

[Report 1911] / Medical Officer of Health, Carlisle City.

Contributors

Carlisle (England). City Council.

Publication/Creation

1911

Persistent URL

<https://wellcomecollection.org/works/wt8uxgkn>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle,

FOR THE YEAR 1911,

BY


JOSEPH BEARD, D.P.H. Cantab.,

Fellow of the Royal College of Surgeons, Edinburgh ;
Member of the Royal College of Surgeons, England ;
Licentiate of the Royal College of Physicians, London.

Medical Officer of Health,
School Medical Officer and
Surgeon to the Police Force.

CARLISLE :

CHAS. THURNAM & SONS, PRINTERS, ENGLISH STREET.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29501313>

HEALTH COMMITTEE
OF THE
CARLISLE CITY COUNCIL, 1911—1912.

MR. COUNCILLOR DIXON, J.P., Chairman.

MR. COUNCILLOR DALTON, Deputy Chairman.

MR. ALDERMAN LITTLE

MR. COUNCILLOR HUTCHINSON

„ COUNCILLOR EDMONDSON

„ „ KING

„ „ FITZSIMMONS

„ „ T. RIDLEY

„ „ HODGSON

„ „ D. THOMSON

and

HIS WORSHIP THE MAYOR (ALDERMAN SIR B. SCOTT, J.P.).

OFFICIALS AND OTHERS CONNECTED WITH THE
PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health.

JOSEPH BEARD, F.R.C.S. (Edin.), L.R.C.P. (Lond.),
D.P.H. (Cantab.), &c.

Chief Sanitary Inspector.

*C. W. HILL.

Inspector under Sale of Food and Drugs Act.

*C. W. HILL.

Assistant Inspectors.

*GEO. W. HARRISON.

EDWARD S. BROADHEAD.

Clerical Staff.

ARTHUR PROUDFOOT.

RICHARD F. THOBURN.

Health Visitor.

MISS J. ROGERSON.

Superintendent of Public Slaughter-houses.

JOHN DODDS.

Veterinary Surgeon.

R. CRAIG ROBINSON, M.R.C.V.S.

Public Analyst.

ROBERT HELLON, Ph.D., F.I.C.

Bacteriologist.

PROF. S. DELEPINE, M.B., C.M., M.Sc., &c.

*Certificated Inspectors.

INDEX.

	PAGE
Abattoirs - - - - -	75, 76, 108, 109
Ambulance - - - - -	80
Antitoxin - - - - -	48
Area in Acres - - - - -	8
Bakehouses - - - - -	74, 75, 82, 83, 107
Baths, Public - - - - -	87
Births and Birth Rates - - - - -	8, 10—12, 16
Cancer - - - - -	69
Carcases Condemned - - - - -	75, 110
Chicken Pox - - - - -	52
Classification and Causes of Death at several age periods	20—27
Collection of Refuse - - - - -	108
Common Lodging-houses - - - - -	81, 107
Complaints - - - - -	105
Copy of Literature Distributed - - - - -	94—98
Dairy Cattle, Inspection of - - - - -	92, 93
Dairies, Cowsheds, and Milkshops - - - - -	80, 107
Deaths and Death Rates - - - - -	8, 12—27
Death Rates in other Towns - - - - -	34, 35
Diarrhœa - - - - -	56—58
Diphtheria - - - - -	47—50
Disinfection - - - - -	79, 112
Diseased Meat and Fruit - - - - -	109, 110
Disposal of Refuse - - - - -	108
Drains - - - - -	106
Enteric Fever - - - - -	53—55, 58
Factory and Workshops - - - - -	72—75, 103, 106
Fish, Chip Potato, and Ice Cream Shops - - - - -	82, 110
Foods and Drugs - - - - -	111
Garbage Removed from Abattoir - - - - -	108
Health Committee - - - - -	3
Health Department, Staff of - - - - -	4
Horses - - - - -	112
House Inspection - - - - -	104
House Refuse Removal - - - - -	108
Housing, Town Planning, &c., Act, 1909	} 76—78, 105
Housing, Town Planning, &c., Regulations, 1910	
Illegitimate Births - - - - -	11
Infantile Mortality - - - - -	28—38
Inquests - - - - -	69, 70
Isolation Hospital - - - - -	56

	PAGE
Markets	81, 82
Measles	51—53
Meat Inspection	75, 76, 108—110
Meteorological Statistics	88—91
Midwives	72
Milk, Examination of	111
Mortuary	70
Mumps	52
Notifications	8, 40
Notification Fees	56
Notification of Phthisis	62, 63, 66, 67
Nuisances	101, 102
Offensive Trades	110
Outworkers	106
Poliomyelitis	55, 56
Prosecutions	72, 83, 111
Puerperal Fever	50, 51
Pulmonary Tuberculosis (Phthisis)	59—68
Population	8
Railway Slaughter-Houses	109
Rainfall	8, 89—91
Sanitary Conditions of Factories and Workshops	103
Samples	111
Scarlet Fever	44—47
School Closure	51
Sewage Disposal	79
Smoke Nuisances	101
Smallpox	50
Statistical Summary	8
Tuberculous Diseases	59—68, 112
Tuberculous Meat	75
Typhus Fever	55
Typhoid Fever	53—55, 58
Uncertified Deaths	8, 70, 71
Urinals and Gullies	107
Underground Bakehouses	75, 82, 83, 107
Vans used as Dwellings	107
Veterinary Inspector's Report	92, 93
Water, Bacteriological Analysis	86
Water, Chemical Analysis	85
Water Supply	83, 84
Whooping Cough	52
Workshops and Workplaces	72—75
Zymotic Diseases	39, 44, 112

To the Chairman and Members of the Health
Committee of the Carlisle City Council.

Mr. Chairman and Gentlemen,

I have the honour to submit, in accordance with the regulations of the Local Government Board and the Memorandum of the Board, dated October, 1909, my Annual Report upon the Health and Sanitary Condition of the City of Carlisle during 1911.

The Report deals with the Birth and Mortality Statistics, and the work carried out during the year, including the measures adopted against the prevention of epidemic and other diseases.

I have to thank you for your support during the year.

I am, Mr. Chairman and Gentlemen,

Your obedient Servant,

JOSEPH BEARD.

Health Department,

19 Fisher Street, Carlisle,

10th May, 1912.

STATISTICAL SUMMARY FOR THE YEAR 1911.

Area in Acres ...	...	...	...	...	2,025
Population (Census of 1911) ...	...	...	...	...	46,432
Population per Acre ...	...	...	...	...	22·9
Number of Families or Separate Occupiers (1911 Census)					10,200
Rateable Value ...	...	...	...	...	£225,593
Number of Inhabitants per House at the last Census ...					4·5
Birth-Rate per thousand living (1911 Census)				...	23·8
Death-Rate per thousand living (1911 Census)				...	15·7
Infantile Mortality ...	...	...	...	...	145
Percentage of Uncertified Deaths ...		...	...	..	1·7
Total Deaths from Diarrhœa ...	...	...	...	...	56
Phthisis, Death Rate per thousand living ...			...	...	1·6
Infectious Cases Notified (including Phthisis, 84 cases)					325
Infectious Cases Isolated at the Fever Hospital ...				...	139
Total Rainfall in inches ...	...	...	...	...	30·20

STATISTICS

RELATING TO

BIRTHS, DEATHS, AND CAUSES OF
DEATHS, ETC.

BIRTHS.

The number of births registered during the past year was 1,109, of which 563 were males and 546 females; this number shows a decrease of 36 births upon the figure for 1910.

Calculating upon the census population of 46,432, the birth-rate was 23.8 per 1,000, which shows an increase of 1.7 per 1,000 upon the year 1910.

Year.	Number of Births Registered			Total.
	Males.	Females	Per 1,000 of the population.	
1910	589	556	22.2	1145
1911	563	546	23.8	1109

The birth-rate for England and Wales, calculated as a whole during 1911, was 24.4 per 1,000, and for the 77 great towns 25.6 per 1,000. The 136 smaller towns (to which classification Carlisle belongs) show an average birth-rate of 23.4 per 1,000, whilst the rate for England and Wales, less the 213 great and small towns, was 23.4 per 1,000.

The rate for the City for 1911, which is calculated upon the census returns, shows an increase over that for the two previous years, but upon calculating the rate for the years 1909 and 1910 upon the census figures, the birth-rate for 1911 is seen to have actually fallen, as shown by the following table.

Year.	Census Population.	No. of Births registered.	Birth-rate per 1,000
1909	46,240	1149	24.8
1910	46,335	1145	24.9
1911	46,432	1109	23.8

ILLEGITIMATE BIRTHS.

The number of illegitimate births registered during 1911 was 60, equal to 54.1 per 1,000 of the total births. The distribution of these births to the two Registration Sub-Districts was as follows:—

St. Cuthbert's—30 illegitimate births, or 59.8 per 1,000 of the total births in that district.

St. Mary's—30 illegitimate births, or 49.3 per 1,000 of the total births in that district.

The total number of illegitimate births registered shows an increase of 5 upon the figures for 1910, when 55 illegitimate births were registered, equal to 48.03 per 1,000 of the total births registered, and a distribution as follows:—

St. Cuthbert's—34 illegitimate births, or 68.07 per 1,000 of the total births in that district.

St. Mary's—21 illegitimate births, or 35.47 per 1,000 of the total births in that district.

Table showing details of the births in the two Sub-Registration Districts, 1911:—

QUARTER ENDING.	ST. MARY.			ST. CUTHBERT.			TOTALS FOR CITY.
	Males.	Females.	Totals.	Males.	Females.	Totals.	
March 31	74	62	136	66	66	132	268
June 30.....	83	85	168	58	54	112	280
September 30	78	85	163	81	62	143	306
December 31..	76	65	141	47	67	114	255
Totals.....	311	297	608	252	249	501	1109

The following list shows the annual birth-rate per 1,000 at all ages in Carlisle since 1875, which appears to be the earliest record available:—

Year.	Birth Rate.	Year.	Birth Rate.
1875	... 35.5	1894	... 32.0
1876	... 38.6	1895	... 31.4
1877	... 38.5	1896	... 29.6
1878	... 38.7	1897	... 30.8
1879	... 37.7	1898	... 30.0
1880	... 37.0	1899	... 29.4
1881	... 36.0	1900	... 30.1
1882	... 35.3	1901	... 27.3
1883	... 32.3	1902	... 27.0
1884	... 35.0	1903	... 28.4
1885	... 34.0	1904	... 26.9
1886	... 33.0	1905	... 24.3
1887	... 31.3	1906	... 25.3
1888	... 33.5	1907	... 23.8
1889	... 30.6	1908	... 24.4
1890	... 30.0	1909	... 22.6
1891	... 30.8	1910	... 22.2
1892	... 30.5	1911	... 23.8
1893	... 34.5		

See Table
on page 10

DEATHS.

The total number of deaths registered in the City during 1911 was 776, as compared with 683 in 1910, making a gross death-rate for the year under review, calculated upon the census figures, of 16.7 per 1,000 of the population living at all ages.

Seventeen deaths occurred of persons belonging to the City in institutions and other places outside, while the deaths of 60 persons not belonging to the City occurred in public institutions and other places within the City.

Excluding the 60 deaths of persons belonging to other districts, and substituting the 17 deaths of Carlisle residents which occurred in the districts beyond the City boundaries, a nett figure of 733 remains, which is the actual number of deaths belonging to the City, showing *the death-rate for 1911, calculated upon the census figures, to be 15.7 per 1,000 of the population living at all ages.*

The corrected death-rate for the whole of England and Wales for 1911 was 14.6 per 1,000 living at all ages, and for the 77 great towns 16.4 per 1,000, the death-rate for the 136 smaller towns (amongst which Carlisle figures) was 14.4 per 1,000, whilst the death-rate for England and Wales (less the 213 great and small towns) was 13.1 per 1,000 living.

In my observations upon the nett general death-rate for the year 1910, I pointed out that the calculations were based upon the estimated population, which in all probability was greatly in excess of the actual population. The prognostication was correct, the estimated population for 1910 being about 5,000 in excess of what the census population was shown to be in 1911.

This difference between the estimated and the actual population, to a certain extent, robs the resulting rates of a certain amount of accuracy, but not to such an extent that any grave consideration need result. Furthermore, in future years it may be possible to avoid such errors as those mentioned, the chances being against any wide fluctuations in the vital statistics of the district.

Table showing details of the deaths in the two Sub-Registration Districts, 1911:—

QUARTER ENDING.	ST. MARY.					ST. CUTHBERT.					TOTALS FOR CITY.
	Males.		Females.		Totals.	Males.		Females.		Totals.	
	Under 5 years	Over 5 years	Under 5 years	Over 5 years		Under 5 years	Over 5 years	Under 5 years	Over 5 years		
March 31	21	37	11	46	115	12	35	13	31	91	206
June 30	17	36	9	41	103	18	27	10	26	81	184
Sept. 30	27	30	23	42	122	15	21	17	28	81	203
Dec. 31	16	46	10	41	113	10	31	4	25	70	183
TOTALS	81	149	53	170	453	55	114	44	110	323	776

Table showing the number of deaths at various age periods in Carlisle:—

	All Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	St. Mary's Sub-District.	St. Cuthbert's Sub-District.
No. of Deaths at all ages and at several age periods ...	776	165	67	29	46	269	200	453	323

Number of deaths of persons not belonging to the district occurring in public institutions and other places within the City:—

Cumberland Infirmary	...	...	...	40
Fusehill Workhouse	...	...	...	6
Private Nursing Homes	...	...	...	5
Strathclyde House	..	...	...	3
Port Road	...	...	...	2
Fever Hospital	...	...	...	1
Thirlmere Street	...	...	...	1
Queen Street	...	...	...	1
Caledonian Rly. Goods Yard	...	...	...	1

Number of deaths of persons belonging to the district occurring in public institutions and other places outside the City:—

Garlands Asylum ...	...	...	...	7
St. Joseph's Home	...	...	...	4
Infirmery, Edinburgh	...	...	...	4
Gate Foot, Brampton	...	...	...	1
Near Plumpton ...	...	...	...	1
				—
				17
				—

Table showing birth-rates and death-rates for Carlisle as compared with England and Wales for the year 1911:—

	Annual Rate per 1,000 living.			Deaths under 1 Year to 1,000 Births.
	Births.	Deaths.		
		Crude.	*Corrected	
England and Wales	24·4	14·6	14·6	130
77 Great Towns	25·6	15·5	16·4	140
136 Smaller Towns	23·4	13·8	14·4	133
England and Wales, less the 213 Towns ...	23·4	13·9	13·1	118
CARLISLE	23·8	16·7 †	15·7 ‡	145·1

* The corrected death-rates are the rates which would have been recorded had the age and sex constitution of the populations of the areas been identical with that of England and Wales, as enumerated in 1901.

† Includes deaths of Non-Residents in the City.

‡ As there is no factor for correction for this City, this figure represents the death-rate after exclusion of certain Non-Residents dying within the City, and the inclusion of certain residents dying outside the City.

TABLE I.
Vital Statistics of whole District during 1911 and previous years.
CARLISLE URBAN DISTRICT.

YEAR.	Population estimated to Middle of each Year	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncorrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of age		AT ALL AGES.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	48,425	1227	...	25.3	811	16.7	56	16	163	132	771	15.9
1907	49,400	1178	...	23.8	848	17.1	62	21	169	143	807	16.3
1908	50,047	1223	...	24.4	713	14.2	55	13	158	129	671	13.4
1909	50,675	1149	...	22.6	735	14.5	53	27	142	123	709	13.9
1910	51,433	1145	...	22.2	683	13.2	63	28	125	110	648	12.6
1911	46,432	1109	- 3	23.8	776	16.7	60	17	161	145	733	15.7

Area of District in acres (exclusive of area covered by water), 2,025.

Total population at all ages 46,432	} At Census of 1911.
Number of Families or separate occupiers 10,200	
Average number of persons per house 4.5	

The following public and other Institutions are within the City.

The Union Workhouse and its Infirmary.
The Cumberland Infirmary.
The Crozier Lodge Isolation Hospital.
Strathclyde House (Home for Incurables).

