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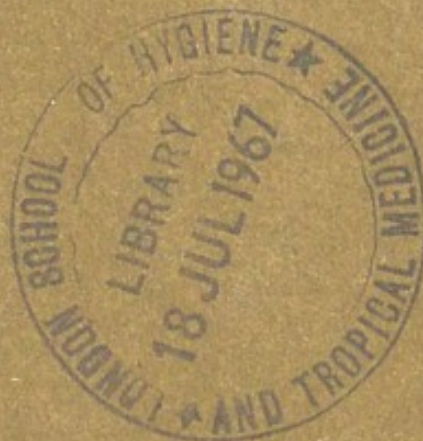
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CITY OF CARLISLE.

REPORT

ON THE

Sanitary Condition of the City of Carlisle

FOR THE YEAR 1923,

BY

JOSEPH BEARD,

F.R.C.S. (Edin.), M.R.C.S. (Eng.), L.R.C.P. (Lond.),

D.P.H. (Cantab.), F.R.S. (Edin.).

Of Gray's Inn, Barrister-at-Law.

Medical Officer of Health,

School Medical Officer,

Chief Tuberculosis Officer, &c.

CARLISLE:

CHAS. THURNAM & SONS, PRINTERS, ENGLISH STREET.

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PUBLIC HEALTH STAFF

including all who are employed in work connected with the public health, whether under the Health, Maternity and Child Welfare, or the Education Committees:—

Medical Officer of Health, School Medical Officer, Chief Tuberculosis Officer, &c., &c.	JOSEPH BEARD, F.R.C.S., D.P.H., &c., &c.
Assistant Medical Officer of Health, Tuberculosis Officer, and Assistant School Medical Officer	ALLAN SEMPLE, M.B., Ch. B., D.P.H.
Assistant School Medical Officer, and Assistant Medical Officer (M. & C. W.)	Miss E. E. BOURNE, M.B., Ch.M., D.P.H.
Dental Surgeon (part-time)	WILLIAM TAYLOR, L.D.S.
Veterinary Inspector (part-time)	R. CRAIG ROBINSON, M.R.C.V.S.
Chief Sanitary Inspector, and Inspector under Sale of Food and Drugs Acts and Shops Acts	* C. W. HILL
Assistant Sanitary Inspectors	‡†* W. HANSON * E. S. BROADHEAD
Health Visitors	Misses H. M. HILL, J. G. SMITH, C. STORDY
Nurse in charge of School Clinic and Tuberculosis Dispensary	Miss M. E. GLOYNE
School Nurses	Misses J. M. TINNION, A. F. MACDONALD, J. S. GUTHRIE
Matron of Maternity Hospital	Miss A. H. HARRIS
Clerks	G. E. BARROW, R. F. THOBURN, Misses L. HIND, and M. PURDAM
Disinfector	H. PORTER
Superintendent of Public Slaughter- houses	J. DODDS
Public Analysts (part-time)	Messrs. HELLON & MANN, WHITE- HAVEN
Bacteriologists (part-time)	PUBLIC HEALTH LABORATORY, MAN- CHESTER CLINICAL RESEARCH ASSOCIATION, LONDON

* Sanitary Inspectors' Certificate, R.S.I.

† Sanitary Inspectors' Certificate, S.I.A.

‡ Meat Inspectors' Certificate, R.S.I.

The following Acts, Bye-laws, and Regulations are in force in the district, and were adopted on the dates mentioned:—

Bye-laws with respect to New Streets and Buildings under the Public Health Act, 1875	... ..	13th Oct., 1885
Regulations under the Contagious Diseases (Animals) Act, 1886, and the Dairies, Cowsheds, and Milkshops Order of 1885	... ..	16th July, 1889
The Infectious Diseases (Prevention) Act, 1890	... ..	10th March, 1891
The Public Health Acts (Amendment Act), 1890	... ..	10th March, 1891
Bye-laws for regulating the Public Pleasure and Recreation Grounds, made in pursuance of the Public Health Act, 1875	... ..	14th Feb., 1893
Bye-laws with respect to Common Lodging-houses, made in pursuance of Section 80 of the Public Health Act, 1875	... ..	15th Aug., 1893
Bye-laws relating to the conveyance of carcases of dead animals through the streets	... ..	8th Jan., 1895
Bye-laws for regulating the Carlisle Public Slaughter-houses under the Public Health Act, 1875	... ..	12th May, 1896
Bye-laws made for regulating the carrying on of offensive trades, in pursuance of Section 113 of the Public Health Act, 1875	... ..	9th March, 1897
Baths and Wash-houses Acts	... ..	9th July, 1901



To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I have the honour to submit my report on the Health of the City during the year 1923.

Much other detail of interest might have been added, but I have kept the report as far as practicable within the limit of the instructions contained in a circular of the Ministry of Health, giving, of course, consideration to the recording of any such particulars as may be required for future reference.

I am,

Ladies and Gentlemen,

Your obedient Servant,

JOSEPH BEARD,
Medical Officer of Health.

Public Health Department,
19 Fisher Street,
Carlisle,

April, 1924.

GENERAL STATISTICS.

Area (acres)	4,488
Population (1923) Estimate of Registrar-General	54,010
Number of Inhabited Houses, 1921	12,017
Number of Families or Separate Occupiers (1921)	Figure not available.
Rateable Value	£314,054
Sum represented by a Penny Rate	£1,173

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

Births—	Total.	M.	F.	
Legitimate	1128	569	559	
Illegitimate	53	20	33	
				Birth-rate 21.8
Deaths	732	362	370	
				Death-rate 13.5

Number of women dying in, or in consequence of, childbirth—

From Sepsis	1
From other causes	8

Deaths of Infants under one year of age per 1,000 births—

Legitimate	81.4
Illegitimate	113.2
— Total	82.9

Deaths from Measles (all ages)	45
„ Whooping Cough (all ages)	8
„ Diarrhœa (under 2 years of age)	10

POPULATION.

The estimate of the population at mid-year, 1923, supplied to me by the Registrar-General, is 54,010, and this figure has been used in making the calculations for this report.

BIRTHS.

The number of births registered during the year was 1,181, a decrease of 86 on the figure for the previous year. The birth-rate is 21.8 per 1,000 of the population at all ages, a decrease of 1.8 on the previous year's figure.

The birth-rate for the whole of England and Wales during 1923 was 19.7 per 1,000. The rate for the 105 great towns, to which classification Carlisle belongs, was 20.4 per 1,000, and for the 157 smaller towns of England and Wales 19.8 per 1,000.

Year.	Number of Births Registered.			Per 1,000 of the population.
	Males.	Females.	Total.	
1918	524	509	1033	17.1
1919	557	509	1066	18.5
1920	759	666	1425	24.7
1921	679	631	1310	24.6
1922	641	626	1267	23.6
1923	589	592	1181	21.8

Table showing details of the Births in the several Wards, 1923.

QUARTER ENDING.	STANWIX AND ETTERBY.	RICKERGATE.	AGLIONBY.	GREYSTONE.	ST. NICHOLAS.	CURROCK.	DENTON HOLME.	ST. CUTHBERT'S.	CALDEWEGATE.	NEWTOWN AND BELLE VUE.	TOTALS FOR CITY.
March 31	11	28	34	29	26	26	44	34	31	15	278
June 30.....	14	33	35	28	44	17	45	39	37	21	313
September 30 ..	13	27	28	28	22	21	52	42	48	12	293
December 31.....	11	25	28	36	37	25	37	41	40	17	297
Totals... ..	49	113	125	121	129	89	178	156	156	65	1181

ILLEGITIMATE BIRTHS.

The number of illegitimate births registered was 53, or 44.8 per 1,000 of the total births. This shows a decrease of 22 upon the figure for 1922.

In 5 instances, or 9.4 per cent. of the total illegitimate births for the year, the mother was not a resident of the City.

The distribution of the illegitimate births among the several wards was as follows:—

	Stanwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	S. Cuthbert's	Caldewgate	Newtown & Belle Vue	Totals for City
Males	1	2	3	1	1	1	4	3	2	2	20
Females	1	4	5	2	4	3	3	4	5	2	33
Totals	2	6	8	3	5	4	7	7	7	4	53

DEATHS.

The total number of deaths registered was 797, as compared with 864 in 1922. 26 deaths occurred of persons belonging to the City in institutions and other places away from Carlisle, while the deaths of 91 persons not belonging to the City occurred in public institutions and other places within the City. Excluding the latter figure, and adding the deaths of Carlisle residents which occurred in other districts, a nett figure of 732 remains, which is equal to a nett death-rate of 13.5 per 1,000.

The death-rate for the whole of England and Wales during 1923 was 11.6 per 1,000. The rate for the 105 great towns, to which classification Carlisle belongs, was 11.6 per 1,000, and for the 157 smaller towns of England and Wales 10.6 per 1,000.

Table showing details of the corrected Deaths in the several Wards, 1923.

Quarter Ending	Stanwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Carrock	Denton Holme	S. Cuthbert's	Caldeagate	Newtown & Belle Vue	Totals for City
March 31	14	19	19	23	22	20	27	24	29	10	207
June 30	16	28	24	16	16	17	18	20	35	19	209
September 30	7	14	13	16	24	13	21	16	10	5	139
December 31	9	18	14	22	21	20	21	20	19	13	177
Totals	46	79	70	77	83	70	87	80	93	47	732

Table showing the number of Deaths at all Ages and at several Age periods.

	All Ages.	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.
No. of Deaths at all ages and at several age periods	732	98	83	23	23	237	268

The following Table shows the diseases causing the largest number of Deaths during 1923, and a comparison with those of 1922, &c. :—

DISEASE.	1922.	1923.	Increase or Decrease	Average No. of Deaths for past 10 yrs.
Pulmonary Tuberculosis & Phthisis	50	40	—10	55
Other forms of Tuberculosis ...	14	14	...	21
Pneumonia	50	52	+ 2	56
Other Diseases of Respiratory System	86	37	—49	58
Measles ... ..	...	45	+ 45	12
Influenza	55	7	—48	34
Whooping Cough	7	8	+ 1	10
Diphtheria, Membranous Croup ...	2	10	+ 8	9
Disease of Heart and Blood Vessels	138	151	+ 13	160
Rheumatic Fever, Chronic Rheumatism, Rheumatoid Arthritis ..	10	9	— 1	6
Cancer and Malignant Disease ...	68	78	+ 10	65
Diseases of Digestive System other than Diarrhœa and Enteritis ...	26	24	— 2	25
Diseases of Urinary System ...	31	25	— 6	30
Diseases of Nervous System ...	69	65	— 4	44
Prematurity and Injury at Birth, &c.	48	59	+ 11	38
Accidents due to Negligence ..	22	15	— 7	21
Diarrhœa and Enteritis ...	21	15	— 6	25

+ Shows an increase in the number of deaths.

— Shows a decrease in the number of deaths.

The following Table sets out the Cause and the Ages at Death of 732 persons belonging to the City:—

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESI- DENTS" IN INSTITUTIONS IN THE DISTRICT.
		All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and up- wards	
1		2	3	4	5	6	7	8	9	10	11
All Causes	{ Certified ...	717	96	41	41	23	23	65	166	262	244
	{ Uncertified ...	15	2	1	...	...	...	1	5	6	
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	45	9	19	17	...	...	...	...	...	2
Scarlet Fever	...	1	...	...	...	...	...	1	...	...	1
Whooping Cough	...	8	1	5	2	...	...	...	...	...	...
Diphtheria and Croup	...	10	...	...	4	6	...	...	...	...	9
Influenza	...	7	1	...	...	...	...	...	...	6	...
Dysentery	...	1	...	...	...	...	...	...	1	...	1
Erysipelas	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	...	40	...	...	1	1	10	21	5	2	6
Tuberculous Meningitis	...	9	1	...	4	2	1	1	...	...	3
Other Tuberculous Diseases	...	5	...	1	...	1	1	1	1	...	3
Cancer, Malignant Disease	...	78	...	...	...	...	...	2	34	42	33
Rheumatic Fever	...	1	...	...	...	...	...	...	1	...	1
Meningitis	...	...	...	...	...	...	...	...	...	...	...
Organic Heart Disease	...	88	...	...	...	2	1	6	28	51	10
Bronchitis	...	31	3	...	...	...	...	1	9	18	3
Pneumonia (all forms)	...	52	11	11	7	2	1	3	8	9	10
Other Diseases of Respiratory Organs	...	6	...	...	...	...	1	...	1	4	...
Diarrhoea and Enteritis	...	15	9	1	1	...	...	...	3	1	9
Appendicitis and Typhlitis	...	3	...	...	1	1	...	...	...	1	10
Cirrhosis of Liver	...	1	...	...	...	...	...	...	1	...	1
Alcoholism	...	...	...	...	...	...	...	...	...	...	...
Nephritis and Bright's Disease	...	16	...	...	...	1	1	...	10	4	2
Puerperal Fever	...	1	...	...	...	...	...	1	...	...	1
Other Accidents and Diseases of Preg- nancy and Parturition	...	8	...	...	...	...	2	6	...	...	8
Congenital Debility & Malformation, including Premature Birth	...	59	54	4	1	...	...	...	...	...	13
Violent Deaths, excluding Suicide	...	15	...	...	1	3	2	3	4	2	18
Suicide	...	5	...	...	...	...	...	1	3	1	3
Other Defined Diseases	...	222	9	1	2	4	3	19	53	124	90
Diseases ill-defined or unknown	...	5	...	...	...	...	...	...	4	1	1
Totals		732	98	42	41	23	23	66	171	268	244
Sub- Entries included in above figures	Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	...
	Poliomyelitis	...	...	...	...	...	...	...	...	...	...
	Typhus Fever	...	...	...	...	...	...	...	...	...	...
	Lobar Pneumonia	10	1	...	1	...	...	...	2	3	3
Pneumonia not defined	11	3	2	1	...	1	...	3	3	1	

The following Table shows the Vital Statistics for the whole City during 1923 and previous years:—

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
1914	52,530	1209	1209	23.0	848	16.1	69	22	148	122.4	801	15.2
†1915	{ 52,625 50,036	1192	1192	22.6	994	18.8	72	31	172	144.3	953	18.1
†1916	{ 49,721 54,097	1103	1103	20.3	850	17.0	93	24	112	101.3	781	15.7
†1917	{ 59,151 53,064	1117	1120	18.9	826	15.5	101	46	119	106.5	771	14.5
†1918	{ 60,188 53,717	1033	1037	17.2	921	17.1	120	49	131	126.8	850	15.8
†1919	{ 57,500 55,198	1066	1078	18.7	778	14.1	112	54	115	107.9	720	13.6
†1920	{ 57,697 57,397	1425	1417	24.7	785	13.7	117	37	114	80.0	705	12.3
†1921	53,200	1310	1298	24.6	818	15.3	85	21	138	105.3	754	14.1
†1922	53,490	1267	1267	23.6	864	16.1	101	21	103	81.2	784	14.6
†1923	54,010	1181	1171	21.8	797	14.7	91	26	98	82.9	732	13.5

† Registrar-General's estimates of population.

