·4	8	0·36	
August ...	29·960	0·662	88·5	45·9	42·6	69·7	52·9	16·8	61·8	51·5	0·382	4·2	2·3	68	520·8	108·2	50·0	1·5	0	12	2	6	6	10	12	6	0	5·3	14	2·07	
September ...	30·051	1·000	81·6	51·3	30·3	62·1	46·0	16·1	54·1	46·0	0·309	3·5	1·2	73	530·6	98·7	41·6	1·1	5	4	1	2	0	11	7	14	8	4·8	11	2·91	
October ...	29·889	1·710	57·8	28·0	29·8	51·3	41·2	10·1	46·6	42·7	0·272	3·1	0·6	85	535·4	73·2	37·8	1·3	5	21	4	4	0	5	4	3	7	7·4	21	2·96	
November ...	29·666	1·452	54·8	29·1	25·7	45·5	37·2	8·3	41·4	36·5	0·217	2·5	0·6	83	537·3	63·3	33·1	2·0	7	4	4	1	7	13	9	5	4	6·1	21	4·01	
December ...	29·643	1·390	54·4	31·1	23·3	45·7	37·8	7·9	41·8	38·1	0·231	2·6	0·5	87	536·2	53·2	32·1	1·7	0	0	0	9	7	10	13	9	7	7·0	28	4·18	
Annual Means	29·960	1·183	65·3	33·7	31·5	53·7	41·3	12 4	47·7	41·1	0·265	2·10	1·0	78	535·9	81·9	37·2	1·6	3	10	2	3	3	10	7	10	5	6·3	...	...	

The Mean Monthly Readings of the Earth Thermometer, four feet below the surface, were as follows:—

January, 42°	March, 41°	May, 47°	July, 54°	September, 56°	November, 47°
February, 41°	April, 42°	June, 52°	August, 57°	October, 52°	December, 44°

Highest Readings = 58° on August 21-23, 27. Lowest Readings = 41° from February 8-20.

Rain fell on 196 days, and measured 29·01 inches.

The summer of last year was very dry, and rain fell on 196 days only, the smallest number of wet days in a single year since 1908.

The amount of rain collected during 1911 was 29·01 inches, against 36·62 during the previous year. This is the smallest amount collected, with the exception of the years 1902 and 1905, that has ever been recorded.

The low rainfall of 1905, viz., 25·94 inches, was due to a very dry autumn.

The following table gives the average rainfall of the five years 1906 to 1910, for the five summer months, and compares it with the rainfall of last year.

MONTH	Average 5 Years 1906-1910.		1911.	
	No. of Days.	Amount Collected.	No. of Days.	Amount Collected.
		inches.		inches.
May	16	2·43	13	1·25
June	15	2·58	13	2·88
July	15	3·02	8	0·36
August	16	2·83	14	2·07
September ...	10	1·68	11	2·91

From the above table it will be observed that July was a markedly dry month, and that May gave only about half the average rainfall, while during September the amount which fell was considerably above the average.

The following table gives the rainfall for the past 18 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
1909	199	35·69
1910	213	36·62
1911	196	29·01

There are 10 stations at which the rainfall is collected and which are distributed over the gathering grounds of the Halifax Corporation. The following table shows the amount collected at each of these stations.

Heights above Sea Level in Feet.											
1911	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 ...	2·76	2·23	2·07	2·17	2·75	2·24	2·12	1·92	1·65	1·42	1·53
February ...	5·06	5·10	4·77	6·07	5·95	4·86	4·71	5·29	4 20	3·99	4·21
March ...	2·58	2·57	2·30	2·32	2·86	2·14	2·29	2·15	1·57	1·24	1·39
April ...	2·46	2·20	2·07	2·46	2·75	2·31	2·22	2 13	1·56	1·50	1 55
May ...	1 65	1·48	1·47	1·60	1·83	1·46	1·47	1·48	1·75	1·41	1·22
June ...	4·77	3·81	3·87	4 42	5·13	4·87	3·83	3·78	3·31	3·00	2·86
July ...	·74	·85	·85	·72	·75	·39	·86	·52	·55	·32	·31
August ...	2·41	2·27	2·28	2·70	2·66	2·33	2·30	2·51	2·23	2·11	1·95
September ...	3·76	3·53	3·45	3·92	3·84	3·68	3·39	3·46	3·12	2·86	2·81
October ...	4·88	4·18	4·39	4·76	5·06	4·13	4·41	4·55	3·90	3·43	3·26
November ...	5·18	4·55	4·29	5·34	5·67	4·37	4·06	4·88	4·64	4·48	4·31
December ...	7·17	6·20	5·79	6·39	8·58	7·75	5·38	5·87	5 28	4·43	4·70
Totals ...	43·42	38·97	37 60	42·87	47·83	40·53	37·04	38 54	33·76	30·19	30·10

The average rainfall on the area of the Halifax Corporation Waterworks, like that in the Borough, was smaller than the previous year as the following will show.

Average Rainfall over all the Gauges,	1910	... ...	45·51
Do. do.	1911	... ...	38·26
	Difference	... ...	7·25

The average rainfall collected at the above stations is always greater than that collected at the Belle Vue meteorological station, and the difference for the year under review was 9·25 inches, which is larger than usual.

Miscellaneous Matters.

I paid regular daily visits during the year to the Borough Fever Hospital, and frequently paid a second visit to that institution.

The various other departments under the control of your committee I have also visited from time to time, viz., the Goux Depôt, Smallpox Hospital, Hall Street Depôt, Charlestown Depôt, and Ovenden and Warley Stables.

To the public slaughterhouse I paid nine visits in connection with the Veterinary Inspector for the purpose of inspecting meat, and giving advice thereon as to seizure, &c., and one visit for the same purpose to a private slaughterhouse.

Nine visits were paid to the various tips in the Borough.

During the year I paid 36 visits to various parts of the Borough for general inspection purposes, and to make myself acquainted with the sanitary condition of those districts.

I paid 15 visits to various factories, workshops, and bakehouses during the year, and 15 visits to suspicious cases of infectious diseases; also some 23 other visits were paid by me for other purposes in the course of my duties during the year.

Borough Fever Hospital.

There were remaining in the hospital on January 1st, 1911, three cases of diphtheria, three of typhoid fever, and 17 of scarlet fever, or a total of 23 patients, and there were admitted during the year a total of 265 cases, including 56 from outside districts, against a total of 237, which included 32 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	36	8	22·2
Scarlet Fever	203	7	3 4
Enteric Fever	25	6	24·0
Typhus Fever	1	..	...
Total	265	21	...

On referring to the above table it will be observed that 21 deaths occurred, against 15 during the previous year.

The deathrate from each of the above diseases was considerably greater than during the previous year, when the mortality per cent. from diphtheria was 18·8; scarlet fever, 1·1; and typhoid fever, 17·6 respectively.

The mortality from these diseases varies from year to year, and though it exceeds that for the previous year, the mortality from diphtheria and typhoid fever were considerably below that for the year 1909.

Scarlet fever was more prevalent in the Borough during the year, and a larger number of cases were admitted to the hospital, viz., 287 for 1911, against 237 for 1910.

One diphtheria and three scarlet fever patients died within 24 hours after admission during the year, and two of the deaths which occurred from scarlet fever, and one from diphtheria, were of persons not belonging 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
1909				21	340	27		388
1910				17	167	53		237
1911			1	25	203	36		265

Mild cases of scarlet fever which develop no complications are now detained in the hospital for four weeks only, hence a reduction results in the patient's expenses.

The practice has been continued during the year of giving the final bath to the patients on the night previous to discharge, after which they are removed into a non-infected ward for the last night.

Since the shorter period of detention in hospital was adopted, and the better method of discharge, we have had, if anything, less return cases of scarlet fever.

I desire to acknowledge the satisfactory manner in which the Matron, Miss Robison, has managed the institution during the year, and the unremitting care and attention which the nurses bestowed upon the patients treated in the institution.

Notification of Births' Act.

The Notification of Births' Act came into force in the Borough in March, 1908.

During the year under review, 1,638 births were notified, against 1,640 during the previous year.

The number of births registered during the past year was 1,868, so that only 88 per cent. of the births which occurred in the Borough were notified to the Medical Officer of Health, under the Act.