Table showing the gross Death-rate of Carlisle from 1874 to 1911 inclusive:—

Year.	Deaths from all causes.		Deaths from Principal Zymotic Diseases.	
	No. Registered.	Rate per 1000 of Population.	No. Registered.	Rate per 1000 of Population.
1874	1055	32·6	367	11·3
1875	934	29·2	201	6·3
1876	800	25·0	100	3·0
1877	750	23·0	55	1·7
1878	828	23·5	83	2·3
1879	818	23·5	76	2·0
1880	777	22·2	106	3·0
1881	717	20·0	67	1·8
1882	852	23·6	189	5·0
1883	779	21·0	67	1·8
1884	783	21·0	38	1·0
1885	769	20·3	66	1·7
1886	745	19·4	62	1·6
1887	772	19·9	75	1·9
1888	722	18·5	59	1·5
1889	723	18·1	69	1·7
1890	792	19·5	65	1·6
1891	789	20·1	63	1·6
1892	805	20·2	55	1·3
1893	868	21·6	145	3·6
1894	780	19·2	44	1·1
1895	794	19·4	33	0·8
1896	753	18·2	30	0·7
1897	811	19·4	54	1·3
1898	935	22·2	103	2·4
1899	818	19·2	42	0·9
1900	807	18·8	60	1·4
1901	810	17·8	64	1·4
1902	856	18·5	82	1·7
1903	813	17·4	58	1·2
1904	933	19·7	63	1·3
1905	783	16·3	66	1·3
1906	811	16·7	34	0·7
1907	848	17·1	77	1·5
1908	713	14·2	42	0·8
1909	735	14·5	30	0·5
1910	683	13·2	21	0·4
1911	776	16·7	96	2·06

CAUSES OF DEATH.

Table showing the diseases causing the largest number of Deaths during 1911, and a comparison with those of 1910:—

	1910.	1911.	Increase or Decrease
Pulmonary Tuberculosis & Phthisis ...	52	75	+ 23
Tuberculous Peritonitis and Tabes Mesenterica }	6	8	+ 2
Tuberculous Meningitis and Hydro- cephalus }	15	7	— 8
Cancer and Malignant Disease ...	47	45	— 2
Prematurity and Injury at Birth ...	34	22	—12
Old Age	46	45	— 1
Syncope, Heart Disease (not specified)...	53	51	— 2
Valvular Disease of Heart	26	34	+ 8
Cerebral Hæmorrhage, Embolism, Thrombosis and Apoplexy }	29	45	+ 16
Pneumonia	56	71	+ 15
Bronchitis	35	27	— 8
Kidney and Bladder Disease...	23	24	+ 1
Debility, Atrophy, Inanition, & Marasmus	16	14	— 2
Measles	3	13	+ 10
Diarrhœa	3	56	+ 53

+ Shows an increase over previous year.

— Shows a decrease over previous year.

NOTE—The Table shows that in 1911 the number of deaths from Diarrhœa; Pulmonary Tuberculosis; Valvular Disease of the Heart; Cerebral Hæmorrhage, Embolism, Thrombosis, and Apoplexy; Pneumonia and Measles was in excess of that for 1910, but in several other diseases or groups of diseases the number of deaths was less.

Total Number of Deaths Registered from all Causes during the year 1911.

CAUSE OF DEATH.	AGES.										TOTALS.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85		85 and upwards
II.—LOCAL DISEASES—continued.											
4.—Diseases of Blood Vessels.											
Cerebral Haemorrhage, Embolism, Thrombosis ... ..	...	...	...	...	1	5	9	12	9	2	38
<i>Apoplexy, Hemiplegia</i> ... ..	...	...	...	...	1	...	3	1	2	..	7
Aneurysm ... ..	...	...	...	1	2	2	...	...	...	...	5
Senile Gangrene ... ..	...	...	...	...	...	...	1	1	2	..	4
Embolism, Thrombosis (not Cerebral)	...	...	...	...	...	...	...	...	...	...	..
Phlebitis... ..	...	...	...	...	...	...	...	...	...	...	..
Varicose Veins ... ..	...	...	...	...	...	...	...	...	...	...	..
Blood Vessels, other Diseases...	...	...	...	...	...	1	...	...	...	...	1
5.—Diseases of Respiratory Organs.											
Laryngitis	1	1	...	...	...	...	...	...	...	...	2
Membranous Laryngitis (not Diphtheritic) ... ..	...	...	...	...	...	...	...	...	...	...	...
<i>Croup (not Spasmod. or Membr.)</i>	...	...	...	...	...	...	...	...	...	...	...
Larynx and Trachea, other Diseases	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	6	3	...	...	1	2	3	5	7	...	27
Emphysema, Asthma ... ..	...	...	...	...	...	...	...	...	...	...	...
Pleurisy ... ..	...	...	...	...	...	...	...	...	...	...	...
Fibroid Disease of Lung	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases, other ..	...	...	...	...	...	...	...	1	...	...	1

INFANTILE MORTALITY.

This term is used as an interpretation of the mortality amongst infants under one year of age, and the mortality rate is calculated upon the number of deaths of such infants per 1,000 born during the same period.

The number of deaths of infants under one year during 1911 was 161, giving an Infantile Mortality rate of 145 per 1,000.

The Infantile Mortality rate for the whole of England and Wales during 1911 was 130 per 1,000 born; for the 77 great towns 140 per 1,000; for the 136 smaller towns (of which Carlisle is one) 133 per 1,000, and for England and Wales less the 213 great and small towns 118 per 1,000.

The rate during 1911 shows that the increase in Infantile Mortality was general throughout England and Wales, which was chiefly to be accounted for by diarrhœa and certain other diseases which bear a strong relationship to the feeding and the preparation of the food of infants.

Diseases of the stomach and bowels of infants are easily induced at any time, but during the hot summer months the number of such diseases increases, and the prolonged hot and dry periods experienced during last summer were responsible for the greater portion of the increase in the mortality amongst those under one year.

The Infantile Mortality rate for this City was higher during 1911 than 1910 by 31 per 1,000, and for this local increase three factors were chiefly responsible, viz.:—Diarrhœa, Measles, and Pneumonia, of which the former was responsible for the greater number.

The death-rate of legitimate infants under one year of age was 142 per 1,000 legitimate births registered.

The death-rate of illegitimate infants under one year of age was 200 per 1,000 illegitimate births registered.

At a Council meeting held on the 14th February, 1911, it was resolved that the Notification of Births Act, 1907, should be put into operation within the City, and that a Female Health Visitor be appointed to carry out certain duties in connection therewith.

The Act came into operation on the 1st June, and Miss J. Rogerson, a resident of Carlisle, was appointed. Miss Rogerson holds a certificate from the Glasgow Maternity Hospital for three months' instruction in midwifery, and has since had experience in midwifery within the City. She commenced work on 15th June, 1911, the following conditions of appointment and duties having previously been passed by the Council.

CONDITIONS OF APPOINTMENT OF FEMALE HEALTH VISITOR.

1. The person appointed will be required to devote the whole of her time to the duties of the office, and shall commence her duties at 9 a.m. each day, and shall cease work at 5-30 p.m. Saturdays 9 a.m. to 1 p.m.
2. She will be required to act under the direction of the Medical Officer of Health.
3. Applicants must have undergone a nurse's training in a general hospital, and must have had experience in midwifery, and other things being equal, preference will be given to candidates holding the Central Midwives Board's Certificate (by examination), a certificate in Sanitary Science, &c.
4. Salary £85 per annum, rising by increments of £5 per annum to £105, inclusive of uniform.
5. One calendar month's notice in writing to be given or received to terminate the engagement.

6. She will be required to begin her duties as soon as possible after appointment.

DUTIES OF FEMALE HEALTH VISITOR.

1. To make herself acquainted with the provisions of the Midwives Act, 1902, and the Notification of Births Act, 1907.
2. To visit the houses where births are notified for the purpose of offering advice to the mothers as to the feeding and rearing of infants, to give advice as to their proper care and training, to urge the importance of proper food, fresh air, and cleanliness, and where children are ill to urge the parents to seek medical advice, taking care not to give medical advice, nor to specially name any doctor, nor to criticise the actions or methods of a medical man in attendance, and where necessary and practicable to repeat these visits.
3. To point out the dangers of a mother administering drugs to her child without medical advice, the dangers of administering advertised (quack) nostrums and the possibility of wrong treatment by untrained and unqualified persons.
4. To make investigations concerning still-births and all deaths of infants, and in special cases deaths of other young children.
5. When possible, to visit expectant mothers, and if necessary, advise them on the management of their health, and to point out the importance of its bearing upon the health of the future baby.
6. To promote a knowledge of the value of fresh air, open windows, and cleanliness in the homes, and cleanliness in the persons of those with whom her duties may bring her into contact.

7. To note any case of infectious disease or any insanitary or foul conditions in or about any home she may visit, and report the same to the Medical Officer of Health.
8. To take all possible precautions against personally carrying infection.
9. To keep systematic records of her work upon such cards and in such books as shall be provided, and make such summary of her work as may be required by the Medical Officer of Health, and assist in the preparation of reports.
10. To carry out such other orders of the Medical Officer of Health, and such other duties as the Health Committee or the Council may from time to time require her to undertake.

The following is a summary of work in connection with the Notification of Births Act, 1907, from its commencement on 1st June, 1911, to the end of the year:—

Number of births notified by Official Letter Card				
Live Births, 590; Still Births, 21; Total	...	...	...	611
Number of births notified otherwise than by Official				
Letter Card	...	...	...	55
Number of births in which no information was				
received other than from the Sub-Registrars'				
Returns	...	...	...	47
Number of Infant deaths under one year	...	...	...	102
Number of deaths from Diarrhœa	...	...	...	42
Total number of primary visits made by Health				
Visitor to houses	...	...	...	690
Total number of re-visits	...	...	...	1,039
Number of visits made by Health Visitor in respect				
to other conditions, viz., Measles and Whoop-				
ing Cough	...	...	...	11

TABLE IV.

St. Mary's Sub-District.

INFANTILE MORTALITY DURING THE YEAR 1911.

Nett Deaths from stated Causes at various ages under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	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.
All Causes.	Certified ...	..	..	12	2	..	6	20	15	21	14	15	85
	Uncertified ...	..	..	2	..	..	..	2	1	..	..	..	3
{	Small-pox ...	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..
{	Measles ...	..	..	..	..	..	..	..	..	..	..	2	2
	Scarlet Fever ..	..	..	..	..	..	..	..	..	1	..	..	1
{	Diphtheria and Croup ..	..	..	..	..	..	..	..	..	..	..	..	..
	Whooping Cough ..	..	..	..	..	..	..	..	2	3	1	..	6
{	Diarrhoea ...	..	..	..	..	..	1	1	1	3	1	1	7
	Enteritis ..	..	..	..	..	..	..	..	8	3	4	4	19
{	Tuberculous Meningitis ...	..	..	..	..	..	..	..	..	..	..	..	..
	Abdominal Tuberculosis ..	..	..	..	..	..	..	..	1	..	1	..	2
{	Other Tuberculous Diseases ..	..	..	..	..	..	..	..	..	..	..	..	..
	Congenital Malformations ..	..	..	1	..	..	1	2	..	..	..	..	2
{	Premature Birth ..	..	..	9	1	..	..	10	..	..	..	..	10
	Atrophy, Debility & Marasmus...	..	..	1	..	..	..	1	1	..	..	..	2
{	Atelectasis ...	..	..	1	1	..	..	2	..	..	..	..	2
	Injury at Birth ...	..	..	..	..	..	..	..	..	..	..	..	..
{	Erysipelas ..	..	..	..	..	..	..	..	..	..	..	1	1
	Syphilis ...	..	..	..	..	..	..	..	3	1	..	..	4
{	Rickets ...	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	..	..	1	1
{	Convulsions ...	..	..	1	..	..	1	2	1	1	1	..	5
	Gastritis ...	..	..	..	..	..	..	..	..	..	..	..	..
{	Laryngitis...	..	..	..	..	..	..	..	1	..	..	..	1
	Bronchitis ..	..	..	..	..	..	..	..	1	1	1	..	3
{	Pneumonia (all forms) ...	..	..	..	..	..	1	1	..	5	2	4	12
	Suffocation, overlying ..	..	..	..	..	..	1	1	..	..	..	..	1
{	Other Causes ...	..	..	1	..	..	1	2	1	4	..	..	7
				14	2	..	6	22	16	21	14	15	88
Nett Births in the year.				{ Legitimate, 578. Illegitimate, 30.				Nett Deaths in the year of				{ Legitimate Infants, 86. Illegitimate " 2.	

TABLE IV.

St. Cuthbert's Sub-District.

INFANTILE MORTALITY DURING THE YEAR 1911.

Nett Deaths from stated Causes at various ages under One Year of Age.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	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.
All Causes	Certified	...	...	14	1	7	5	27	14	9	14	8	72
	Uncertified	...	...	1	..	..	...	1	.	...	...	...	1
Small-pox	...	...	...	..	..	..	..	..	..	..	..	..	..

Chicken-pox	...	...	...	..	..	..	..	..	..	..	..	..	..

Measles	...	...	...	..	..	..	..	..	..	..	..	1	1

Scarlet Fever	...	...	...	..	..	..	..	..	..	..	..	..	..

Diphtheria and Croup	...	...	...	..	..	..	..	..	..	..	..	..	..

Whooping Cough	...	...	...	..	..	..	..	..	..	..	3	1	4

Diarrhoea	...	...	...	..	..	..	..	..	2	..	..	1	3

Enteritis	...	...	...	..	1	1	..	2	5	3	2	1	13

Tuberculous Meningitis	...	...	...	..	..	..	..	..	..	..	1	..	1

Abdominal Tuberculous	...	...	...	..	..	..	..	..	..	1	..	..	1

Other Tuberculous Diseases	...	...	...	..	..	..	..	..	..	..	..	..	..

Congenital Malformations	...	...	...	1	..	..	..	1	..	..	..	..	1

Premature Birth	...	...	...	7	..	1	1	9	1	..	..	..	10

Atrophy, Debility, & Marasmus	...	...	...	4	..	3	2	9	2	1	..	..	12

Atelectasis	...	...	...	1	..	..	..	1	..	..	..	..	1

Injury at Birth	...	...	...	1	..	..	1	2	..	..	..	..	2

Erysipelas	...	...	...	..	..	..	..	..	..	..	..	..	..

Syphilis	...	...	...	..	..	..	..	..	..	..	..	..	..

Rickets	...	...	...	..	..	..	..	..	..	..	..	..	..

Meningitis (not Tuberculous)	...	...	...	..	..	..	..	..	..	..	..	..	..

Convulsions	...	...	...	1	..	..	..	1	1	..	1	..	3

Gastritis	...	...	...	..	..	..	..	..	..	..	..	..	..

Laryngitis	...	...	...	..	..	..	..	..	..	..	..	..	..

Bronchitis	...	...	...	..	..	..	..	..	1	..	1	1	3

Pneumonia (all forms)	...	...	...	..	..	..	1	1	2	1	4	3	11

Suffocation, overlying	...	...	...	..	..	..	..	..	..	..	..	..	..

Other Causes	...	...	...	..	..	2	..	2	..	3	2	..	7

				15	1	7	5	28	14	9	14	8	73
Nett Births in the year				{ Legitimate, 471. Illegitimate, 30.				Nett Deaths in the year of				{ Legitimate Infants, 63. Illegitimate „ 10.	

Table showing population and rates from principal

NAME OF TOWN.	Population.	Birth-Rate.	Death-Rate. (after correc- tion for Non- Residents.)	Infantile Mortality Rate.
Accrington	45,075	17·57	15·77	180·55
Ashton-under-Lyne	45,179	23·00	17·2	193·8
Bath	50,729	15·5	13·1	101·0
Blackpool	58,376	15·97	13·28	127·18
Burton-upon-Trent	48,275	21·73	13·43	110·6
Bury	58,665	20·28	16·26	166·0
Coventry	106,377	26·9	13·3	109·8
Crewe	44,970	22·9	—	162·0
Enfield	56,344	23·14	12·99	140·79
Exeter	48,660	19·81	15·87	124·0
Gillingham	52,252	23·6	11·4	112·0
Handsworth	68,618	21·0	10·7	95·0
Hornsey	84,602	17·4	9·5	78·0
Ilford	78,205	21·4	9·4	83·0
Ipswich	73,939	23·8	12·6	101·0
Lancaster	41,400	20·14	13·06	100·0
Lincoln	57,294	25·02	14·74	136·2
Newport	83,700	27·32	13·51	122·6
Oxford	53,049	19·05	12·92	107·6
Rotherham	62,700	28·85	—	161·0
Stockton-on-Tees	52,175	29·4	16·7	132·0
Tynemouth	58,822	28·01	15·0	123·0
Wakefield	51,598	24·3	16·4	143·0
Wallasey	78,514	22·1	12·6	109·0
Warrington	72,177	28·1	15·7	147·0
Wigan	82,171	27·05	16·76	193·0
Wimbledon	54,875	20·5	10·7	110·0
Workington	25,099	26·3	13·5	123·8
CITY OF CARLISLE ..	46,432	23·8	15·7	145·0

— Not stated.

causes of death in Carlisle and a number of other towns :—

Zymotic Death-Rate.	Respiratory Diseases, Death-Rate (other than Phthisis).	Phthisis Death-Rate.	Other Tuberculous Diseases, Death-Rate.	Malignant Diseases, Death-Rate.
2.06	2.66	0.84	0.28	1.06
2.5	2.6	1.3	0.2	0.9
0.83	2.7	1.0	0.14	1.32
1.57	1.49	0.82	0.16	1.18
1.12	1.74	1.47	0.45	0.76
2.01	2.91	0.95	0.44	0.77
1.83	1.91	0.80	0.27	—
2.13	1.99	0.75	0.51	0.84
2.73	0.40	0.79	0.10	0.83
1.86	2.34	1.4	0.55	1.27
2.5	1.6	1.12*	—	0.7
1.1	—	0.56	0.35	0.91
0.92	—	0.6	0.9	1.2
1.3	1.1	0.6	1.7	0.7
1.14	1.44	1.31	0.23	1.11
1.06	1.98	1.27	0.41	0.91
2.2	1.6	1.04	0.29	1.19
1.85	1.97	1.02	0.51	0.81
1.204	1.67	0.903	0.37	1.40
3.15	2.71	0.83	0.41	0.81
2.6	3.3	1.1	0.86	—
1.6	2.5	1.2	0.4	0.7
1.84	2.39	1.22	0.66	1.43
1.01	1.9	1.0	0.4	1.0
2.8	2.6	1.46	0.63	0.17
3.91	4.02	0.72	0.74	0.53
1.8	1.5	0.84	0.30	0.91
1.03	—	—	—	—
2.06	2.1	1.6	0.4	0.9

* All Tuberculous Diseases.

