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# COUNTY BOROUGH OF BURY.

# ANNUAL REPORT

OF THE

# Medical Officer of Health,

FOR THE YEAR 1911.

 $_{\mathrm{BY}}$ 

# G. GRANVILLE BUCKLEY,

M.D., D.P.H.

MEDICAL OFFICER OF HEALTH FOR THE BOROUGH,
MEDICAL OFFICER TO THE EDUCATION COMMITTEE,
AND

MEDICAL INSPECTOR UNDER THE MIDWIVES ACT.

#### BURY:

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# HEALTH COMMITTEE, 1911.

CHAIRMAN - ALDERMAN PARKS.

DEPUTY-CHAIRMAN - COUNCILLOR T. B. SMITH.

THE MAYOR (Councillor W. Bridge).

Alderman	ASHWORTH,	Councillor	DUCKWORTH,
,,	DAWSON,	,,	HARDMAN,
,,	COLLINGE,	,,,	HARGREAVES,
,,	FLETCHER,	,,	HARRISON,
,,	GREENHALGH,	,,	G. A. KAY.
Councillor	BATTERSBY,	,,	RILEY,
,,	BRADLEY,	,,	ROTHWELL,
,,	DAWSON,	,,	J. SMITH,
,,	DOUGLAS,	,,	A. TAYLOR.

Meetings—The Wednesday in each month immediately preceding the 14th day before the Council, at 10-0 a.m.

#### OFFICIALS OF THE HEALTH DEPARTMENT.

- Inspector of Nuisances, District Inspector of Moorside and East Wards, Inspector under Shop Hours' Acts, Inspector under Explosives Act, &c.:—John Haworth, Cert. R.S.I., Certified Sanitary Engineer.
- District Inspector for Bury South and Elton, Inspector of Common Lodging-Houses, Canal Boats, &c.:—Samuel Kay, Cert. R.S.I.
- Inspector of Meat, and of Dairies, Cowsheds, and Milkshops; Inspector of Offensive Trades, &c.:—W. P. Openshaw, Cert. R.S.I., Certified Inspector of Meat and other Food.
- Health Visitor, Inspector of Workshops (where Females are employed), Inspector under Shop Hours' Acts, Inspector of Midwives, &c.:—Nurse L. E. Walton, Assoc. R.S.I.
- School Visitor: LILIAN H. RISHTON, M.I.H.
- Chief Clerk: -P. Wood. Junior Clerk: -Fred Haworth.
- Disinfectors, Drain Testers, &c.:—John Kenyon and Henry Mitchell, Cert. R.S.I.

Medical Officer of Health:
G. Granville Buckley, M.D., D.P.H.

Inspector under Food and Drugs Acts, Abattoirs Superintendent:
H. C. Cass (Markets Inspector).

Borough Analyst: - Thomas J. Hutchinson, F.I.C.

Veterinary Inspectors and Surgeons: —W. Packman, M.R.C.V.S., and W. E. S. RICHMOND, M.R.C.V.S.

# Public Health Department, Parsons Lane,

BURY,

July, 1912.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have the honour to present to you my Annual Report on the health and sanitary circumstances of your Borough during the year 1911.

Early in March an epidemic of Smallpox commenced which resulted in the notification of a total of 30 cases. The cases were of a somewhat mild type, and none were fatal.

The death rate shows an increase over that of 1910. This is chiefly accounted for by the increase in the number of deaths from Respiratory Diseases and Diarrhæa. The dry, hot summer of last year was exceptionally favourable to the spread of Epidemic Diarrhæa, no fewer than 65 deaths being registered as due to this cause alone, compared with 25 in the previous year.

Perhaps the most satisfactory feature of the report is the decrease in the number of notifications of Scarlet Fever, the number notified being less than half that of the previous year.

Another matter for congratulation is the small number of deaths attributed to Phthisis, the number (57) being the lowest recorded for the Borough.

This result speaks well for the methods employed in the Borough to combat this disease, and, in my opinion, fully justifies the expenditure incurred in the provision of Sanatorium treatment, the appointment of an Inspector to visit home-treated cases, and also in the free distribution of sputum cups, handkerchiefs, &c.

For special items of information in this report I am indebted to Messrs. J. Ainsworth Settle, H. C. Cass, R. B. Rigby, J. Isherwood, S. Comfort, and to the Public Officials; also to many Medical Officers of Health, more particularly to my predecessor, Dr. Burnet, for the valuable aid given by the statistical records he has kept.

I have also to express my thanks to all the members of my staff for their loyalty and co-operation in their respective capacities, and to Mr. T. H. Turner for much valuable assistance in the preparation of this report.

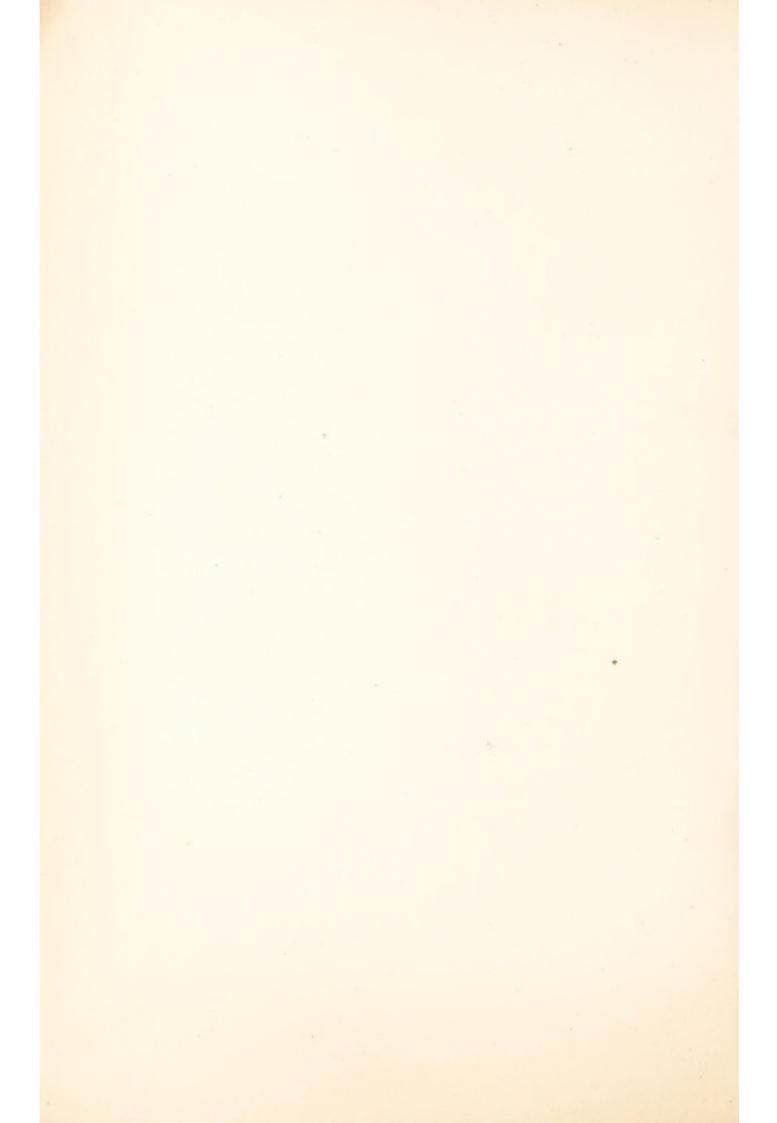
Especially am I grateful to you for the courtesy, co-operation, and kind consideration extended to me.