The following Public and other Institutions are within the City:—

The Union Workhouse and its Infirmary.
 The Cumberland Infirmary.
 Carlisle Non-Provident Dispensary.
 The Crozier Lodge Isolation Hospital.
 Strathclyde House (Home for Incurables).
 St. Joseph's Home (aged and infirm persons).
 Chadwick Memorial Industrial School.
 Corporation Dispensary and School Clinic.
 Corporation Maternity Hospital and Clinics.

Birth-rate, Death-rate, and Infantile Mortality in Carlisle since 1891.

Year.	No. of Births.	Birth-rate.	No. of Deaths.	Gross Death-rate.	Infantile Mortality.	Average Five Years.		
						Birth-rate.	Death-rate.	Infantile Mortality.
1891	1207	30.8	789	20.1	137	31.8	20.1	142.6
1892	1213	30.5	805	20.2	123			
1893	1389	34.5	868	21.6	178			
1894	1315	32.0	780	19.2	133			
1895	1311	31.4	794	19.4	142			
1896	1246	29.6	753	18.2	137	29.9	19.5	146.6
1897	1324	30.8	811	19.4	134			
1898	1311	30.0	935	22.2	183			
1899	1300	29.4	818	19.2	145			
1900	1354	30.1	807	18.8	134			
1901	1246	27.3	810	17.8	129	26.7	17.9	131.0
1902	1245	27.0	856	18.5	117			
1903	1322	28.4	813	17.4	118			
1904	1278	26.7	933	19.7	152			
1905	1168	24.3	783	16.3	139			
1906	1227	25.3	811	16.7	132	23.6	15.1	127.5
1907	1178	23.8	848	17.1	143			
1908	1223	24.4	713	14.2	129			
1909	1149	22.6	735	14.5	123.6			
1910	1145	22.2	683	13.2	110.0			
1911	1109	23.8	776	16.7	145.0	23.2	17.1	128.2
1912	1142	24.6	813	17.5	102.4			
1913	1164	22.1	821	15.6	127.1			
1914	1209	23.0	848	16.1	122.4			
1915	1192	22.6	1027	19.5	144.3			
1916	1103	20.3	850	17.0	101.5	19.9	15.5	104.5
1917	1117	18.8	826	15.5	106.5			
1918	1033	17.1	921	17.1	126.8			
1919	1066	18.5	778	14.1	107.9			
1920	1425	24.7	785	13.7	80			
1921	1310	24.6	818	15.3	105.3	22.6	14.7	91.4
1922	1267	23.6	864	16.1	81.2			
1923	1181	21.8	797	14.7	82.9			

The following figures relate to the deaths of persons not normally resident in the district which occurred within the City:—

Cumberland Infirmary ...	...	...	54
Private Nursing Homes	...	...	25
Private Houses	...	...	6
Fusehill Hospital	...	...	3
Crozier Lodge	...	...	3

INQUESTS.

During the year the City Coroner held 37 inquests. Of this number, 30 related to deaths of persons who resided within the City, and 7 to persons who resided in other districts, but who died within the City. 4 related to children under five years of age, in 2 instances the infant being under one year.

MORTUARY.

7 bodies were removed to the Public Mortuary, a post-mortem examination being made in each instance.

UNCERTIFIED DEATHS.

15 deaths were registered of persons belonging to the City in which no certificate was given by a medical man, and in which no inquest was held.

During 1922, 27 such deaths were registered.

CANCER.

The following figures include all deaths from causes coming within the general term cancer. The number of deaths registered during 1923 was 78.

Calculated upon the population at all ages a mortality rate of 1.4 per 1,000 is obtained.

**TABLE OF DEATHS FROM CANCER,
1914 to 1923.**

Age.	Numbers.									
	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
1 to 5 years ...	...	...	...	...	...	...	...	...	...	...
5 to 15 years ...	...	...	...	...	1	...	1	...	...	...
15 to 25 years ...	...	1	1	1	1	...	...	1	1	...
25 to 35 years ...	2	...	2	1	1	2	1	2	...	...
35 to 45 years ...	10	3	6	7	5	...	5	2	4	2
45 to 55 years ...	10	7	17	10	13	9	15	5	12	13
55 to 65 years ...	20	21	21	32	21	19	12	20	22	21
65 to 75 years ...	16	20	18	14	17	15	17	19	15	26
75 & upwards ...	10	6	9	8	7	4	11	4	14	16
Totals ...	68	58	74	73	66	49	62	53	68	78

RAINFALL.

Observations taken at the Carlisle Cemetery by J. T. Charlton, Esq.

MONTHS.	1923.												Average for 10 years 1913-1922. in.
	Rainfall, days on which Rain fell.											Number of days on which Rain fell.	
	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923.		
January	2.17	2.64	3.17	3.55	1.53	3.13	2.88	4.17	5.01	2.25	1.74	22	3.05
February	1.27	2.59	3.56	3.31	1.13	2.86	1.05	2.61	0.16	2.87	4.08	22	2.15
March	3.37	2.67	1.88	2.14	1.98	0.66	2.35	3.11	3.71	1.31	0.84	9	2.32
April	2.77	1.36	1.91	2.44	2.45	0.50	1.49	2.17	0.86	1.89	2.55	18	1.73
May	1.78	1.73	2.04	2.98	1.91	1.88	1.10	3.48	1.28	1.79	1.28	19	2.00
June	2.40	1.06	1.15	3.30	2.01	0.87	2.66	2.11	0.65	2.98	0.60	13	1.92
July	1.12	3.04	3.80	4.61	1.31	3.73	0.87	4.26	2.44	4.54	2.22	21	2.97
August	2.17	2.73	3.27	2.39	5.64	3.21	2.96	2.50	5.39	2.53	7.42	23	3.28
September	2.11	1.28	1.03	2.06	2.61	7.36	1.81	1.89	2.15	2.92	3.01	20	2.52
October	2.51	1.11	1.25	5.10	4.33	4.00	2.36	1.00	2.56	1.20	5.61	27	2.54
November	3.40	4.52	0.58	4.34	2.83	2.01	2.35	2.02	1.68	0.84	4.06	19	2.46
December	2.46	3.58	4.64	2.75	1.40	3.44	3.32	2.79	3.94	3.43	2.42	18	3.17
Totals	27.53	28.31	28.28	38.97	29.13	33.65	25.21	32.11	29.83	28.55	36.53	231	30.16
Total number of days on which Rain fell	194	201	183	228	176	190	191	211	205	209	...	...	199

WATER SUPPLY.

Bacteriological Results of Quarterly Samples taken from a Domestic Tap.

Examinations made at the Public Health Laboratory, Manchester.

QUANTITATIVE ANALYSIS		1923.							
A. Aerobic micro-organism growing in 3 days in nutrient gelatine at 20° C. to 21° C.	Number of colonies in one gramme of water.				No. of kinds clearly recognisable.				
	MAR.	JUNE.	SEPT.	DEC.	MAR.	JUNE.	SEPT.	DEC.	
Non-Liquefying Bacteria ...	37	89	17	29	2	4	3	3	
Liquefying Bacteria ...	24	23	10	14	2	3	5	3	
Other Micro-Organisms ...	0	0	0	0	...	...	...	...
B. Anærobic Micro-Organisms ...	...	...	...	...	...	...	...	...
	}	}	}	}	}	}	}	}	
	61	112	27	43	4	7	8	6	

QUALITATIVE ANALYSIS.	1923.			
	MARCH.	JUNE.	SEPT.	DEC.
A. Bacteria associated with sewage or faecal pollution	B. Coli communis found in 100 C.C. but not in 10 C.C.	B. Coli communis found in 100 C.C. but not in 10 C.C.	B. Coli communis found in 100 C.C. but not in 10 C.C.	B. Coli communis found in 10 C.C. but not in 1 C.C.
B. Bacteria associated with disease	Not found.	Not found	Not found	Not found

Bacteriologically all the samples were satisfactory.

Results of Chemical Analyses of Quarterly Samples of Water taken from a Domestic Tap.

Examinations made by Messrs. Hellon and Mann, Whitehaven.

CHEMICAL.	1923			
	MARCH.	JUNE.	SEPT.	DEC.
Results shown in grains per gallon.				
Total Solid Matter in solution dried at 212° Fahr.	8.960	9.520	9.800	9.800
Chlorine existing as Chlorides ... ..	.560	.525	.490	.525
Ammonia ... ..	.001	.001	traces	traces
Albuminoid Ammonia	.001	.004	.004	.001
Nitrogen existing as Nitrates	traces	traces	traces	traces
Oxygen absorbed in 15 minutes at 80° Fahr.	.019	.076	.089	.035
Oxygen absorbed in 4 hours at 80° Fahr. ...	.051	.109	.142	.073
Lead & other Poisonous Metals	None	None	None	None
Hardness before boiling	7 $\frac{1}{4}$ °	6 $\frac{1}{2}$ °	7°	7 $\frac{1}{4}$ °
Hardness after boiling	1 $\frac{3}{4}$ °	$\frac{3}{4}$ °	1°	1 $\frac{1}{4}$ °
Appearance in two-foot tube	Clear yellowish-green	Clear greenish-yellow	Clear yellowish-green	Clear yellowish-green
Smell when heated to 100° Fahr. ...	None	None	None	None
Microscopical Examination	Slight deposit of Vegetable debris	Slight deposit of Vegetable debris	Slight deposit of Vegetable debris	Slight deposit of Vegetable debris

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, the results being satisfactory.

The Lacomoid re-action in all instances was Alkaline.

Total annual distribution of Water from Cumwhinton covered reservoir during the years 1914 to 1923.

Year.	Number of Gallons.	No. of Gallons per head, per day.
1914	690,410,000	33.34
1915	710,974,000	34.03
1916	758,483,000	35.80
1917	801,490,000	33.78
1918	795,220,000	34.58
1919	804,040,000	34.88
1920	814,170,000	35.41
1921	771,250,000	33.54
1922	759,500,000	32.98
1923	747,320,000	32.49

FOOD.

Milk Supply.

There are 23 registered cow-keepers in the City, and there were 36 occupied cow-sheds, with an average of 260 cows kept therein during the year. There were 52 purveyors of milk on the register.

16 samples of milk being brought into the City from outside dairies were purchased and submitted for bacteriological examination for the presence of tubercle bacilli, further details of which are shown on page 28.

54 samples of milk were purchased and submitted to chemical analysis during the year, of which 49 were found to comply with the standard laid down by the Regulations. The remaining 5 samples showed that the milk was below the limit in non-fatty solids, further particulars relating to which are given in the table on page 73.

Public Health (Milk and Cream) Regulations, 1912 and 1917.

1. *Milk and Cream not sold as Preserved Cream.*

Number of samples examined for the presence of a preservative:—

Milk.....	54.	Cream.....	Nil.
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Number in which preservatives were reported to be present:—

Milk.....	Nil.	Cream.....	Nil.
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2. *Cream sold as Preserved Cream.*

No samples were taken for analysis during the year.

MEAT.

There are 3 private slaughter-houses in the City, with licences restricted in 2 instances to the killing of sheep and lambs, and the third restricted to pigs. 1 of the former is owned by the L. & N. E. Railway group, and another by the L. M. & S. Railway group, both of which are used during certain periods of the year for the slaughter of sheep and lambs for sale at Smithfield Market, London. The remaining slaughter-house, which is licensed only for the slaughter of pigs, forms part of the premises of Messrs. Cavaghan & Gray, Harraby. The slaughter of all animals within the City, other than those killed at the slaughter-houses previously mentioned, takes place at the Corporation Public Slaughter-houses.

The following Table gives particulars of Animals killed, Carcasses examined, and particulars of Carcasses unfit for human food:—

Animal	Total number of animals slaughtered and examined	Number of carcasses specially referred for examination	Number in which the whole carcass was unfit for human food	Number in which a portion of a carcass was unfit for human food	Number affected with Tuberculosis.	
					Whole carcass condemned	Part of carcass condemned
Oxen	4,028	85	51	34	30	13
Sheep	13,249	29	25	4	...	...
Calves	768	4	4	...	1	...
Pigs	4,644	14	9	5	1	...
Totals	22,689	132	89	43	32	13

OTHER FOODS.