— Not stated.

The 161 deaths of infants belonging to the City under one year of age are recorded under the following headings, arranged in order of their frequency:—

Epidemic Diarrhœa, Epid. (or Zym.) Enteritis	...	42
Pneumonia	... ..	23
Premature Birth	... ..	20
Atrophy, Debility, Inanition, Marasmus	...	14
Whooping Cough	... ..	10
Convulsions	... ..	8
Bronchitis	... ..	6
Gastritis, Gastro-intestinal Catarrh	... ..	4
Congenital Syphilis	... ..	4
Atelectasis	... ..	3
Tabes Mesenterica, Tuberculous Peritonitis	...	3
Measles	... ..	3
Influenza	... ..	3
Congenital Defects	... ..	2
Epilepsy	... ..	2
Hernia	... ..	2
Injury at Birth	... ..	2
Tuberculous Meningitis	... ..	1
Meningitis (not Tuberculous)	... ..	1
Suffocation (overlaid)	... ..	1
Liver and Gall Bladder, other Diseases	... ..	1
Septicæmia (not Puerperal)	... ..	1
Laryngitis	... ..	1
Want of Breast Milk	... ..	1
Scarlet Fever	... ..	1
Erysipelas	... ..	1
Poisoning (accidental)	... ..	1

LIST SHOWING NUMBER OF DEATHS OF INFANTS
UNDER 1 YEAR, WITH OCCUPATION OF PARENTS.

Whole District	...	...	{ Legitimate 149 } { Illegitimate 12 }	161
St. Mary's Sub-Registration District	...	...	{ Legitimate 86 } { Illegitimate 2 }	88
St. Cuthbert's Sub-Registration District	...	...	{ Legitimate 63 } { Illegitimate 10 }	73

LEGITIMATE.

Occupation of Father.	Numbers.
Labourer	50
Railway Employés (Engine Drivers, Guards, Firemen, Cleaners and Porters)	15
Groom, Coachman, Cab Driver, Carter	13
Painter, Plumber, Joiner, and Polishers	6
Iron Worker, Black and White Smiths	6
Engine or other Fitters	5
Soldier	4
Designer, Compositor, and Lithographer	4
Butcher	3
Clerk	3
Police Constable, Prison Warders	3
Warehousemen	3
Tailors and Hatters	3
Grocer	2
Fellmonger	2
Slater and Bricklayer	2
Traveller and Insurance Agent	2
Wireman and Telegraph Linesman	2
Innkeeper and Hotel Managers	2
Gardener	2
Coal Miner	2
Pawnbroker	2
Baker	1
Warper	1
Tram Conductor	1
Hawker	1
Musician	1
Brush Maker	1
Gas Meter Inspector	1
Packer	1
Salesman	1
Ice Cream Maker	1
Coachbuilder	1
Fishmonger	1
No Occupation	1
Total	149

ILLEGITIMATE.

Occupation of Mother.				Numbers.
Domestic Servant	...	...	...	4
No Occupation	...	...	...	3
Weaver	...	...	...	2
Laundress	...	...	...	1
Shop Assistant	...	...	...	1
Charwoman	...	...	...	1
Total				12

Population, births, birth-rate, and infantile mortality rates for a series of years, 1884-1911:—

Year.	Population.	No. of Births.	Rate per 1000.	Infantile Death-Rate per 1000 births.
1884	37,285	1303	35.0	158
1885	37,881	1285	34.0	164
1886	38,402	1262	33.0	146
1887	38,793	1214	31.3	141
1888	39,027	1307	33.5	129
1889	39,944	1224	30.6	142
1890	40,500	1215	30.0	150
*1891	39,200	1207	30.8	137
1892	39,750	1213	30.5	123
1893	40,150	1389	34.5	178
1894	41,022	1315	32.0	133
1895	41,658	1311	31.4	142
1896	42,294	1246	29.6	137
1897	42,930	1324	30.8	134
1898	43,566	1311	30.0	183
1899	44,202	1306	29.4	145
1900	44,838	1354	30.1	134
*1901	45,478	1246	27.3	129
1902	46,078	1245	27.0	117
1903	46,500	1322	28.4	118
1904	47,350	1278	26.7	152
1905	47,920	1168	24.3	139
1906	48,425	1227	25.3	132
1907	49,400	1178	23.8	143
1908	50,047	1223	24.4	129
1909	50,675	1149	22.6	123.6
1910	51,433	1145	22.2	110.0
*1911	46,432	1109	23.8	145.

*Census Population.

ZYMOTIC DISEASES.

(Syn. Infectious Diseases).

The number of cases of Infectious Disease notified during the year 1911 was 241, being a decrease of 116 on the number notified during 1910.

The number of deaths from all Zymotic Diseases during 1911 was 96, as compared with 21 and 30 for 1909 and 1910 respectively; this figure gives a death-rate of 2.06 per 1,000 of the census population, the cause of death being registered as follows:—

Diarrhœa	...	...	...	56
Whooping Cough	...	...	...	21
Measles	...	...	...	13
Diphtheria	...	...	...	4
Scarlet Fever	...	...	...	2
				—
				96
				—

Table showing the number and nature of the Infectious Diseases at the several age groups notified in the two sub-registration districts of the City during 1911.

NOTIFIABLE DISEASE				Number of Cases Notified.								Total Cases Notified in each Locality.		TOTAL CASES REMOVED TO HOSPITAL.
				At all ages.	At Ages—Years.							St. Mary's Sub-District.	St. Cuthbert's Sub-District.	
					Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.			
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	..	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	}	...	...	44	1	13	15	9	6	...	..	20	24	33
Erysipelas		...	...	49	3	1	1	5	20	11	8	27	22	...
Scarlet Fever		139	3	31	80	16	7	1	1	64	75	104
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	..	...
Enteric Fever	..	...	...	3	...	...	...	2	1	...	..	2	1	2
Relapsing Fever	...	...	...	...	...	...	..	...	...	...	..	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	..	..	...
Puerperal Fever	...	...	...	6	...	...	...	1	5	...	..	6	..	...
Plague	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Phthisis	{	Under Tuberculosis Regulations, 1908	...	26	..	...	...	5	11	10	...	6	20	..
		Under Tuberculosis Regulations, 1911	...	56	...	1	9	17	24	5	...	36	20	...
		Others	...	2	...	...	...	...	2	...	...	2	...	...
Totals	...	...	325	7	46	105	55	76	27	9	163	162	139	

Isolation Hospitals—Names and Situations—

Crozier Lodge, Newtown, Carlisle—Total Available Beds 50

Smallpox Hospital, Belle Vue „ „ „ 12

Number of Diseases that can be concurrently treated, 4.

ZYMOTIC DISEASES.

Table showing the number of notifications during each of the four quarters of the year ending 1911:—

Notifiable Disease.	Number of Notifications sent in during				Totals.
	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	
Scarlet Fever ...	60	21	20	38	139
Diphtheria (including Membranous Croup)	11	8	10	15	44
Erysipelas ...	16	10	10	13	49
Enteric or (Typhoid) Fever	0	0	2	1	3
Typhus Fever ...	0	0	0	0	0
Smallpox ...	0	0	0	0	0
Puerperal Fever ...	2	1	1	2	6
Totals ...	89	40	43	69	241

Total number of notifications of each class of notifiable Infectious Disease:—

Notifiable Disease.	1909	1910	1911
Scarlet Fever ...	119	248	139
Diphtheria (including Membranous Croup) ...	36	37	44
Erysipelas ...	79	60	49
Enteric or (Typhoid) Fever ..	1	6	3
Typhus Fever ...	8	0	0
Smallpox ...	0	0	0
Puerperal Fever ...	1	6	6
Totals ...	244	357	241

Deaths from the principal Zymotic Diseases, including Diarrhœa and Dysentery:—

Year	1907	1908	1909	1910	1911
Total number of deaths	77	42	30	21	96

Table showing the Number and Nature of the Deaths from the principal Zymotic Diseases,
1901 to 1911.

NOTIFIABLE DISEASE.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Smallpox .....	...	...	4	...	...	...	...	...	...	...	...
Measles... ..	5	10	3	7	17	1	54	...	11	3	13
Scarlet Fever	6	17	5	3	5	9	6	1	6	2	2
Diphtheria	14	41	20	14	6	5	3	4	4	2	4
Whooping Cough.....	14	5	20	20	11	5	11	23	8	11	21
$\left\{ \begin{array}{l} \text{Typhus} \\ \text{Enteric or Typhoid} \\ \text{Simple continued} \end{array} \right.$	...	...	...	...	5	...	...	...	1	...	...
	5	7	3	3	3	1	...	...	...	...	...

Diarrhoea	20	2	3	16	19	13	3	14	...	3	56
Totals	64	82	58	63	66	34	77	42	30	21	96
Rate per 1000 of population.....	1.3	1.7	1.2	1.3	1.3	0.7	1.5	0.84	0.5	.40	2.06

Tables showing the several localities where deaths from
the principal Zymotic Diseases occurred :—

LOCALITY.	Smallpox	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria	Typhus Fever.	Enteric or (Typhoid) Fever.	Diarrhoea.	Totals.
<i>St. Mary's Sub-District—</i>									
Fever Hospital	1	1	..	..	..	..	2
Cumberland Infirmary	1	..	..	2	3
Milbourne Street	3	..	..	..	1	4
Monksclose Road	1	..	..	..	2	3
Lewthwaite's Square	1	..	..	..	..	1
Clift Street	1	..	..	..	..	1
Milholme Terrace	1	..	..	..	..	1
Northumberland Street	1	..	..	..	..	1
Wigton Road	1	1
Port Road	1	1
Dale Street	1	1
Lorne Crescent	1	1
Scotch Street	1	..	..	..	..	..	..	1
Broad Street	1	..	..	..	..	1
Stainton Street	1	..	..	..	..	..	..	1
Bridge Street	1	1
Queen Street	1	1
Wigton Road	1	1
Young's Lane, Rickergate	1	1
Gibbon's Court, Rickergate	1	1
Charlotte Street	1	1
Bridge Lane	1	..	..	..	..	..	..	1
Denton Street	2	2
Barwise Nook	1	1
Newtown Road	1	1
Trafalgar Street	1	1
Mary Street	1	1
Burns Street	1	1
Newcastle Street	1	1
Peter Street	1	1
Westmorland Street	1	1
Cumberland Street	1	..	..	..	..	..	..	1
Rigg Street	2	2
West Walls	1	1
Colville Street	1	1
Shaddongate	3	3
Collingwood Street	1	1
Byron Street	1	1
Garfield Street	1	..	..	..	1
Barley Stack Lane	1	1
Clift Street	1	..	..	..	..	..	1
<i>St. Cuthbert's Sub-District—</i>									
Gloucester Road	1	1
King Street	2	2
Brook Street	1	..	..	..	1	2
South View Terrace	1	..	..	..	..	1
Carried forward	4	2	12	2	..	..	39	59

Zymotic Diseases—continued.

LOCALITY.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria	Typhus Fever.	Enteric or (Typhoid) Fever.	Diarrhoea.	Totals.
Brought forward	...	4	2	12	2	...	...	39	59
South Street	1	...	...	...	1	2
St. Nicholas Street	1	...	...	...	1	2
Oswald Street	...	1	...	1	...	...	...	...	2
South John Street	...	3	...	1	...	...	...	...	4
Union Street	...	1	...	2	...	...	...	1	4
Brook Street	...	1	...	...	...	...	...	...	1
Sowerby Street	...	1	...	...	...	...	...	...	1
Thompson Street	1	1	...	...	...	2
Alexander Street	1	...	...	...	1	2
Blackfriars Street	1	1
Margaret Street	...	1	...	...	...	...	...	...	1
William Street	1	...	...	...	1	2
South George Street	2	2
Saddle Lane, Botchergate	...	1	...	...	...	...	...	2	3
Linton Street	1	1
Tait Street	1	1
Crown Street	2	2
Harrison Street	2	2
Lowther Arcade	1	...	...	...	1
St. Stephen's Street	1	1
Totals	13	2	21	4	...	...	56	96

SCARLET FEVER.

(Syn. Scarlatina).

The number of cases of Scarlet Fever notified or brought to my notice by other means during 1911 was 139, being a decrease of 109 on the figure for 1910.

The number of deaths registered from this disease was two, equal to a rate of .04 per 1,000 of the census population, or 1.4 per cent. of the notified cases.

Of the 139 cases thus recorded, 104 or 74.8 per cent. were isolated in Hospital.

During 1910, 2 deaths were registered from this disease, or equal to a rate of .03 per 1,000 of the then estimated population.

Out of the total number of cases notified four exhibited none of the symptoms or signs of the disease; all four appeared to have had some simple febrile attack.

RETURN CASES OF SCARLET FEVER.

Three cases of Scarlet Fever occurred in three houses, to which a patient recently isolated in Hospital had returned. Of these three cases, one occurred in Hope's Court, Port Road, the cause of the infection being probably the nasal discharge, which persisted in a child who returned home after nearly 11 weeks' treatment in hospital.

LOCALITY OF THE THREE RETURN CASES.

Address.	Date of Notification of first case.	Date of Discharge of first case from Hospital.	Date of Notification of second cases at the same house.
Red Bank Square, Currock ...	27th Sept. 3rd Oct. (1910)	25th Nov. (1910) (Otorrhœa)	3rd January (1911)
Regent Street	10th Nov. (1910)	30th Dec. (1910)	8th January (1911)
Hope's Court, Port Road ...	4th Dec. (1910)	15th Feb. (1911) (Rhinorrhœa)	2nd April (1911)

Table showing simultaneous and secondary cases of
Scarlet Fever:—

Address.	Date of Notifica- tion of first case or cases.	Date of notifica- tion of a second or more cases at the same house.	Whether isolated in Hospital or not.
Compton Street	29th January	16th October	Yes
East Norfolk Street	30th January	2nd February	Yes
Warwick Road	4th February	6th February	No
Wood Court, Wood Street ...	10th February	...	Yes
	10th February		Yes
Railway Place, Sallyport ...	13th February	...	Yes
	13th February		Yes
Milbourne Street	23rd February	7th June	Yes
Wood Street	15th March	22nd March	Yes
		22nd March	Yes
Castle Street	17th March	...	No
	17th March		No
George Street	14th August	...	No
	14th August		No
Charlotte Street	8th September	11th September	Yes
		15th September	Yes
		15th September	Yes
Milbourne Street	12th October	24th November	Yes
Portland Place	23rd October	8th November	No
	23rd October	30th November	No
	23rd October		No
Castle Street	30th October	...	Yes
	30th October		Yes

Table showing yearly number of cases of Scarlet
Fever notified since 1891:—

Year	No.	Year	No.	Year	No.
1891	564	1898	120	1905	378
1892	103	1899	61	1906	670
1893	181	1900	99	1907	177
1894	77	1901	363	1908	89
1895	64	1902	280	1909	119
1896	162	1903	101	1910	248
1897	258	1904	180	1911	139

Table giving name of school and number of cases in which a school child was infected with Scarlet Fever during 1909, 1910, and 1911:—

			1909.	1910.	1911.
			<hr/>	<hr/>	<hr/>
Ashley Street	...	...	8	23	8
Bishop Goodwin	...	...	14	22	9
Brook Street	...	...	13	34	4
Caldewgate	...	...	3	4	14
Christ Church	...	...	1	3	2
Denton Holme	...	...	6	2	3
Fawcett	...	...	1	2	4
Higher Grade	...	...	1	3	1
Holy Trinity	...	...	0	3	1
Lowther Street	...	...	4	12	2
Norman Street	...	...	1	14	7
Robert Ferguson	...	...	8	7	2
St. Bede's	...	...	0	2	2
St. Cuthbert's	...	...	1	3	5
St. John's	...	...	7	5	3
St. Patrick's	...	...	2	0	0
St. Stephen's	...	...	1	0	7
Botcherby	...	...	3	6	0
Stanwix	...	...	0	1	0
Upperby	...	...	0	0	0
Private Schools	...	...	3	10	6
			<hr/>	<hr/>	<hr/>
			77	156	80
			<hr/>	<hr/>	<hr/>

DIPHTHERIA.