The actual number which were not reported was 230, or 4 per cent. less than were notified during the year 1910. It appears that there are still some who are not aware of the provisions of this Act.

According to the information supplied to me by the Registrars of the cemeteries, burial grounds, &c., 93 still-born infants were buried during the year. The number of still-born infants notified during the year was 59, consequently it is evident that all the children who were still-born, were not reported during the year.

Halifax Public Health Association.

The Committee of the above Association is constituted as follows:

Alderman T. Hey, J.P., Chairman, Health Committee
Dr. J. T. Neech, Medical Officer of Health.
Miss Alice M. Thompson, Lady Health Visitor.
Mrs. E. N. Whitley, Lady Superintendent.

Mrs. C. Smithson,	,,	,,
Mrs. J. Collinson,	,,	,,
Mrs. Hack,	,,	,,
Mrs. Crabtree,	,,	,,
Mrs. G. H. Smith.	Mrs. Ward.	
Mr. A. W. Whitley.	Mrs. A. Clay.	

Miss Thompson, the Lady Health Visitor, acts as Secretary to the Association, and the lady members of the same continue to render her invaluable assistance in the carrying out of her work in the Borough.

The Committee meets monthly to transact the business of the Association, and an Annual Public Meeting is also held. The Annual Public Meeting was presided over by His Worship the Mayor, was well attended, and was addressed by Alderman Broadbent, of Huddersfield.

Connected with this Association, are a number of voluntary assistant lady visitors, who follow up the visits of the official health visitor, and keep in touch

with those mothers who appear to need supervision, for a period of 12 months after the birth of their infants.

In order to facilitate the carrying out of this work, the Borough is divided into five districts, to each of which a number of voluntary visitors are assigned, under the charge of a lady superintendent.

The following table gives the names of the lady superintendents, and their districts.

District.	Lady Superintendent
Ovenden, Pellon and Kingston Wards	Mrs. E. N. Whitley
Akroydon and North Wards	Mrs. C. Smithson
Central and West Wards	Mrs. J. Collinson
South and East Wards ...	Mrs. Hack
Skircoat and Southowram Wards	Mrs. Crabtree

The following are the names of the voluntary assistant lady visitors.

Mrs. Stirk,
Mrs. Seed,
Mrs. Wilson,
Mrs. Smith,
Mrs. Meskimmon,
Mrs. Ackroyd,
Mrs. Horsfall,
Mrs. Wadsworth.
Mrs. Hepworth,
Mrs. Taylor,
Mrs. Balme,
Mrs. Watkins,
Mrs. Holroyd,
Mrs. Mitchell,
Mrs. Burnett,
Mrs. Clark,
Mrs. Greenwood,
Mrs. Mitchell,
Mrs. Hogg,
Mrs. Parkinson,
Mrs. Wade,
Mrs. Kidd.

The total number of visits paid by the voluntary lady visitors was 1,320, against 1,260 during the previous year.

The extra number of visits were entailed through the excessive prevalance of summer Diarrhœa during last year.

I am satisfied the good work which these ladies are doing, is of great value to the infant life of the town.

Lady Health Visitor's Report.

Miss A. M. Thompson, the Lady Health Visitor, has submitted to me the following report.

There were 909 visits paid by me to notified births, and 590 to Guild cases and others, against 1,037 and 103 respectfully during the previous year.

In the course of my visitation, I found 123 houses fairly clean, 57 dirty, and the remainder clean.

The number of subsequent visits paid by the assistant visitors were as follows:—

Ovenden, Pellon, and Kingston Wards	210
Akroydon and North Wards	351
Central and West Wards	210
South and East Wards	309
Skircoat and Southowram Wards ...	240

Of the 1,638 births notified, 909 were attended by medical men, the rest by midwives.

Out of 624 of the above notified births 602 were breast fed, 22 only being fed with the bottle at the first visit. A very large proportion of infants are breast fed for 12 months.

I weighed 116 infants under one week old during the year, with the following results :—

2	weighed	12	lbs. each.
7	,,	11	,,
9	,,	10	,,
35	,,	9	,,
46	,,	8	,,
13	,,	7	,,
4	,,	5	,,

It is encouraging to report the almost universal use of the boat shaped bottle. The mothers often very proudly bring them out to show that they are using the most approved kind.

A nourishment fund has been established, which is a scheme for mothers to have a daily meal for some weeks before or after confinement. There is a rule, which is strictly adhered to, that each mother must go and consume the meal at the dining room nearest to her home. Some do not approve of this, and would prefer to send for it, but the object would be defeated, because the meal would be shared with the family, and so be of no real good to anyone. Those who are in actual need of the meals, thankfully and gladly go for them, and 40

meal tickets were issued for this purpose during the year, which represented 480 meals.

The cocoa allowed to mothers is appreciated as much as anything done for them : in fact, they find it of so much benefit, that they really make an effort to get it for themselves afterwards.

The Babies' Welcome Club has been a great success. This is a club whereby the mothers save in weekly payments, sums of money ranging from 2/- to £2. They are allowed 1d. for every 1/- saved. This money is drawn out at the time of confinement.

The number of members which joined during the year was 60, against 37 during the previous year.

It is probable that the maternity benefit under the Insurance Act will supersede this Babies Welcome Club.

A weekly sewing meeting is held for mothers, at which they make garments for their little ones. Each mother pays ½d. per week for which she receives a cup of tea and a bun.

The material is provided, and when the garment is made the maker is allowed to take it home, and 100 of such garments were made during the year.

The voluntary lady visitors attend these meetings in turns to help with the babies, or to make garments which are sold at a small cost to the mothers. A quarterly plan is drawn up so that each helper knows beforehand the date she is expected to be down at the meeting.

The sum of 17s.11d. was taken in weekly halfpence, and £1 1s. 5½d. for garments sold to the mothers.

The cost of material, Non-flamm, &c., was £1 18s. 9d. thus a small balance was left in hand.

The lady superintendents kindly provided the teas, and to them, and the ladies who have so kindly given material and helped at the meetings, a debt of gratitude is due.

On June 29th, 1911, a unique presentation took place. All the infants one year old during that, the coronation month, were entertained with their mothers at Bank Field, by His Worship the Mayor and Mayoress, Alderman and Mrs. Whitley Thomson, and the infants, numbering 132, were each presented with a Royal Doulton coronation mug.

The infant mortality for last year was 123 deaths per 1,000 born. Unfortunately this is an increase upon that of the previous year, when the mortality was 89 per 1,000. This, however, is not really a fair comparison, because last summer was exceptionally hot and dry, consequently deaths from diarrhœa were very much more prevalent, and this disease alone practically accounts for the increased infant mortality.

Halifax is not alone in this respect, as the infant deathrate generally throughout the country was very much higher than for the previous year, in fact Halifax occupied a very favourable position in this respect when compared with other towns.

The increased sickness among infants, during the summer months, placed considerably more work upon the voluntary visitors in distributing leaflets, and instructing mothers during the prevalence of diarrhœa. Ten of them undertook this special work, and great credit is due to them for the manner in which they carried it out. Undoubtedly their efforts helped to keep our infant mortality at what must be considered a reasonable rate for the year under consideration.

It is encouraging to be able to report that there is no difficulty in getting new visitors as the work increases, and great credit and thanks are due to all these ladies for the splendid work they have so unselfishly done for the betterment of the infant life of Halifax.

Midwives Act.

As has been customary for the last three years, the midwives practising in the Borough were called together on the kind invitation of Mrs. G. H. Smith, at the Guild Room, and she generously provided tea for them. This year's meeting marked a distinct step forward, as a Midwives' Guild was formed for the first time in Halifax.

Mrs. Eddy, of Manchester. and Mrs. Quarmby, of Wigan, addressed the meeting, setting forth the ideals of the Guild, which stand for temperance, purity, and raising the standard of midwives.

Seventeen of the midwives joined the society, and it was decided that a monthly meeting be held, which should be addressed whenever possible by a medical practitioner.

I am glad to be able now to report that almost without exception the midwives are daily taking the temperature and pulse of their patients during the lying-in period.

I paid 53 visits to the midwives during the year under review, and as a result have obtained the following particulars relative to the midwives case books, of which some are exceedingly well kept.