Information concerning unsound food, food inspection, bakehouses, &c., and the work under the Sale of Food and Drugs Acts, is given on pages 70 to 73 of the Report of the Sanitary Inspector.

INFECTIOUS DISEASES.

During the year 420 notifications of infectious diseases were received, 87 of which related to various forms of tuberculosis, and 333 to other infectious diseases.

The number of deaths certified as due to the seven principal zymotic diseases was 79, equal to a zymotic death-rate of 1.4 per 1,000 of the population. In the previous year 31 deaths were certified as due to zymotic diseases.

Table showing the Age and Seasonal incidence of the various Infectious Diseases notified during 1923.

	Number of Cases Notified at various Ages.							Number of Cases notified in each Ward.										Total number of cases notified	Number of cases in- correctly notified	Nett number of cases notified	Number of cases removed to hospital
	Under 1 year	1-5 years	5-15 years	15-25 years	25-45 years	45-65 years	65 and up-wards	Stanwix and Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldegate	Newtown & Belle Vue				
	Scarlet Fever	27	98	14	10	1	...	1	8	14	37	19	22	11	10	22	6					150	3	147	82
Diphtheria	22	53	4	6	2	...	...	7	7	...	6	16	19	7	12	7	87	20	67	46	
Puerperal Fever	...	...	...	4	4	...	...	1	...	...	1	...	...	2	...	...	4	...	4	...	...
Erysipelas	1	1	...	4	11	3	2	2	1	...	5	3	...	1	3	3	20	...	20	1	...
Malaria	...	...	...	2	2	...	...	1	3	10	6	3	6	...	3	...	4	...	4	...	...
Acute Primary Pneumonia	5	9	4	8	3	2	3	3	3	2	...	3	...	6	8	...	48	...	48	7	...
Acute Influenzal Pneumonia	2	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	5	...	5	...	...
Encephalitis Lethargica	...	1	...	1	1	...	...	...	1	...	...	1	...	...	...	...	3	...	3	...	...
Ophthalmia Neonatorum	12	...	...	...	...	...	...	...	...	1	...	2	1	2	...	3	12	1	11	...	...
Pulmonary Tuberculosis	...	6	17	26	6	3	6	8	3	8	11	8	3	8	11	5	71	...	71	...	...
Other forms of Tuberculosis	...	5	6	2	...	...	1	4	1	...	2	1	1	1	3	2	16	...	16	...	...

SCARLET FEVER.

During the year 150 cases of scarlet fever were notified, an increase of 46 on the number notified during the previous year, the incidence of the disease being higher during the early part of the year. Cases occurred in all parts of the City, and there was no evidence of any local spread of infection.

82 of the patients, or 54.6 per cent., were removed to the Isolation Hospital.

1 death only of a resident was registered as being due to scarlet fever.

5 cases of this disease occurred at the Cumberland Infirmary, 2 of whom were patients who did not reside in the City.

3 children notified as suffering from diphtheria were found not to be suffering from the disease, but from scarlet fever.

2 return cases occurred.

Table showing notifications, cases isolated, and number of deaths from scarlet fever during the years 1919—1923.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	Average period in Hospital (days).	No. of return cases.	No. of deaths.	Deaths per 100 cases.
1919	41	25	34.3	0	2	4.9
1920	70	47	42.8	1	0	0.0
1921	79	57	43.5	0	1	1.2
1922	104	65	40.5	2	1	0.9
1923	150	82	41.7	2	1	0.6

DIPHTHERIA.

The number of cases of diphtheria notified was 87, compared with 64 in 1922.

10 deaths of residents were registered as being due to diphtheria.

The death-rate for this disease was 0.18 per 1,000 of the estimated population at all ages.

46, or 52.8 per cent., of the cases notified were removed to the Isolation Hospital.

In 20 instances the patient was subsequently found not to be suffering from diphtheria.

1 return case occurred.

Table showing notifications, cases isolated, and number of deaths from diphtheria during the years 1919—1923.

Year.	No. of cases notified.	No. of cases isolated in Hospital.	No. of deaths.	Deaths per 100 cases.
1919	51	34	5	9.8
1920	35	20	2	5.7
1921	57	42	8	14.0
1922	64	48	2	3.1
1923	87	46	10	11.5

ANTI-DIPHTHERIA SERUM.

48 applications were made by medical practitioners for the free supply of anti-diphtheria serum, 448,000 units being supplied.

Table showing case mortality of Scarlet Fever and Diphtheria isolated in Hospital compared with Home Cases.

Year.	SCARLET FEVER.				DIPHTHERIA.			
	Hospital Cases.		Home Cases.		Hospital Cases.		Home Cases.	
	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100	No. of Cases Isolated.	Death-rate per 100
1919	25	8.0	16	0.0	34	11.7	17	5.9
1920	47	0.0	20	0.0	20	5.0	10	10.0
1921	57	1.7	22	0.0	42	11.9	15	20.0
1922	65	1.5	39	0.0	48	4.1	16	0.0
1923	82	0.0	68	1.4	46	6.5	41	17.0

SMALLPOX.

The district was free from Smallpox, and in no instance was notification received from another Authority that a person having been in contact with Smallpox was proceeding to Carlisle.

ENTERIC FEVER.

The district was free from enteric fever.

Table showing the average number of cases notified as enteric fever for 5-year periods, 1890—1919, and for the 4 years 1920—1923.

Years.	Average for periods of 5 years.	Year.	Number of cases notified.
1890-1894	21·2	1920	2
1895-1899	18·6	1921	1
1900-1904	12·6	1922	...
1905-1909	3·2	1923	...
1910-1914	3·8	...	...
1915-1919	1·4	...	...

No case of typhus or continued fever was notified.

MALARIA.

4 notifications relating to patients suffering from malaria were received. In each instance the patient had been abroad on active service, and had there been infected with the disease.

No case of malaria of indigenous origin was notified.

DYSENTERY.

No case of dysentery was notified.

PNEUMONIA.

53 notifications of cases of pneumonia were received during the year. In 5 instances the disease was stated to be of the acute influenzal type, and in 48 instances of the acute primary type.

The cases were investigated by the Health Visitors and, where not removed to Hospital, isolation carried out as far as possible, and where necessary advice given as to nursing and prevention of infection to others. 69 visits by the Health Visitors were made in this connection.

In 7 instances the patient was removed to Hospital.

In no instance did death take place of the cases notified as influenzal pneumonia, but in 12 other instances death occurred.

INFLUENZA.

7 deaths of residents were registered as due directly to influenza.

The age distribution of the deaths occurring among the 7 persons was as follows:—

0 to 1	1 to 2	2 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 up- wards	Total
1	5	1	...	7

INFLUENZA VACCINE.

No application was received during the year for a supply of influenza vaccine.

ENCEPHALITIS LETHARGICA.

3 cases of this disease were notified during the year, 2 of the patients being female adults, aged 57 years and 34 years respectively, the other being a little girl aged 6 years, who was the only one of the three resident in Carlisle. This little patient recovered, but is unfortunately totally blind.

With regard to the younger of the female adults, her death took place before the notification was received. From the history obtained it appears that she resided outside Carlisle, and whilst away from her home in another part of the county she became ill and was brought into Carlisle to be treated, where she died shortly after her arrival. With regard to the remaining case, this woman was admitted into the Cumberland Infirmary for treatment for her illness, from which she recovered.

CEREBRO-SPINAL FEVER.

No case of cerebro-spinal fever was notified during the year.

TETANUS, &c.

No case of tetanus was notified during the year, and no application was received for a supply of tetanus anti-toxin.

Particulars relating to puerperal fever, ophthalmia neonatorum, measles, whooping cough, chickenpox, and mumps, are given on pages 41, 55, and 56.

NOTIFICATION FEES.

The total amount paid in fees for notifications of all notifiable diseases during 1923 was £52 1s. 0d.

SUMMARY OF NURSING ARRANGEMENTS, HOSPITALS, AND OTHER INSTITUTIONS, AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home.

(a) *General.* None.

(b) *Infectious.* An annual retaining fee of £20 is paid by the Council to the Queen's Nurses of the Carlisle District Nursing Association, on condition that nursing facilities will be made available by them for such cases of puerperal fever, ophthalmia neonatorum, measles, whooping cough, and epidemic diarrhœa, as the Council may require them to attend. In addition, 1s. per visit is paid on account of such cases.

Midwives.

The Corporation does not employ midwives except at the Maternity Hospital, and does not pay any subsidy in respect of any midwife practising in the district.

Hospitals provided or subsidised by the Local Authority.

(1) *Tuberculosis.* The Corporation has a call upon 20 beds in the Blencathra Sanatorium, Threlkeld, Cumberland, in accordance with the agreement made between the Local Government Board, the Sanatorium Committee, and the Corporation.

(2) *Maternity.* A hospital has been provided by the Corporation at 3 George Street, Carlisle, containing 7 beds and cots.

(3) *Children.* There is a children's ward at the Cumberland Infirmary which provides for local requirements. The Corporation make a general contribution to the funds.

(4) *Fever.* General infectious diseases are sent to Crozier Lodge Isolation Hospital, Carlisle, 50 beds.

(5) *Smallpox.* The Corporation has provided a hospital for the isolation of smallpox a few miles out of the City, containing 12 beds.

(6) *Others.* None.

LIST OF EXISTING CLINICS AND INFANT WELFARE CENTRES IN THE CITY.

Nature of Centre.	Address.	Accommodation.	Provided by.
Maternity and Child Welfare (Post-natal), once weekly	Maternity Hospital, 3 George Street	Waiting, Consulting, and Weighing Rooms	Carlisle Corporation
Maternity and Child Welfare (Ante-natal), once weekly	Do.	Waiting, Consulting, and Dressing Rooms	Do.
Infant Welfare Centre, weekly	West Walls	One Large Room	The Carlisle Mothers' and Babies' Welcome Society
Do.	St. John's Hall, South Street	Two Rooms	Do.
Do.	Caldewgate	One Room	Do.
Do.	Mac Innes Hall, Stanwix	Two Rooms	Do.
School Clinic, Minor Ailments, daily	2 George Street	Three Rooms	Carlisle Corporation
Do.	Do.	Two Rooms	Do.
Do.	Do.	Two Rooms and Dark Room	Do.
Do.	Do.	Two Rooms	Do.
Tuberculosis Clinics, four times weekly	1 George Street	Four Rooms and Laboratory	Do.
Venereal Clinic, five sessions weekly and intermediate treatment	Cumberland Infirmary	Three Rooms	Jointly by Carlisle Corporation and the Cumberland County Council

Institutional Treatment for Unmarried Mothers, Illegitimate Infants, and Homeless Children.

With the exception of a small house provided by the Diocesan Association at 25 Myddleton Street, Carlisle, which makes provision for one or two expectant unmarried females temporarily, there is no institution providing these facilities except those of the Poor Law Authority.

Ambulance Facilities.

(a) For infectious cases. An ambulance is kept at the Isolation Hospital for the use of cases occurring in the City and the adjacent Rural District.

(b) For non-infectious and accident cases. A public ambulance, provided by the Corporation, for accidents and illness other than infectious disease is kept at the Fire Station, Spring Gardens Lane, for which the following charges are made:—

For residents in the City	7/6 for each removal
For not exceeding 2 miles outside the City	10/- ..
For, beyond 2 miles and not exceeding 3 miles	12/6 ..
For each additional mile thereafter (limited to 20 miles outside the City)	3/- per mile

Between 9 p.m. and 7 a.m. 50 per cent. additional is charged.

In cases of accidents in the streets no charge is made for the removal of persons to the Infirmary or their homes.

BACTERIOLOGICAL WORK.

During the year 72 specimens of sputum have been examined for the presence of tubercle bacilli, in 23 of which the organism was found.

41 swabs from throats were submitted to the Clinical Research Association for examination for the Klebs Loeffler Bacillus, and in 19 instances the organism was found.

16 samples of milk were purchased from persons purveying milk within the City and submitted to the Public Health Laboratory, Manchester, for experimental inoculation, and in 14 instances no ill effect was observed in the health of the animals experimented upon. In 1 instance tubercle bacilli were found. Inoculation of animals from further samples of milk taken from the cows at the same farm gave no indication of the presence of tubercle bacilli. In the remaining instance the animal experimented upon died within 5 days of inoculation, and it was not possible to say positively that no tubercle bacilli were present. Inoculation of animals from further samples of milk taken from the cows at the same farm gave no indication of the presence of tubercle bacilli.

4 samples of City water, taken from a domestic tap, were submitted to the Public Health Laboratory, Manchester, for bacteriological examination. A tabulated summary of the reports is given on page 15.

A portion of a bottle of rennet, which was thought to have been responsible for several cases of sickness arising after the eating of junket prepared from it, was found to be free from organisms associated with disease and also from any form of chemical irritant.

TUBERCULOSIS.

During the year 129 new patients were examined by the Tuberculosis Officer, 122 at the Dispensary, Spring Gardens Lane, and 7 at the homes of patients who were too ill to attend the Dispensary. 64 of the patients were notified cases, 31 were contacts of whom 5 were subsequently notified by the Tuberculosis Officer himself, and 40 were suspects, of whom 1 was ultimately found to be suffering from Tuberculosis.

Of the notified cases, 30 were insured persons, 22 were children of school age, and 12 were outside either of these categories. 55 of the patients newly notified were suffering from pulmonary tuberculosis and 9 from non-pulmonary tuberculosis, the classification being as follows:—

	Insured Persons.	School Children.	Others.	Total.
Stage I ...	5	14	4	23
Stage II ...	15	3	4	22
Stage III ...	8	—	2	10
	—	—	—	—
	28	17	10	55
Non-Pulmonary	2	5	2	9
	—	—	—	—
	30	22	12	64
	—	—	—	—

257 old patients were also under the supervision of the Tuberculosis Officer, 233 of whom were examined at the Dispensary, and 24 at their own homes, where the patient was either bedridden or not fit to be out of doors. 210 of these patients were notified cases, 14 were contacts, and 39 were suspects; out of the former of the two latter groups 1 person, and out of the latter 5 persons, were subsequently notified by the Tuberculosis Officer.