I am, Gentlemen,
Your obedient Servant,
G. GRANVILLE BUCKLEY,
Medical Officer of Health.

# CONTENTS.

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	PAGE
I.—Statistical	. 9-25
II.—Infant Mortality	. 26—30
III.—Infectious Diseases	. 31-66
(a) Notifiable	. 31—50
(b) Non-Notifiable	. 51-59
(c) Tuberculosis	. 60-69
(d) Diarrhœa	. 58—59
IV.—Schools	. 51-53
V.—Cancer	. 70
VI.—Water Supply	. 72-74
VII.—Sanitary Administration	
(a) Disinfection	. 71
(b) Factories and Workshops	75-77
(c) Housing	
(d) Common Lodging Houses	. 81
(e) Smoke Nuisance	. 84
(f) Inspection of Meat and Milk	. 81—82
(g) Food and Drugs Acts	. 83
(h) Midwives' Act	. 84
VIII.—Tables	. 85—90
IX.—Report of Borough Analyst	. 91—94
X.—Inspectors' Reports	. 95—116
XI.—Index	.117—120



# County Borough of Bury.

# STATISTICAL SUMMARY, 1911.

Density.—The mean density of the Borough from the census of 1911 was equal to 10.05 persons per acre:—In Church Ward, 26.72; East Ward, 16.15: Moorside Ward, 9.33; Redvales Ward, 9.04; Elton Ward, 6.76.

Area.—The Municipal Borough of Bury comprises parts of what were formerly the Townships of Tottington-lower-End, Shuttleworth, Bircle-cum-Bamford, Heap, Pilsworth, Pilkington, Radcliffe and Elton, as well as the township of Walmersley, and has a total area of 5907 acres.

Elevation.—The mean elevation of the Borough is about 300 feet above sea level, and varies between 223 feet at Blackford Bridge and 765 feet at Higher Sedger Hey.

#### LEGAL SUMMARY.

Particulars of the Sanitary Laws in force in the Borough (other than Public General Acts):—

LOCAL ACT.

Bury Corporation Act, 1909.

ACTS CONFIRMING PROVISIONAL ORDERS.

Local Government Board's Provisional Orders Confirmation (No. 17) Act, 1903. (An Act to confirm certain Provisional Orders relating to Bury and the Bury and District Joint Hospital Board.)

Local Government Board's Provisional Orders Confirmation (No. 5) Act, 1911, which confirmed a Provisional Order made by the Local Government Board for the inclusion of Warth Fold within the Borough as from the 9th November, 1911.

#### ACTS ADOPTED.

Public Health Acts Amendment Act, 1890. (March 5th, 1891; came into operation May 1st, 1891.)

Infectious Diseases (Prevention) Act, 1890. (August 2nd, 1900; came into operation October 1st, 1901.)

Housing of the Working Classes Act, 1890—Part III. (June 3rd, 1909.)

Notification of Births Act, 1907. (March 5th, 1908.)

Public Health Acts Amendment Act, 1907. Orders made, declaring certain Parts and Sections thereof to be in force in the Borough, by the Local Government Board on November 8th, 1909 (came into operation 1st January, 1910), and by the Secretary of State on October 13th, 1909.

### ACTS CONSTITUTING CERTAIN JOINT AUTHORITIES-

(i.) as to prevention of pollution of rivers, namely: Local Government Board's Provisional Orders Confirmation

- (No. 10) Act, 1891. (Confirming a Provisional Order constituting a Joint Committee, under section 14 of the Local Government Act, 1888, to enforce the provisions of the Rivers Pollution Prevention Act, 1876, in relation to parts of the Rivers Irwell and Mersey);
- (ii.) as to water supply, namely:—Bury and District Water (Transfer) Act, 1900 (constituting the Bury and District Joint Water Board).

Estimated Population.—The Registrar-General estimated that the population of the Borough would be 58,665 at the middle of the year 1911, this being a decrease of 744 under the estimated population of the preceding year.

The following table shows the estimated population and the number of males and females in each ward of the Borough.

Ward.	Males.	Females		Total.
Moorside	6500	 7709		14209
East	6073	 6626		12699
Church	3398	 3509		6907
Redvales	5069	 5966	٠	11035
Elton	6686	 7129		13815
Totals	27726	30939		58665

### Rainfall for the Year 1911. Bury. (Yard, Parsons Lane). JAN... Total Rainfall 1 '50in. Greatest fall in 24 hours o'33in., date January 5th. No. of days on which o or in. or more fell = 16. FEB... Total Rainfall 5'02in. Greatest fall in 24 hours 0'74 in., date February 21st. No. of days on which o or in. or more fell = 19. MAR. Total Rainfall 2'11in. Greatest fall in 24 hours o'58in., date March 1st. No. of days on which o or in. or more fell = 17. APRL. Total Rainfall 2.93in. Greatest fall in 24 hours o'60in., date April 27th. No. of days on which o otin. or more fell = 14. MAY. Total Rainfall 2.46in. Greatest fall in 24 hours 1.25in., date May 13th. No. of days on which o'orin. or more fell = 9. JUNE Total Rainfall 3.04in. Greatest fall in 24 hours o 83in., date June 24th No. of days on which o or in. or more fell = 13. JULY Total Rainfall 0'22in. Greatest fall in 24 hours o'o6in., date July 19th. No. of days on which o or in. or more fell = 6. Aug.. Total Rainfall 2'47in. Greatest fall in 24 hours o 63in., date August 20th. No. of days on which o or in, or more fell = 11. SEP... Total Rainfall 4.03in. Greatest fall in 24 hours 1.35in., date September 12th. No. of days on which o or in. or more fell = 14. OCT...Total Rainfall 3.74in. Greatest fall in 24 hours o'57in., date October 20th and 29th. No. of days on which o o in., or more fell = 17. Nov...Total Rainfall 4.50in. Greatest fall in 24 hours o.62in., date November 12th. No. of days on which o orin. or more fell = 21.