Number on Register	Case Books			
	Well kept	Fairly well kept	Not Up-to-date	No case book
27	18	5	2	2

In regard to the 2 midwives whose registers were not up-to-date, they cannot themselves write and are therefore dependent upon relatives to write up their cases.

Of the two who did not possess a case book, one is employed as a monthly nurse, the other attending relatives only, having really ceased to practise, and as a matter of fact did not attend one case during the year.

The midwives continue to cordially support my efforts in advising the mother in the care of herself and infant.

There were 27 midwives who notified their intention to practise within the Borough during the year, two of whom are qualified by examination, the rest by long practise.

There were five notices received during the year of sending for medical aid, and 59 of still-born infants.

The following is a list of the midwives registered at the Health Office during the year 1911.

Name	Address
Jowett Sarah Alice ..	10, Beacon Hill Road
Edwards Sarah	47, St. Stephen Street
Sutcliffe Ellen	6, Spindle Street
Halstead Frances Ellen ...	3, Aspinall Street, Siddal
Warren Harriet	17, Newstead Grove
Lake Lucy	31, Stump Cross
Connew Sarah	23, Clay Street, Hanson Lane
Arnold Mary Ann.. ...	14, Exchange Street
Ogden Emma	42, Burnley Road
Robinson Mary Ann ...	14, Ashbourne Grove
Shelley Emelina	6, Ellen Royd
Crowther Hannah Elizabeth	39, Hammond Street
Wilson Elizabeth Ann ...	1, Shoesmith's Buildings
Marsland Emma	16, Cherry Street
Aaron Hannah	7, Lane Ends, Wheatley
Crabtree Isabella	31, Bright Street
Blakey Louisa	33, Commercial Road
Crossley Hannah	25, Fairview terrace
Smith Clara	40, Winding Road
Wade Hannah	Smith's Arms, Corporation St.
Milner Mary Hannah ...	8, Chestnut Street
Woodhead Fanny... ...	40, Chestnut Street
Smith Emma	21, Causeway Foot
Wood Mary Elizabeth ...	9, Fern Street, Boothtown
Wade	66, St. Peter Street
Brook Emma	5, Hope Street, Shelf
Crossley Minnie	Brinton Terrace

VETERINARY INSPECTOR'S REPORT.

Dairies, Cowsheds, and Milkshops.

Mr. J. Pollard, M.R.C.V.S., D.V.S.M., has submitted to me the following report.

The number of cowsheds and milkshops on the register are as follows :—

Cowsheds	...	...	510
Milkshops	...	...	69
			579

This number is the same as the previous year, there being a decrease of three in the number of cowsheds, and an increase of three in the number of milkshops.

There were 360 Dairy Farmers and Purveyors of Milk on the register, the same as the previous year.

In accordance with the usual practice, a number of cowsheds which did not conform to the regulations were selected for alteration or reconstruction, and 11 cowsheds were so dealt with during the year, which number, together with 105 cowsheds previously dealt with in this way, make a total of 116 cowsheds which now comply with the requirements of the regulations.

In reviewing the past year I have little to add to my remarks of the previous year, as in visiting the cowsheds the same things greet one's eyes, and with the slow progress we are able to make I feel at times there is a danger of familiarity with the faults, creating a contempt for them.

The past year has been characterised by the high price of feeding stuffs, also by a rise in the price of milk.

In my last report I advocated that milk obtained under more favourable conditions, and particularly from cows free from tuberculosis was of more value.

The question arises, has any more care been exercised in the collection and the delivery of milk since the increased price was obtained.

The answer is emphatically no, and while I know the production has been less remunerative, even with the increase of price, still I am firmly convinced it will be necessary to take more drastic action with those who persist in neglecting to exercise the care that is due.

Another factor which hampers progress locally is, there are a large number of small farms where cow-keeping is combined with other occupations, on account of the return from the former not being considered sufficient to keep the household, with the result the farm work has to take a second place, consequently often neglected, or left to the junior members of the family to attend to in a perfunctory manner.

The need for more control of clinically tuberculous cattle is instanced by the following case, which is only one of many.

During the past year I had occasion to draw attention to a cow which was clinically tuberculous, and as usual, advised the disposal to a local knacker. The owner informed me he did not consider their offer sufficient, so simply sent it to another town for disposal.

What becomes of such beasts at such inflated prices? If they are seen in the local cattle market they can only be ordered out.

At the latter part of the past year, the Committee approved of sending milk away for testing for Tubercle Bacillus. One sample was forwarded in November last, the result being negative.

During the year under review I paid 457 visits, and the Inspector for Illingworth district 453 visits, a total of 910, to the various cowsheds in the Borough, and the District Inspectors paid 193 visits to the registered milkshops.

In consequence of these visits, a total of 88 defects were discovered and reported, and 97 remedied, as the following table will show.

Nature of Defects	Number Reported	Number Remedied
Not Registered	1	1
Want of Light	6	8
„ Airspace	7	8
„ Ventilation	5	7
Defective Floors	19	18
Dirty Stands and Floors	1	1
Cowsheds to Limewash	34	34
Overflowing Liquid Manure Tank ...	3	4
Accumulation of Manure	4	4
Defective Middensteads	4	3
Cowsheds Overcrowded ...	2	3
Defective Made-up & Untrapped Drains	1	5
Pigs in Cowshed	1	1
Total .	88	97

During the past year 1,572 cows were individually examined, against 1,639 during the previous year, being 67 fewer, although I paid 72 more visits to cowsheds in 1911 than in 1910.

In 9 cases were cows found to be affected with some abnormality of the udder, one of which was tubercular and was duly removed.

Four cows were clinically tuberculous and were removed from the cowsheds, three were destroyed at the knackers, one destination unknown.

One case of Johnes' disease was also seen in the course of inspection, and the affected animal was destroyed.

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

INSPECTION OF CATTLE.

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
1911.						
Jan. 12	83	10		8 good, 2 thin	Bad	
,, 12	83	5		Fair, 1 dirty	1 Moderate, 1 poor	
,, 13	84	11		Fair	Poor	
,, 13	84	8		Good	Moderate	
,, 13	84	9		,,	2 Poor	
,, 18	87	5		Good, but dirty	Moderate	
,, 18	88	15		Fair	1 Good, 1 moderate	
,, 18	88	9		,,	1 Poor	
,, 18	88	9		Good, 2 dirty	Poor	
,, 18	88	9		Fair, 2 dirty	,,	
,, 18	88	19		Fair	2 Moderate, 1 poor	
,, 26	91	5		Good	Moderate	Deficient in light and ventilation
Feb. 1	95	4		Fair, 1 dirty	Good	
,, 1	95	3		Fair	Poor	
,, 1	95	4		,,	Good	
,, 1	95	9		Fair, but dirty	Moderate	
,, 1	95	9		Good, few dirty	Good	Accumulation of manure
,, 2	96	10		Very good	Poor	
,, 2	96	5		Good	Good	
,, 2	96	11		Fair	1 Moderate, 1 poor	
,, 2	96	9	1	Fair, few dirty	Moderate	1 With diseased quarter
,, 3	97	9		Fair, and dirty	Bad	
,, 3	97	10		Fair	Poor	
,, 3	97	12		Very good and clean	2 Poor	
,, 15	105	8		Good, 2 dirty	2 Moderate	

Feb.	15	105	3		Good, 1 dirty	2 Moderate	
,,	15	105	5		Fair, few dirty	Poor	
,,	15	105	6		,, ,,	,,	
,,	15	105	10		Fair	,,	
,,	22	109	12		Very good, several dirty	1 Good, 1 poor	
,,	22	109	13		Good, several dirty	Good	
,,	22	109	10		Fair	1 Moderate, 1 poor	
,,	23	111	19		,,	2 Good, 1 moderate	
,,	23	111	10		,,	Moderate	
,,	23	111	6		,,	,,	
March	1	115	6		Fair, several dirty	,,	
,,	1	115	4		Fair	Poor	
,,	1	115	4		Fair, 1 sick	Moderate	
,,	1	115	3		Fair	Bad	
,,	10	121	15	1	Fair, 2 dirty	Moderate	1 With atrophied quarter
,,	10	121	6		Fair	Poor	
,,	10	121	27		Fair, several dirty	2 Moderate, 3 poor	1 With small communications with pig stye
,,	14	124	6		Fair, 1 dirty	Poor	
,,	14	124	10		Fair	1 Moderate, 1 poor	
,,	14	124	3		Good	Poor	
,,	14	124	12		Fair, several dirty	3 Bad	
,,	14	124	14		Fair, few dirty	1 Moderate, 2 poor	
,,	17	126	10		Fair	1 Moderate, 1 poor	
,,	17	126	9		Fair, few dirty	Poor	
,,	22	129	20		Fair, 1 thin	Moderate	
,,	22	129	8		Fair	Poor	
,,	22	129	7		,,	Poor, overcrowded	
,,	23	130	5		,,	Moderate	