Of the old notified cases, 59 were insured persons, 37 were discharged soldiers, 68 were children of school age, and 46 belonged to other categories. The total number of patients under supervision during the year was therefore 386, the distribution of the cases being as follows:—Pulmonary tuberculosis, 246; non-pulmonary tuberculosis, 28 (viz., glands, 15; abdomen, 4; bones and joints, 4; other forms, 5); and suspected tuberculosis, 112.

The total number of attendances for examination at the Tuberculosis Dispensary during the year was 1352, of which number 980 were made by notified patients, 122 by contacts, and 250 by persons suspected to be suffering from tuberculosis. The number of visits by insured persons was 258, by discharged soldiers, 114, by school children, 464, and by others, 144; whilst 73 visits were made by the Tuberculosis Officer to the homes of patients too ill to attend the Dispensary.

37 patients received special treatment by means of Tuberculin (B.E.), the total number of injections given being 413.

4 cases were treated by means of X-ray, making 47 attendances for this purpose.

The total number of clinics held at the Tuberculosis Dispensary during the year was 208, the average number of patients attending per session being 6.5.

5,107 visits were made by the nurses to the homes of patients on the register, which at the end of the year contained 847 names.

8 thermometers and 3 sputum flasks were given to patients, and cod liver oil and malt was supplied free in 9 instances.

72 specimens of sputum were examined, and in 23 of these tubercle bacilli were found.

At the commencement of the year 16 patients were receiving treatment in Blencathra Sanatorium, and 36 other patients were admitted during the year, making a total of 52 who received this form of treatment. 41 patients were discharged, 2 died, and 9 were still under treatment on the 31st December. The condition of those discharged was as follows:—Much improved, 14; improved, 20; unchanged, 7. The total number of days spent in sanatorium by those who completed their treatment was 6,525, equal to an average duration of residential treatment of 151.8 days per patient.

On considering the various tables included in this section of the report, that dealing with the period of survival after notification calls for some comment. Of the 54 deaths from tuberculosis, 26 per cent. had not been notified by the medical practitioners in attendance, 1 case was dead when the notification was received, and 3 cases died within a week of notification. In one-third of the deaths from this disease therefore the sufferer had either not been notified or had died before or within a week of notification. Only 55.5 per cent. of the fatal cases survived more than three months after notification; 40.7 per

cent. did not survive more than six months, in 31.4 per cent. death took place not longer than nine months, and in only 26 per cent. did the patient survive more than one year after notification.

These figures indicate that so far as prevention is concerned the officers of the Local Authority are placed at a disadvantage, since a large number of patients are not notified until the disease has become very dangerous to others and the patient himself beyond the chances of recovery, an unfortunate condition which is still further aggravated by the absence of any kind of accommodation to which such disabled and infecting cases might be removed. Evidence of this unsatisfactory state of notification of tuberculosis is demonstrated by reference to the table of classification of the new cases, the only satisfactory feature of which is the reference to school children who are examined by the School Medical Officer and seen by the Tuberculosis Officer, in respect of which it will be observed that over 82 per cent. are first seen in an early and hopeful stage of the infection. With regard to the notification of insured persons, it is found that 82 per cent. of those examined at the Dispensary furnish the late or advanced type of case; no fewer than 28 per cent. belong to the latter category, for whom there is no hope of recovery, and out of 54 deaths, 24 were insured patients, one half of whom had died within six months of notification. The above figures apply solely to Carlisle, but there is much evidence that failure of some medical practitioners to notify the disease or to be guilty of some delay in sending in a notification is met with in many districts, and on account of the importance of the question I quote here a comparatively recent circular of the Minister of Health to medical practitioners in England and Wales:—

“ 1. The attention of the Minister of Health is constantly being called to the failure of some medical

practitioners to notify cases of tuberculosis. In certain districts it has been found that more than 40 per cent. of the persons dying from tuberculosis had not been previously notified as suffering from that disease. The Minister views with so much concern this failure to perform a duty which has been incumbent upon all medical practitioners since 1913, that he has decided to communicate direct with every practitioner in England and Wales on the subject.

“ 2. Under the Public Health (Tuberculosis) Regulations, 1912, it is the statutory duty of every practitioner throughout the country, within 48 hours of his first becoming aware that any of his patients is suffering from tuberculosis, to notify the case to the Medical Officer of Health of the District in which the patient is residing, unless he has reasonable grounds for believing that the case has already been notified to that officer. In any case of doubt the practitioner should ascertain from the Medical Officer of Health whether the case has already been notified before deciding that it is not necessary for him to notify. The Public Health Act, 1896, provides substantial penalties for any wilful neglect or refusal to carry out the Regulations.

“ 3. The Minister fully appreciates that there are difficulties attending the notification of cases of tuberculosis which do not arise in the case of other infectious diseases, and that some persons suffering from tuberculosis do not consult a doctor until the disease is already in an advanced stage. He also recognises that in the early stages of tuberculosis it may be difficult to arrive at a definite diagnosis, and that practitioners are naturally reluctant to notify their patients as suffering from tuberculosis until that disease has been definitely diagnosed. The Minister thinks it well to point out that the Tuberculosis Regulations only require a practitioner to notify a case as soon as he becomes aware that the patient is suffering from tuberculosis. There is no obligation to notify a case in which the practitioner merely suspects the presence of tuberculosis. On the other hand, it is hardly necessary to draw attention to the importance,

in the interests of the patient, of arriving at a definite diagnosis in all doubtful cases as early as possible, and practitioners are aware that, under the tuberculosis schemes of local authorities, facilities are available for assistance in diagnosis, including the services of the Tuberculosis Officer for consultation.

“ 4. The Minister also recognises that in some instances a practitioner may hesitate to notify the case because he fears that the fact that the patient is suffering from tuberculosis may thus become known to the patient's employers or neighbours, or because the patient objects on the ground of possible inconvenience or of the supposed stigma attaching to a diagnosis of tuberculosis. But the Tuberculosis Regulations expressly require that every notification and every document relating to a person notified under the Regulations shall be regarded by the Medical Officer of Health, and by every person who has access thereto, as confidential, and the Minister is not aware of any case in which there has been a breach of this requirement.

“ 5. The prompt notification of all cases of tuberculosis is of importance in the interests of the community as well as of the patient. In this way only can full and early co-operation be secured between the medical practitioner, the Medical Officer of Health of the district, and the Tuberculosis Officer, in order that all possible steps may be taken to prevent the spread of infection, to discover other possible cases which have been in contact with the patient, and to ensure that the patient receives, to the fullest extent possible, the treatment best suited to his condition. If in any particular case the practitioner considers that the circumstances are such as to render it unnecessary or contrary to the interests of the patient for the home to be visited by these officers or their staff, it is open for him to arrange with the officers concerned for such visits to be dispensed with.

“ 6. The Minister feels confident, now that the matter has been brought clearly to the notice of medical practitioners, that there will be a more complete observance of the requirements of the Tuber-

culosis Regulations, and that Local Authorities will have no need to resort to legal proceedings to secure compliance with the Regulations.”

TREATMENT OF DISCHARGED SAILORS AND SOLDIERS.

37 discharged soldiers suffering from tuberculosis, admitted by the Ministry of Pensions to be attributable to or aggravated by service in the War, have attended the Dispensary during the year, making a total of 114 attendances; 2 of these pensioners died during the year.

1 pensioner was receiving treatment in Blencathra Sanatorium on the 1st January, 1923, and was discharged during the year, after a period of residence of 279 days, his condition on discharge being improved.

2 tuberculous pensioners were receiving combined treatment and training at Englethwaite Tuberculosis Colony at the beginning of the year, and completed their training satisfactorily; both are now carrying on their trades and their health is good. 2 other pensioners were admitted to Englethwaite during the year and are still undergoing treatment and training.

1 pensioner completed his training in the Liverpool Sanatorium and was discharged during the year, his condition being satisfactory.

Distribution of the Deaths from Tuberculosis in the various Wards of the City, 1923.

	Stanwix	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldewgate	Newtown & Belle Vue	Carlisle
Pulmonary ...	4	4	2	5	3	4	3	4	6	5	40
Non-Pulmonary ...	...	3	3	1	1	...	1	2	2	1	14
Totals	4	7	5	6	4	4	4	6	8	6	54

Summary of Notifications of Tuberculosis from 31st December, 1922, to 29th December, 1923.
NOTIFICATIONS ON FORM A.

		Number of Primary Notifications.											Total Prim-ary Noti-fications.	Total Noti-fications on Form A.
		Ages.		0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55			55-65	65 & up-wards.
Pulmonary	Males	...	4	1	1	2	3	5	8	4	..	1	29	31
	Females	...	2	1	...	3	5	10	3	1	1	2	28		29
Non-pulmonary	Males	...	4	...	1	..	1	..	..	..	..	6	6	
	Females	...	1	1	1	1	1	1	1	..	..	7		7
Totals		...	11	3	3	6	10	16	12	5	1	3	70		73

NOTIFICATIONS ON FORM B.

		Number of Primary Notifications.				Total Noti-fications on Form B.
		Ages.		Total.		
Pulmonary	Males	...	4	2	6	6
	Females	...	5	3	8	
Non-pulmonary	Males	...	...	1	1	2
	Females	...	2	...	2	
Totals		...	11	6	17	17

NOTIFICATIONS ON FORM C.

		Poor Law Institutions.		Sanatoria.	
		Pulmonary	Non-pulmonary	Pulmonary	Sanatoria.
Males	Females	...	...	19	23
	Males	...	...	...
Totals		...	...	...	43

Age and Sex distribution of New Cases and Deaths from Tuberculosis, 1923.

Ages.	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 and over.	
New Cases.												
Pulmonary—												
Male	4	5	3	2	3	5	8	4	...	1
Female	2	6	3	3	5	10	3	1	1	2
Non-Pulmonary—												
Male	4	...	2	...	1	...	...	..	..	...
Female	1	3	1	1	1	1	...	...	...	...
Deaths.												
Pulmonary—												
Male	1	...	...	1	5	2	9	2	2	...
Female	1	2	2	7	3	1	...	2
Non-Pulmonary—												
Male	4	1	...	...	2	1	1	...	...	...
Female	...	1	1	2	...	...	...	...	1	...	...	...

The following Table shows the period persons dying in 1923 survived after notification.

	Not Notified	Died before Notification	Died within 7 days	Survived more than									
				1 week	1 month	3 months	6 months	9 months	1 year	1½ years	2 years	3 years	4 years
Pulmonary	7	...	1	2	3	8	5	2	3	2	5	1	1
Non-Pulmonary	7	1	2	1	...	...	...	1	...	...	1	...	1

Deaths from Tuberculosis, Influenza, and other Respiratory Diseases, 1919-1923.

Year.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Tuberculosis, all forms.	Influenza.	Other Respiratory diseases.
1919	46	16	62	38	103
1920	36	15	51	28	119
1921	46	22	68	18	105
1922	50	14	64	55	136
1923	40	14	54	7	89

PUBLIC HEALTH (VENEREAL DISEASES) REGULATIONS, 1916.

Diagnosis and Treatment of Venereal Diseases.

During the year 217 persons residing in Carlisle, 147 of whom were males and 70 females, were under treatment or observation at the Clinic at the Cumberland Infirmary. This is a decrease of 12 persons upon the figure for the previous year.

105 patients were found to be suffering from syphilis, 4 from non-syphilitic chancre, 75 from gonorrhœa, and 33 from conditions other than venereal disease. 123 new patients attended for the first time during the year, as compared with 124 for the previous year.

1,262 attendances were made by these patients, a decrease of 256 on the figure for the previous year. In addition, 1,477 attendances were made by patients for intermediate treatment by irrigation, and 330 doses of arsenobenzol compounds were administered to patients. No serious case of arsenical dermatitis occurred.

CLINICS.

Clinics were held on the same days and at the same hours as in the previous year, viz., for women and children on Mondays, at 2-30 p.m., and Thursdays, at 5-30 p.m. The male clinics for syphilis were held on Wednesdays, at 2-30 p.m., and Thursdays, at 6 p.m.; and the male clinics for gonorrhœa on Wednesdays, at 6 p.m.

New cases were seen at any of the clinics.

ACCOMMODATION AT THE INFIRMARY.

In the early part of the year the alterations in the premises temporarily occupied were completed, and have

been found to be most satisfactory. In effecting the alterations the comfort and convenience of patients and staff have been most carefully considered.

With regard to the joint scheme, during the past year a total of 452 persons were treated at the two treatment centres, of whom 265 were seen for the first time, the remainder being carried over from the previous year. 73 of these were found not to be suffering from venereal disease, leaving 379. The figure for 1922 was 384.

In the number of new cases of syphilis (109) there was a decrease of 11, but there was an increase of 10 in the new cases of gonorrhœa (81).