(Including Membranous Croup).

The number of cases of Diphtheria notified during 1911 was 44, as against 37 during 1910 and 36 during 1909.

Of these, 2 occurred in St. Mary's and 24 in St. Cuthbert's Sub Registration Districts respectively.

Three of the 44 cases were found to be suffering from another disease and not from Diphtheria, viz.:—

Scarlet Fever	...	...	...	1
Quinsy	...	...	...	1
Post Measles laryngeal Catarrh	...	...	...	1
				—
				3
				—

During 1911, four deaths were registered as due to this disease, the death-rate being equal to .08 per 1,000 of the census population, or 9.09 per cent. of the cases notified.

Of the 44 cases, 33, or 75 per cent., were removed to the Isolation Hospital.

No return case occurred during the year.

ANTITOXIN.

During 1911 one application only was made by a medical man for the free supply of Anti-Diphtheric Serum, 6,000 units being supplied to him.

Tabular statement—total number of cases of Diphtheria during the year 1911—with action taken thereon:—

Date.	Locality.	Insanitary conditions present	Action taken.
1911			
16th Jan.	Arthur Street	None	Removed to Isolation Hospital and disinfection
19th „	Harvey Street	Do.	Do.
25th „	Caldewgate	Do.	Do.
29th „	Westmorland St.	Do.	Do.
31st „	East Norfolk St.	Do.	Do.
1st Feb.	Wood's Court, Wood Street	Do.	Do.
7th „	Richardson Street	Do.	Do.
4th Mar.	Spencer Street	Do.	Do.
16th „	Victoria Place	Defective paving of area	Do.
18th „	Irishgate Brow	None	Do.
31st „	Westmorland St.	Drain apparently defective	Do.

DIPHTHERIA—continued.

Date.	Locality.	Insanitary conditions present.	Action taken.
1911 2nd April	Broad Street	None	Removed to Isolation Hospital and disinfection
28th „	Cumberland Infirmary	Do.	Do.
29th „	Grasmere Street	Do.	Do.
6th May	South Street	Notice served for defect	Do.
10th „	Delta Court, William Street	None	Do.
21st „	South Western Terrace	Do.	Do.
27th „	Victoria Place	Do.	Isolated at home, and subsequent disinfection.
24th „	Bower Street	Do.	Removed to Isolation Hospital and disinfection.
1st July	Warwick Road	Do.	Do.
14th „	Raven Street	Do.	Do.
16th „	Ashley Street	Do.	Isolated at home, and subsequent disinfection
17th „	Princess Street	Do.	Removed to Isolation Hospital and disinfection
24th „	Oswald Street	Do.	Do.
30th „	Shield's Court, Water Street	Do.	Do.
4th Aug.	Cumberland Infirmary	Do.	Do.
27th „	Lowther Arcade	Do.	Isolated at home, and subsequent disinfection
28th „	Monksclow Road	Do.	Removed to Isolation Hospital and disinfection
11th Sept.	Thomson Street	Do.	Isolated at home, and subsequent disinfection
2nd Oct.	Court Street	Do.	Removed to Isolation Hospital and disinfection
4th „	South Street	Do.	Do.
16th „	East Norfolk St.	Do.	Do.
21st „	Garfield Street	Do.	Isolated at home, and subsequent disinfection
28th „	Greystone Road	Do.	Do.
30th „	John Street, Caldewgate	Dampness in kitchen and bedroom	Removed to Isolation Hospital and disinfection
30th „	Botchergate	None	Isolated at home, and subsequent disinfection
31st „	Tait Street	Do.	Do.
15th Nov.	Brewery Row	Do.	Removed to Isolation Hospital and disinfection
20th „	Port Road	Do.	Do.
25th „	Grey Street	Do.	Do.
29th „	Morton Street	Do.	Do.
1st Dec.	Newtown Road	Do.	Do.
12th „	London Road	Do.	Isolated at home, and subsequent disinfection
22nd „	Portland Place	Do.	Removed to Isolation Hospital and disinfection

Table giving name of school and number of cases in which a school child was infected with Diphtheria during 1909, 1910, and 1911:—

			1909.	1910.	1911.
			<hr/>	<hr/>	<hr/>
Ashley Street	...	...	1	2	1
Bishop Goodwin	...	...	1	1	2
Brook Street	...	...	0	1	3
Caldewgate	...	...	1	1	0
Christ Church	...	...	0	1	2
Denton Holme	...	...	0	1	0
Fawcett	...	...	0	1	1
Higher Grade	...	...	0	0	0
Holy Trinity	...	...	0	0	2
Lowther Street	...	...	0	0	1
Norman Street	...	...	0	1	2
Robert Ferguson	...	...	1	0	1
St. Bede's	...	...	3	0	0
St. Cuthbert's	...	...	1	2	1
St. John's	...	...	0	0	0
St. Patrick's	...	...	1	0	0
St. Stephen's	...	...	0	0	2
Botcherby	...	...	0	0	0
Stanwix	...	...	0	0	0
Upperby	...	...	0	0	0
Private Schools	...	...	1	2	1
			<hr/>	<hr/>	<hr/>
			10	13	19
			<hr/>	<hr/>	<hr/>

SMALLPOX.

The district was free from Smallpox during 1911.

PUERPERAL FEVER.

During 1911 six cases were notified, and one death resulted from this disease.

In each case careful investigations were made, the necessary precautions taken, and where a midwife was attending, if deemed necessary, she was at once suspended, and the cleansing of her clothing, bag, and appliances carried out.

MEASLES.

Thirteen deaths were registered during 1911 as due to this disease, a mortality rate equal to .27 per 1,000 of the census population.

Death from measles is almost entirely confined to young life. The disease is very infectious, therefore too much care and caution cannot be exercised in isolating the affected children. Yet how many mothers treat the disease as a trifling ailment, and one which the child is bound to get; both these ideas are fallacious, for Measles is a most fatal infective disease in children, and responsible for an appalling loss of life every year. It is untrue to state that every child must take Measles, for many persons go through life without contracting the disease, and it is important to keep always in mind the fact that the longer the infant or young child can be protected, the less likely is he to contract the disease.

SCHOOL CLOSURE.

No school or school department was closed during the year on account of disease.

The following figures do not take into account cases of Measles occurring in children not attending school, but only in those children actually attending, and give only a slight idea of the amount of suffering, distress, and inconvenience caused in homes in which the disease occurred :—

Figures showing actual number of sufferers among school children from several non-notifiable diseases during 1911:—

Name of School (All Departments)	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
Ashley Street ...	6	1	23	342	372
Bishop Goodwin...	69	30	30	23	152
Brook Street ...	103	33	28	28	192
Caldewgate ...	8	2	20	180	210
Christ Church ...	33	21	15	19	88
Denton Holme ...	8	3	...	79	90
Fawcett ...	10	...	2	30	42
Higher Grade ...	4	1	...	3	8
Holy Trinity ...	...	7	4	20	31
Lowther Street ...	31	14	13	28	86
Norman Street ...	67	15	18	24	124
Robert Ferguson...	31	15	31	106	183
St. Bede's ...	3	10	8	40	61
St. Cuthbert's ...	16	6	14	25	61
St. John's ...	14	3	9	4	30
St. Patrick's ...	7	3	3	7	20
St. Stephen's ...	27	1	13	5	46
Totals ...	437	165	231	963	1796

Table showing the total number of school children who suffered from several non-notifiable diseases during 1910 and 1911:—

Year.	Measles.	Chicken Pox.	Whooping Cough.	Mumps.	Total.
1910	104	146	401	185	836
1911	437	165	231	963	1796

ANNUAL MORTALITY FROM MEASLES, 1874—1911.

Year.	No. of Deaths.	Year.	No. of Deaths.
1874	... 1	1893	... 77
1875	... 56	1894	... 20
1876	... 5	1895	... 5
1877	... 12	1896	... 1
1878	... 2	1897	... 1
1879	... 22	1898	... 59
1880	... 4	1899	... 5
1881	... 0	1900	... 13
1882	... 36	1901	... 5
1883	... 11	1902	... 10
1884	... 0	1903	... 3
1885	... 22	1904	... 7
1886	... 4	1905	... 17
1887	... 16	1906	... 1
1888	... 3	1907	... 54
1889	... 44	1908	... 0
1890	... 1	1909	... 11
1891	... 22	1910	... 3
1892	... 3	1911	... 13

ENTERIC FEVER.

(Syn. Typhoid Fever.)

Three cases of Enteric Fever were notified during 1911, but one case was found not to be suffering from the disease. Of the two actual cases one only would appear to have had origin within the City. The patient was a young woman, a factory worker.

The other case was an in-patient at the Cumberland Infirmary, who was removed to the Isolation Hospital, the home of the patient being at Newcastleton, Roxburghshire, Scotland.

The illness in the third case was influenza and pneumonia.

All three cases recovered.

Tabular statement of the cases notified as Enteric (Typhoid) Fever during the year 1911, with action taken.

Date.	Locality.	Insanitary conditions present.	Action taken.	Result.
30th Aug.	Lorne Street	None	Isolated at home and subsequent disinfection	Cured
30th Aug.	Cumberland Infirmary	None	Removed to Isolation Hospital	Cured
5th Dec.	Trevor St. North	None	Removed to Isolation Hospital	Cured

ENTERIC (TYPHOID) FEVER IN CARLISLE.

						Annual No. of Cases.	
BEFORE ADOPTION OF NOTIFICATION ACT.	Typhoid Cases estimated from the deaths on the basis of the case mortality of Enteric (Typhoid) Fever during the first 18 years of compulsory notification.	1874	172	Average of 8 years, 99
		1875	...	...	...	180
		1876	...	...	...	75
		1877	...	...	...	37
		1878	...	...	...	82
		1879	...	...	...	82
		1880	...	...	...	112
		1881	...	...	...	52
		1882	67	Average of 8 years 53.12
		1883	...	...	...	60
		1884	...	...	...	52
		1885	...	...	...	7
		1886	...	...	...	45
		1887	...	...	...	127
		1888	...	...	...	60
		1889	...	...	...	7

ENTERIC (TYPHOID FEVER—continued.

Cases of Enteric or (Typhoid) Fever notified during 22 years of compulsory notification.	Annual No. of Cases.				
	1890	1891	1892	1893	1894
	21	18	32	20	15
	1895	20	13	19	22
	1896	19	7	19	16
	1897	16	6	15	7
	1898	5	1	2	1
	1899	2	1	6	3
	1900	1	6	3	
	1901	1	6	3	
	1902	1	6	3	
	1903	1	6	3	
	1904	1	6	3	
	1905	1	6	3	
	1906	1	6	3	
	1907	1	6	3	
	1908	1	6	3	
	1909	1	6	3	
	1910	1	6	3	
	1911	1	6	3	

TYPHUS FEVER.

The City was free from Typhus Fever during 1911.

EPIDEMIC POLIOMYELITIS.

No notification of this disease was received during 1911.

Following upon my final report upon the outbreak of the above disease in Carlisle during 1910, and the receipt of the memorandum from the Local Government Board upon the advisability of its compulsory notification, the Carlisle City Council, at a meeting held on Tuesday, 9th January, of this year, resolved that the Infectious Diseases (Notification) Act, 1889, should apply in the district of

the said City to the diseases known as Acute Poliomyelitis, and Cerebro-Spinal Fever, and that this resolution come into force on the 1st day of March, 1912.

ISOLATION HOSPITAL.

Table showing number of cases removed to Hospital :—

Diseases.	No. of cases admitted	No. of cases recovered.	No. of cases died.
Scarlet Fever	104	103	*1
Diphtheria	33	32	1
Enteric (Typhoid) Fever	2	2	..
Totals	139	137	2

* Notified as diphtheria, see notes under that heading.

NOTIFICATION FEES.

The total amount paid in fees for notifications during 1911 was £45 17s. 6d.

DIARRHŒA.

Fifty-six deaths from this disease were registered during 1911, as against three in 1910 and none in 1909.

The intensity of epidemic diarrhœa varies very considerably year by year.

Deaths from this disease are more numerous during the hotter months of the year, viz., July, August, and September, and there is a strong relationship between the occurrence of Epidemic Diarrhœa, temperature, and other atmospheric and telluric (earth) conditions, a hot dry

summer being usually associated with an increase in the number of deaths from Diarrhœa, and a cool wet summer with a decrease.

Forty-four out of the 56 deaths in the City from Diarrhœa took place during the very hot and dry months of August and September, 30 deaths occurring during the former month and 14 during the latter.

It will be observed from the foregoing remarks that the conditions which favour the occurrence of Diarrhœa are such as also favour the dissemination of dust and dirt, an increase in the number of house flies, increased susceptibility of all food stuffs to rapidly decompose, and these are the most important exciting causes of the malady.

So that with the approach of hot weather, greater precautions should be taken to prevent decomposition and contamination of food stuffs, especially by flies and filth, *e.g.*, blown garbage, dried excreta, and like materials, readily carried about by air currents, the pernicious effects of which are fostered by the prevailing favourable atmospheric temperature. Particular care should be taken with milk and other foods which readily decompose in warm weather, and which form the principal diet of infants, amongst whom the greater number of deaths from Diarrhœa is found.

A warning was again issued by means of a poster displayed at the entrance of all the lanes and courts in the poorer parts of the City, pointing out to householders and other the prevalence of the disease in hot weather, and the precautions which should be taken with regard to the care and the food of infants and young children, &c.

See Zymotic Table, page 43 for locality of deaths.

MORTALITY FROM DIARRHŒA AND ENTERIC (TYPHOID) FEVER,
1874-1911.

Year.	DEATHS FROM DIARRHŒA.															Deaths from Enteric (Typhoid) Fever.
	Autumn Quarter. No. Regis- tered.	Rate per- 1000 of population	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Total for Year.	No.
																Registered.
1874	35	1.50	2	2	...	...	1	1	6	20	9	6	...	3	50	23
1875	27	1.30	2	...	4	1	2	4	5	12	10	2	...	2	44	24
1876	12	1.10	3	1	3	3	1	...	2	5	5	1	6	7	37	10
1877	10	.84	2	1	2	1	2	2	2	6	2	1	3	4	28	5
1878	26	1.06	1	2	1	1	3	3	9	8	9	1	1	1	40	11
1879	...	.34	2	1	1	1	...	2	2	2	...	...	1	...	12	11
1880	3	1.20	...	...	5	...	...	...	3	7	21	5	1	...	42	15
1881	...	.50	...	2	...	2	...	2	2	2	3	3	...	2	18	7
1882	1	.55	...	1	...	...	...	1	5	7	5	1	...	...	20	9
1883	8	.45	...	2	...	...	...	...	...	3	5	6	1	...	17	8
1884	14	.61	2	...	...	1	1	1	7	3	4	3	1	...	23	7
1885	4	.26	1	1	1	...	...	1	2	2	...	...	1	1	10	1
1886	8	.60	1	2	...	...	...	2	1	1	6	7	1	2	23	6
1887	7	.36	1	...	1	2	...	2	...	5	2	1	...	...	14	17
1888	8	.23	1	...	1	1	...	...	...	3	5	1	...	1	13	8
1889	6	.27	2	1	...	...	...	...	...	5	1	1	...	1	11	1
1890	16	.54	...	...	2	...	1	...	1	7	8	1	1	1	22	2
1891	5	.22	1	...	...	...	...	1	1	2	2	2	...	...	9	2
1892	2	.10	1	...	...	...	...	...	...	...	2	1	...	...	4	3
1893	9	.49	...	2	2	2	...	2	...	2	7	1	2	...	20	5
1894	1	.09	...	...	...	...	...	...	...	...	1	1	2	...	4	2
1895	3	.24	2	1	...	1	...	...	1	...	2	3	...	...	10	4
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
1897	4	.21	...	...	2	1	...	...	1	...	3	2	...	...	9	3
1898	16	.57	...	...	2	...	1	1	1	4	11	2	1	1	24	2
1899	10	.25	...	...	...	...	...	...	...	3	7	1	...	...	11	1
1900	7	.53	...	...	...	1	...	4	1	3	3	8	3	...	23	2
1901	11	.43	2	3	...	...	...	1	1	5	5	3	...	...	20	5
1902	1	.04	...	...	...	...	...	...	1	...	...	...	1	...	2	7
1903	1	.06	...	...	1	...	...	1	...	...	1	...	...	...	3	3
1904	7	.33	...	...	...	...	...	1	...	4	3	2	3	3	16	3
1905	10	.39	3	...	...	1	2	...	...	5	5	2	1	...	19	3
1906	7	.26	2	...	1	1	...	...	...	2	5	...	2	...	13	1
1907	...	.05	...	...	...	...	1	2	...	...	...	...	...	...	3	...
1908	12	.28	...	...	...	1	...	...	2	3	7	...	...	1	14	...
1909	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1910	2	.05	...	...	...	...	...	...	...	...	2	...	1	...	3	...
1911	45	1.20	2	1	1	3	...	1	1	30	14	2	1	...	56	...