Inspection of Cattle—*Continued.*

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
Mar. 23	130	4		Fair	Moderate	
,, 24	131	6		,,	Poor	
.. 24	131	6	1	Good	Good	1 With atrophied quarter
.. 24	131	4		,,	Moderate	
.. 24	131	10	1	,,	1 Good, 1 moderate	.. ,,
. 29	134	26	1	Fair	3 Poor	,, .
.. 29	134	10		Fair, few dirty	Moderate	
. 29	134	7		,, ,,	Poor	
.. 29	134	1		Good	,,	
.. 29	134	4		Fair	1 Moderate, 1 poor	
.. 31	135	16		,,	2 Good	
.. 31	135	15		,,	,,	
.. 31	135	3		Good	Moderate	
.. 31	135	4		,,	Poor	
April 3	137	29		Fair	2 Moderate	
.. 3	137	12		Good	Good	
.. 12	144	14		Fair, few thin and dirty	1 Moderate, 1 poor	
. 12	144	6		Fair	Moderate	
.. 12	144	9		Fair, few dirty	2 Moderate	
.. 12	144	4		Fair, 1 dirty	Good	Accumulation of manure
.. 12	144	7		Fair	Moderate	
.. 21	149	8		,,	Good	
.. 21	149	10		,,	1 Moderate, 1 poor	
.. 21	149	1		Good	Bad	
.. 21	149	13		Thin (newly purchased)	1 Moderate, 1 poor	

April	21	149	13		Good	1 Poor	
,,	26	152	13		,,	3 Poor	
,,	26	152	23		Good, except 1 lame	3 Good	
,,	26	152	13		Good and clean	1 Moderate, 2 poor	
,,	27	153	2		,, ,,	Poor	
,,	28	153	9		Fair, few dirty	1 Moderate, 1 poor	
,,	28	153	14		Fair	2 Moderate, floors dirty and overcrowded	1 With injured teat
,,	28	153	3		Fair	Moderate	
,,	28	153	5		Good	Poor	
,,	28	153	12		Fair, 1 dirty	2 Poor	
May	1	155	18		Fair, several dirty	1 Moderate, 1 poor	Sheds dirty & accumulation of manure
,,	1	155	22		,, ,,	1 Moderate, 2 poor	Requires new middenstead
,,	2	156	8		7 Fair, *1 sick tubercular	Moderate	*Sent to knackers
,,	4	158	12		*Fair	Good	*1 With indurated quarter of udder
,,	4	158	6		,,	Poor	
,,	4	158	5		4 Fair, 1 dirty	Good	
,,	4	158	3		Good	,,	
,,	10	162	8		Fair and clean	,,	
,,	10	162	5	*1	Fair	Moderate	*Udder tubercular
June	7	180	1	1	Thin (clinically tuberculous)	Poor	Sent away to another town—destination unknown
,,	27	184	3	1	2 Good, *1 thin tuberculous	Moderate	*Sent to knackers
,,	30	196	1		Thin, tuberculous	Good	,, ,,
Aug.	1	208	1		,, ,,	———	,, ,,
Oct.	5	252	13		Good, 2 dirty	1 Good, 2 poor	Not re-limewashed
,,	5	252	6		Fair	Good	,, ,,
,,	5	252	9		,,	1 Good, 1 Moderate	,, ,,

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. 5	252	5		Fair, few dirty	Moderate	Not re-limewashed
,, 5	252	6		Fair	Poor	
,, 6	253	12		,,	1 Moderate, 1 poor	Overcrowded
,, 6	253	12		Good	Good	Not re-limewashed
,, 13	258	2		,,	Poor	
,, 13	258	8		Fair	1 Good, 1 poor	
,, 13	258	4		Fair, 2 dirty	Moderate	
,, 13	258	5		Fair	Good	,, ,,
,, 13	258	11		10 Fair, 1 *waster	1 Moderate, 2 poor	,, ,, *Johne's disease
,, 17	261	9		Fair	1 Moderate, 1 poor	Floor defective
,, 18	262	13		Good, several dirty	2 Good	
,, 18	262	10		Good, few dirty	1 Moderate, 1 poor	
,, 18	262	4		Fair	Moderate	
,, 18	262	4		,,	,,	Not re-limewashed
,, 19	63	23		Fair, several dirty	2 Moderate, 1 poor	
,, 20	264	13		Fair, few dirty	Moderate	,, ,,
,, 20	264	10		,, ,,	Good	
,, 23	265	4		Fair	Poor	,, ,,
,, 23	265	4		Thin, but appear healthy	,,	,, ,,
,, 23	265	8		Fair	,,	
,, 24	267	7	*1	Good	,,	*Biological test, not tuberculous
,, 30	272	12		Fair	1 Moderate, 2 poor	
Nov. 2	275	9		,,	Moderate	Not re-limewashed
,, 2	275	8		Fair, few dirty	,,	

Nov.	2	276	8	Fair, few dirty	Poor	Not re-limewashed
,,	8	280	4	Fair	,,	
,,	10	282	3	1 Sick, 1 lame	Moderate, but floor dirty	
,,	10	282	6	Fair	Moderate	
,,	10	282	8	,,	Good	
,,	10	282	11	,,	Poor	
,,	14	285	8	,,	Moderate	
,,	16	287	9	,,	Bad	
,,	16	287	17	,,	2 Good, 1 Moderate	
,,	16	287	5	,,	Poor	
,,	16	287	8	,,	Moderate	Floor defective
,,	17	288	25	Good but dirty	Dirty	
,,	17	288	9	Fair but dirty	Moderate	
,,	20	289	8	Fair	Poor	
,,	20	289	4	,,	,,	
,,	20	289	3	,,	,,	
,,	22	292	13	,,	,,	
,,	22	292	10	,,	,,	
,,	22	292	10	,, few dirty	,,	
,,	22	292	13	Fair, several dirty	Moderate	
,,	23	293	25	Fair	3 Moderate, 2 poor	
,,	23	293	7	Fair, 1 dirty	Poor	
,,	23	293	6	,,	,,	
,,	24	294	20	,,	2 Moderate	
,,	24	294	5	Good	,,	
,,	24	294	6	Fair	1 Moderate	
,,	24	294	5	Good	,,	
,,	24	294	6	,,	Good	

Inspection of Cattle—*Continued.*

Date of Inspection	No. of Folio	Cattle and Condition			Condition of Shed	Remarks
		Number Examined	Udders Diseased	General Condition		
Nov. 24	294	14		Fair	Good	
,, 28	297	5		Thin	Moderate	
,, 28	297	17		Fair, 1 dirty	1 Moderate, 1 poor	
,, 29	298	5		Fair, 2 dirty		
,, 29	298	4		Fair		
,, 30	299	5		,,	Moderate	
,, 30	299	13		,,	,,	
,, 30	299	4		,,	,,	
,, 30	299	6		,,	,,	
Dec 4	301	13		Good and clean	Poor	
,, 4	301	13		Fair, several dirty	2 Moderate	
,, 7	304	5		Fair	Poor	
,, 7	304	4		,,	Moderate	Deficient in light and ventilation
,, 8	305	13		Fair, 1 dirty	2 Good	
,, 8	305	13		Fair	2 ,,	
,, 13	308	9		,,	Poor	
,, 13	308	15		,,	1 Moderate, 2 poor	
,, 14	309	9		,,	Moderate	

Slaughterhouses.