Areas in which Patients resided.	New Patients.	Total Attendances.
Carlisle	123	2,739
Cumberland	127	1,376
Dumfriesshire	5	110
Westmorland	2	26
Kent	2	2
London	2	3
Hull	1	1
Aberdeen	1	1
Holland	2	2
Total	265	4,260

Return relating to all persons resident in the City of Carlisle who were treated at the Treatment Centre at the Cumberland Infirmary during the year ended the 31st December, 1923:—

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than Venereal.		Total.	
	M	F	M	F	M	F	M	F	M	F
1. Number of persons who, on the 1st Jan., 1923, were under treatment or observation for	39	23	1	...	22	9	...	...	62	32
2. Number dealt with during the year for the first time and found to be suffering from	26	17	3	...	34	10	22	11	85	38
Total—Items 1 and 2	65	40	4	...	56	19	22	11	147	70
3. Number of persons who ceased to attend										
(a) before completing the first course of treatment for	6	6	2	...	15	5	...	...	23	11
(b) after one or more courses, but before completion of treatment for	12	11	...	...	...	...	...	...	12	11
(c) after completion of treatment, but before final tests as to cure of	7	4	...	...	6	2	...	..	13	6
4. Number of persons transferred to other Treatment Centres after treatment for	2	1	...	...	...	2	...	...	2	3
5. Number of persons discharged after completion of treatment and observation for	4	1	1	...	8	4	...	...	13	5
6. Number of persons who, on the 1st Jan., 1924, were under treatment or observation for	34	17	1	...	27	6	...	...	62	23
Total—Items 3, 4, 5 & 6	65	40	4	...	56	19	...	...	125	59
7. Out-Patient attendances:—										
(a) For individual attention by the Medical Officer	440	242	5	...	428	93	35	19	908	354
(b) For intermediate treatment, e.g., irrigation, dressings, etc.	7	...	...	...	1469	...	1	...	1477	...
Total Attendances	447	242	5	...	1897	93	36	19	2385	354

Aggregate number of "In-patient days" of treatment given:—Nil.

Number of doses of Salvarsan-substitute administered in Out-patient Clinic:—330.

Examination of Pathological Material :—

	For Detection of			For Wassermann Re-action.
	Spirochaetes.	Gonococci.	Other Organisms.	
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	4	34	...	...
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory ...	2	11	...	174

MATERNITY AND CHILD WELFARE.

During the past year 1,220 notifications of birth were received, 1,168 of which related to live births and 52 to still-births. 655 were notified by medical practitioners, 561 by midwives, and 4 by other persons. In 21 other instances failure to notify occurred.

HEALTH VISITORS.

The following is a summary of the visits paid by the Health Visitors of the Corporation :—

Total number of homes visited	...	...	...	13,249
Primary visits in connection with the notification of births	...	...	...	1,176
Re-visits in connection with the notification of births—				
0—1 year	...	...	...	4,903
1—2 years	...	...	...	3,374
2—3 years	...	...	...	3,310
3—4 years	...	...	...	3,001
4—5 years	...	...	...	1,697
			—	16,285
Total number of routine visits to children	...	...	...	17,462
Visits to boarded-out children	...	...	...	148
Visits to expectant mothers—				
Primary	...	...	...	212
Re-visits	...	...	...	234
			—	446

Visits in connection with—

Deaths of children under 1 year	...	...	...	85
Ophthalmia Neonatorum	...	...	...	44
Diarrhœa	...	...	...	92
Bronchitis	...	...	...	96
Broncho-Pneumonia	...	...	...	65
Acute Primary or Influenzal Pneumonia	...	...	...	69
Measles	...	...	...	1,579
Whooping Cough	...	...	...	483
Chickenpox	...	...	...	68
Puerperal Fever	...	...	...	3
Other Conditions	...	...	...	11

INSPECTION OF MIDWIVES.

In January, 1923, 18 midwives gave notice of intention to practise in the City, and on later dates 4 others notified their intention to practise, making a total of 22. 4 midwives left the City, leaving at the end of 1923 18 midwives on the register.

These midwives attended a total of 692 confinements.

1 case of puerperal fever occurred in the practice of a midwife.

Notices in accordance with the rules of the Central Midwives' Board were received in connection with the following conditions:—

Cases in which a midwife called for the assistance of a medical practitioner	...	...	...	38
Cases in which a midwife advised that medical help should be obtained	...	...	...	102
Notification of the intention to substitute artificial for breast feeding	...	...	...	29
Notification of still-births	...	...	...	4
Notification of having laid out a dead body	...	...	...	4
Notification of liability to be a source of infection	...	...	...	3
Notification of death of infant	...	...	...	1

The circumstances in which medical help was either obtained or advised are given as follows:—

Condition of Mother—

Ante-natal	...	...	...	...	13
Excessive vomiting	...	...	...	1	
Hæmorrhage	...	...	...	9	
Swelling of feet, hands, face, &c.	...	...	...	2	
Fits	...	...	...	1	
During labour	...	...	...	...	67
Delayed labour	...	...	...	42	
Malpresentation	...	...	...	11	
Retained Secundines	...	...	...	10	
Varicose Veins	...	...	...	3	
Tumour of Vulva	...	...	...	1	
Post-natal	...	...	...	...	34
Rupture of Perineum	...	...	...	21	
Hæmorrhage	...	...	...	4	
Rise of Temperature	...	...	...	6	
Weakness	...	...	...	3	
Condition of Child	...	...	...	...	26
Feebleness	...	...	...	5	
Prematurity	...	...	...	4	
Deformity	...	...	...	5	
Conjunctivitis	...	...	...	9	
Dyspepsia	...	...	...	1	
Fits	...	...	...	1	
Rash	...	...	...	1	

The following conditions are given as the reasons for the substitution of artificial feeding:—

By doctors' orders on account of—

Debility of mother	5
Spina Bifida (infant)	1
No definite reason	8

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By midwives on account of—

Insufficient milk	3
Debility of mother	4
Inverted nipples	3
Phthisis	...	...	...	1
Eclampsia (Convulsions)	1
Disinclination of mother	1
Weakness of Infant	1
Infant nursed out	1

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Midwives were regularly inspected by visits at their own homes, and the necessary examinations of their outfits and registers have also been carried out. 31 routine and 20 special visits have thus been paid.

The following important matters in which midwives were concerned required special attention and have been recorded:—

Failure of midwife to report to the Local Supervising Authority that she was attending a case of puerperal fever	...	...	...	1
Instances in which midwives failed to state the reason for having obtained medical help	...	...	...	2
Instances in which the Authority were of opinion that the midwife had failed to pay the full number of visits to her patient	...	...	...	3
Instances in which a midwife used a designation contrary to the rules of the Central Midwives' Board	...	...	...	2

HOME NURSING.

Under the arrangement with the Carlisle District Nursing Association, the following visits were paid by the nurses of the Association:—

	No. of Cases.	No. of Visits.
Pleurisy	1	1
Pneumonia	4	40
Stomatitis	1	1

42

MATERNITY HOSPITAL.

187 patients received treatment in this institution, 22 of whom were admitted upon the request of medical practitioners.

5 deaths of mothers occurred, 1 being a patient who was admitted after delivery as suffering from puerperal phlebitis, who was found to have septicæmia. Of the other 4, 3 were very urgent cases, 2 of whom died shortly after admission.

In 3 instances the blood was submitted to the Wassermann test, and in each case the result was negative.

The following are also amongst the important particulars relating to the work of the Maternity Hospital:—

Remaining in Hospital on 31st December, 1922 ...	7
Number of cases admitted during the year ...	180
	187
Total ...	187

Average duration of stay ...	11.8 days
Number of cases delivered by midwives ...	144 „
Number of cases delivered by doctors ...	25 „
Total number of confinements ...	169 „
Number of cases treated ante-natally only ...	11 „
Number of cases treated during puerperium only	7 „

Number of cases in which medical assistance was specially indicated:—

Mothers—

Before labour ...	24
Albuminuria ...	8
Eclampsia ...	1
Malpresentation ...	7
Hæmorrhage ...	2
Pelvic Contraction ...	4

Cystitis	...	...	1	
Hyperemesis	...	...	1	
During labour	...	...	...	39
Delayed labour	...	...	18	
Pelvic Contraction	...	...	3	
Accidental Hæmorrhage	...	...	4	
Placenta Prævia	...	...	6	
Prolapse of Cord	...	...	2	
Malpresentation	...	...	3	
Eclampsia	...	...	3	
After labour	...	...	...	37
Rupture of Perineum	...	...	22	
Raised Temperature	...	...	4	
Post-partum Hæmorrhage	...	...	3	
Phlebitis	...	...	2	
Albuminuria	...	...	3	
Eclampsia	...	...	1	
Uræmia	...	...	1	
Paralysis	...	...	1	
For Infant	...	...	...	3
Feebleness	...	...	3	
Number of maternal deaths	...	...	...	5
Causes—				
Concealed Accidental Hæmorrhage			1	
Eclampsia	...	...	1	
Septicæmia	...	...	1	
Uræmia and Secondary Post-partum				
Hæmorrhage	...	...	1	
Heart Failure	...	...	1	
Number of foetal deaths	...	...	...	21
Still-births	...	...	...	16
Causes—				
Eclampsia	...	...	2	
Malpresentation	...	...	1	
Accidental Hæmorrhage	...	...	4	
Contracted Pelvis	...	...	1	
Placenta Prævia	...	...	3	

Uræmia	...	...	2
Cause unknown	...	...	3
Died before 10 days	...	...	5
Causes—			
Prematurity	...	...	4
Albuminuria	...	...	1

Conditions necessitating the substitution of artificial feeding for breast feeding:—

Insufficient Milk	...	...	...	8
Albuminuria	...	...	...	1
Debility	...	...	...	3
Defect of Nipples	...	...	...	1
Twins	...	...	...	4

ANTE-NATAL CLINIC.

The number of attendances made at the clinic for expectant mothers was 516, and among the conditions requiring medical attention or advice were the following:—Heart disease, bronchitis, anæmia, constipation, hyperemesis, dyspepsia, diarrhœa, defective teeth, chronic nephritis, albuminuria, varicose veins, lordosis, hyperthyroidism, cracked nipples, mastitis, uterine prolapse, pelvic contraction, malpresentation, hæmorrhage, leucorrhœa, and hydramnios.

INFANT CONSULTATIONS.

At the clinics for children up to five years of age, there were 816 attendances (a slight decrease on the number for 1922, but almost twice as many as in 1921), during which treatment or advice was found to be necessary for the following conditions:—Malnutrition, injudicious feeding, diarrhœa, dyspepsia, constipation, worms, hernia, rickets, bronchitis, whooping cough, pneumonia, seborrhœa, eczema, impetigo, pruritus, dacrocystitis, blepharitis, conjunctivitis, otorrhœa, adenoids, phimosis, hypospadias, tongue-tie, cleft palate, talipes, adenitis, &c.

VOLUNTARY AGENCY.**Babies' Welcomes and Schools for Mothers.**

The total number of sessions held at the four voluntary centres, viz., West Walls, Botchergate, Caldewgate, and Stanwix, was 162, at which 7,218 attendances were made as follows:—

Babies	...	...	...	...	3,777
Mothers	...	...	...	...	3,441

The number of children who attended for the first time was 182, whilst 3,595 visits were made by those who had attended before. 1,531 visits related to children under one year of age, and 2,064 to those between one and five years.

The number of first attendances of mothers was 136, the number of attendances of those who had previously attended being 3,305.

Classes in connection with the teaching of the following subjects were held and addresses given as follows:—

Mothercraft	...	...	72 addresses
Sewing	...	...	8 addresses
Hygiene	...	...	27 addresses
Cookery	...	...	12 addresses

HEALTH VISITOR.

Total number of homes visited	...	...	2,316
Primary visits	...	...	643
Re-visits to children—			
0—1 year	...	...	1,445
1—2 years	...	...	212
2—3 years	...	...	394
3—4 years	...	...	266
4—5 years	...	...	238
			— 2,555
Total number of visits to children	...	...	3,198

Visits to expectant mothers—

Primary	...	...	...	...	8
Re-visits	...	...	...	...	6
Number of Attendances at Babies' Welcomes ...					107

The Assistant Medical Officer for Maternity and Child Welfare visited one of the Welcomes each week, making one visit to each of the Welcomes once a month. As in former years, on the occasion of her visits to the Welcomes, she addressed the mothers on some appropriate subject, emphasising its aspect in relation to the health of children.

FREE PROVISION OF MILK.

During the year 2,172 gallons of fresh milk were supplied to 152 families for the purpose, principally of assisting the feeding of infants, and in a few instances to nursing mothers. Previous to supplying the milk careful investigation of the circumstances was made in each instance.

STILL-BIRTHS.

The number of still-births notified during the year was 52, or 14 less than the number notified in 1922. Of this number 8 were notified by midwives, concerning which the following particulars are available:—3 were full-time pregnancies and 5 were premature; of the 3 full-time still-births, 2 were macerated foetuses, and 1 complication at labour; of the 5 premature still-births, 3 were macerated foetuses and 2 complications at labour.

It will be observed that in the great majority of the cases the cause of the still-birth was unascertainable, but in a number of instances information suggestive of a history of ante-partum hæmorrhage was obtained.

The bodies of 50 still-born children were given burial in the Carlisle Cemetery.

The illegitimate still-births, numbering 7, comprised 11.6 per cent. of the total illegitimate births, viz., the illegitimate births registered together with the illegitimate still-births notified.

The legitimate still-births, numbering 45, comprised 3.8 per cent. of the total legitimate births, viz., the legitimate births registered together with the legitimate still-births notified.

Of the 1,181 children born alive, 53, or 4.5 per cent., were illegitimate; whilst of the 52 children born dead, 7, or 13.4 per cent., were illegitimate.

Table showing certain particulars regarding the 52 still-births.