Dec...Total Rainfall 7.25in.

Greatest fall in 24 hours o 80in., date December 8th.

No. of days on which o o in. or more fell = 28.

#### BIRTHS.

During the year 1,204 births have been registered within the Borough, of which 15 belonged to other districts. By excluding these 15 births the number is reduced to 1,189, to which must be added one birth which occurred outside the Borough. This brings the corrected number of births to 1,190, of which 601 were boys and 589 were girls, representing a birth rate of 20.28 per 1,000 of the population, as compared with a rate of 20.79 per 1,000 in the preceding year. The corrected number of births registered shows a decrease of 45 as compared with the number for the previous year, and is 107 below the mean number for the ten years 1901-1910.

The birth rate for the year is the lowest recorded for the Borough, and is one of the most unsatisfactory features of the year's statistics. It compares very unfavourably with similar Lancashire towns, such as St. Helens 33.51, Bootle 30.2, Wigan 27.05, and Oldham 24.4 per 1,000 respectively.

#### WARD DISTRIBUTION.

	N	o, of Birtl	hs.	Rate per 1,000.
Moorside		279		19.11
East		285		23.94
Church		160		21.92
Redvales		184		17.16
Elton		282		19.93

Sixty of the above births were illegitimate, as compared with fifty-three in the previous year, being apportioned to the wards as follows:—

	Moorside	9	
	East	22	(10 of which occurred in the Union Workhouse).
	Church		the emon tronscary.
~	Redvales	7	
	Elton	10	(1 of which occurred in the Union Workhouse).
	Total	-	

#### MARRIAGES.

The total number of marriages celebrated in the Bury Union during the year 1911 was 1,308, being an increase of 33 as compared with the preceding year. The quarterly returns of the marriages solemnised in the Bury District in the year 1911 are summarised as follows:—

Church	of England.	Autho	Before rised Pe	rsons.	Before Registra	re.	Total.
March Quarter, 1911	. 113		43		73		229
June Quarter, 1911	. 197		79		87		363
September Quarter, 1911	. 246		80		106		432
December Quarter, 1911	. 160		50		74		284
Totals	716		252		340		1308

#### DEATHS.

During the year 1,060 deaths have been registered in the Borough, being an increase of 78, as compared with the preceding year. Of these deaths, 211 occurred in the Union Workhouse, 51 in the Dispensary Hospital, 16 in the Florence Nightingale Hospital, and five in the Robinson Kay Home.

Of the above deaths, 129 were of persons not usually resident in the Borough, 49 being from Heywood, 37 from Radcliffe, 14 from Ramsbottom, eight from Tottington, five from Whitefield, five from Bury Rural, three from Edenfield, three from Rochdale, and one each from Manchester, Leeds, Blackburn, Miles Platting, and Haslingden.

By excluding these 129 deaths of non-residents, the total number of deaths is reduced to 931, to which must be added the 23 deaths of Bury residents who have died in other towns. The corrected number of deaths of Bury residents is thus brought to 954, which is more by 86 than the previous year, and is nine below the mean number for the ten years 1901-1910.

The death rate is equal to 16.26 per 1,000, as compared with a rate of 14.61 per 1,000 in the previous year, and compares favourably with the rate (16.4 per 1,000) for the 77 great towns of England and Wales.

The increase in the death rate is due chiefly to the increased number of deaths from Respiratory diseases and Diarrhœa. The tatter was caused by the extremely hot and dry summer, and is not confined to Bury. The death rate from Diarrhœa shows a corresponding increase all over the country.

The lowest death rates are recorded in Redvales Ward (11.60) and Elton Ward (13.83), whilst the highest death rates, as may be expected, were in the most densely populated parts of the Borough, namely: Church Ward (21.14), East Ward (19.14), and Moorside Ward (16.95).

The following table shows the natural increase of the population, i.e., the excess of births over deaths during the past 20 years (1892-1911):—

Year.	Births.	Deaths.	Natural Increase.
1892	1617	1202	415
1893	1488	1287	201
1894	1507	1077	480
1895	1710	1414	296
1896	1454	1162	292
1897	1520	1099	421
1898	1483	1057	426
1899	1439	1061	378
1900	1390	1108	282
1901	1272	975	297
1902	1214	955	259
1903	1329	1030	299
1904	1883	1008	380
1905	1271	964	307
1906	1336	1001	335
1907	1886	989	897
1908	1877	989	438
1909	1226	965	261
1910	1235	868	367
1911	1190	954	286
Total	27777	21060	6717

District Mortality Rates.—The following table shows clearly the difference as regards the mortality rates in the various Wards:—

POPULATION, ACREAGE, AND DEATH RATES IN THE VARIOUS WARDS.

						Mo	rtality	per 100	O Livin	g.
WARD.	Estim'ted Popula- tion to middle of 1911.	Acreage.	Persons per Acre.	Total Deaths	*Death Rate per 1000.	Zymotic Diseases.	Phthisis.	Other Tuberculous Diseases.	Other Respiratory Diseases.	Cancer.
Moorside	14209	1534	9.26	241	16.95	1.90	1.05	0.77	2.60	1.19
East	12699	786	16.16	248	19.53	3.07	1.02	0.39	4.25	0.95
Church	6907	258	27.30	146	21.14	1:74	2.46	0.43	3.62	0.72
Redvales	11035	1221	9.03	128	11.60	0.68	0.27	0.27	1.81	0.68
Elton	13815	2042	6.76	191	13.83	0.72	0.65	0.29	2.53	0.36
Totals	58665	5836	10.05	954	16.26	2.18	0.97	0.44	2.91	0.78

\*Deaths occurring in Public Institutions have been relegated to the Ward to which the person belonged; deaths within the Borough of persons usually resident outside are here excluded, and correction is made for persons dying without the Borough, but usually resident within. It will be observed from the above table that the highest death rates, as in previous years, are recorded in Church and East Wards, which are the most densely-populated districts.