There are eight private slaughterhouses in the Borough, being the same number as the previous year. Of the eight only five have been regularly used throughout the year for the purpose of slaughtering; in fact some have not been used for that purpose during the past three years. All have been kept in a fairly satisfactory condition.

During the year I have paid 1,011 visits to the abattoirs, and the number of animals slaughtered during that period, ended December 31st, was as follows :—

Cattle	Calves	Sheep and Lambs	Pigs	Total
7,071	3,117	20,976	5,878	37,042

There were 573 separate seizures of meat and offal during the year, and the following table shows the number of carcases condemned, and the total weight of the same.

	Cattle	Calves	Sheep & Lambs	Pigs	Total
Number of Animals killed	7,071	3,117	20,976	5,878	37,042
Do. condemned	11	11	20	55	97
Weight of those condemned in lbs. ...	5,255	685	1,000	5,236	12,176

The following table furnishes particulars of the diseases and other conditions which caused the condemnation of the meat during the year.

	Anthrax	Tuberculosis	Inflammatory Diseases	Jaundice	Rickets	Dropsical	Immature	Swine Fever	Swine Erysipelas	Asphyxiated	Cadavers	Otherwise unsound	Decomposition
Cattle	1	7	1									2	
Calves		1	2	1		1	4					1	1
Sheep			6			2				1	3	8	11
Pigs		26	6	7	3			4	1			8	
Rabbits... ...													348
Geese													9
Ducks													56

In addition to the above there were 37 seizures of fish, fruit, &c., and the following table shows the weight of the various kinds of food destroyed.

Kinds of Food Destroyed	Quantity in lbs.
11 Carcases of Beef	5255
Beef not in Carcase	1010
11 Carcases of Veal	685
Veal not in Carcase	19
31 Carcases of Mutton	1665
55 Carcases of Pork	5236
Pork not in Carcase	1471
348 Rabbits	818
9 Geese	45
56 Ducks	224
Fish	9954
Fruit	1047
Other Foods	1202
Offal	7953
Total	36574

The table does not show all meat, &c., destroyed, as tons of meat was destroyed by the butchers voluntarily, on account of decomposition taking place, due to the exceptional weather experienced during the past summer.

The question of fat supplied to fish fryers gave us some consideration during the past summer. In one case a prosecution was desired but could not be proceeded with on account of a legal technicality.

The total amount of meat destroyed on account of tuberculosis was greater in weight than the previous year, although the number of carcases of beasts condemned was the same, the percentage was less, being exceedingly small.

Total amount of meat destroyed...	...	24,365 lbs.
Total amount of meat destroyed on account of tuberculosis	... 7,742 lbs.	
Total amount of offal destroyed on account of tuberculosis	... 5,583 lbs.	
Total amount destroyed on account of tuberculosis	...	13,325 lbs.
Total amount destroyed from other causes...		11,040 lbs.

The greater part of the meat, fish, &c., destroyed during the year was voluntarily surrendered by the owner for destruction, and in only four cases was it necessary to get a Justice's order.

There were no prosecutions during the past year for exposing meat, &c., for sale, although seizures were made with that intent but not proceeded with.

I would like to see the establishment of a Mutual Insurance Fund to cover the loss of carcases condemned as unfit for food on account of Tuberculosis, while the percentage of condemnation of the whole carcases of cattle is exceedingly small, still these losses are often felt very severely by the owner, particularly when meat is dear. The principle is accepted by most of the butchers, but who will take the initiative in the matter?

Number of visits made during the year.

Description of Premises	Number of Visits
Public Slaughterhouses	1011
Private Slaughterhouses	117
Borough Market	326
Wholesale Market	314
Fasting Sheds...	250
Potted Meat Houses	200
Tripe Boiling Houses	95
Butchers' Shops	2642
Fried Fish Shops	61
Cowsheds	457
Other Visits	112
Total	5585

In addition to the above, I have paid frequent visits of attendance on the horses of the Health Committee, at the Hall Street and Goux Depots, also other stables; examined new purchases, and have had frequent calls on my services by other Committees.

SALE OF FOOD AND DRUGS ACTS.

There were 246 samples of food stuffs taken during the year, against 251 during the previous year.

Of the above, 68 were unofficial samples which included 34 of butter, 12 of lard, and 12 of best rice.

Two of the unofficial samples of butter were found on analysis to be margarine, but when official samples were taken soon after, butter was sold to the inspector. The samples of lard were all genuine, but two samples of rice were adulterated, one not very badly so, and the party concerned was cautioned, but the other contained an excessive amount of talc. An official sample was then taken, and a summons was issued but was eventually dismissed on the payment of costs.

One person was prosecuted for milk adulteration, but in five other cases the analyses showed the milk to be only slightly below the standard, consequently the parties were cautioned by letter or otherwise.

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

There were 246 samples of food analysed during the year 1911. No drugs were sampled. The following table gives the number analysed per 1,000 of the population in some recent years, and the percentage of adulteration.

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
1900	210	4·7	101,187	2·07
1906	230	10·4	105,000	2·19
1910	251	6·0	101,500	2·47
1911	246	4·9	102,000	2·41

The proportion taken throughout the country shows a rise every year. It is now 3·09 per 1,000, at which rate 315 samples should be taken in Halifax, or 69 more than were actually taken. Satisfaction is to be found, however, in the fact that an improvement has been made in the last two years.

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

Article	Total	Genuine	Adulterated	Doubtful	Percentage adulterated
Milk	143	136	6	1	4·2
Butter	38	34	3	1	7·9
Lard	12	12	0	0	·0
Vinegar	16	12	0	4	·0
Rice	13	10	3	0	23·3
Pepper	16	16	0	0	·0
Beer	8	8	0	0	·0
Totals	246	228	12	6	4·9

The percentage of adulteration was lower than last year, but whereas there was no prosecution in 1910, there were two in 1911. One was a milk, deficient in fat to the extent of 13·0 per cent. below the minimum limiting standard, and the other a rice, containing too much "facing" of talc. The first case resulted in a fine of £2, and 16/- costs; the second was dismissed on payment of costs.

Whilst 12 different classes of Food and Drugs were sampled in 1910, only seven such (none of them Drugs) were touched upon in 1911. This leaves a large proportion of the various commodities which fall under the scope of the Act, without check or control. The knowledge amongst traders that there *is* a Public Analyst has a wholesome effect upon their dealings, but years of immunity from the attentions of the sampler are apt to breed a certain amount of confidence and daring which an occasional visit would quickly dispel, to the benefit of the customer in general. It is a truism, of course, that the latter has a right to expect protection in regard to *all* his purchases of Food and Drugs.

Of the samples taken, three classes were free from adverse report, viz., lard, pepper, and beer, but so few were taken of each that this result carries little weight. It is a fact, however, that pepper is very seldom found wrong in these days, the average last year being about one half to 1 per cent. Lard is more frequently sophisticated owing to its high price. Beer remains a favouite "sample" with others than our inspector, and, whilst it never seems to get free from arsenic, still has less than the one-hundredth part of a grain per gallon, which is an accepted limit. Vinegar is the subject of some contention, and it appears that

even makers of good standing claim a right to improve on the old ideal of a product obtained from malt, or malt and grain, only. A certain amount of other saccharine matter is used to produce a clearer, less albuminous, and better-keeping article; much the same, indeed, as is almost universally the practice in beer making. The addition of wood acetic acid, however, is not to be condoned, and a certain standard of extractive must be kept up.

Rice yielded the highest percentage of adulteration. All the evidence is in favour of the wisdom, from a health point of view, of restricting the amount of talc which is added for the purpose of improving its appearance. The unpolished rice, which is so readily obtainable in the town, is without doubt the best, and, whilst a difference in appearance is obvious before cooking, there is none at all after.

Butter afforded three defective samples, and at least one of very doubtful character. The adulterator will continue to devote his skill to this article with a good measure of success. The analysis of fats and oils is one of the most difficult problems, and becomes more so when the genuine article can be shown to vary so considerably. It is this variation which permits a chemist—an asset possessed by all large firms—to pick out a genuine butter of certain characteristics and add to it a scientific mixture of two other fats in such amount that the result is still within the bounds of known genuineness.