	Total.	Legitimate.	Illegitimate.	Male.	Female.	Full Time.	8 Months.	7 Months or less.
Maternal Conditions—								
Albuminuria	2	2	0	0	2	0	1	1
Eclampsia	2	1	1	1	1	0	1	
Ante-partum Hæmorrhage...	9	8	1	6	3	0	4	5
Syphilis	1	1	0	1	0	1	0	0
Strain or Accident	2	1	1	1	1	0	1	1
Delayed Labour	5	5	0	4	1	5	0	0
Instrumental Delivery	7	7	0	4	3	7	0	0
Malpresentation	2	2	0	2	0	2	0	0
Malformation of Child	2	1	1	1	1	2	0	0
Prolapse of Cord	1	1	0	1	0	0	1	0
Marked Prematurity	4	4	0	0	4	0	0	4
No cause ascertained	14	12	2	8	6	11	3	0
No information available ...	1	0	1	0	1	0	0	0

INFANT MORTALITY.

The total number of deaths of infants under one year was 103; the number of deaths of residents was 98, which provides a nett infant mortality rate of 82.9 per 1,000 of the registered births. This figure is practically the same as in 1922. Correcting for variation by adopting the method suggested by the Registrar-General, viz., taking as a denominator the sum of 70 per cent. of the current year's births and 30 per cent. of the births of the previous year, the infant mortality rate for 1923 is 81.2 per 1,000 births registered.

As during 1922, the chief factor in the production of a low infant mortality rate for the year was the absence of any large outbreak of diarrhœal disease, which would be very materially contributed to by the coolness of the summer throughout, which was coincident with a larger rainfall and also an increase in the number of days upon which rain fell.

The number of deaths due to diarrhœa amongst infants up to one year was 7.6 per 1,000 registered births, as compared with 5.5 per 1,000 registered births in 1922, and with 22.1 per 1,000 registered births in 1921. There was also a slight fall in the number of deaths from tuberculosis, and a noticeable decrease in the number of deaths from influenza and from accidents.

The mortality rate for infants under four weeks was a little higher than during 1922. No fewer than 19 children died before they were a day old, 36 before they were one week old, and 40 before the fourteenth day. The chief cause of these early deaths was prematurity of birth, which was responsible for 28.0 deaths per 1,000 of the registered births, as compared with 17.4 per cent. in 1922. Against this increase in the number of premature births, however, may be set off a decrease in the number of stillbirths, viz., from 66 in 1922 to 52 in 1923.

INFANT MORTALITY, with deaths from stated causes, at various ages and in various seasons, of children under one year of age.

CAUSE OF DEATH.	AGE.							MONTH.												Total Deaths under One Year.		
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks & under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.		November.	December.
All Causes. { Certified ... } Uncertified ...	36	4	5	2	47	13	9	17	10	6	8	21	7	10	11	3	2	4	12	3	9	96
{ Whooping Cough ...	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
{ Influenza ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Measles ...	..	..	..	..	..	..	1	3	5	..	2	6	..	1	..	..	..	..	..	..	..	1
{ Tuberculosis (all forms) ...	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Status Lymphaticus ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
{ Bronchitis ...	..	..	..	..	..	..	..	3	..	1	1	1	..	..	..	..	..	..	..	..	..	..
{ Pneumonia (all forms) ...	..	..	..	..	..	1	3	4	3	1	4	4	1	1	2	1	3	..	..	..	..	11
{ Enteritis ...	..	..	..	1	1	2	3	1	2	..	1	1	..	..	..	..	..	..	1	1	..	9
{ Gastritis ...	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1
{ Hernia (post operative shock) ...	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
{ Convulsions ...	2	..	..	..	2	..	1	2	1	..	..	..	1	1	1	..	..	1	..	..	..	1
{ Prematurity ...	23	4	3	1	31	4	..	..	..	3	2	6	4	3	4	1	..	1	10	1	..	35
{ Congenital Defects ...	5	..	1	..	6	2	..	..	..	..	1	..	1	..	..	..	..	1	1	1	3	8
{ Malignant Jaundice ...	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
{ Atrophy, Debility & Marasmus ...	2	..	..	..	2	1	..	3	..	..	1	1	..	..	1	..	..	..	..	..	3	6
{ Cerebral Hæmorrhage ...	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
{ Other Causes ...	4	..	..	..	4	..	..	..	..	1	1	1	..	..	..	..	..	..	..	1	..	4
Totals	36	4	5	2	47	13	9	17	12	6	8	21	7	10	11	3	3	4	12	3	10	98

Rates of Mortality among Infants at various ages, and from the principal causes, per 1,000 births.

Year	Nett Infant Mortality Rate.	AGES.					CAUSES.					
		Under 4 Weeks	4 Weeks and under 3 Months	3 Months and under 6 Months	6 Months and under 9 Months	9 Months and under 12 Months	Not Preventable.			Preventable.		
							Premature Birth	Atrophy, Debility & Marasmus	Congenital Malformations and Atelectasis.	Diarrhoea and Enteritis	Bronchitis and Pneumonia	Whooping Cough
1909	123.6	47.9	26.1	20.9	14.8	13.9	21.7	17.4	7.0	20.9	13.1	4.4
1910	109.1	41.9	19.1	21.0	15.7	11.4	28.8	13.1	5.2	12.2	14.8	4.4
1911	145.0	45.0	27.0	27.0	25.2	20.8	18.0	12.6	4.5	37.9	26.1	9.0
1912	102.4	42.0	15.8	16.6	17.5	10.5	15.8	15.8	9.6	9.6	21.9	6.1
1913	127.1	49.8	17.2	27.5	19.0	13.7	28.4	12.9	6.0	19.0	18.0	3.4
1914	122.4	48.0	25.6	21.5	15.7	11.6	19.8	15.7	5.6	20.7	18.2	5.8
1915	144.3	51.2	30.2	26.8	14.3	21.8	30.2	12.6	5.9	15.9	20.1	10.1
1916	101.5	47.1	13.6	16.3	15.4	9.1	27.2	7.3	8.1	17.2	14.5	0.0
1917	106.5	39.4	16.1	23.3	15.2	12.7	20.6	7.2	10.8	24.2	10.7	1.8
1918	126.8	38.7	17.4	26.1	30.0	14.5	22.3	10.6	4.8	14.5	25.2	19.4
1919	107.9	45.9	17.8	18.8	13.1	12.3	19.7	22.5	9.4	13.1	20.6	0.0
1920	80.0	30.2	13.4	19.3	10.5	7.0	16.1	11.9	9.1	8.6	13.3	3.5
1921	105.3	38.2	17.5	23.7	16.8	9.1	11.4	17.5	9.1	22.1	13.7	2.3
1922	81.2	35.5	11.0	14.2	7.9	12.6	17.4	8.7	6.3	5.5	15.8	2.4
1923	82.9	39.7	11.0	7.6	14.3	10.1	29.6	5.0	6.7	7.6	11.8	0.8

Infant Mortality Rates for the various Wards, 1918-1923.

Year	Stanwix & Etterby	Rickergate	Aglionby	Greystone	St. Nicholas	Currock	Denton Holme	St. Cuthbert's	Caldewgate	Newtown & Belle Vue	Carlisle
1918	108.7	141.2	135.4	101.7	94.9	93.8	125.0	193.3	156.2	97.2	126.8
1919	81.6	97.8	123.3	83.9	125.0	65.4	160.6	119.0	115.1	65.8	107.9
1920	46.5	77.5	54.3	100.0	68.6	57.4	81.6	113.2	87.0	78.4	80.0
1921	23.8	150.7	91.7	174.6	86.9	62.0	105.2	62.5	158.4	56.8	105.3
1922	50.8	47.6	84.0	75.7	102.9	90.9	98.7	65.7	78.5	112.5	81.2
1923	163.2	79.6	64.0	82.6	77.5	44.9	73.0	64.1	141.0	107.6	82.9

INFANT MORTALITY IN RELATION TO THE MODE OF FEEDING.

The following table shows the deaths of infants under one year in relation to the mode of feeding:—

MODE OF FEEDING.	Number so Fed.			Number of Deaths.			Mortality Rate per 1,000 so fed.
	Legitimate.	Illegitimate.	Total.	Legitimate.	Illegitimate.	Total.	
	Breast	858	28	886	30	0		30	33.8
Partly Breast and partly Bottle	117	10	127	17	1	18	141.7
Bottle—							
(1) Boat-shaped	115	9	124	14	0	14	112.9
(2) Tube bottle	4	0	4	1	0	1	250.0
Debilitated Infants—							
(1) Spoon-fed	10	0	10	10	0	10	1,000.0
(2) Unable to be fed	22	5	27	19	5	24	888.8
No information re feeding	27	3	30	4	1	5	166.6

Table showing the Death-rate per 1,000 infants under 1 year, classified according to the Method of Feeding,
1914—1923.

Mode of Feeding.	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	10 years.			Average Mortality Rate.
											Total No. of Children.	Total No. of Deaths.	Total No. of Deaths.	
Total infant mortality rate ...	122.4	144.3	101.5	106.5	126.8	107.9	80.0	105.3	81.2	82.9	11893	1242	104.4	
Mortality rate for breast-fed infants ..	58.3	7.49	4.43	25.3	49.6	44.2	35.1	39.6	38.4	33.8	9365	412	43.9	
Mortality rate for infants partly fed on breast and partly on bottle ...	400.0	500.0	133.3	515.1	122.2	378.4	171.7	407.7	152.0	141.7	709	171	241.1	
Mortality rate for infants fed by bottle	476.6	612.0	428.6	324.3	520.4	230.3	209.8	229.2	212.5	117.1	1100	352	320.0	

INFANT MORTALITY AND RAINFALL.

Year.	Rainfall in Inches.	Number of days on which rain fell.	Infant Mortality.
1909	33·13	162	123·6
1910	29·64	197	110·0
1911	30·20	181	145·0
1912	30·01	217	102·4
1913	27·53	194	127·1
1914	28·31	201	122·4
1915	28·28	183	144·3
1916	38·97	228	101·5
1917	29·13	176	106·5
1918	33·65	190	126·8
1919	25·21	191	107·9
1920	32·11	211	80·0
1921	29·83	205	105·3
1922	28·55	209	81·2
1923	36·53	231	82·9

ILLEGITIMACY.

The number of illegitimate births registered was 53, or 44.5 per 1,000 registered births, being 14.7 per 1,000 less than the figure for 1922. The number of deaths amongst these children was 6, or 113.2 per 1,000 illegitimate births. The deaths of legitimate children numbered 92, or 81.4 per 1,000 legitimate births. The Health Visitors paid 148 visits to boarded-out children.

PUERPERAL FEVER.

During the year 4 notifications relating to puerperal fever were received, and in 1 instance the condition was fatal. In 2 instances the condition followed instrumental deliveries, whilst in connection with the remaining two the confinement was normal.

OPHTHALMIA NEONATORUM.

12 cases of ophthalmia neonatorum were notified, or 10 fewer than in 1922, 12 less than in 1921, and 44 less than in 1920. In one of these cases the discharge was not purulent; in 10 cases both eyes were affected, and in 2 cases only one eye was affected. 7 of the cases were notified by medical practitioners, 4 by midwives, and 1 by both doctor and midwife. In no case was there any permanent damage to the eye.

In connection with this condition the Health Visitors of the Corporation paid 49 visits to affected babies in order that, if appropriate treatment were not being carried out, arrangements could be made for treatment.

In 10 instances the condition was treated at home, and the remaining 2 at the Out-patient Department of the Cumberland Infirmary.

CASES.			Vision un-impaired	Vision impaired	Total Blindness.	Deaths during treatment.	Remarks.
Notified.	Treated.						
	At Home.	In Hospital.					
12	12	Nil.	12	Nil.	Nil.	Nil.	

INFECTIOUS DISEASES.

The Health Visitors paid 2,130 visits to cases of zymotic diseases among children up to five years of age, apart from their visits to children suffering from gastro-enteritis and ophthalmia neonatorum.

DIARRHŒA.

There were 15 deaths from diarrhœa during the year. The following table shows the age incidence:—

Age.					No. of deaths.
0—1 year	...	...	...	...	9
1—2 years	...	...	...	...	1
2—5 years	...	...	...	...	1
5—15 years	...	...	...	...	0
15—25 years	...	...	...	...	0
25—45 years	...	...	...	...	0
45—65 years	...	...	...	...	3
Over 65 years	...	...	...	...	1
					—
					15
					—

POLIOMYELITIS.

No notification relating to poliomyelitis was received during the year.

DEATHS AMONG CHILDREN AGED 1—5 YEARS.

83 deaths occurred among children aged 1—5 years from causes detailed hereunder:—

Infectious Diseases	...	...	...	47
Tubercular Diseases	...	...	...	6
Respiratory Diseases	...	...	...	18
Gastro-intestinal Diseases	...	...	...	4
Violence	...	...	...	1
Other Diseases	...	...	...	7
				—
				83
				—

HYGIENE OF PLACES OF PUBLIC ENTERTAINMENT.

The visits made in this connection will be found in the Sanitary Inspector's Report, page 79.

REPORT OF THE VETERINARY INSPECTOR.

During the year 188 newly-purchased cows were examined in the several byres of the City, amongst which the following conditions were found:—

Disease of the Womb	...	...	...	2
Disease of the Udder	...	...	...	2
				—
				4
				—

1 animal was tested with tuberculin, a characteristic re-action being obtained. These 4 animals were returned to the sellers.

The bovine animals exposed for sale at the Sands Cattle Market, and also at the Auction Marts, were examined, a total of 48,321 examinations being made.

The Auction Marts were visited each Monday in the year, and 12,384 pigs were examined.

141,082 sheep were also examined during the year.

2 carcasses of beef were examined at the Public Abattoir, and were certified as unfit for human consumption.