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

Causes of Death.	Nett Deaths at the subjoined Ages of Residents, whether occurring within or without the District.									
Causes of Death.	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 upwards.	Total Deaths whether of Residents or Non-residents in Institutions in the
ll Causes   Certified	932 22	195 5	56	49	28 1	39	104 2	219 3	242 11	281
Interic Fever	,									2
mallpox										
Ieasles	26	3	14	8	1					4
carlet Fever	10	1		5	4					8
Vhooping Cough	12	4	6	2						1
Diphtheria and Croup	5 8	2		5		i		3	2	4 3
rysipelas										0
erebro-Spinal Fever			::	1::		1	::	1	::	
hthisis (Pulmonary										
Tuberculosis)	57				3	11	23	18	2	10
uberculous Meningitis	10	4	1	2	2			1		1
therTuberculousDiseases	100	2	2	3	5	1		2	1	8
Rheumatic Fever	5				1		2	1	1	1
ancer, Malignant Disease	46	15	";				6	26	14	11
Bronchitis	84 33	15	10	2 3		2	2	25	34	21
neumonia (other forms)		4	4	5	2	3	8	10	3	3 8
ther Diseases of Respira-							"	-		ľ
tory Organs	15	1			1	1	4	3	5	1
Diarrhoea and Enteritis	65	45	7	5		1	1	1	5	4
ppendicitis and Typhlitis				1	2	2	3	1		7
lcoholism	1						1			
'irrhosis of Liver Tephritis and Bright's	6						1	3	2	2
Disease	15					1	2	6	6	4
uerperal Fever	3			1		1	2			l î
ther accidents & Diseases						-		1		l î
of Pregnancy and Partu-										
rition	7	1				1	4	1		2
ongenital Debility and										
Malformation, including Premature Birth	70	68		2000			1	1	la de	6
iolent Deaths, excluding		00		1.			1	1		0
Suicides	35			3	2	1	9	9	11	17
uicides	7						2	4	1	2
other Defined Diseases	253	21	6	3	5	12	33	95	78	81
Diseases Ill-defined or							2000	1		
Unknown	117	15	2	2	1	1	1	9	86	71
	954	200	56	49	29	39	106	222	253	283

### INFANT MORTALITY, 1911.

### Nett Deaths from stated causes at various Ages under One Year of Age.

CAUSE OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3.4 weeks.	Total under 1 month.	1-3 Months.	3-6 Months.	6.9 Months.	9-12 Months.	Total Deaths under 1 year.
All Causes { Certified Uncertified	37 3	8	5	7	57 3	45	33 1	38 1	22	195 5
Smallpox Chicken-pox Measles Scarlet Fever Diphtheria and Croup Whooping Cough Diarrhea Enteritis Tuberculous Meningitis Abdominal Tuberculosis Other Tuberculous Diseases Congenital Malformations Premature Birth Atrophy, Debility & Marasmus		· · · · · · · · · · · · · · · · · · ·	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	· · · · · · · · · · · · · · · · · · ·	2   2   2 29 9	13     4 13	   2 13      		 1  5  	3 1  4 45  4 2  2 35 31
Atelectasis	2 2		::	1	3 2	::	::	::	::	3 2
Erysipelas Syphilis		::	::	:	::	i	::	::	·: 1	2
Rickets Meningitis (not Tuberculous) Convulsions Gastritis Laryngitis Bronchitis Pneumonia (all forms) Suffocation, overlying	3		··· ··· ·· ·· ·· ·· ·· ·· ··		3 2  1	1 3 1  4 1	1 4 3	1 3 5 5	1 1 9	11 3 15 18
Other Causes	40	8		$-\frac{1}{7}$	60	45	34	39	22	200

Nett Births in the year } Legitimate.. 1130 Illegitimate .. 60

Nett Deaths in the year | Legitimate Infants ... 183

Vital Statistics of Whole District During 1911 and previous Years.

					BIRTHS.		TOTAL DEATHS	DEATHS	Transfer-	Transfer-	NETT	THE DISTRICT.	BEI	LONGII
YEAR	I.R.		Population estimated to middle of	Un-	Nett.	tt.	DIST	DISTRICT.	able Deaths of Non-	able Deaths of Residents	Under 1 Year of Age.	der 1 Year of Age.	Y	At all Ages.
			each Year.	Number.	Number.	Rate	Number	Rate	registered in the District.	registered in the District.	Number.	Rate per 1000 nett Births.	Number	ber
1906	:	:	58744	1336	i	*22.74	1084	18.40	109	26	*286	*177	1001	-
1907	:	:	58901	1886	:	*22.68	1084	17.55	108	13	*181	*185	989	6
1908	:	:	59064	1377	:	*28.31	1056	17.87	130	13	*178	*129	989	0
1909	:	:	59284	1226	:	*20.61	1063	17.94	115	17	*156	*129	965	10
1910	:	:	59409	1235	:	*20.79	985	16.53	124	10	*154	*124	898	00
1911	:	:	58665	1204	1190	20.28	1060	18.07	129	28	200	168	954	1 +

Area of District in acres (exclusive of area) 5886.

\* Uncorrected.

I year. Deaths under 230 261 'səZu Deaths at all ELTON 272 824 809 867 Registered. and Previous Years. DISTRICTS. year. middle of each estimated to Population Deaths under 1 year. 330 SUB-REGISTRATION ages. Deaths at all SOUTH. Registered. Births Population estimated to middle of each Ξ. 86 74 78 l year. Separate Localities Deaths under ages. Deaths at all NORTH Registered. Births 26290 26348 26607 Population estimated to middle of each year. l year. Deaths under of BURY (whole district). 58450 1383 1003 58818 1829 1080 Vital Statistics Deaths at all 58665 1190 58049 1272 58182 1214 58594 1271 58694 1297 Registered. Births year. Population estimated to middle of each 1901 to 1910 Averages of ears : : YEAR 1909 1910 1905 1906 

	Mortality at	Different Ag	ge Per	iods	Of the 95	4 deaths	s:
200	occurred in o	children unde	er one	year o	of age	20.96 p	er cent.
56	occurred bet	ween the age	s of 1	and 2	years	5.87	,,
49	,,	,,	2 8	and 5	years	5.14	,,
30	,,	,,	5 ar	nd 15	years	3.14	,,
38	,,	,,	15 ar	nd 25	years	3.98	,,
106	,,	,,	25 ar	nd 45	years	11.11	,,
223	,,	,,	45 ar	nd 65	years	23.38	,,
252	occurred in	persons over	65 ye	ears o	f age	26:42	,,
						100.00	

Infectious Diseases (including Influenza).—The percentage of deaths from the infectious diseases (13.52) is 5.46 per cent. higher than in the preceding year. This increase is due chiefly to the increased number of deaths from Diarrhœa. As will be seen on reference to the appended table, the percentage of deaths from these diseases is, with one exception, the highst recorded during the past nine years:—

Percentage... 12.04 14.05 9.23 11.59 9.09 9.09 7.25 8.06 13.52

Diseases of the Respiratory System (excluding Phthisis):—
171 deaths have been attributed to various diseases of the respiratory organs, which is an increase of 36 deaths as compared with the preceding year.