One milk sample was the subject of a prosecution, as stated above. The others returned as adulterated were evidently judged not bad enough for this course to

be taken. It is my opinion that more samples are being obtained of milk coming just over the standard, pointing to a use by the seller of separated or skimmed milk in judicious proportion. It is a matter of satisfaction that no preservatives were found in milk.

In the country generally there were many interesting phases of adulteration detected, a few of which may be shortly noted. Margarine was found containing mineral oil, vaseline, and paraffin wax. Lard also contained paraffin wax instead of the usual beef stearin, cotton oil, &c. Much artificial lard is now sold, often under a distinctive name which protects it. Cocoanut oil is a favourite substitute. Suet was largely sold containing starch. Bread and butter, as sold in eating houses, was frequently found to be bread and margarine. Cheese was artfully made with a very heavy and thick rind of barium sulphate, tinted red with iron oxide. Flour, apart from the almost universal but doubtfully beneficial bleaching, was sometimes treated with acid phosphate of lime to "improve" it. Cocoa was largely mixed with ground cocoa shell, a portion of the bean which should be rejected. Infants' Foods received attention and were found frequently to show great contrast to the claims on their labels. Most consisted chiefly of flour and cane sugar, and whilst cautioning buyers against articles "composed of starch only," themselves contained large quantities of it. A prosecution has been successfully taken against one such.

As to drugs, camphorated oil was found to be made from artificial or synthetic camphor, and in general this division showed even more deficiencies than the foods, possibly because somewhat neglected by samplers.

It is a matter for keen regret that the Local Government Board have deferred from session to session, and have not yet introduced into Parliament, the long promised Milk Bill. It is a matter upon which there is general agreement among Urban Authorities, and this hesitation is not easily explained.

Further additions to the very valuable Reports issued by the Local Government Board have been as follows :—

"On the nutritive value of bread made from different varieties of wheat flour."

"On an enquiry as to condensed milks; with special reference to their use as Infant's Foods."

"On analysis and methods of detection of certain proprietary substances sold as preservatives for milk, cream, &c."

The Fertilisers and Feeding Stuffs Act, 1906.

The year 1911 was the second one during which the Act has been enforced in Halifax, and good work has been done.

The article "Burgess' Famous Plant Food," mentioned in the last Report, was the subject of a prosecution, and the vendor was fined £10 and costs, £1 18s. 0d., or one month.

No other article has been proceeded against, though on strictly technical grounds this might have been done in two or three cases.

Vendors are still apt to quite ignore the Act in omitting to provide with every sale or parcel, a label or invoice stating its strength in the necessary particulars,

namely, oil and albuminoids in the case of foods, and nitrogen, potash, and phosphates in fertilisers. There is really no excuse for this, especially, perhaps, when the article is sold in packet form. It is simply a matter of routine and involves no difficulty beyond obtaining some printed labels or invoices. Those concerned, having been advised of the error should see to its rectification in future. Fortunately the articles indicated have not been really poor in quality or unsuited for their declared purpose, or other action would probably have been taken.

One article named "Egg Bread," for cage birds, was examined, and gave rise to strong suspicion that no egg at all was present. Unfortunately it would seem to need only a very small and negligible quantity of egg to justify the name. Certainly the article was little or no richer in alimentary substance than dry bread, the colour being largely or entirely artificial. This is really fraud. Mention should again be made of the opinion of the Board that cage birds are outside the scope of the Act. A test case would be interesting, and even if it failed the article would stand condemned.

A fertiliser again came under notice which was too weak to deserve the name, and representation as to this class of "fertiliser" was made to the Board of Agriculture.

COUNTY BOROUGH OF HALIFAX

THE

Sanitary Inspector's Report

FOR THE

YEAR ENDED 31st DECEMBER, 1911.

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-seventh Annual Report on the operations of the Health Department for the year ended December 31st, 1911.

TOWN HALL, HALIFAX,

1912.

HEALTH DEPARTMENT.

Summary of Work done.

Number of Houses Visited under the Housing and Town Planning Act	582
Number of Visits to Lodging Houses and Furnished Rooms	596
Number of Visits to Houses with reference to Cleanliness, Overcrowding, &c.	235
Number of Visits to Houses with reference to Defective Drainage	8902
Number of Visits to Houses with reference to Infectious Diseases...	1646
Number of Notices Served	635
Rooms Disinfected	764
Cases Removed to the Hospital	265
Infectious Diseases reported	501
Letters served (referring to Nuisances, &c.) ...	376
Summonses taken out...	4
Smoke Observations taken	554
Old Ashpits altered to Goux and Water Carriage System	48
Goux Closets registered	37

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	187
,, ,, Pipes	53
,, ,, Syphon Traps	64
,, Basement Drains...	70
,, Yard Drains	42
,, Urinal Drains	10
,, W.C. Drains	78
,, Area Drains	18
,, Private Street Drains	2
Made-up Sink Pipes	134
Defective Sink Stones	9
Made-up Bath Pipes	4
,, Lavatory Pipes	4
,, Basement Drains	76
,, Water Closets	30
,, Yard Drains	56
,, Urinal Drains	6
,, Gullies	86
,, Private Street Drains	4
,, Intercepting Traps	7
Untrapped Basement Drains	10
,, Sink Drains and Pipes	37
,, Area Drains	3
,, Yard Drains	24
,, Bath Pipes	5

NUISANCES—*Continued.*

Nature of Nuisances	Number Registered
Untrapped Lavatory Pipes	7
Drains not efficiently Trapped :—	
Sink Drains...	10
Cellar Drains	7
Yard Drains	2
Area Drains	4
Sink Drains and Pipes requiring Disconnecting	137
Defective Fall-pipe Drains	69
„ Fall-pipes	96
„ Spouting	99
„ Roofing	24
Broken Pot and Iron Traps	36
Insufficient Supply of Water to Closets ...	12
Nuisances from Water in Cellar	71
„ Want of Drains	14
„ Smoke	4
„ Swine	44
„ Pigeons	1
„ Rabbits	2
Houses Overcrowded	14
„ requiring Limewashing	17
Accumulations of Offensive Matter	63
Privies requiring Limewashing	48
Dirty Passages	27
Insufficient Privy Accommodation	23
Offensive Ashpits and Privies	105
„ Goux Closets	231
„ Ash Tubs	462
Doors off Closets	41

NUISANCES—*Continued.*

Nature of Nuisances	Number Registered
Doors off Ashes Tub Places	53
Dilapidated Closets	71
Ashpits requiring Re-construction	6
Miscellaneous	49
Convert Goux Closets to Water Closets ...	8
Offensive Street Gullies	12
No Water Supply	7
IN FACTORIES.	
Offensive Smoke	4
Insufficient Closet Accommodation	4
Made-up Drain	14
Insanitary Closets	16
Closets requiring Ventilating	12
Offensive Accumulation	1
Want of Light to W.C.'s	6
Made-up W.C.	28
Dirty Closets	2
Wanted separate approaches to W.C.	5
Closets opening direct into Workroom ...	3
Miscellaneous	4
IN WORKSHOPS.	
Rooms requiring Lime-washing	32
Dirty Closets	9
Want of Ventilation	3
Overcrowding	2
Defective Water Closets	3

NUISANCES—*Continued.*

Nature of Nuisances	Number Registered
Defective Drains and Sink Pipes	8
Sink Pipes requiring disconnecting	2
Want of Closet Accommodation	3
Defective and Made-up W.C.	6
Dilapidated Goux Closets	2
No Water to W.C.	2
Miscellaneous	23
BAKEHOUSES.	
Bakehouses requiring Lime-washing	48
Goux Closet converted to W.C	1
Defective and Made-up Drains	4
Defective Ceiling	1
Dirty Floors	2
Want of proper Cover for Milk	1
No Abstract	1

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	157	114	15	129
February	252	189	28	217
March	222	169	41	210
April	219	103	82	185
May	371	129	100	229
June	183	125	28	153
July	238	148	44	192
August	171	105	33	138
September	195	119	29	148
October	309	160	54	214
November	368	166	83	249
December	112	83	20	103
TOTAL ...	2797	1610	557	2167

The total number of ashpits cleansed during the year was 2,797, as against 3,203 in the previous year.

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

TABLE SHOWING THE NUMBER OF ASHPITS WITHIN THE BOROUGH, DECEMBER 31ST, 1911.