TUBERCULOUS DISEASES.

Under this heading are included deaths which have occurred from any of the following conditions:—

Pulmonary Tuberculosis (Consumption of the Lungs), Tuberculous Meningitis (including Acute Hydrocephalus), Tuberculous Peritonitis, Tabes Mesenterica, Generalised Tuberculosis, Tuberculosis of bones, joints, and other organs, Lupus, and Scrofula.

The total number of deaths registered during 1911 from Tuberculosis of all forms was 94, equal to 2.02 per 1,000 of the census population. Of this number 75 or 79.7 per cent. of the deaths were from Pulmonary Tuberculosis.

During 1910, 82 deaths were registered from all forms of Tuberculosis, of which 52, or 63 per cent., were from Pulmonary Tuberculosis.

The above figures show that during 1911 there was an increase of 12 in the number of deaths from all forms of Tuberculosis, and an increase of 23 in the deaths from Pulmonary Tuberculosis over 1910.

Nine deaths from Tuberculosis of all forms occurred in institutions within the City, and of this number 5 were due to Pulmonary Tuberculosis.

During 1911 voluntary notifications were received in two cases only of Pulmonary Tuberculosis.

PULMONARY TUBERCULOSIS.

(Syn. Consumption of Lungs, Phthisis.)

This is the most frequent of Tuberculous Diseases, and the most universally prevalent of all diseases amongst white races; it is an infectious disease, and is usually transmitted from man to man, but it is also capable of

being transmitted from animals to man by means of food, of which milk is the commonest example; but by far the greater number of cases are those which are caused by personal contact.

Tuberculosis is most common amongst the poor, and may be said to be a disease especially of the lower classes, and by whom it is usually disseminated, largely as a result of ignorance, dirty habits, and some of their characteristic modes of living.

The town dweller more easily falls a victim to the disease than one who lives in the country, and there is a close relationship between the overcrowding of rooms, houses, and workplaces, and this disease; the overcrowding of houses very often indicating poverty, and is almost invariably associated with an impure atmosphere.

Many trades predispose the worker to this disease, especially those occupations accompanied by the formation of dust, or where work is carried out in overcrowded, hot, and moist workrooms. Intemperance and other debilitating conditions are also important factors in the predisposition to this disease.

Phthisis depends largely upon known and remediable conditions, and improvement in hygiene and other matters has led to a decline in the death-rate from this disease, but the great difficulty experienced is to get the Consumptives of the labouring classes to carry out the simplest hygienic rules or methods of precaution, the result being that persons in dangerous stages of the disease occupy the same bed as another or several other members of the same household. It is thus that the disease secures most

of its victims, finally in many instances resulting in the infection of a whole household. Whereas, the precaution where possible of a separate bedroom, or, in the absence of this, a separate bed for the Consumptive, and the carrying out of certain simple rules would prevent this danger, and minimise the chances of infection of healthy persons.

Ages at death of the 75 cases of Pulmonary Tuberculosis in Carlisle during 1911:—

Under 1 Year.	1-2	2-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	All Ages.
...	...	2	1	19	21	11	12	6	3	75

The distribution of the deaths were as follows:—

St. Mary's Sub-Registration District	...	37
St. Cuthbert's Sub-Registration District	...	38
		—
		75
		—

Two other diseases of the chest, viz.:—Pneumonia and Bronchitis, were responsible for 98 deaths during 1911.

Disease.	St. Mary's.	St. Cuthbert's.	Total.
Broncho Pneumonia	8	14	22
Pneumonia (all other forms)	31	18	49
Bronchitis	15	12	27
	54	44	98

The following table gives the number and nature of voluntary notifications of Pulmonary Tuberculosis during 1911 :—

Date.	Sex.	Age.	Address.	Nature of Disease notified.
17th Jan.	Male.	20	Rosemary Lane	Phthisis.
22nd Apr.	Male.	25	The Castle	Phthisis.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1908.

Under the provisions of the above regulations 26 notifications of Pulmonary Tuberculosis were received, of which number 16 were by the Medical Officer of the Poor Law Infirmary, and 10 by Poor Law District Medical Officers.

In one instance the same patient was notified on three separate occasions, and in two other instances the same patient was notified on two occasions during the year.

This multiplicity of notifications is difficult to avoid, owing to the unsatisfactory and easy method by which a patient may take his discharge from a Poor Law Institution, and the facility with which re-admission may be gained shortly after discharge.

FORM A.

Notifications from Medical Officers of Poor Law			
Institutions of persons in their Institutions			
suffering from Phthisis ... ..	...	...	16

FORM B.

Notifications from District Medical Officers of the Carlisle Union of persons suffering from Phthisis in their districts	10
--	--------	----

FORM C.

Notifications from Superintendent Officers of Poor Law Institutions of the death in, or the removal of a Phthisis patient from the Institu- tion to another address	17
--	--------	----

FORM D.

Notifications from Relieving Officers of change of address of Phthisis patients in their districts		1
---	--	---

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1908.

Tabulated Statement showing particulars of cases notified to Medical Officer of Health during 1911, and action taken.

Consecutive No.	Sex.	Age.	Notified from Poor Law Institution.	Name of Poor Law Union.	Did the Patient leave Poor Law Institution before death.	Did the Patient go to his own residence or another Institution.	Changed Residence, i.e., Persons who did not enter Poor Law Institution.	Visits undertaken by Staff of Health Department.	Other actions taken by Health Department.	Result at the end of 1911.
1	Female	58 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
2	Female	52 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
3	Female	27 years	Yes	Carlisle	Yes	Went to own residence	...	Visited	Advice given Instruction paper left	Living
4	Male	30 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
5	Male	46 years	Yes	Carlisle	Yes	Not known	...	Not visited	...	Not known left district
6	Male	46 years	Yes	Carlisle	Yes	Left the City	...	Not visited	...	Not known left district
7	Male	40 years	Yes	Carlisle	Yes	Left the City	...	Not visited	...	Not known left district
8	Male	45 years	Yes	Carlisle	Yes	Left the City	...	Not visited	...	Not known left district
9	Male	47 years	Yes	Carlisle	No	...	...	Not visited	...	Dead
10	Female	35 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living

11	Male	34 years	Yes	Carlisle	Yes	Went to own residence	...	Visited	Advice given Instruction paper left	Living
12	Male	31 years	Yes	Carlisle	Yes	Went to own residence	...	Visited	Advice given Instruction paper left	Living
13	Male	46 years	Yes	Carlisle	No	...	...	Not visited	...	Living
14	Male	23 years	Yes	Carlisle	No	...	...	Not visited	..	Living
15	Male	46 years	Yes	Carlisle	Yes	Not known	...	Not visited	...	Not known left district
16	Male	19 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Dead
17	Female	18 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
18	Male	28 years	Yes	Carlisle	Yes	Went to own residence	..	Visited	Advice given Instruction paper left	Living
19	Male	44 years	Yes	Carlisle	No	...	...	Not visited	...	Living
20	Female	22 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
21	Male	59 years	Yes	Carlisle	No	...	...	Not visited	...	Living
22	Male	35 years	Yes	Carlisle	No	...	...	Not visited	...	Dead
23	Female	40 years	No	Carlisle	...	...	...	Visited	Advice given Instruction paper left	Living
24	Male	47 years	Yes	Carlisle	Yes	Left the City	...	Not visited	...	Not known left district
25	Male	19 years	No	Carlisle	..	...	Yes	Visited	Advice given Instruction paper left	Living
26	Male	37 years	No	Carlisle	..	...	...	Visited	Advice given Instruction paper left	Living

TUBERCULOSIS (HOSPITALS) REGULATIONS, 1911.

The above regulations, made by the Local Government Board, came into operation on 1st May, 1911. The regulation is an extension of the Tuberculosis Regulations of 1908, and applies to every person suffering from Pulmonary Tuberculosis who is an in-patient or an out-patient of any hospital, dispensary, or similar institution for the treatment of the sick, which is partially or wholly supported otherwise than from rates and taxes.

By Article IV (1) A Medical Officer of any hospital, dispensary, &c., within a period of 48 hours after his first recognition of Pulmonary Tuberculosis in a person upon whom he is in medical attendance at the hospital, shall complete, sign, and transmit a notification of the case in the form shown in the schedule to this order to the Medical Officer of Health for the area within which the Hospital is situated.

Under the above regulations the following cases were notified from the commencement on 1st May to the end of the year:—

Article IV—

(1) (a)	Total number of notifications received ...	56
(b)	Total number of notifications relating to residents within the City area ...	54
(2) (a)	Total number of notifications received whose address was not within the City area	2
(b)	Total number of notifications transmitted to the Medical Officer of Health for the area in which the patient resided	2

Total number of cases notified as in-patients 25

Total number of cases notified as out-patients 31

—
56
—

Upon receipt of the notification in 46 of the 54 cases the residence of the patient was visited by a Sanitary Inspector, and when the patient was a home patient advice was given, an instruction paper left with the patient, and in cases too poor to afford to buy one, an enamelled spit cup or a spit bottle was provided by the Health Department. In the cases where the patient was in a Sanatorium or Hospital, advice was given to the relations or friends and an instruction paper left with them.

Upon receipt of the death returns from the Sub-Registrars, deaths from Pulmonary Tuberculosis were picked out, and the houses, as many as possible, again visited, the supervision of cleansing being carried out by a Sanitary Inspector, and where possible the walls, &c., of the room where the consumptive had spent his last days, being sprayed with a 4% solution of Formaldehyde.

PHTHISIS—SANATORIUM AND HOSPITAL ACCOMMODATION.

Copy of reply sent in answer to the enquiry by the Local Government Board.

Classes for which accommodation is provided.	By whom provided.	Where situated.	Total number of beds.	How are patients selected?	Are patients under the care of a resident Medical Officer?	What charge, if any, is made for the use of Beds?	Do the Sanitary Authority use— (1) their Isolation Hospital, or (2) their Small-pox Hospital for cases of Phtthisis?	Do the Sanitary Authority reserve Beds in any Phtthisis Sanatorium; If so, how many, and in what Sanatorium?	Do the Sanitary Authority provide portable open-air Shelters or Tents?
(a) Early cases. Yes.	Managed by a Committee, Medical and Lay, has a Doctor and Solicitor as Joint Secretaries. Kept up by public subscriptions and fees. Is associated with the Cumberland branch of the National Association for the prevention of Consumption.	Called the Blencathra Sanatorium, and situated on the sheltered slope of one of the Cumberland mountains at Threlkeld.	Thirty to thirty-six.	Most of the patients are sent direct by their Medical Attendant or Hospital or Dispensary Physician. Some are also examined by the Resident Medical Officer in the districts where Committees associated with the Sanatorium exist. Some cases are also examined by me as School Medical Officer for the Charity Organisation Society.	Yes. Dr. Wilbert Goodchild.	Adults from any parts of Cumberland, 30/- per week; other districts, £2 per week. Under 12 years, from any part of Cumberland, 17/6 per week; other districts, 25/- per week.	No.	No.	No.
(b) Intermediate cases. Yes.									
(c) Advanced cases are taken in, but the Committee do not care to have them.									

Have the Council, or any Private Body, provided a Dispensary? If so, give particulars. No.

CANCER.

The following figures include all registered deaths from causes comprised within the general term Cancer, the number of deaths thus registered during 1911 was 45, as against 47 in the year 1910.

The age distribution was as follows:—

Age.				Number.
1— 5 years	...	...	...	1
5—15	„	...	...	2
15—25	„	...	...	2
25—35	„	...	...	5
35—45	„	...	...	5
45—55	„	...	...	6
55—65	„	...	...	11
65—75	„	...	...	7
75 and upwards	...	...	...	6
Total				45

INQUESTS.

The City Coroner held 47 inquests during the past year.

Of this number 39 were held upon the bodies of those who had been resident in the City, and 8 upon the bodies of persons who had resided in other districts of the County but who died within the City.

Seven of the inquests were held upon the bodies of children under five years, four of these being children under one year

The finding of the Jury in these seven cases respectively was:—

Cause.				Age.
Shock, result of being accidentally burned				4 years
Do.	do.	do.	...	3 „
Pneumonia, result of accidental scalding				10 months
Suffocation, accidentally overlaid in bed...				3 weeks
Shock, result of being accidentally scalded				2 $\frac{8}{12}$ years
Misadventure, accidentally poisoned				6 months
Natural causes, convulsions				1 month

MORTUARY.

During 1911, 11 bodies were removed to the Public Mortuary, West Walls, and post-mortem examinations were performed upon 4 of the bodies at the Mortuary.

UNCERTIFIED DEATHS.

During the past year 13 deaths were registered in which no certificate was given by a medical man, and in which no Coroner's Inquest was held.

During 1910, 12 such deaths were registered.

The 13 deaths in question were registered as follows :—

No.	Sex.	Age.	Cause of Death as Registered.
1	Female	*2 months	Convulsions
2	Female	38 years	Apoplexy
3	Female	*6 days	Inanition
4	Female	*5 minutes	A convulsion
5	Female	55 years	Bronchitis
6	Male	18 months	Catarrh of the bowels
7	Female	12 months	Whooping cough
8	Male	*1 hour	Premature birth
9	Female	33 years	Heart failure
10	Female	74 years	Heart failure
11	Male	32 years	Aneurism
12	Female	69 years	Syncope
13	Female	66 years	Heart failure

* It will be observed that four of these thirteen uncertified deaths were infants under 1 year of age.

MIDWIVES ACT, 1902.

SUPERVISION OF MIDWIVES.

During 1911, 15 Midwives were on the register within the City.

At the end of each quarter of the year (and at all other times when necessary) I visited all the City Midwives who were registered with the Supervising Authority, making the necessary inspections of their books, bags, and appliances.

During the year prosecutions were instituted against three women who were practising midwifery, contrary to the provisions of the above Act. A conviction was obtained in each instance, and penalties of £3 3s., £1 1s., and 10s. 6d. respectively were imposed.

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF
NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries)	41	2	...
WORKSHOPS (Including Workshop Laundries)	504	33	1
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	..	...	...
TOTAL	545	35	1

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS, AND
WORKPLACES.

Particulars.	Number of Defects.			Number of Pro- secutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	27	27	...	...
Want of ventilation	1	1	...	...
Overcrowding... ..	1	1	...	...
Want of drainage of floors ...	...	...	...	...
Other nuisances .. ...	...	..	...	...
<i>Sanitary accommodation :—</i>				
{ 1. Insufficient	1	1	...	...
{ 2. Unsuitable or defective	5	5	...	...
{ 3. Not separate for sexes	2	2	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of under- ground bakehouse (s. 101) ..	1	...	...	1
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100)	8	8	...	...
Other offences (Excluding offences relating to outwork which are in- cluded in Part 3 of this report)	6	6	...	...
Total	52	51	...	1

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107,					
	Lists received from Employers.					
	Sending twice in the year.			Sending once in the year.		
	Lists.	Outworkers.		Lists.	Outworkers.	
		Con-tractors.	Work-men.		Con-tractors.	Work-men.
Wearing apparel—						
(1) Making, &c....	4	...	6	2	...	2
(2) Cleaning and Washing ...	...	...	...	...	..	..
Total ...	4	...	6	2	...	2

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year				Number.
Important classes of work-shops, such as workshop bakehouses, may be enumerated here.	{	Workshops ...	...	221
		Domestic Workshops ...	...	28
		Bakehouses ...	...	71
		Total number of workshops on Register ...		320

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	3
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) :—	
Notified by H.M. Inspector	16
Reports (of action taken) sent to H.M. Inspector	20
Other ... ..	...
Underground Bakehouses (s. 101) :—	
Certificates granted during the year ... ..	...
In use at the end of the year	3

PUBLIC SLAUGHTER-HOUSES.

MEAT INSPECTION, &c.

During the year special examinations were made upon 95 diseased carcasses of meat at the Public Abattoir as compared with 102 during 1910.