Of these deaths, 84 (or 49.71 per cent. of the total 171) were attributed to Bronchitis, being an increase of seven deaths, as compared with the number (77) in the preceding year. The following table shows the age periods at which deaths from Bronchitis were recorded:—

Under 1. under 2. under 5. under 15. under 25. under 45. under 65. 65 upwards.

15 ... 4 ... 2 ... — ... 2 ... 2 ... 25 ... 34

Pneumonia caused 72 deaths, as compared with 56 deaths in the previous year. Of this number, 33 cases were due to Broncho Pneumonia and 39 to other forms. The following table shows the ward distribution and the age periods at which these deaths were recorded:—

Wards.	Under 1.		2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and up- wards	Totals
Moorside	7	- 5	1	2		2	_	1	18
East	6	4	2	-	2	1	6	1	22
Church	2	8	8	_	_	1	1	1	11
Redvales	2	_	-	_	1	1	4	2	10
Elton	1	2	2	-	-	4	2	-	11
Totals	18	14	8	2	8	9	13	5	72

Phthisis caused 57 deaths, making a total of 228 deaths from respiratory diseases, as compared with 208 deaths in the previous year.

Deaths from Respiratory Diseases in each of the preceding ten years:—

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Bronchitis	86	93	99	118	90	98	100	75	117	77
Pneumonia	85	89	98	56	75	59	58	66	104	56
Oth'r Respirat'ry			1.0						_	
Diseases	11	2	12	8	15	8	7	7	7	2
Phthisis	85	75	69	97	78	74	66	68	71	78
Totals	267	259	278	279	253	234	281	211	299	208

#### LONGEVITY.

Deaths of Persons over 60 Years of age.—The deaths of persons over 60 years of age were equal to 33.65 of the total deaths, as compared with 35.37 per cent. in the preceding year.

The number of deaths attributed to **old age** was 92, a decrease of 6 as compared with the previous year. The following table gives the number of deaths attributed to Old Age, and the percentage to the total number of deaths; also a comparison with each of the ten preceding years:—

YEAR.	1901	1902	1903	1904	1905	1906	190 7	1908	1909	1910	1911
No. of Deaths Per cent. of		74	79	78	72	66	77	72	94	98	92
Total Deaths		7.64	7.67	7.27	7.48	6.59	8.20	7.60	9.74	11.29	9.64

## INQUESTS DURING THE YEAR 1911.

During the year the causes of death of 81 Bury residents were investigated by the District Coroner (Mr. S. F. Butcher). In 59 instances it was found advisable to hold an inquest, and of this number 39 related to the bodies of males and 20 to the bodies of females. In 22 cases a public enquiry was dispensed with.

The following is a classification of the sex and age periods:-

		Females
Under one year of age	I	I
Over one and under two years of age	_	—
Over two and under five years of age	3	—
Over five and under 15 years of age	_	2
Over 15 and under 25 years of age	I	2
Over 25 and under 45 years of age	10	2
Qver 45 and under 65 years of age	14	8
Over 65 years of age	10	5
	_	_
Total	39	20

The verdicts of the Coroner's Juries, and the wards to which the deceased belonged, are shown in the table:—

	Moorside			East	Chu	rch	R	edval	es.	Elton
Natural Causes		7		3		-		4		4
Accident		8		5		3		6		7
Suicide		4		2		_		I		I
Found drowned		I		_		- 22		1		2

#### UNCERTIFIED DEATHS.

The number of uncertified deaths (i.e., deaths which had not been certified by a medical man, or cases in which the Coroner considered an inquest unnecessary) was 22, twelve being of males and ten of females.

The following shows the age periods, and the wards to which the deceased belonged:—

	Ages	0-1	1*2	2-5	5-15	15-25	25	45	45-65	65 U	pwards
Moorside	 I		_	 _	 1	 _	 I		2		2
East	 4		_	 _	 _	 _	 _		_		4
Church	 _		_	 _	 _	 _	 _		1		1
Redvales	 _		_	 _	 _	 -	 1		_		3
Elton	 _		_	 _	 _	 _	 _		_		I

# Annual Rate of Mortality compared with other Towns.

The following table compares the Birth Rate and certain Death Rates of Bury with other manufacturing towns:—

TOWN.	Estimated Population.	Birth Rate per 1000.	Death Rate per 1000.	Zymotic Death Rate per 1000.	Phthisis Death Rate per 1000.	Other Tubercu- lous Diseases Rate per 1000	Cancer Death Rate per 1000.	Other Respira- tory Diseases.	Diarrhœa Death Rate per 1000.	Infant Mortality per 1000 Births.
Accrington	7.50		15.77	1.97	0.84	0.28	1.06	2.66	_	180
Asht'n-u-Lyne	45179	23.0	17.2	2.5	1.3	0.2	0.9	2.6	1.6	198
Blackburn	133160	21.4	16.1	2.3	_	_	-	_	1.56	186
Bolton	181202	22.9	16.3	_	1.03	0.36	_	2.74	1.58	160
Bootle	70100	30.2	18.3	2.9	1.8	0.4	1.04	8.9	2.0	145
Burnley	106569	23.2	18.1	3.6	1.04	0.4	0.77	3.25	2.42	210
Bury	58665	20.28	16.26	2.18	0.97	0.44	0.78	2.91	1.11	168
Crewe	45042	22.9	18.6	2.13	0.75	0.51	0.84	1.99	1.59	162
Darwen	40398	18.71	15.87	1.51	0.84	0.15	0.84	2.52	0.84	153
Eccles	42200	22.2	18.7	1.7	1.01	0.10	1.09	1.7	1.2	115
Halifax	101556	18.3	15.3	1.4	0.92	0.35	1.1	2.5	0.68	123
Lancaster	41400	20.14	18.06	1.06	1.27	0.41	0.91	1.98	_	100
Oldham	147751	24.4	18.2	2.5	1.2	_	_	3.2	1.8	159
Radcliffe	26100	18.5	16.4	2.6	0.8	0.2	0.7	3.0	1.6	181
Ramsbottom	15200	17.8	18.68	1.44	1.12	0.32	1.05	1.97	0.65	140
Rotherham	62500	28.85	16.63	3.15	0.83	0.41	0.81	2.71	1.74	161
St. Helens	96870	88.51	18.30	3.03	1.01	0.66	0.64	3.54	1.47	158
Stockport	109090	23.33	17:38	2.73	1.35	0.53	1.06	2.98	2.05	172
Wallasey			12.6	1.8	1.0	0.4	1.09	1.9	2.6	109
Warrington .	72375	28.1	15.7	2.8	1.46	0.63	0.17	2.6	1.9	147
Whitefield			13.4	1.4	0.7	0.50	0.28	2.7	1.7	151
Wigan	200000000000000000000000000000000000000		18.27	3.91	0.72	0.74	0.53	4.02	2.26	193
	~	-								

<sup>\*</sup> Corrected for Public Institutions.