District	Wards	Ashpits with Privies	Dry Ashpits	Total
1	Akroydon and North ...	37	45	82
2	Ovenden and Illingworth	240	25	265
3	Central and East ...	20	73	93
4	West and South ...	5	164	169
5	Skircoat and Southowram	17	13	30
6	Pellon and Kingston ...	5	32	37
7	Copley	94	35	129
8	Warley	194	20	214
9	Northowram	145	...	145
	TOTAL	757	407	1164

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	53253	2003
February	47937	1791
March	55521	2090
April...	47029	1790
May	35902	2109
June...	48978	1732
July	52119	1606
August	53371	1618
September	52590	1569
October	52998	1921
November	52967	1988
December	49031	1949
TOTAL	621696	22166

The above represents 28,258 loads of night soil as against 28,173, and 22,166 loads of ashes as against 21,836 for the preceding year.

The number of additional closets registered is 37, being a decrease of 28 on the number registered during the year 1910.

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 145 Tubs returned in connection with property pulled down.	14881	437
1899	15287	551
1900	15974	687
1901 38 Tubs returned.	16397	461
1902	16808	411
1903	17164	356
1904	17428	264
1905	17662	234
1906	17823	161
1907	17920	97
1908	17975	55
1909	18038	63
1910	18103	65
1911	18140	37

During the year 13 closets have been erected in connection with new property, and 24 have been altered from the old system.

Streets Scavenging.

Table showing number of streets and miles requiring sweeping in each ward.

WARDS	Number of Streets	Number of Lineal Miles of Setting	
		Miles	Yard
East	93	7	1133
Central	41	4	1069
South	50	6	907
West	39	5	3
North	39	4	1137
Northowram	34	5	715
Southowram	39	7	61
Skircoat	41	5	1257
Copley	7	7	1491
Kingston	24	2	1518
Pellon	27	3	1564
Ovenden and Illingworth ...	32	12	495
TOTAL	466	73	790

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	3238976	1840	576
Central	1201096	682	776
South	1212358	688	1478
West	802798	456	238
North	874144	496	1184
Akroydon	459992	261	632
Southowram	782544	444	1104
Skircoat	586969	333	889
Copley	39260	22	540
Kingston	287121	163	241
Pellon	385975	219	535
Ovenden and Illingworth Part swept by Halifax Gang	1081272	614	632
TOTAL ...	10952505	6223	25

Streets Scavenging.

The subjoined table gives at a glance the work done in this department during 1910.

Number of Streets swept	43750
Lineal yards swept	10952505
Square yards swept	85050171
Number of Streets watered	15581
Loads of Water used for that purpose ...	17680
Loads of Sweepings gathered	9537
Loads of Snow removed from the streets ...	28
Number of Gullies emptied	236282
Garbage removed from Market Hall	1134
Loads of Ashes and Sand put on streets ...	99
Gullies flushed	1120

During the year 160 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	18097
Improvement Committee	1120
Highways Committee	160
Waterworks	80
Private Firms	2880
Total	22337

Charlestown.

Load of ashes from ash tubs, 1972.

ANALYSIS OF REFUSE COLLECTED IN THE BOROUGH OF HALIFAX DURING THE YEAR 1911

	No. of Loads
From Wet and Dry Ashpits	2168
From Ashes Tubs	22166
From Goux Closet Tubs	28258
Sweepings gathered from the Streets, and Refuse from Gullies	9537
Garbage removed from Market Hall ...	1134
Garbage from Fried Fish Shops	300
Total Number of Loads ...	63563

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 minutes of Dense Smoke emitted
Number of Observations taken	554	
Number showing moderate Smoke or *nil*	325	
Number of Observations taken for a period of 60 minutes, each showing Dense Smoke	229	
Number of Observations showing Dense Smoke above the maximum adopted by the Committee	15	
Average number of minutes of Dense Smoke emitted from Chimneys		0·96

The number of observations taken during the year is 554. 15 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 0·96.

Table showing the number of Infected Houses visited by the District Inspectors.

WARDS	Typhus Fever	Enteric Fever	Scarlet Fever	Continued Fever	Puerperal Fever	Diphtheria	Erysipelas
Ovenden ...			58			7	8
Akroydon ...		3	20	1		8	8
North ...		2	23			7	3
Central ...		3	13			6	4
West ...		5	34			9	6
South ...		6	9			11	2
East ...		2	6			6	1
Southowram		6	8			8	1
Skircoat ...		3	18			16	14
Pellon ...			31			12	5
Kingston ...	1	2	20		2	9	6
Illingworth ...		2	22			3	2
Northowram			2			1	3
Warley ...		1	20			6	2
Copley ...			3			1	
TOTAL ...	1	35	287	1	2	110	65

Table showing the number of Infectious Diseases removed to the Borough Fever Hospital by the District Inspectors, during the year 1911.

	Typhus Fever	Typhoid Fever	Scarlet Fever	Diphtheria	Total
Ovenden ...			33	2	35
Akroydon ...		3	8	1	12
North ...			12	2	14
Central ...		3	6	3	12
West ...		3	23	1	27
South ...		5	3	2	10
East ...		1	3	4	8
Southowram ...		3	5	5	13
Skircoat ..		1	7	1	9
Pellon ...			16	3	19
Kingston ...	1	1	12	1	15
Illingworth ...		1	13		14
Warley ...			17	1	18
Northowram ...				1	1
Copley ...			2		2
Out of Borough		4	43	9	56
TOTAL ...	1	25	203	36	265

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	662
Mattresses	306
Pillows	1252
Sheets	642
Bolsters	650
Blankets	1132
Counterpanes	583
Carpets and Rugs	83
Drawers and Hose	1296
Flannel Vests, Dresses and Petticoats ...	1583
Mats and Sundries	2793
Dressing Gowns and Shawls ...	642
Coats	430
Cushions	63
Trousers	185
Waistcoats	179
Miscellaneous	40
TOTAL ...	12521

Canal Boats.

During the year 1911, 43 Inspections have been made, and in every case the Boats were found clean and in good condition.

These inspections have been made periodically by the Chief Sanitary Inspector, since his appointment as Inspector under the Canal Boats Act of 1884.

There has not been a single case of sickness or overcrowding during the year, and where women and children were on board, proper provision was made for the division of the sexes.

Of the 43 boats inspected there were 2 with women and children, and 11 with women, the children having been brought for the single journey only.

All boats were free from bilge water, ventilation was fairly good, and good provision was made for the storage of water for domestic purposes, neither has there been any objection to the inspections.

All boats plying in this district 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
43	290	86	14	100

AGES OF CHILDREN FOUND ON CANAL BOATS:

	Years				Total
	Under 1	2	3	5	
Number	1	1	1	1	4

TABLE SHOWING PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACT, AND PUBLIC HEALTH ACT, &c.

Date	Defendant's Name	Nature of Offence	Decision of Court			Remarks
			Penalties	Costs	Total	
			£ s. d.	£ s d.	£ s. d.	
Feb. 7th ...	Frank Walton, Rosemary Farm Siddal	Overcrowded Cowshed	...	0 3 0	0 3 0	Casewithdrawn defendant paying costs
June 13th...	Burgess & Co., (J. H. Burgess) 3, Bradshaw Street, Rochdale	Fertiliser, Plant Food, Not answering the description given on the packet, 22 per cent. of Phosphates, only containing 4 per cent.	10 0 0	1 18 6	11 18 6	In default of payment, one month to prison, defendant went to prison
Aug. 8th ...	Ernest Robinson, Lower Schole Croft, Halifax..	Selling Milk with 13 per cent. of Fat abstracted.	2 0 0	0 16 0	2 16 0	...
Nov. 21st ...	J. Ridley, 34, King Cross Street	Selling Rice adulterated with 78 per cent. of a mineral matter known as talc.	...	0 3 0	0 3 0	Dismissed on payment of costs

Prosecutions.

The number of prosecutions during the year was 4, against 10 in the previous year. The total fines, including costs, amounted to £14 17s. 6d.

Vans and Tents.

These were regularly inspected during the Spring and Summer Fairs, and at other times when visiting the town, and were generally found in a clean condition, and free from any infectious disease.