The following table gives particulars of the carcasses examined :—

Animal	Total number of animals slaughtered	Number of carcasses examined	Number of cases in which the whole carcass was pronounced unfit for food	Number of cases in which portions of a carcass were pronounced unfit for food	Number of condemned carcasses affected with Tuberculosis
Oxen ...	3462	71	53	18	56
Sheep ...	15711	20	17	3	...
Calves ...	808	2	2	...	...
Pigs ...	4018	2	2	...	1
Goat ...	1	...	...	...	...
Totals ...	24000	95	74	21	57

Six carcasses of mutton were also condemned as unfit for human food at the licensed slaughter-houses upon the London & North Western and North Eastern Railway Companies' premises. All the carcasses were seized and destroyed.

During the Railway Strike in August, 24 carcasses of mutton and 8 fore-quarters of chilled beef were seized at the London & North Western Railway Company's Goods Depôt as being unfit for human food; the mutton and beef had been rendered unfit for food owing to the inability of the Railway Company to deliver.

HOUSING, TOWN PLANNING, &c., ACT, 1909.
HOUSING, TOWN PLANNING, &c., REGULATIONS,
1910.

Under and for the purposes of Section 17 of the above statutory provision, 104 dwelling houses were inspected during the year 1911.

The houses inspected comprise single and double roomed tenements, combined houses and shops, and a number of through houses of a self-contained character, with either a separate or common yard.

The property inspected for the purposes of the above Act was situated in Lonsdale's Lane, John Street, Church Street, Queen Street, and Rickergate.

Representation was made by me to the Local Authority that three dwelling houses, comprising 13 rooms, occupied by 4 families, and known as Nos. 19, 21, and 23, Rickergate, were in a condition so dangerous or injurious to health as to be unfit for human habitation. A Closing Order in each instance was made by the City Council acting as the Urban District Council, on the 9th May, 1911.

The owner of the houses Nos. 21 and 23 appealed against the Closing Order. An Inquiry was held on the 7th September, 1911, by W. R. Collin, Esq., one of the Board's Inspectors. The Board subsequently confirmed the Closing Order, which became operative on the 23rd October, 1911. An order for the demolition of the three houses was made on 12th April of the present year.

Representation was also made by me to the Local Authority that the dwelling houses known as Nos. 31, 33, 35, 37, 39, 41, and 43 Queen Street, comprising 22 rooms, 18 of which were occupied by 13 families, were in a condition so dangerous or injurious to health as to be unfit for human habitation. The Health Committee recommended that a Closing Order be made, which was confirmed by the Council on the 9th January of the present year.

With respect to the dwelling houses known as Nos. 2, 3, and 5, Bird-in-Hand Lane, and the houses Nos. 3, 4, and 8, Rayson's Court, Drovers Lane, set out in my Report for 1910, in which Closing Orders were made by the Council on the 13th April, 1910, the question of the consideration of the demolition took place on the 28th April, 1911, at which the Health Committee resolved not to proceed with the Demolition Order, the windows and doors of the houses of both properties concerned having in the meantime been securely barricaded.

With respect to the dwelling houses known as Nos. 13 to 47 and 42 to 52 Duke Street, and 1 to 41 Back Duke Street, set out in my report for 1910, a Demolition Order in each instance was made by the City Council, but at a subsequent meeting it was decided to wait six months before enforcing the demolition.

This period has not expired at the end of 1911, but the notice requiring the owner to forthwith take down the houses was served early in the present year.

Tabular statement of particulars in regard to dwelling houses inspected under and for the purposes of the Housing, Town Planning Act (Sec. 17), 1909:—

Number of dwelling houses inspected under and for the purposes of Sec. 17 of the Act of 1909	...	104
--	-----	-----

Number of dwelling houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	27
--	-----	-----	-----	-----	----

Number of representations made to the Local Authority with a view to the making of Closing Orders	16
---	-----	-----	-----	-----	----

Number of Closing Orders made	*3
-------------------------------	-----	-----	----

Number of dwelling houses the defects in which were remedied without the making of Closing Orders	Nil
---	-----

Number of dwelling houses which after the making of Closing Orders were put into a fit state for human habitation	Nil
---	-----	-----	-----	-----

Character of the defects found to exist:—General dilapidation of walls, floors, and ceilings, and also defects in drainage and paving.

*Closing orders were made in respect of 13 other houses by the Health Committee which were not confirmed by the Council until 9th January of the present year.

DISINFECTION.

A small Defries Disinfector has been erected by the Fever Hospital Committee at the Fever Hospital, and arrangements have been made by the Health Committee with the Fever Hospital Committee for the disinfection of infected bedding and other articles.

The arrangement is to be for 12 months, during which time the cost involved in working the disinfector, the wages of one man, and horse hire, &c., are to be borne by the City Council and the Rural District Council in shares based upon the average number of infectious cases for each district during the past five years.

The cost of two vans in course of construction for the conveyance of infected and disinfected goods is also to be borne by the two Authorities mentioned, and the work of disinfection within the City will be commenced as soon as the vans are completed.

SEWAGE WORKS.

During the past year I have paid several visits—all of them surprise visits—to the Sewage Works of the City, and am satisfied that the work is carried out by those employed there in a careful manner.

The several stages through which the sewage passes during the various processes of treatment are closely supervised, and the resulting effluent is satisfactory. The lagooned material does not appear to cause any discomfort to those working upon it, and whatever effluvium arises during carting is only appreciable at a slight distance; it is, however, essential that great care should be exercised by those removing this material so as to avoid possible complaints due to leakage from the carts when passing through the streets of the City.

AMBULANCE.

The Horse Ambulance provided by the Corporation is under the superintendence of the Head Constable, and is housed at the Chief Fire Station, Spring Gardens Lane. It is in keeping with modern requirements and is available for use by the general public in case of accident and injury by fire, &c., or its use may be obtained for the removal of any sick or convalescent person other than in infectious diseases (for which a special ambulance is provided).

During 1911 the Ambulance was engaged on 68 occasions privately, and fees amounting to £37 2s. 9d. were received through this source.

DAIRIES, COWSHEDS, AND MILKSHOPS.

I have visited all the cow byres within the City during the past year; on the whole the byres are in a fairly satisfactory condition.

In one or two cases where byres are situated in a field, the ground being unpaved is wet and easily polluted, and owing to the absence of proper drainage the polluted surface water has difficulty in getting away, making the surroundings of the byre very unpleasant, and calculated to have an injurious effect upon the cattle, and increases the chances of milk contamination.

The milk supply of the City consists partly of that from the byres within the City and partly from the surrounding rural districts of the County.

The dairy cattle stalled in the byres within the City are under the constant supervision of the City

Veterinary Surgeon, and the dairy buildings and other places from which milk is sold are regularly inspected by the staff of the Health Department, over which I have always exercised an active supervision.

COMMON LODGING HOUSES.

I visited the common lodging houses within the City during the past year, one or two of them on more than one occasion; generally they were found to be clean and orderly. There were no prosecutions during the year either of registered lodging house keepers or of any person keeping a common lodging house contrary to the provisions of the statute.

COVERED MARKETS.

In my Annual Report for 1908, 1909, and 1910, I reported upon the nuisance of dogs in the Covered Markets, and pointed out the danger to the health of the public from the excreta of such animals infecting the food products exposed for sale.

The Markets Committee have been anxious to put an end to the nuisance, and have had notices posted up at several points inside the Market, warning the public against bringing dogs into the building; some slight beneficial effect has followed this procedure, but there are still to be seen every day upon which the Market is opened, innumerable dogs running about and voiding their excreta about the interior of the Market. This is most marked, on a Saturday, when thousands of people purchase foodstuffs, and when large quantities of food are deposited for sale, some of it being in receptacles upon the market flags.

There is usually no difficulty in identifying the owner or owners of the dogs, and therefore stronger measures than those so far adopted should be taken to put a stop to the nuisance.

FRIED FISH AND POTATO SHOPS.

There are 32 fried fish and chip potato shops within the City, as compared with 35 in 1910.

I have no evidence of illness in the City due to the class of food sold at these shops (which generally speaking may be said to be good), although cases of illness similar in character to Enteric Fever have been observed from time to time in other towns, and said to be due to contaminated fish, or improperly cleaned fish being insufficiently cooked.

ICE CREAM SHOPS.

This commodity is prepared upon and sold from a number of premises within the City. It is a luxury which should have the most scrupulous attention and care during its manufacture and subsequent manipulation, but unfortunately this article, which during recent years has become very popular with the working classes, is often produced by dirty people, some of an itinerant class, and mostly foreigners, whose disregard for cleanliness during its preparation is a marked characteristic, the consequences of which may prove very disastrous, as exemplified by an outbreak of Enteric Fever which took place in the Borough of Eccles during November and December, 1910, mentioned in my report for the year 1910.

BAKEHOUSES.

There are 71 known bakehouses within the City, 3 of which are underground and certified by the City Council. All are regularly inspected.

Generally the bakehouses in the City are of an average class, but certain conditions with respect to the management of a number of them require to be closely watched, viz., the tendency to overcrowding in the smaller ones, and with the exception of perhaps three or four, an air of carelessness on the part of both women and men bakers with regard to the cleanliness of their immediate surroundings, and care during the making, storage, handling, and cooling of the food stuffs.

During the year proceedings were taken against the occupier of a confectioner's shop for using as a bakehouse an underground room, contrary to the provisions of the Factory and Workshops Act, 1901; a conviction was obtained, and a penalty of £1 1s. was inflicted.

WATER SUPPLY.

During 1911 samples of water were taken from a domestic tap and submitted quarterly to chemical and bacteriological examination, the quality of the water during the year being uniformly good. A slight tinted condition of the water was observed on several days during the year, a condition which may occur from time to time, but need not give rise to the slightest uneasiness or suspicion of contamination.

The chemical and bacteriological results of four samples of water are given in the following pages, together with the results of a special examination as to the action of the water upon lead.

Total monthly distribution of water from Cumwhinton covered reservoir during 1911:—

Month.	Number of Gallons.	No. of Gallons per head, per day.
January ...	52,420,000	30·19
February ..	45,800,000	29·20
March ...	49,540,000	28·42
April ...	49,170,000	29·26
May ...	56,410,000	32·49
June ...	57,190,000	34·41
July ..	61,600,000	35·48
August ...	61,890,000	35·65
September	57,195,000	32·87
October ..	54,118,000	31·17
November .	49,857,000	29·67
December .	50,300,000	28·97

Total output of water from Cumwhinton covered reservoir during the years 1909, 1910, 1911:—

Year.	Number of Gallons.	No. of Gallons per head, per day.
1909	629,455,000	30·77
1910	631,453,000	30·87
1911	645,490,000	31·48

REPORT ON WATER, CHEMICAL AND BACTERIOLOGICAL.

CHEMICAL ANALYSIS BY DR. HELLON, WHITEHAVEN.

REPORTS ON SAMPLES OF WATER FROM DOMESTIC TAP.

Results shown in grains per gallon.

1911.

CHEMICAL.	APRIL.	JULY.	OCT.	DEC.
Total Solid Matter in solution dried at 212° F	7.000	7.840	6.720	7.560
Chlorine existing as Chlorides	.595	.560	.560	.630
Free Ammonia ... ..	.001	traces	traces	traces
Albuminoid Ammonia ... ..	.003	.004	.004	.002
Nitrogen existing as Nitrates...	traces	traces	traces	traces
Oxygen absorbed in 15 minutes at 80° F ... ..	.033	.064	.060	.035
Oxygen absorbed in 4 hours at 80° F ... ..	.066	.117	.113	.058
Lead and other Poisonous Metals	None	None	None	None
Hardness before boiling ...	5 $\frac{1}{4}$ °	5 $\frac{1}{2}$ °	6°	6 $\frac{3}{4}$ °
Hardness after boiling ...	$\frac{1}{4}$ °	$\frac{1}{2}$ °	1°	$\frac{3}{4}$ °
Appearance in two-foot tube ...	Clear greenish- yellow	Slightly turbid greenish- yellow	Slightly turbid green	Clear green
Smell when heated to 100° F...	None	None	None	None
Microscopical Examination ...	Vegetable debris	Vegetable debris	Vegetable debris	Slight deposit of vegetable debris

BACTERIOLOGICAL EXAMINATION BY
PROF. DELÉPINE, MANCHESTER.

QUANTITATIVE ANALYSIS.									
A Aerobic micro-organisms growing for 3 days in nutrient gelatine at 20° C to 21° C.		Number of colonies in one gramme of water.				No. of kinds clearly recognisable.			
		APRIL.	JULY.	OCT.	DEC.	APR.	JULY.	OCT.	DEC.
Non-Liquefying Bacteria ...	11 } 12	32 } 36	0 } 8	3 } 22	1 } 2	2 } 4	0 } 2	2 } 5	
Liquefying Bacteria ...	1 }	4 }	8 }	19 }	1 }	2 }	2 }	3 }	
Other Micro-Organisms ...	...	...	...	...	...	...	...	...
B Anaerobic Micro-Organisms ...	...	...	...	...	...	...	...	...
QUALITATIVE ANALYSIS.		APRIL.	JULY.	OCT.	DEC.				
A Bacteria associated with sewage or faecal pollution ...	B. Coli communis not found in 10 C. C.	B. Coli communis found in 5 C. C.	B. Coli communis not found in 100 C. C.	B. Coli communis not found in 100 C. C.					
B Bacteria associated with disease	Not found	Not found	Not found	Not found					

A determination of the plumbo-solvent action of the water was made according to the method of the Local Government Board in all samples taken during the year, with the following results :—

Lead dissolved at 13° C—

	1st	2nd	3rd	4th	5th	Average.
APRIL { 50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	None.	·03	·03	·03	·03	·03

Lead dissolved at 15° C—

	1st	2nd	3rd	4th	5th	Average.
JULY { 50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	·04	·04	·04	·04	·04	·04

Lead dissolved at 14° C—

	1st	2nd	3rd	4th	5th	Average.
OCT. { 50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	·02	·02	·02	·02	·02	·02

Lead dissolved at 6° C—

	1st	2nd	3rd	4th	5th	Average.
DEC. { 50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	50 c.c.	
	·02	·02	·02	·02	·02	0·2

The above figures shew that the samples of water were only capable of taking up minute and innocuous quantities of lead under the most stringent experimental conditions.

CARLISLE PUBLIC BATHS.

Number of bathers during 1911.

The total number of bathers was 60,190, as compared with 57,680 in 1910 and 47,042 in 1909.

SWIMMING BATHS.				1st Class.	2nd Class.	Total.
Adults (both sexes)	...	...	...	3,236	13,870	17,106
Grammar School	...	...	...	685	...	685
Elementary School Children (Free)	...	...	...	...	12,779	12,779
Boys' Brigade, &c. (swimmers charged 1d. each)	...	...	...	...	8,003	8,003
Club and Contract Bathers (1st and 2nd Class)	...	...	...	...	...	7,385
PRIVATE BATHS.						
Adults (both sexes)	...	...	...	3,821	8,211	12,032
Vapour	...	...	...	153	...	153
Salt	...	...	...	...	2	2
TURKISH BATHS.						
Males	...	...	...	483	1,313	1,796
Females	...	...	...	10	239	249
Totals				...	...	60,190

METEOROLOGICAL STATISTICS, 1911.

OBSERVATIONS TAKEN AT THE CEMETERY BY
J. T. CHARLTON, ESQ.