#### INFANT MORTALITY.

Number	of	Births	d	uring	the	year						1,190
Number	of	deaths	of	child	ren	under	one	ye	ear	of	age	200
Infant M	or	tality .										168

The Infant Mortality for the year 1911 is the highest recorded for the Borough since 1906, being 44 per 1,000 births higher than the previous year and 21 above the mean rate for the ten preceding years. The heavy mortality amongst infants is one of the most unsatisfactory features of the year's work. Undoubtedly the very hot summer, with the consequent prevalence of summer diarrhæa, was largely responsible for the increased mortality. No fewer than forty-five deaths of infants under one year of age were attributed to diarrhæa, as compared with 19 deaths in the previous year. It is, however, pleasing to record that the number of deaths from common infectious ailments, e.g., Measles, Whooping Cough, &c., is not above the average of previous years.

During the summer months of the year special visits were paid by the Health Visitor to the homes of the babies, who were being bottle-fed, in order to advise mothers where necessary on the feeding and care of their infants during this period of the year. In addition close attention was also given to scavenging, and the frequent removal of household refuse, as the latter branch of work bears an important part in the prevention of summer Diarrhœa.

It will be seen from a reference to page 29 that the number of bottle-fed children was increased as compared with the previous year. This fact is very much to be regretted, and, in my opinion, is due in a great measure to the improvement through which the cotton trade is at present passing.

On reference to the appended table, it will be seen that 40 deaths (or 20 per cent.) occurred during the first week after birth, and 60 (or 30 per cent.) occurred during the first month.

Deaths from Zymotic diseases show an increase as compared with the previous years, viz.: 53 deaths in 1911, 24 in 1910, 22 in 1909, and 23 in 1908.

Deaths from Respiratory diseases show an increase of 21 as compared with the previous year, 15 being due to Bronchitis, 18 to Pneumonia, and one to other diseases of the respiratory organs.

The following table shows the number of deaths of infants per 1,000 births in Bury during the past eleven years:—

										Average	
1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	10 years	1911
166	128	174	163	146	177	135	129	129	124	147	168

Infant Mortality for the whole of England and	
Wales (1911)	130
For the 77 Great Towns	140
For the 136 Smaller Towns	133
For England and Wales (less the 213 towns)	118
For Bury	168

From the list below it will be observed that as regards Infant Mortality Bury compares favourably with other Lancashire towns.

### Infant Mortalities .- Chief Lancashire Towns :-

Accrington	180	Darwen	153
Ashton-under-Lyne.	193	Oldham	159
Blackburn	186	Rochdale	139
Bolton	160	St. Helens	158
Bootle	145	Warrington	147
Burnley	1000	Wigan	193
Bury			

Causes of Death.—Zymotic Diseases have caused 53 deaths, three being due to Measles, 45 to Diarrhœa, four to Whooping Cough, and one to Scarlet Fever. The chief increase is shown in the number of deaths from Diarrhœa (26 more than in the year

1910). The number of infant deaths from Diarrhœa during the last nine years in Bury is apportioned as follows:—45 in 1911, 19 in 1910, 12 in 1909, 20 in 1908, 11 in 1907, 43 in 1906, 33 in 1905, 32 in 1904, and 38 in 1903.

Respiratory Diseases.—These were responsible for 34 deaths (as compared with 13 deaths in 1910), and of these 15 were due to Bronchitis, 18 to Pneumonia, and one to other diseases of the respiratory organs.

Tuberculous Diseases.—The Tuberculous diseases show a slight decrease. The number of deaths was six, as compared with seven deaths in 1910, four in 1909, nine in 1908, seven in 1907, and 11 in 1906.

Remaining Causes.—The chief remaining causes of death were:—

Premature Birth	35
Convulsions	11
Atrophy and Debility	31
Congenital Defects	

An analysis of the deaths at the various age periods is given on page 18.

Inquests.—During the year the Coroner (Mr. S. F. Butcher) enquired into the cause of death in two instances (one male and one female), the ages of the children being one day and eleven weeks respectively. The causes of death were returned as follows:

—"Natural Causes," 2.

Uncertified Deaths.—In five instances the Coroner deemed the holding of an inquest unnecessary, the cause of death in each case being returned as due to "Natural Causes."

Illegitimacy.—5.0 per cent. of the total births were illegitimate, and of the total deaths of children under one year of age 8.5 were of illegitimate children, as compared with 9.1 per cent. in 1910. The infant mortality among legitimate children was 154 per 1,000 births, whereas among illegitimate children it was 283 per 1,000 births.

Occupation of Mother.—Of the mothers of the 200 fatal cases:—

77 were occupied only with house duties (38.50 per cent.).

123 were engaged as either mill workers or otherwise employed away from home (61.50 per cent.).

In 1910 the percentage of mill workers was 58.49, and of home workers 41.51.

The following table shows the increase in the number of the mothers of fatal cases who are employed outside the home:—

Year	Deaths	Infa	nt Morta	ality	(a) Ou	Mothers of tside Home	(b)	ed At Hon	Doubtful		
1901	 213		166		60	(28%)		117		36	
1902	 156		128		41	(26%)		106		9	
1903	 231		174		76	(33%)		135		20	
1904	 226		163		71	(31%)		128		27	
1905	 184		146		71	(38%)		113		-	
1906	 236		177		139	(59%)		97		-	
1907	 181		135		25	(62%)		56		-	
1908	 178		129		63	(35%)		115		_	
1909	 159		129		93	(58%)		66		_	
1910	 154		124		100	(58%)		54		_	
1911	 200		168		123	(61%)		77		_	

Insurance.—75, or 37.50 per cent., of the infants who died were insured, as compared with 37.00 per cent. in the year 1910.