A total of 4,164 examinations of milk cows were made in the several byres of the City, in order to ascertain the presence of disease likely to affect the milk supply, in the course of which the following conditions were found:—

Inflammation of Udder	...	...	...	1
Acute Pulmonary Tuberculosis	...	...	...	1
Septic Poisoning	...	...	...	1
Gastric Derangement	...	...	...	3
Milk Fever	...	...	...	3
				—
				9
				—

The animal suffering from acute pulmonary tuberculosis died, and the milk from the remaining 8 was destroyed until convalescence was established.

The Corporation horses, 20 in number (including the one employed at the Cemetery), have been under close observation, and have been free from serious illness during the year.

On February 15th 2 pigs died at Fusehill Workhouse; I found the causes of death to be as follows:—

Septic Pericarditis and Pleurisy	...	...	1
Pneumonia	...	...	1

On February 23rd I received notice of suspected swine fever at premises within the City Boundary; the matter was immediately reported to the Ministry of Agriculture and Fisheries.

ANIMALS (LANDING FROM IRELAND) ORDER, 1922.

I have made 6,703 examinations of animals detained under the provisions of the above Order.

14 cattle were removed in contravention of the Order. The owner was prosecuted and fined £25 and costs.

On the 17th June an Irish heifer died suddenly. I made a post-mortem examination and found the cause of death to be pleurisy, caused by injury during transit.

On the 4th September the Town Clerk forwarded to me a telegram from the Ministry of Agriculture and Fisheries that all Irish cattle recently arrived were to be immediately examined. On the following morning I examined all the Irish animals in the City and found them free from disease.

On account of the outbreak of Foot and Mouth Disease, the Minister of Agriculture and Fisheries issued instructions as to the inspection of all live stock exposed for sale in the City markets.

On 31st August I was informed that Foot and Mouth Disease had broken out near Preston. As 14 dairy cattle had been sent from Preston to a Carlisle Auction the previous day, I was ordered to see these cattle, all of which I found to be free from disease.

On 19th July I visited a farm on the outskirts of the City and examined a herd of 15 dairy cows; 2 of the number had slight indurations of the udder. Samples of milk were taken from the 2 animals in question and were submitted for bacteriological and biological examination. The tubercle bacillus was not found in either sample.

On 8th November 477 sheep which had been in contact with animals in Stirlingshire suffering from Foot and Mouth Disease arrived in Carlisle. Upon investigation I found that all the sheep had been slaughtered immediately on their arrival.

On 23rd November the Ministry issued a standstill Order over the greater part of England and Scotland, including this area. Animals were accordingly held up as follows:—N.E.R. Cattle Dock, 185 sheep, 1 bull, and 1 cow; Citadel Station, 1 calf, 1 pig, and 1 goat; L. & N.W.R. Cattle Dock, 150 cattle and 113 pigs.

I examined all the above stock. 2 pigs died at the L. & N.W. Railway Cattle Dock, suspected to be due to Foot and Mouth Disease; the deaths were subsequently found not to be due to this disease. The remaining 111 pigs were slaughtered at the Public Slaughter-houses, and specially examined for symptoms of Foot and Mouth Disease, but were found to be free from this disease. 1 carcase was affected with swine erysipelas and was destroyed.

On 19th November I examined a bullock suspected to be suffering from Foot and Mouth Disease, but found the animal dying from septic pneumonia.

On 27th December I was informed that a heifer was ailing at the Home Farm, Botcherby. On proceeding to the farm and making an examination of a white heifer

I found her to be suffering from Foot and Mouth Disease. The Ministry's Inspector subsequently confirmed my diagnosis.

On 26th November, at the request of the Chief Constable, I examined 14 sheep that had been exposed for sale in Newcastle Market the day Foot and Mouth Disease broke out there. On arrival at the farm I found these 14 sheep had been mixed with 74 others, and all were grazing in a field together with 9 cattle. Notices were served upon the owners to detain the animals for 21 days, and these I kept under observation for the same period.

On 12th December I received notice from the Chief Constable that a sheep was suspected to be affected with sheep scab. I examined 22 ewes; scrapings of the skins were examined and were found to be negative.

On 5th May I examined a gelding reported to be suffering from parasitic mange. Upon microscopical examination the specific parasite was not found, and on the 14th May I examined 13 sheep and 6 lambs in the Infirmary field. 2 ewes were in a grossly neglected condition, and the owner was prosecuted and fined.

HOUSING.

Up to the end of the year the total number of houses for the erection of which the Corporation had received the sanction of the Ministry of Health was 408, 160 relating to the parlour type and 248 to the non-parlour type of house, to be provided as follows:—Denton Street, 24; Boustead's Grassing, 32; Stanwix, 74; Longsowerby, 98; Blackwell Road Estate, 140; and Wigton Road Estate, 40.

The total number of houses erected by the end of the past year was 308, of which 56 were at Denton Street and Boustead's Grassing, 74 at Stanwix, 98 at Longsowerby, and 80 at Blackwell Road Estate.

The houses in course of erection at the end of the year comprised 40 on the Wigton Road Estate and 60 on the Blackwell Road Estate. During the year 24 houses were built by private enterprise.

Table relating to the present position of certain houses in which Closing or Demolition Orders have been made.

Number and Situation.	Date represented to Committee.	Date of Closing Order served under Housing, Town Planning, &c., Act, 1909.	Date of Demolition Order served under Housing, Town Planning, &c., Act, 1909.	Remarks.
1, 2, 3, 4, 5, 6, 7, & 9 Barley Stack Lane	21st Nov., 1913	9th Dec., 1913	10th June, 1914	Part of the property demolished, the other part still standing
12, 14, 16, 18, 22, 26, & 28 Chapel Street	19th June, 1914	15th July, 1914	14th Sept., 1915	<i>In statu quo</i>
5 houses in Donald's Court, Willow Holme	19th June, 1914	15th July, 1914	14th Sept., 1915	Do.
3 houses, Willow Holme	19th June, 1914	15th July, 1914	14th Sept., 1915	Do.
Fay's Lodging House, Drovers Lane, Rickergate	2nd Dec., 1921	13th Dec., 1921	12th Sept., 1922	Purchased by the Corporation for street improvement, property to be demolished.
27, 27a, 27b, 29, 30a, 30b, 30c, & 31 South John Street	2nd May, 1923	8th May, 1923	...	Property demolished.
8 houses in Dunn's Court, South John St.				
40 & 42 Crown Street	2nd May, 1923	8th May, 1923	..	Property made habitable by conversion into 4 self-contained flats.
8 houses in Irving's Court No. 2, Crown St.				Two houses demolished.

Number and Situation.	Date represented to Committee.	Date of Closing Order served under Housing, Town Planning, &c., Act, 1919	Date of Demolition Order served under Housing, Town, Planning, &c., Act, 1909	Remarks.
2 Dona Court, Crown St.	1st June, 1923	12th June, 1923	...	House demolished.
3 houses in Irving's Court No. 1, Crown St.				
30 Robert Street				
4 and 5 Young's Crt., Robert St.				
37, 39 & 49 South John Street				
3 houses in Rayson's Ct. No. 1, South John St.				
1 house in Barker's Court, South John St.	30th Nov. 1923	11th Dec., 1923
3 houses in Rayson's Court No. 2, South John St.				
93, 95, 97, 99, 99a, 101, 103, & 105 Union St.				

In addition to the particulars given in the following tables, other information will be found in the Inspector's Report, pages 66 and 67.

Table showing number of dwelling-houses erected in the City during the past ten years:—

Year.	No. of Houses erected.		Year.	No. of Houses erected.	
1914	...	38	1919	...	2
1915	...	9	1920	...	27
1916	...	1	1921	...	96
1917	2	1922	...	123
1918	...	0	1923	...	96

Number of New Houses erected during the year :—

(a) Total.	96
(b) With State assistance under the Housing Acts, 1919 or 1923 :—	
(i) By the Local Authority.	72
(ii) By other bodies or persons.	Nil
<i>1.—Unfit Dwelling Houses.</i>	
<i>Inspection.</i> —(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Act)	
	291
(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	173
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	51
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	123
<i>2.—Remedy of Defects without Service of formal Notices.</i>	
Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	Nil
<i>3.—Action under Statutory Powers.</i>	
(a) Proceedings under Section 28 of the Housing, Town Planning, &c., Act, 1919—	
(1) Number of dwelling houses in respect of which notices were served requiring repairs	135
(2) Number of dwelling houses which were rendered fit	
(a) By Owners	111
(b) By Local Authority in default of Owners	Nil
(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by Owners of intention to close ...	Nil

(b) Proceedings under Public Health Acts—		
(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied		118
(2) Number of dwelling houses in which defects were remedied		
(a) By Owners		110
(b) By Local Authority in default of Owners		Nil
(c) Proceedings under Sections 17 and 18 of the Housing, Town Planning, &c., Act, 1909—		
(1) Number of representations made with a view to the making of Closing Orders		51
(2) Number of dwelling houses in respect of which Closing Orders were made ...		51
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit		10
(4) Number of dwelling houses in respect of which Demolition Orders were made		Nil
(5) Number of dwelling houses demolished in pursuance of Demolition Orders ...		Nil

Chief Inspector's Annual Report.

To the Chairman and Members of the Health Committee.

I have the honour to present to you my Annual Report upon the work of the Sanitary Inspectors during the year 1923.

HOUSING.

The works recorded in my last report as being in hand are now completed at property in Newtown Road, Bright Street, Isabella Street, Byron Street, Scott Street, and Milton Street.

Your Inspectors were responsible for a large amount of practical work in the way of rendering old houses fit for human habitation. During the year 155 statutory notices (Sec. 28 of the 1919 Act) were served upon owners of property at Union Street, Crown Street, Robert Street, Byron Street, Scott Street, and Milton Street, the number of dwellings affected being 135.

In addition, 51 Closing Orders under the 1909 Act and 38 notices upon tenants to quit premises were served.

The Committee determined Closing Orders in 10 instances, the houses having been rendered fit for human habitation.

The determining of the Closing Orders related to property in Crown Street, a block of 10 tenements being converted into 4 self-contained flats. Several other properties are in course of conversion into flats and self-contained houses.

The notices to quit were attended with considerable trouble to your staff, who were for months actively engaged in interviewing and re-interviewing the affected tenants in order to get them satisfactorily housed.

Several of the people, for reasons of their own, were not prepared to pay the rent demanded for new houses, so that it became necessary to seek exchanges with tenants of other houses who were desirous of availing themselves of the offer of a new house.

The number of tenants removed direct from Crown Street and South John Street to new houses at Currock was 24, and 33 other displaced tenants were accommodated in different parts of the City in houses vacated by those taking the new houses.

The experiment of removing tenants who have never yet enjoyed the amenities of a modern house from congested areas to a suburban environment will be followed with interest.

A total of 3,562 inspections were made under the Housing Acts, 173 of which were special inspections for recording particulars.

The requirements of our specifications conform as nearly as possible to the Ministry of Health's standard, but regard must be had, in certain cases, to the consequences of being too exacting. For instance, it would not be wise to provide sinks, &c., in tenements liable to be converted into self-contained houses when houses become plentiful.

Seventeen tenements were made into through dwellings.

Various repairs to houses were also effected under the Public Health Acts. In this connection 110 houses were improved.

As a result of the service of Closing Orders, 19 houses were demolished, the serving of Demolition Orders being anticipated.

NUISANCES.

We had 177 complaints of nuisances reported at the office, in addition to 483 matters discovered in routine inspections.

Written and verbal notices are given to abate nuisances, and 406 such notices were served. In 395 cases the nuisance was abated.

DRAINAGE.

The Department has the supervision of drains, except those laid in connection with plans deposited with the Surveyor for new works.

New drains were laid or repairs effected during the year at 59 houses, 47 of which were the result of notices served.

The number of inspections made by your Inspectors was 886, and in 43 cases tests, either chemical or water, were employed.

CONVERSION TO WATER CARRIAGE SYSTEM.

At seven houses in Stanwix conversions from the conservancy system (middens) to water-closets were made.

VAN DWELLINGS.

The usual periodical inspections were made and enquiries put to occupiers of van dwellings accompanying travelling shows or fairs at the Sands. We found no fault, however.

The presence of two vans on private premises was a source of annoyance, but the nuisance was satisfactorily abated.

The site for vans at the Sands has been much improved during the year by the paving of ground around the water taps and the removal of the midden to a more satisfactory position.

COMMON LODGING-HOUSES.

The only registered Common Lodging-house is Lowther House, Lowther Street, owned and managed by this Department, and during the year it was conducted in a satisfactory manner.

The Lodging-house known as Fay's, Drovers Lane, used on sufferance for some time, has been partly demolished.

STABLE PREMISES.

There are approximately 110 of these in the City, and inspections are made at irregular times, the total visits during the year being 167. A few horse-keepers require special attention, as they store unnecessarily large quantities of manure improperly. The cold season was not productive of many flies from this or any source.

Legal proceedings were taken in respect of one insanitary stable midden and yard, and the defendant was fined and an Order for the execution of certain works specified in our notice made.

FACTORIES AND WORKSHOPS.

The number of workshops on our register is 309. Of this number 61 are Domestic Workshops. Included in the above are 75 bakehouses, 3 of which are underground. The general condition of the workshops is good. Cleansing, lighting, and ventilation are well maintained, and there is no overcrowding. 406 visits were paid to workshops.

The factories number 90, and 122 inspections were made.

We received six notices from His Majesty's Inspector of Factories relating to sanitary defects remediable under Public Health Acts. These were complied with and the Inspector subsequently informed of our action. The matters complained of were:—

Sanitary conveniences without ventilated space	1
Limewashing of bakehouses overdue	4
Insufficient sanitary conveniences	1
	—
	6
	—

SMOKE NUISANCES.