The past year will be remembered as a year of remarkably high temperature. The hot summer was followed by a mild autumn, and the average temperature for the whole year was about 2 degrees higher than that of the preceding year, the mean shade temperature being 49.8 degrees as compared with 47.8 in 1910, and the mean temperature by instruments exposed to sunshine and frost 64.2 degrees as compared with 62.5 degrees in 1910. The highest reading for the year was 133 degrees in the sun on July 12th, the highest reading on record in this district; and the lowest reading was 12 degrees on February 2nd. The highest reading in the shade was 88 degrees on July 12th and the lowest 16 degrees on February 1st. The hottest months were July and August with the remarkably high mean of 63.5 and 62.5 respectively by shaded instruments, and 83.5 and 81.5 respectively by the exposed thermometers. In the previous year the highest average was in June with 79 degrees by the exposed thermometer, and August with 61 degrees by the shaded instruments. The following tables give a summary of the temperature readings:—

			Solar radiation Maximum.		Terrestrial Minimum.	Mean of exposed Thermometers.
January	...	...	84° on 30th	...	17° on 31st	43.9°
February	...	...	96° on 28th	...	12° on 2nd	46.8°
March	...	...	109° on 12th	...	23° on 13th	56.5°
April	...	...	113° on 23rd	...	22° on 11th	65°
May	...	...	127° on 30th	...	29° on 21st	76°
June	...	...	129° on 4th	...	28° on 14th	78.5°
July	...	...	133° on 12th	...	36° on 3rd	83.5°
August	...	...	128° on 8, 9, 10 & 13th	...	38° on 23rd	81.5°
September	...	...	126° on 1st	...	28° on 2nd	74°
October	...	...	105° on 10th	...	23° on 28th	60.1°
November	...	...	92° on 14th	...	23° on 10th	56.4°
December	...	...	78° on 18th	...	25° on 23rd	47.9°

			Shade Maximum.		Shade Minimum.	Mean Temperature.
January	...	...	53° on 25th	...	22° on 31st	41.6°
February	...	...	55° on 21st	...	16° on 1st	39.3°
March	...	...	51° on 1st	...	27° on 13th	42.0°
April	...	...	61° on 13th	...	26° on 5th	45.0°
May	...	...	81° on 28th	...	32° on 21st	56.0°
June	...	...	84° on 2nd	...	33° on 14th	58.5°
July	...	...	88° on 12th	...	41° on 3rd	63.5°
August	...	...	85° on 13th	...	39° on 23rd	62.5°
September	...	...	76° on 10th	...	32° on 22nd	57.2°
October	...	...	66° on 20th	...	25° on 28th	46.6°
November	...	...	59° on 3rd	...	25° on 10th	42.8°
December	...	...	55° on 8th	...	29° on 23rd	42.2°

			Mean at dew point.		Monthly range.		Greatest diurnal range.
January	...	...	34.5	...	31°	...	24° on 13th
February	...	...	34.3	...	39°	...	24° on 12th
March	...	...	34.2	...	24°	...	18° on 7th
April	...	...	36.1	...	35°	...	29° on 12th
May	...	...	48.7	...	49°	...	34° on 21st
June	...	...	51.3	...	51°	...	40° on 4th
July	...	...	55.9	...	47°	...	43° on 10th
August	...	...	57.4	...	46°	...	31° on 23rd
September	...	...	48.9	...	44°	...	35° on 4th
October	...	...	42.7	...	41°	...	33° on 29th
November	...	...	37.6	...	34°	...	20° on 3rd
December	...	...	40.4	...	26°	...	21° on 23rd

December was the month which showed the greatest barometrical fluctuations, and it was also the month of the greatest rainfall. The highest reading during the year was 30.610 inches on February 1st, as compared with 30.514 on October 14th last year, and the lowest reading was 28.752 on November 18th, as compared with 28.356 on November 7th. Details of the monthly variations of the barometer were as follows:—

		Highest reading.		Lowest reading.		Mean.		Monthly range.
January	...	30.556 on 31st	...	29.258 on 7th	...	30.045	...	1.298
February	...	30.610 on 1st	...	28.912 on 23rd	...	30.240	...	1.698
March	...	20.340 on 25th	...	29.010 on 9th	...	30.140	...	1.330
April	...	30.308 on 6th	...	29.034 on 29th	...	29.852	...	1.274
May	...	30.188 on 28th	...	29.352 on 3rd	...	29.983	...	0.836
June	...	30.430 on 7th	...	29.298 on 18th	...	29.864	...	1.132
July	...	30.516 on 10th	...	29.454 on 1st	...	30.150	...	1.062
August	...	30.194 on 14th	...	29.230 on 26th	...	29.560	...	0.964
September	...	30.198 on 16th	...	29.148 on 20th	...	29.835	...	1.050
October	...	30.454 on 10th	...	28.924 on 22nd	...	29.860	...	1.530
November	...	30.080 on 29th	...	28.752 on 18th	...	29.482	...	1.323
December	...	30.192 on 31st	...	28.588 on 11th	...	29.434	...	1.604

The rainfall for the year was about the average for this district, the drought in the summer being compensated for by an exceptionally wet period at the end of the year. In the twelve months the total rainfall was equal to 30.20 inches, as compared with 29.64 inches in the preceding year, but rain fell on 16 fewer days than in 1910. The days on which rain was recorded numbered 181, as compared with 197 in the preceding year. The statistics indicate no certainty of one month of the year being drier than another, because whilst July with little more than half an inch of rain was the driest month last year it was one of the wettest with $3\frac{1}{2}$ inches in the previous year. The heaviest fall in any month was in December with 4.73, whilst in the previous year February and August

had the unenviable record with over 4 inches. The rainfall details are as follows:—

			1911.			1910.	
			Inches.	Days.		Inches.	Days.
January	...	...	1.04	in 13	...	2.73	in 19
February	...	...	3.62	in 16	...	4.04	in 24
March	...	...	1.33	in 15	...	1.25	in 15
April	...	...	2.75	in 18	...	1.89	in 20
May	...	...	2.32	in 12	...	2.07	in 17
June	...	...	3.79	in 13	...	1.53	in 14
July	...	...	0.69	in 7	...	3.76	in 16
August	...	...	2.20	in 11	...	4.28	in 18
September	...	...	2.16	in 11	...	0.38	in 6
October	...	...	2.23	in 14	...	1.68	in 11
November	...	...	3.34	in 22	...	3.61	in 16
December	...	...	4.73	in 29	...	2.62	in 21

The statistics indicate that the prevailing winds in this district are from the south-west and west, but east and north-easterly winds were much more in evidence last year than in 1910. The following are details of the wind, cloud, and ozone during the year:—

WIND.											
	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm	Dys.	
January
February
March
April
May
June
July
August
September
October
November
December
	12	46	17	38	23	100	61	18	50	365	

			Wind.	Cloud.	Ozone.
			Mean force.	Mean amount.	Mean degree.
			Maximum 12.	Maximum 10.	Maximum 10.
January	...	...	2.7°	6.6°	3.9°
February	...	...	3.4°	6.6°	3.8°
March	...	...	3.3°	6.0°	3.3°
April	...	...	2.8°	7.6°	3.8°
May	...	...	1.8°	5.2°	3.3°
June	...	...	2.3°	5.2°	3.7°
July	...	...	2.0°	3.5°	4.0°
August	...	...	1.8°	5.5°	4.0°
September	...	...	1.9°	5.8°	4.5°
October	...	...	2.0°	5.5°	1.5°
November	...	...	3.0°	6.8°	3.5°
December	...	...	2.1°	6.9°	4.2°

RAINFALL

The observations were taken during 1911 at the Cemetery.

MONTHS.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911.	
											Average for 10 years 1901-1910.	Number of Rainfall days on which Rain fell.
January	in. 2.02	in. 2.40	in. 4.34	in. 2.18	in. 1.42	in. 4.02	in. 1.16	in. 2.92	in. 1.69	in. 2.73	in. 2.43	13
February	1.08	1.04	5.00	2.24	1.38	1.70	1.74	2.68	1.50	4.04	2.24	16
March	1.84	2.36	3.76	2.54	2.56	2.00	2.65	3.68	3.14	1.25	2.57	15
April	2.28	1.58	2.06	2.36	2.90	.94	2.06	2.08	2.52	1.69	2.04	18
May	2.02	2.48	2.76	2.62	1.56	3.80	3.30	3.28	.81	2.07	2.47	12
June	1.76	1.66	1.60	1.86	1.26	1.46	4.64	1.70	2.95	1.53	2.04	13
July	1.26	2.46	4.80	1.84	2.54	2.04	2.38	3.50	4.44	3.76	3.20	7
August	4.40	2.50	4.90	3.54	3.06	4.72	3.32	3.18	3.68	4.28	3.75	11
September	.98	1.62	3.76	1.14	2.20	1.30	6.70	3.88	2.50	.38	2.44	11
October	4.18	2.94	9.54	1.54	2.22	4.40	6.22	1.98	5.22	1.68	3.99	14
November	3.64	1.28	2.58	2.60	2.54	3.02	2.68	2.56	.86	3.61	2.53	22
December	3.74	3.20	2.14	2.26	1.34	2.48	5.64	1.86	3.82	2.62	2.91	29
Totals	29.20	25.52	47.24	26.72	24.98	31.88	36.49	33.30	33.13	29.64	32.66	181
Total number of days on which Rain fell	187	216	236	198	182	194	211	201	162	197	198	30.20

VETERINARY INSPECTOR'S ANNUAL REPORT.

During the year 155 newly purchased and newly calved cows have been examined; of these 149 were found to be free from disease, the remaining 5 cows had nodular enlargements in the udder.

The milk of two of the latter animals was submitted for bacteriological examination, and in each case was found to contain pus and blood.

One cow was found to be suffering from Septicæmia and another from Chronic Disease of the Lungs.

These 7 animals were returned to the sellers. Searching enquiries were made to ascertain the destination of these cows, and it was found that they had all been taken out of the district; consequently they were no longer a danger to the health of the City.

3,142 examinations were made in order to ascertain the presence of disease likely to affect the milk supply, and in addition to the 7 cases mentioned above the following conditions likely to affect the milk secretion of the regular occupants of the byres were discovered:—

Gastric Derangement	...	...	11
Septicæmia	...	...	4
Congestion of Lungs	...	...	3
Stomach Staggers	...	...	1
Inflammation of Udder	...	...	1
„ of Liver	...	...	1
„ of Brain	...	...	1
Milk Fever	...	...	1
Internal Hæmorrhage	...	...	1
Total	...	...	24

The animal suffering from inflammation of the brain died, and in the case of the animal suffering from Internal

Hæmorrhage, the condition of the animal was hopeless, and I advised the owner to have her destroyed, to which he readily consented.

The milk of the other 22 cows was destroyed until they were convalescent.

At the request of the Medical Officer of Health and Chief Sanitary Inspector, I made the following examinations at the Public Slaughter-house, viz.:—8 carcasses of beef, 1 carcase of mutton, also 1 carcase of beef deposited at the cold storage. I found the whole of the carcasses to be unfit for human food.

The Auction Marts were regularly visited each Monday, and 14,432 pigs were examined by me. One pig suffering from heat stroke was bled and sent to the Public Slaughter-house to be dressed; the carcase was thought to be fit for human consumption. Another pig ailing in the Mart was, upon examination, found to be suffering from dietetic disturbance, and was placed under supervision and treatment for a week, when it was sold.

During my inspections at the Auction Marts I found one cow suffering from Chronic Disease of the Udder, and another with its milk containing a large quantity of blood. The milk of both animals was put down the sewer in my presence.

Three cattle exposed for sale in the Fat Stock Market were found in an emaciated and extensively diseased condition. One animal was seized, and in each of the other two instances the owner was given the alternative of taking the animals to the Public Abattoir, a condition in which he acquiesced. After slaughter all three carcasses were found to be affected with old standing tuberculosis.

The horses belonging to the Corporation stud, 20 in number, which includes 2 horses used by the Fire Brigade, have been free from any serious illness, and have been in constant work.

R. CRAIG ROBINSON, M.R.C.V.S.

(Copy in reduced type).

NOTES AND ADVICE ON THE FEEDING AND CARE OF INFANTS.

Every infant should be fed entirely from the mother's breast for eight months. Few babies die when fed in this natural manner compared with the great loss of life which occurs amongst those artificially fed.

If it becomes necessary to feed a baby artificially, by reason of the absence of breast milk, illness of mother, or any other condition, then fresh cows' milk (not condensed milk) should be obtained twice a day.

The milk should be obtained from places where the utmost care is taken with regard to cleanliness and cooling during milking, transit, storage, and retailing, and the vessels into which it is received at the home of the baby should be kept scrupulously clean.

The milk should be kept in a cool place and protected from dust and flies, and the water used to dilute the milk should be freshly drawn from the tap or boiled before using.

Always feed a baby at regular intervals, every two hours at first, and never hurry the feeding; after the first month a healthy child should not require food between midnight and six in the morning; very often a drink of water will soothe a restless baby.

Condensed milk should not be given unless it is impossible to obtain fresh milk; it is inferior to fresh milk, and condensed skimmed milk is worthless as a food for a baby.

If artificial feeding has to be resorted to, the bottle should be of the boat-shaped kind with a teat large enough to be capable of being turned inside out. The bottle and teat should be scalded after each feed and constantly kept in clean cold water. A bottle with a long tube should never be used, as it is a danger.

The baby should be entirely weaned at the age of nine months, and for this purpose it is best to substitute for the breast feeds two or three feeds of fresh cows' milk during the day.

Do not give a baby such food as bread, biscuits, arrowroot, potatoes, or patent or tinned foods of any kind, because an infant under the age of seven months cannot digest them. On no account should beer, stout, spirits, tea, coffee, pickles, cheese, sweets, and articles of a like nature be given to an infant.

Drugs, including soothing syrups and teething powders, should never be given except upon medical advice.

The india rubber dummy teat or comforter is dangerous to health and should never be put into a baby's mouth. If anything of the kind is necessary it is better to allow the baby to bite a solid ivory or bone ring; this develops the jaws and is an advantage both during and after the process of teething.

Great care should be taken concerning everything connected with the feeding of babies during the hotter months of the year; it is then that stomach and bowel troubles are most frequent and fatal. If diarrhœa or vomiting be present, medical advice should be sought early. Such diseases, however, may be prevented by careful attention to the cleanliness of the home and person of the mother, cleanliness and clothing of the child, the admission into the house of plenty of fresh air, the provision of suitable food and fresh pure water.

The watchword of those responsible for the management of babies should be fresh food.

The baby should be taken out of doors upon every fine day, and when in the house fresh air should be constantly admitted by means of the open window.

Dirt and filth should not be allowed to accumulate or be deposited inside or near the house, and any refuse of a nature likely to decompose or attract flies should be immediately burned; other refuse should be removed at the earliest opportunity.

Every water-closet should be flushed repeatedly, and house sinks, gullies, drains, etc., kept sweet and clean by frequent flushing. The free use of water is better than disinfectants.

Every defective water-closet, gully trap, drain, or other nuisance should be at once reported to the Health Department, 19 Fisher Street, Carlisle.

JOSEPH BEARD, F.R.C.S., D.P.H., etc.,

Medical Officer of Health.

Health Department,

19 Fisher Street,

Carlisle.

(Copy in reduced type).

DIRECTIONS FOR PREVENTING THE SPREAD OF MEASLES AND WHOOPING COUGH.

Measles and Whooping Cough are both very infectious conditions, and are responsible for more deaths every year than Scarlet Fever, Diphtheria, Enteric Fever, and Smallpox combined.

The belief that every child is bound to have these two diseases is erroneous and misleading. The real facts are that the longer children are protected from these diseases the less likely are they to take them, and still less likely to die if they do contract them.

Many children who recover from an attack of Measles and Whooping Cough are left with some weakness of the eyes, ears, lungs, etc., from which they never recover, and are thus severely handicapped in the struggle for life. It is therefore very cruel and wrong to bring healthy young children into contact with the disease by putting the sick and healthy together, as is so commonly the case.

MEASLES.

This disease begins not unlike a cold in the head, with sneezing, running of the eyes and nose, so that when measles is about, such a child should be properly isolated, without waiting until a rash appears, because measles is infectious for three or four days before the rash comes out.

The healthy children should not be allowed to go into the sick-room, neither should the infected child be allowed to get up for a week or ten days after the disappearance of the rash or the subsidence of complications.

No child who is affected should attend school for at least four weeks from the commencement of the illness, and other children attending school from the same house must conform to the regulations of the Education Authority.

Medical advice should be sought early, so that the life of the suffering child may be saved.

WHOOPIING COUGH.

Whooping Cough usually begins like an ordinary cold, which in a few days is either accompanied by or gives place to a short cough. Later on the characteristic whoop may make its appearance, and may cause vomiting, bleeding at the nose, bloodshot eyes, etc.

Whooping Cough kills twice as many children as Scarlet Fever every year, therefore it cannot be said to be a trifling disease, and as is the case of Measles, the longer children escape the less likely is the disease to prove fatal. A child suffering from Whooping Cough should be isolated just as carefully as are people suffering from Smallpox and other fevers until the characteristic cough has disappeared. It should also be borne in mind that Whooping Cough is infectious for some days before the whooping stage. Medical advice should be sought early, so as to avoid the dangerous complications which arise, and other children attending school from an infected house must conform to the regulations of the Education Authority.

Every house where Measles or Whooping Cough has existed should be thoroughly cleansed and disinfected, and, if requested, the Health Authority of this City will carry out the necessary disinfection.

By the exercise of more common sense and care on the part of those in charge of children a great amount of the sickness and suffering connected with these diseases might be avoided, and a large proportion of the deaths prevented.

JOSEPH BEARD, F.R.C.S., D.P.H.,

Medical Officer of Health.

Health Department,

19 Fisher Street, Carlisle.

(Copy in reduced type).

ADVICE FOR THE PREVENTION OF HUMAN TUBERCULOSIS
(CONSUMPTION).

Consumption is an infectious disease, and is almost always caught either from a person who is suffering from the disease or through infected air, milk, and possibly meat.

Some children are born with a constitution which strongly favours their developing consumption, so that every care should be taken to avoid exposing children to this terrible disease.

Intemperance, overcrowding, bad air, darkness, dampness, colds, repeated sore throats, and many other diseases render people liable to take consumption by weakening their constitutions.

Sound health is the best protection against the disease.

Consumption is caused by a living germ, which may give rise to disease of other parts of the body besides the chest, such as the bowels, glands of neck, etc. All milk should therefore be obtained from cows which are free from suspicion of Tuberculosis.