Influence of Feeding on Infant Mortality.—During the year Nurse Walton has obtained information as to the method of feeding of 1,104 of the 1,190 infants born. Of these:

```
631 were breast-fed, amongst which were 10 deaths, i.e., 1.58% 296 ,, bottle-fed ,, ,, 84 ,, ,, 28.38% 162 ,, breast and bottle-fed ,, I ,, ,, 0.62% 15 ,, spoon-fed ,, I2 ,, ,, 80.00% 38 died within 24 hours of birth.
```

Importance of Feeding.—From the above table the paramount importance of breast-feeding is forcibly illustrated, as showing that the death-rate amongst bottle-fed babies is more than 17 times that of breast-fed babies.

### District Mortality.

		Infant Deaths	Births	I	Deaths per 1000 births
D Month	Moorside Ward	54	 279		193
Bury North	Moorside Ward East Ward	62	 285		217
Dury South	(Church Ward	29	 160		181
bury South	Church Ward Redvales Ward	18	 184		98
Elton Ward		37	 282		131
Who	le Borough	200	1,190		168
					-

### NOTIFICATION OF BIRTHS ACT, 1907.

The above Act was adopted at a meeting of the Town Council held on February 8th, 1908, and the consent of the Local Government Board having been obtained, came into operation on April 8th.

Under the Notification of Births Act of 1907, 1,099 births were notified, 940 being notified by midwives, 126 by medical practitioners, and 33 by parents or other persons. Of the total number of births notified, 39 were returned as being "still-born," of which 32 were notified by midwives, six by medical practitioners, and one was notified by the parent.

The effect of the above measure cannot but tend to have a beneficial effect from a health point of view. Especially is this the case with regard to the feeding and care of infants, as the Lady Inspector is thus able at an earlier stage, where necessary, to give such information with regard to feeding, &c., as may be desired.

When one considers the high mortality which has annually taken place amongst infants in Bury, I am optimistic enough to hope that the adoption of the above measure will prove to be an important factor in reducing this mortality in the future.

In conclusion, I have pleasure in recording my appreciation of the valuable assistance which has been rendered, especially by the medical practitioners and midwives of the Borough, to the Health Department, by the promptitude with which the notifications have been made, thus tending towards the efficient and satisfactory working of this Act.

#### NOTIFICATION OF INFECTIOUS DISEASES.

Α.	Infectious	DISEASES	Notification	ACT, 1899.

Number	of	cases	 	 	 	 357
Number	of	deaths	 	 	 	 18

During the year 1911 the cases notified under the Infectious Diseases Notification Act number 357, or 19 less than the average for the preceding ten years. With regard to Scarlet Fever, there was a decrease of 344 cases notified as compared with the year 1910; the number notified (220), however, is seven above the annual average for the previous ten years. The cases of Diphtheria and Membranous Croup show a reduction of 29 in the average number of notifications during the past ten years.

As compared with 1910, Scarlet Fever shows a decrease of 344, Enteric Fever an increase of seven, Erysipelas a decrease of eight, and Puerperal Fever an increase of two. The total number of deaths from the notifiable infectious diseases was 18, as compared with 33 in 1910, 15 in 1909, 21 in 1908, 23 in 1907, 20 in 1906, and 24 in 1905.

It was not found necessary to notify Chicken-pox during the year.

B. Other Infectious Diseases.—1,074 notifications (989 verified) were received from school authorities of cases of suspected Measles, Whooping Cough, &c., as compared with 589 in 1910, 989 in 1909, 653 in 1908, 730 in 1907, and 1,081 in 1906. Of these 1,074 suspected Infectious Diseases, 469 were cases of suspected Measles (434 verified). 57 Chicken-pox (54 verified), 300 Mumps (273 verified), 19 Ringworm (16 verified), and 187 Whooping Cough (175 verified).

The notified cases of Measles show an increase of 85, and Whooping Cough an increase of 187, as compared with their respective numbers in 1910. The number of deaths from Measles was 26, an increase of 18, and from Whooping Cough 12 deaths occurred, as compared with none in 1910.

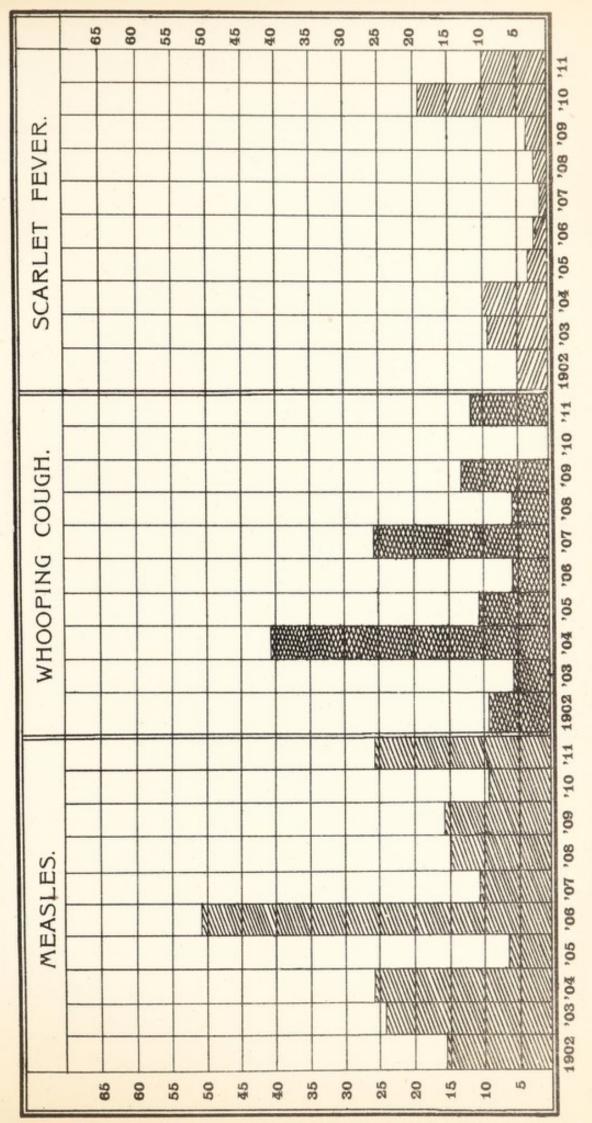
Suggestions for the Prevention of Measles.—The best administrative measures for the control of Measles may be summarised as follows:—