Minor offences only occurred during the year, and a verbal caution had the necessary effect.

INSPECTION OF MEAT AND OTHER FOODS, PUBLIC MARKETS, &c.

A total of 15 tons 8 cwts. 1 qr. 6lbs. of meat and a quantity of foodstuffs were examined and certified to be unfit for human consumption. Detailed list appears as an appendix.

Regular inspections are made of food shops and stalls, in addition to the Slaughter-houses.

The amount of meat certified to be unfit for food may seem large for the City of Carlisle, but a considerable portion (approximately $4\frac{1}{2}$ tons) is what is known as "casualty meat," *i.e.*, animals which have suffered some accident or sudden illness either on farms or in transit by rail or boat.

SLAUGHTER-HOUSES.

The Public Slaughter-houses are under the control of this Department, and have been maintained satisfactorily. A table showing the total animals killed is given on page 74.

The improvements at the London and North Eastern Railway Slaughter-house were completed in September, and the licence, which had been withheld, was re-issued.

There are three licensed slaughter-houses in the City, one each at the L.M. & S. and L. & N.E. Railways, and one at Messrs. Cavaghan & Gray's Bacon Factory, Harraby. These places are frequently inspected, and have been kept in a satisfactory condition. The Railway slaughter-houses are used exclusively for the slaughter of sheep, which are sent to the London and other markets, while Messrs. Cavaghan & Gray's premises are used exclusively for pigs, mainly for bacon-curing purposes.

DAIRIES, COWSHEDS, AND MILKSHOPS.

There are on the register 23 cow-keepers occupying 36 cowsheds. They were visited at least twice each during the year.

There is a reduction of 2 cow-keepers on last year's report, 1 at Botcherby and 1 at Harraby.

The total number of milk purveyors is 52, 24 of whom reside outside the City. There are, in addition, 15 milk-shops registered.

FRIED FISH AND POTATO SHOPS.

134 inspections were made to 33 fried fish shops. The trade is conducted in a satisfactory manner.

ICE CREAM SHOPS.

This trade is now being largely conducted at restaurants, in addition to the sale by hawkers. We have 19 premises registered. In only 1 case had we reason to seriously complain of the manner in which the trade was carried on.

OFFENSIVE TRADES.

The offensive trades in the City consist of 1 gut scraper, 2 tripe dressers, 1 tanner, and 1 fellmonger.

No complaint was received respecting these trades.

FOOD AND DRUGS ACTS.

Particulars of the 131 samples taken for analysis under these Acts will be found tabulated in the Appendix.

1 vendor of milk was proceeded against, but the Magistrates dismissed the case.

REFUSE REMOVAL.

House refuse collection is carried on as previously, twice and thrice weekly, with a daily collection in the centre of the City.

During the year 17,598 loads of refuse were deposited at several tips (trade refuse carted privately excepted).

The garbage from the Slaughter-house was also tipped and amounted to 421 loads.

DEPOT.

The 19 horses under my charge at Boustead's Grassing are used partly for house refuse and partly for street scavenging.

URINALS.

There are 20 public urinals under my charge. 2 were re-built during the year. All are cleansed daily.

In February I submitted a special report to the Committee upon the position of existing urinal accommodation, with recommendations for the provision of new urinals at several points in the City.

RAT REPRESSION.

Visits were made upon complaint of the existence of rats at 79 premises. Many tests of drains were made and advice given.

749 dead rats were received at the Dépôt. The Corporation pay 2d. for every dead rat caught in the City.

SHOPS ACT.

This Act necessitated 736 day and evening inspections.

3 shop-keepers were prosecuted for breaches of the Shops (Early Closing) Act, (1920), Amendment Act, 1921, and were fined.

INFECTIOUS DISEASE AND DISINFECTION.

We investigated 261 cases, and 136 were removed to hospital for isolation. All the houses from which cases occurred were disinfected. The number of articles of bedding, clothing, &c., disinfected is in the Appendix.

DISEASED AND UNSOUND FOOD.

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

Nature of Food Condemned.	Quantity.			
	Tons.	Cwts.	Qrs.	Lbs.
Beef	14	1	0	13
Mutton		8	2	14
Pork		16	0	7
Veal		2	2	0
Total ...	15	8	1	6
Rabbits				13 couples
Tinned Fruits, etc.				120 tins
Tinned Meat, Fish, etc.				10 tins
Tinned Milk and Cream				7 tins
Salmon				11½ lbs.
Grapes				2 barrels
Tomatoes				4 boxes

SALE OF FOOD AND DRUGS ACTS.

Table showing articles purchased during the year, with results of analyses and remarks as to action taken thereon.

Article.	No. of Samples.	No. found to be Genuine.	Number Adulterated.	Extent and Form of Adulteration.	Remarks.
Milk ...	54	49	5	<i>a.</i> Non-fatty solids 0.78 % below limit <i>b.</i> Non-fatty solids 0.31 % below limit <i>c.</i> Non-fatty solids 0.48 % below limit <i>d.</i> Non-fatty solids 0.80 % below limit <i>e.</i> Non-fatty solids 0.33 % below limit	Samples <i>a</i> , <i>c</i> , and <i>d</i> were purchased from the same source. Vendor was prosecuted, but the case dismissed. Samples <i>b</i> and <i>e</i> were purchased from the same source.
Butter ...	32	32	...	...
Sponge Cake	11	11	...	..
Salad Oil ...	5	5	...	...
Lime Juice Cordial	3	3	...	...
Coffee ...	12	12	...	...
Cream of Tartar	4	4	...	...
Lard ...	5	5	...	...
Baking Powder	5	5	...	...
No. of Samples	131				
No. Genuine	...	126			
No. Adulterated	...	...	5		

The following Tables give the number of animals killed during the years stated:—

PUBLIC ABATTOIR.

Year.	Beasts.	Sheep and Lambs.	Calves.	Pigs.	Total.
1917	4,166	15,609	248	3,334	23,357
1918	3,257	53,357	235	1,894	58,743
1919	3,054	57,885	815	2,451	64,205
1920	2,930	35,862	828	2,462	42,082
1921	3,135	15,566	545	3,625	22,871
1922	3,512	16,294	518	4,711	25,035
1923	4,028	13,249	768	4,644	22,689

L.M. & S. RAILWAY SLAUGHTER-HOUSE.

1921	...	31,301	...	...	31,301
1922	...	40,790	...	...	40,790
1923	...	26,121	...	...	26,121

L. & N.E. RAILWAY SLAUGHTER-HOUSE.

1921	...	43,366	...	...	43,366
1922	...	55,926	...	...	55,926
1923	...	39,897	...	...	39,897

REFUSE REMOVAL.

Number of Loads of House Refuse removed to Tips	17,598
„ Loads of Slaughter-house Garbage ...	421

DISINFECTION.

Number of Cases of Infectious Diseases Investigated	261
„ Cases of Infectious Disease removed to Hospital	136
„ Mattresses and Beds Disinfected	120
„ Bed Covers	122
„ Bolsters and Covers	94
„ Pillows and Covers	446
„ Blankets	419
„ Quilts	244
„ Carpets and Rugs	14
„ Sheets	81
„ Coats	17
„ Miscellaneous Articles	135
„ Houses Disinfected	185
„ Schools Disinfected	2

FACTORIES, WORKSHOPS, WORKPLACES, AND HOMEWORK.

1.—Inspection of Factories, Workshops, & Workplaces.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries)	125	8	Nil
WORKSHOPS (Including Workshop Laundries)	580	26	Nil
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)			
TOTAL	705	34	...

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— Making, &c. ...	2	...	...	1	...	..
Cleaning and Washing ...	...	...	...	...	..	..
Total ...	2	...	...	1	...	...

2.—Defects found in Factories, Workshops, and Workplaces.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	24	24	...	...
Want of ventilation ... ..	...	...	...	...
Overcrowding... ..	...	...	...	...
Want of drainage of floors ...	...	...	...	...
Other nuisances ... ..	...	...	...	...
Sanitary accommodation :—				
{ Insufficient ... ..	...	...	...	...
{ Unsuitable or defective	6	6	...	...
{ Not separate for sexes	1	1	...	...
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)...	...	...	...	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ... ..	...	...	...	...
Other offences (Excluding offences relating to outwork, which are included in Part 3 of this report)	3	3	...	...
Total	34	34	Nil	Nil

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year	Number.
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Workshops 173
	Domestic Workshops ... 61
	Bakehouses 75
Total number of workshops on Register ...	309

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901) .. .. .	...
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory & Workshop Acts (s. 5, 1901) :	
Notified by H.M. Inspector	6
Reports (of action taken) sent to H.M. Inspector	6
Other ... ..	...
Underground Bakehouses (s. 101) —	
In use at the end of the year	3

6.—Classified List of Workshops.

Business.	No.	Business.	No.
Millinery .. .	21	Tinsmiths	2
Tailoring	33	Hand-weavers	2
Sugar Boiling	4	Fishing Tackle	3
Cycle Repairing	10	Stocking Knitting... ..	1
Dressmaking	32	Scale Repairers	2
Bakehouses	75	Picture Framing	2
Boot Repairing	36	Photography	7
Saddlery	6	Tripe Dressing	2
Meat Preparation	27	Marine Dealers	4
Watch Makers, &c.	15	Gut Scraper	1
Upholstering	5	Fellmonger	1
Cloggers	10	Tanner	1
Coopers	3	Rudd Maker	1
Basket Making	2		
Umbrella Repairing	1		
		Total	309

**TABULATED LIST OF WORKS EXECUTED
DURING 1923 AS A RESULT OF NOTICES
SERVED UNDER THE HOUSING ACTS.**

Particulars of Work.	Under Sec. 28, Housing, &c., Act, 1919.	As a result of Closing Orders.
	No. of Houses.	
Damp Walls rendered in Cement	34	5
Walls Plastered or Re-plastered	93	5
Ceilings " "	86	6
Flagged or Boarded Floors Re-laid or Repaired	64	5
Windows provided, or Overhauled and made to Open	80	5
Roofs made Watertight... ..	38	5
Eaves and Down Spouting made Watertight ...	70	5
External Walls Pointed in Cement	66	5
Door Jambs, Window Sills, Heads, and Plinths Faced Up in Cement	73	5
Doors and Internal Woodwork Repaired ...	65	6
Handrails to Stairs provided	11	1
Skirtings (wood or cement) Made or Repaired ...	51	5
Cooking Ranges Re-set or Repaired	37	4
New " provided	1	2
Ventilated Food Stores provided	28	4
Back to Back Tenements converted to Through Houses	6	11
Slop-sinks provided, with Trapped Waste-pipes, complete	13	5
Water Supply laid on to above	10	5
Sink Waste-pipes Repaired	4	—
Drains, New or Repaired	17	2
	Number	
Yards Paved or Re-paved	17	2
Common Passages or Staircases Re-plastered and Repaired	17	3
Common Passages Re-paved	11	2
New Water-Closets provided	10	3
Water-Closets Repaired	19	—
New Wash-houses provided	5	1
Wash-houses Repaired	13	1

**SUMMARY OF SANITARY WORK PERFORMED
IN CONNECTION WITH INSPECTION OF
DISTRICT.**

Nature of Inspections.	Number of visits paid.
HOUSES—	
Houses inspected in accordance with the Housing (Inspection of District) Regulations, 1910	3562
Houses inspected under the Public Health Act, 1875	2897
Houses inspected, special inquiry	14
Visits <i>re</i> Infectious Diseases	779
Drains Inspected	886
„ Tested	43
Common Lodging-houses inspected	4
Inspections <i>re</i> Nuisances from Fowls & Animals	48
Common Yards, Courts, & Alleys inspected ...	6911
Temporary or movable dwellings inspected ...	203
Public Halls, Schools, etc.... ..	7
Dirty Houses	11
Nuisances investigated	660
Visits <i>re</i> overcrowding	24
TRADE PREMISES—	
Bakehouses	174
Laundries	3
Cowsheds	89
Milkshops	31
Ice-Cream Shops	22
Fried Fish Shops	134
Slaughter-houses	601
Markets	212
Factories	122
Workshops and Workplaces	406
Chimneys observed (smoke nuisances) ...	10
Visits after serving notices to supervise works in progress	243
Refuse Tips	118
Stables	167
Shops Act Inspections	736
Water samples taken for analysis	8
Visits <i>re</i> Rats and Mice Destruction Order ...	79
Miscellaneous inspections	1613
Urinals Inspected	79
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Notices served to abate Nuisances	406
„ complied with	395
„ not complied with	11

**REMEDIAL WORKS DONE BY NOTICES UNDER
PUBLIC HEALTH ACTS.**

Overcrowding Abated	...	...	...	4
Walls, Damp and Defective, Remedied	...	...	...	14
Roofs, Guttering, &c., Repaired	...	...	...	79
Yards Paved and Repaired	...	...	...	7
Water-closets Repaired	...	...	...	41
Flushing Apparatus Repaired	...	...	...	4
Drains Unstopped	...	...	...	70
Drains Reconstructed and Repaired	...	...	...	59
Accumulation of Manure, &c., Removed	...	...	...	24
Workshops (including Bakehouses), Cleansed, Lime- washed, &c.	...	...	...	18
Sink Waste-pipes Repaired or Renewed	...	...	...	3
Mill Races Cleansed	...	...	...	4
Open Ventilation and Lighting Improved	...	...	...	20
Wash-houses Repaired	...	...	...	3
Privies Abolished	...	...	...	4
Water-closets substituted therefor	...	...	...	7
Wastes of Water reported	...	...	...	46

I have the honour to be,

Your obedient Servant,

C. W. HILL,
Chief Inspector.