It is possible for consumption to be made harmless to other people by careful habits on the part of the sick person and the care of his friends.

Every person suffering from consumption of the lungs is capable of giving the disease to others by means of the spit, which contains the living germs. The spit of a consumptive person is very dangerous both in its fresh and also in a dried condition.

Consumptive persons should not spit, except into a small piece of clean rag or paper, which should be immediately burnt, or into a spittoon which can be disinfected, and care should be taken that none of the spit or phlegm is deposited upon the walls or floor of a room, or upon any article of furniture or clothing.

A spit bottle, which can be carried in the pocket, may be purchased for a small sum, but where the sufferer is unable to buy one the Health Committee will provide one on application being made to the Medical Officer of Health.

If a spitting cup is used, it should contain a little water and carbolic acid, or other disinfectant. Consumptives should not spit into a dry vessel.

The contents of the spit cup or spit bottle should be emptied down a water-closet or drain, or on to a fire, and the bottle or cup should be cleansed with boiling water, followed by a disinfectant.

If a handkerchief or any kind of clothing of value has been soiled with spit, it should be boiled and washed as soon as possible, otherwise the soiled article should be burned.

No spoon, cup, or other article which has touched the mouth of a consumptive person should be used by anyone else until it has been boiled.

Food which has been left by a consumptive should not be eaten by a healthy person.

No one who is a consumptive ought to kiss or be kissed.

No mother who is consumptive should suckle a baby, nor first suck a dummy teat before inserting it into the baby's mouth.

Every person who is a consumptive ought to have a bedroom to himself if possible, and if not, he should occupy a separate bed.

Sunlight and fresh air are the very best disinfectants; they cannot be used too freely.

In cleaning a room a damp duster should always be used, and where possible damp tea leaves or damp sawdust should be put down before sweeping, so that the dust will be removed without being spread through the air. The duster should afterwards be boiled, and the sawdust or tea leaves burned.

Every three months during the life-time of a consumptive who spits or who has diarrhoea, and always after the death of such a consumptive person, it is necessary that disinfection of clothing, bedding, &c., should be thoroughly carried out. The disinfection of the room will be done by the staff of the Health Department, on notice being sent to 19 Fisher Street, Carlisle.

The Health Committee of the City earnestly solicit the co-operation of those who are brought into contact with poor consumptives, in the hope that these and other simple safeguards to health may be more widely understood, and that ultimately this dreadful scourge, or white man's plague, may be stamped out.

JOSEPH BEARD, F.R.C.S., D.P.H., etc.,

Medical Officer of Health.

Health Department,

19 Fisher Street, Carlisle.

ANNUAL REPORT

OF

CHIEF SANITARY INSPECTOR.

CHIEF SANITARY INSPECTOR'S ANNUAL
REPORT.

**To the Chairman & Members of the Health
Committee of the Carlisle City Council.**

Gentlemen,

I have the honour of presenting to you my nineteenth Annual Report dealing with the work of the Sanitary Inspectors for the year 1911.

There have been frequent inspections of bakehouses, fried fish shops, and all places whereon food is prepared, and careful attention paid to the foodstuffs, and also to the cleansing, lighting, ventilation, and paving of these premises.

The number of houses inspected by house-to-house visitation shows an increase on last year, and much substantial and lasting work has been done in the nature of drainage, paving, and other structural work.

Careful attention has been paid to factory chimneys and numerous observations made regarding the emission of black smoke, and I am pleased to be able to report an improvement in this direction. At one works, where dense volumes of black smoke were emitted, a very satisfactory result has been obtained by the fixing of a smoke consuming apparatus.

INSPECTION OF THE CITY AND REMOVAL OF
NUISANCES.

The systematic inspection of the lanes, courts, and yards within the City has been carried out as in former years, and where nuisances discovered were owing to structural defects, the usual notices were served, but in most cases where the nuisances could be readily abated by the occupier of the premises whereon it existed, verbal intimation was given.

I have pleasure in again recording that in no case was it necessary to institute police court proceedings to procure the abatement of a nuisance.

Table showing the number of notices and nature of the nuisances dealt with during the year:—

Public Health Acts—

Nuisance.	No. of Notices.
Choked and filthy water-closets ...	105
Defective and dilapidated water-closets ...	46
Defective W.C. cisterns ...	9
Absence of water to sanitary conveniences ...	7
Choked and defective drains ...	108
Offensive and defective gullies ...	51
Insufficient gully accommodation ...	2
Waste of water ...	13
Absence of sink ...	1
Choked and defective waste pipes ...	11
Choked and defective eaves, gutters, and down-spouts ...	226
Defective and insufficient flagging and paving of yards and lanes ...	114
Defective roofs to premises ...	10
Defective walls, floors, ceilings, &c. ...	29
Dirty passages and staircases ...	127
Accumulations of refuse and manure ...	50
Accumulation of fish boxes ...	1
Dirty houses ...	8
Dirty yards, courts, &c. ...	25
Overcrowding ...	12
Improper keeping of animals and fowls ...	10
Offensive water course ...	4
Escape of coal gas ...	2
Miscellaneous ...	6

Factory and Workshop Acts—

Dirty workrooms	...	...	...	27
Dirty bakehouses	...	...	...	8
Defective walls	...	...	...	2
Defective floors	...	...	...	2
Defective ceilings	...	...	...	2
Absence of ventilation	...	...	...	1
Overcrowding of workroom	...	...	...	1

Sanitary Accommodation—

Insufficient	...	...	...	1
Unsuitable or defective	...	...	...	5
Not separate for sexes	...	...	...	2
				<hr/>
				51
				977
				<hr/>

Total	1,028
-------	-----	-----	-----	-------

HOUSE-TO-HOUSE INSPECTION.

(Excluding those inspected under the provisions of the Housing, Town Planning, &c., Act, 1909.)

The following table gives the particulars of the houses inspected and the nuisances discovered:—

Name of Street or Court	Number of houses inspected	Defective water-closets	Choked and defective drains, gullies, and waste pipes	Dilapidated paving and flagging	Defective roofs and spouting of houses	Insufficient drainage and w.c. accommodation	Defective walls, floors, stair-cases, & ceilings of houses	Insufficient ventilation	Overcrowding of houses	Animals and fowls im-properly kept	Miscellaneous
Greystone Road ...	83	5	2	4	4	...	2	...	...	1	...
Grey Flatt Terrace ..	8	4	15	4	8	...	2	...	...	...	...
Melbourne Road ...	6	...	4	...	2	...	...	...	...	...	...
Melrose Terrace ...	9	...	16	...	...	...	...	...	...	...	...
Milbourne Street ...	95	2	4	11	11	1	3	...	2	1	1
Grasmere Street ..	35	3	5	17	13	...	1	...	...	...	...
Petteril Street ...	99	3	1	4	11	...	3	...	...	...	1
Blackhall Road ...	47	7	5	8	5	...	2	...	...	2	1
Sunnyside ..	13	1	4	1	...	...	...	...	...	...	...
Nicholson Street ...	8	1	3	...	2	...	...	...	...	...	...
Beaconsfield Street ..	38	6	1	9	8	...	3	...	...	...	2
Arthur Street...	24	5	2	18	6	...	...	...	...	...	...
Gardenia Street ...	17	...	1	1	2	...	...	...	...	...	...
Thirlmere Street ...	19	3	...	3	4	...	...	...	...	...	...
Totals ...	501	40	63	80	76	1	16	...	2	4	5

COMPLAINTS.

171 complaints have been received. Each complaint was investigated, and the following list shows the nature of the nuisances found:—

Dirty yards, courts, passages	...	...	2
Smoke nuisances	...	...	2
Choked, dirty, and defective W.C.'s.	...	...	18
Choked and defective drains and gullies	...	...	54
Dampness in houses	...	...	3
Dirty houses	...	...	6
Accumulation of refuse, &c.	...	...	10
Defective flagging and paving	...	...	3
Flooding of cellar	...	...	9
Absence of water to sanitary convenience	...	...	2
Insanitary manure pits	...	...	2
Waste of Water	...	...	3
Defective spouting	...	...	3
Offensive smell from sewer	...	...	2
Dirty stables	...	...	2
Overcrowding of house	...	...	1
Escape of coal gas	...	...	1
Animals and fowls improperly kept	...	...	1
Miscellaneous	...	...	6
			<hr/> 120 <hr/>

In many instances no nuisance was found to exist, the nuisance having been abated before the inspection was made, or the complaint found to have been lodged as the result of spite and quarrels.

HOUSING, TOWN PLANNING, &c., ACT, 1909.

Under the provisions of the above Act 104 houses have been inspected; further particulars of these are found in the report of your Medical Officer.

DRAIN TESTING.

During the year the smoke or water tests were applied to the drains of 69 houses.

FACTORY AND WORKSHOP ACTS.

The whole of the workshops upon the register have been inspected, and where any infringements of the provisions of the Factory and Workshop Acts were discovered, notices were served to have them remedied.

The total number of workshops upon the register, excluding bakehouses, is 249.

Three workshops were found to be without the Factory Abstract affixed, as prescribed by Sec. 128 of the Act. In each instance the Factory Inspector was notified, in accordance with the provisions of Sec. 133 of the Act.

Sixteen complaints were received from H.M. Inspector of Factories relating to sanitary defects in Factories and Workshops, viz. :—

Structural sanitary defects	...	...	5
Absence of ventilation	...	...	1
Dirty workshops	...	...	5
Dirty sanitary conveniences	...	...	1
Insufficient sanitary conveniences		...	2
Insufficient means of escape in case of fire	...		2
			<hr/>
			16
			<hr/>

OUT-WORKERS.

Six lists of out-workers have been received, as required by the home work provisions of the Factory and Workshop Act, 1901. All the out-workers' premises were visited and found to be in a satisfactory condition.

BAKEHOUSES.

There are 71 bakehouses upon the register, including 3 underground.

Fifteen defects, necessitating lime-washing of walls and ceilings, cleansing and repairing of floors, walls, and ceilings, were found in these bakehouses.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There were 42 cow-keepers and milk-sellers upon the register. Their premises have been frequently inspected, and the provisions of the Dairies, Cowsheds, and Milkshops Order as to air space and ventilation, cleansing of milk vessels, &c., have been enforced.

COMMON LODGING HOUSES.

There are four licensed common lodging houses within the City. They have been frequently inspected, both during the day and night time, and have generally been found in a satisfactory condition.

VANS USED AS DWELLINGS.

All the vans entering the City to attend fairs, &c., have been inspected, in order to ascertain their sanitary condition, and also for the purposes of detecting any infectious disease which might exist amongst the inmates.

URINALS AND GULLIES.

The urinals and gullies have received the same amount of attention as in previous years, being regularly cleansed by the staff of men employed for that purpose.

HOUSE REFUSE REMOVAL.

13,022 loads of refuse have been collected and removed to the refuse tips and destructor.

GARBAGE.

155 loads of garbage and refuse have also been removed from the Public Slaughter-house by the Corporation carters.

Month.	Number of Loads removed from the			Total.	Slaughter-House Garbage. Loads Removed.
	East District.	West District.	Morning Ashes.		
January ...	319	269	547	1,135	14
February ...	300	237	495	1,032	10
March ...	355	261	585	1,201	9
April ...	299	239	530	1,068	11
May ...	351	266	598	1,215	13
June ...	294	228	533	1,055	13
July ...	214	196	515	925	9
August ...	246	234	515	995	20
September ...	271	190	491	952	15
October ...	323	259	532	1,114	11
November ...	329	260	565	1,154	18
December ...	340	263	573	1,176	12
Totals ...	3,641	2,902	6,479	13,022	155

PUBLIC ABATTOIR AND RAILWAY SLAUGHTER-HOUSES.

Frequent visits have been paid to the Public Slaughter-houses, which have been kept in a satisfactory condition.

The Railway Slaughter-houses have also received careful supervision, and, as a rule, were found in a clean and sanitary condition.

The following table gives the number of animals killed during the years mentioned:—

PUBLIC SLAUGHTER-HOUSES.

Year.	Beasts.	Sheep and Lambs.	Calves.	Pigs.	Total.
1902	3,758	17,153	660	3,808	25,379
1903	3,845	16,301	692	4,322	25,160
1904	4,075	16,860	759	4,753	26,447
1905	3,946	15,657	751	4,674	25,028
1906	4,059	15,274	797	4,139	24,269
1907	4,020	14,745	962	4,419	24,146
1908	3,772	14,911	760	4,064	23,507
1909	3,713	16,799	690	3,744	24,946
1910	3,562	16,491	716	3,444	24,213
1911	3,462	15,711	808 & 1 goat	4,018	24,000

L. & N. W. RAILWAY COY.'S SLAUGHTER-HOUSE.

Year.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1910	29,758	...	...	...	29,758
1911	34,197	...	...	...	34,197

N. E. RAILWAY COY.'S SLAUGHTER-HOUSE

Year.	Sheep.	Lambs.	Calves.	Pigs.	Total.
1910	46,135	...	...	...	46,135
1911	41,362	...	...	...	41,362

DISEASED AND UNSOUND FOOD.

The public markets and premises whereon food is exposed for sale have been frequently visited, and the

necessity of the observance of hygienic measures being taken, in all cases where human food is concerned, has been constantly pointed out.

The following table shows the amount of food seized or surrendered as being unfit for human consumption:—

Nature of Food Condemned.					Quantity.
Beef ...	...	...	...	...	23,754 lbs.
Mutton	...	...	...	...	2,279 „
Veal	...	...	...	...	126 „
Pork	...	...	...	...	196 „
Fruit	...	...	...	...	14 „

FRIED FISH AND POTATO SHOPS.

There are 32 fried fish and potato shops on the register, as compared with 35 last year. A total of 136 visits have been made to the premises, and cautions were in several instances administered regarding the cleanliness of the utensils used in the business.

ICE CREAM.

The premises whereon this article is made have had careful supervision, 52 visits being paid, and in all cases enquiries and examinations have been made regarding the source of the ice and the condition of the milk, &c., used.

OFFENSIVE TRADES.

The premises whereon offensive trades are carried on have received attention, and in each case the business was found to be conducted in a proper manner.

Table showing particulars of the administration of the Food and Drugs Act, 1875—1907.

Article.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Remarks.
Milk	36	32	4	(a) Deficient in fat, .1% below limit. (b) Deficient in fat .34%. (c) Deficient in fat .33%. (d) Deficient in fat .1%.	Vendor cautioned; second sample taken after an interval of 11 months, result genuine. The vendor of sample (b) was asked for an explanation of the deficiency in fat. He said that the milk was sold as obtained from the cows, and agreed to an appeal to the cows. Sample (c) was taken at the farm at 5.30 a.m., the milking being done in the presence of the Inspector. The above samples (b) and (c) were purchased on the 13th Feb. and 6th March respectively. The milk was from a herd of about 20 cows, several of which were near calving. A third sample purchased on the 7th December was reported by the Analyst to be genuine.
Butter	20	20	...	...	Vendor cautioned.
Whisky	31	26	5	(a) 4.4° below legal limit. (b) 13.4° below legal limit (c) 5.8° below legal limit (d) 1.2° below legal limit (e) 5.2° below legal limit.	Informal sample, vendor cautioned. 2nd sample obtained after an interval of 2 months, result genuine. Informal sample. 2nd sample obtained, result genuine. Informal sample. 2nd sample (d) taken formally. No action taken, but a 3rd sample was obtained, result genuine. Fined £1 1s. and 10s. costs.
Lard	21	21	...	...	...
Coffee	17	7	10	Adulterated with chicory, amounts varying from 26% to 68%.	Informal samples. 2nd samples taken (early in the present year), 2 of which were adulterated. Vendor proceeded against in one case and fined 2s. 6d. In the other case vendor was cautioned.
Cheese	19	19	...	..	...
Margarine	11	11	...	...	...

INFECTIOUS DISEASES.

During the year 241 cases of Infectious Diseases have been notified, as against 357 last year. All the cases have been investigated and reported upon to the Medical Officer of Health, and 139 cases have been removed to hospital for isolation, as against 202 last year.

TUBERCULOUS DISEASES.

64 cases of Tuberculosis, notified by the Poor Law Medical Officer, Voluntary Notification, and under the Public Health (Tuberculosis in Hospitals) Regulations, 1911, have been visited by your Inspectors, re-visits being made in many cases. Verbal and printed advice as to cleanliness, mode of living, and general hygiene was given in every instance.

DISINFECTION.

All the houses from which cases of Infectious Diseases were removed to Hospital, and rooms in which cases were isolated at home, were either sprayed with formaldehyde or cleansed under supervision.

HORSES.

The number of horses under my charge at the Dépôt, Bousteads Grassing, is 18—nine of these are engaged in house refuse removal, 8 are used for street cleansing purposes, and 1 is kept as a relief horse.

During the year 1 horse was bought and 1 sold.

I am, Gentlemen,

Your obedient Servant,

C. W. HILL.