During the year 582 houses have been inspected under the Town Planning Act. This work takes up a considerable amount of time, as the particulars required to comply with the Act are numerous.

The defects found in connection with the above, were chiefly of a minor character, and were abated after notifying the owner.

Street Scavenging.

The number of streets cleansed during the year was 43,750, and the number of loads of sweepings 9,537, being an increase of 3,143, and 376 respectively over the previous year.

The number of loads of water put on the streets was 17,680, which is 1,450 less than in the previous year, in consequence of an insufficient supply of water early in September.

Smoke Observations.

The number of Smoke Observations was 554, against 582 in the previous year. The average number of minutes of dense smoke emitted being 0·96, against 1·37 in the previous year. A few firms as in the previous year have spent a considerable amount of money in making improvements with a view to minimise the amount of black smoke from their chimneys, yet

there is room for further improvement before we can boast of a smokeless atmosphere.

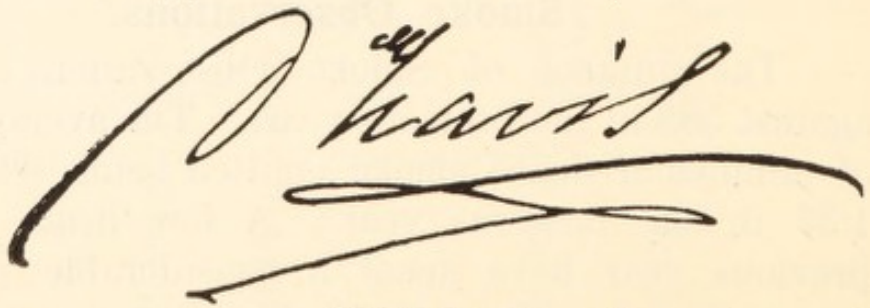
During the year 15 samples of Fertilizers and Feeding Stuffs have been purchased and submitted for Analysis.

The greater portion of the samples were purchased unofficially. In 13 cases both Fertilizers and Feeding Stuffs were genuine, 1 was adulterated. In this case the maker claimed on his label, that it contained 0·6 per cent. of Nitrogen, and over 22 per cent. of Phosphate of Lime, but was found to consist principally of ground coal, coke, ashes, earth, and decayed organic matter. Legal proceedings were taken against the Maker, and was fined £10, and £1 18s. 6d. costs, or one month to prison.

In another case a farmer complained that after feeding his cattle on a Meal Compound purchased from a Hull firm, in a few hours after feeding, the milk began to thicken. A sample was taken from the farm, and sent to the Borough Analyst, for analysis, but nothing was found to account for the above. The makers after being notified by the farmer, as to the effect it had upon his cattle, at once gave instructions for it to be returned.

I again desire to acknowledge the very valuable assistance rendered me by the District Inspectors, 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 1911 AND PREVIOUS YEARS.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered 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 belonging to the District			
		Un-corrected Number	Nett						Under 1 year of age.		At all ages.	
			Number.	Rate *	Number.	Rate.*			Number.	Rate per 1,000 Births Registered	Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	103,246	2070	...	20·0	1741	16·8	107	40	242	116	1674	16·2
1907	102,908	1927	...	18·7	1655	16·0	145	48	195	102	1558	15·1
1908	102,570	2118	...	20·6	1664	16·2	139	36	216	101	1561	15·2
1909	102,232	1840	...	17·9	1654	16·1	132	30	183	99	1552	15·1
1910	101,894	1860	...	18·2	1543	15·1	139	27	166	89	1431	14·0
1911	101,556	1875	1868	18·3	1631	16·0	130	53	231	123	1554	15·3

Table showing the number of Infectious Diseases in each locality of the Borough, notified during the year, and classified according to age.

NOTIFIABLE DISEASES	CASES NOTIFIED IN WHOLE DISTRICT.								TOTAL CASES NOTIFIED IN EACH LOCALITY.															Total cases removed to Hospital.
	At all Ages	At Ages—Years							Ovenden Ward.	Akroydon Ward.	North Ward.	Central Ward.	West Ward (W).	South Ward.	East Ward.	Southowram Ward (H).	Skircoat Ward.	Copley Ward.	Pellon Ward.	Kingston Ward.	Illingworth Ward.	Northowram Ward	Warley Ward.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.																
Small-pox	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...		...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	...	...	..	...	...	...
Diphtheria including Membranous Croup ...	110	...	32	55	10	10	2	1	7	8	7	6	9	11	6	8	16	1	12	9	3	1	6	36
Erysipelas	65	1	1	4	3	16	25	15	8	8	3	4	6	2	1	1	14	...	5	6	2	3	2	...
Scarlet Fever ...	287	...	54	191	28	14	...	...	58	20	23	13	34	9	6	8	18	3	31	20	22	2	20	203
Typhus Fever ...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	.	...	...	1	...	...	..	1
Enteric Fever ...	35	...	...	8	10	13	4	...	...	3	2	3	5	6	2	6	3	...	...	2	2	...	1	25
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis { Under Tuberculosis Regulations, 1908	41	...	...	1	4	21	13	2	2	...	5	...	9	3	9	10	1	...	...	1	1	...	...	46
Phthisis { Under Tuberculosis Regulations, 1911	22	...	...	4	6	7	5	...	1	2	3	1	3	1	6	3	1	...	...	...	...	1	...	5
TOTALS... ...	564	1	87	263	61	83	51	18	76	42	43	27	66	32	30	36	53	4	48	41	30	7	29	316

Causes of, and Ages at Death, during the Year 1911.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT. AT SUBJOINED AGES.									Total Deaths in Public Institutions in the District.
	At all Ages.	Under 1	1 to 2.	2 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	
All Causes { Certified ...	1547	230	51	54	55	68	184	433	472	437
All Causes { Uncertified ...	7	1	...	...	1	...	...	2	3	1
Enteric Fever	10	...	...	...	2	3	4	1	...	9
Measles	7	2	4	1	...	...	...	...	...	1
Scarlet Fever	8	...	1	2	2	2	1	..	...	8
Whooping Cough	26	9	7	8	2	...	...	...	...	1
Diphtheria and Croup	23	...	2	7	12	1	...	1	...	16
Influenza	7	...	...	...	...	...	1	3	3	1
Erysipelas	1	...	...	...	...	...	...	...	1	1
Anthrax	2	...	...	...	...	1	...	1	...	...
Phthisis (Pulmonary Tuberculosis)	94	1	...	...	4	20	35	23	11	34
Tuberculous Meningitis	13	4	3	4	1	1	...	...	...	4
Other Tuberculous Diseases	23	4	2	1	4	4	3	3	2	13
Rheumatic Fever	3	...	...	...	1	2	...	...	...	2
Cancer, Malignant Disease	119	...	...	...	...	...	11	64	44	32
Bronchitis	128	14	5	3	1	...	6	38	61	24
Broncho-Pneumonia	46	18	7	8	...	2	1	8	2	9
Pneumonia (all other forms)	81	7	1	2	3	1	19	31	17	17
Other Diseases of Respiratory Organs ...	27	2	...	...	..	...	6	14	5	4
Diarrhœa and Enteritis	70	45	8	5	1	...	1	4	6	7
Appendicitis and Typhlitis ...	15	...	...	...	1	3	5	4	2	16
Alcoholism	1	...	...	...	...	...	1	...	...	...
Cirrhosis of Liver	6	...	...	...	...	...	...	5	1	1
Nephritis and Bright's Disease	47	...	...	...	...	3	8	19	17	8
Other Accidents and Diseases of Pregnancy and Parturition	9	...	...	...	...	...	9	...	...	1
Congenital Debility and Malformation, including Premature Birth	77	70	...	...	1	2	...	3	1	12
Violent Deaths, excluding Suicide	26	1	2	1	3	2	2	7	8	23
Suicides	14	...	...	...	...	...	4	7	3	3
Brain and Nervous Diseases	182	2	2	1	5	3	14	65	90	48
Heart Diseases	161	1	...	1	3	8	26	67	55	37
Other Defined Diseases...	316	47	7	9	9	10	26	64	144	103
Diseases Ill-defined or Unknown	12	4	...	1	1	...	1	3	2	3
All Causes	1554	231	51	54	56	68	184	435	475	438

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