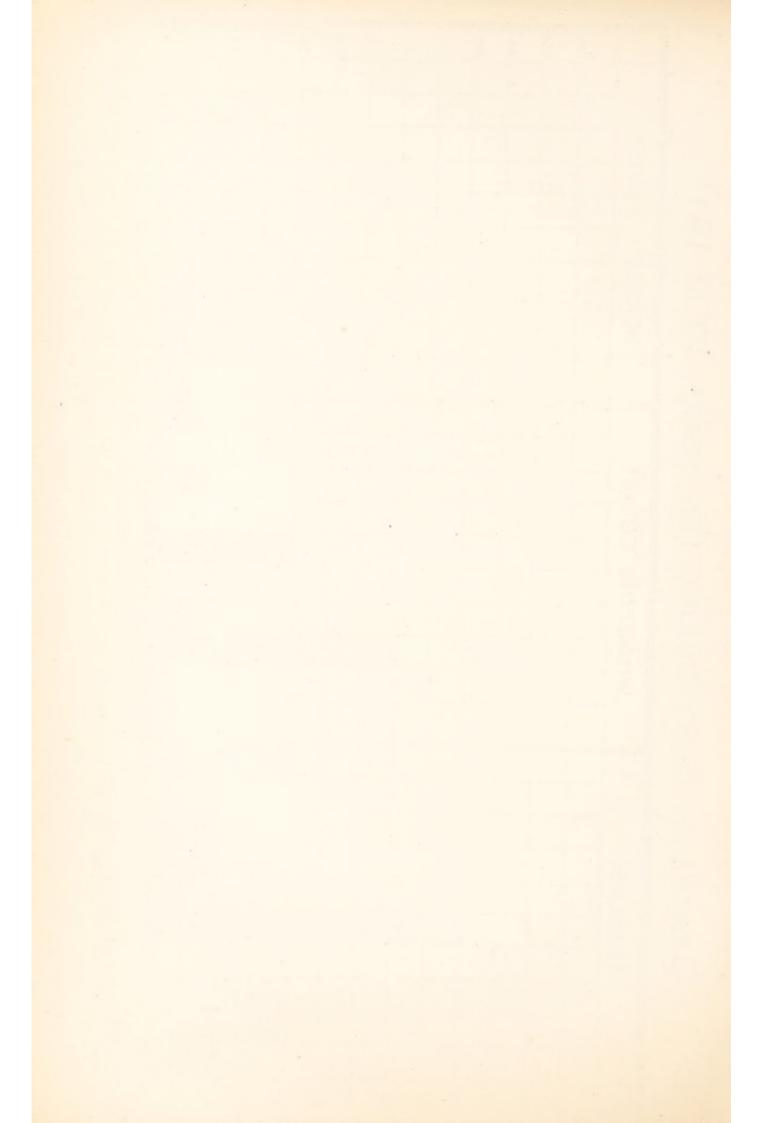
- A. Through Schools.—(1) By school notification. (2)
  By medical inspection of school children. (3) By
  exclusion from school of suspected children. (4)
  School closure.
- B. At Home.—By visits of Health Visitor and education of mothers.
- c. Generally by Popular Lectures, &c.

The advantage of school notification is to be seen in the fact that out of 1,074 such notifications received during the year, as many as 989 cases were verified as suffering from the disease. This reflects great credit upon the teachers in the Elementary Schools for their powers of observation and their concern for the welfare of the children in their charge.

It is obvious that much assistance may be given to those engaged in medical inspection by the teachers in the schools, on account of the special knowledge the latter have of the dispositions of the individual children when in health, which enables them to discern the changes which take place in incipient disease.

DEATHS IN BURY DURING TEN YEARS, 1902-1911





# Table showing the number of cases of Infectious Disease notified from 1888 to 1911.

DISEASE.	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Smallpox Scarlet Fever	5 92	42	98	255	272	12 359	28 449	160	1 365	262	148	236	5 432	179	37	59 156	25 261	33 197	1 90	40	98	389	564	30
Diphtheria and Membran'usCroup	17	20	22	34	36	34	42	32	27	27	24	45	18			107	73	55		48	52	59	44	
Enteric Fever Continued Fever.	21	18	36	88	41	76	76 30	70	41 8	59 13	56 15	45 12	40 11	47 9	33 5	37	22	33	33	18	15	9	18	25
Typhus Fever Cholera		1			2		10				1													.,
Puerperal Fever Measless		22	2 27	5 360	3	4	13	4	2	5	6	8	15	7	11	2	11	4	11	14	9	5	4	6
Whooping Cought Erysipelast	19	179	63	45					1.				34	15	20	20	10	46	42	35	26	38	40	32
Chickenpox *	123						4.1											79			20		40.	0.6
TOTALS	644	283	248	788	354	494	648	274	444	366	250	346	555	335	444	383	403	450	215	156	202	500	670	357

#### Cases of Infectious Disease notified during the Year 1911.

	Cases notified in whole District.									otal Cas fied in ocality	each	No. of Cases Removed to Hospital from				
Notifiable Disease.				At A	ges—Y	ears.				tration Distric		eac	Total Cases Remov'd			
	At all Ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	up- wards.	North.	South.	Elton.	North.	South.	Elton.	to Hospit'l	
Smallpox	30		1	6	10	9	4		28	1	1	28	1	1	30	
Cholera							0.0			**				**		
Diphtheria (including Membranous Croup)	44		19	23	2 3				27	12	5	19	6	3	28	
Erysipelas	32	3	66	120	3 19	10 11	12	4	18 111	11 58	3 51	96	46	36	178	
Typhus Fever Enteric Fever	25		3	3	5		5		16		7	14	2	6	22	
Relapsing Fever		**		++				**							4.4	
Continued Fever Puerperal Fever	6				2	- 4			5	i						
Plague																
TOTALS	357	3	89	155	41	4.43	22	4	205	85	67	157	55	46	258	

# Number of Cases of Infectious Disease Reported in each Month of the Year.

	Scarlet Fever.	Diphtheria & Membranous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox
January	38	4	8			2	
February	22	3				1	
March	33	2	2			3	27
April	29	2	***	***		2	2
May	28	2				4	1
June	13	2	1		1	2	
July	10	5	2		1	1	
August	8	4					
September	5	2	8		1	2	
October	4	4	5		2	7	
November	16	11	3		1	3	
December	14	8	1			5	
Totals	220	44	25		6	32	30

# Number of Cases of Infectious Disease Notified in Each Quarter of the Year 1911.

	Scarlet Fever.	Diphtheria & Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox
QUARTER.	00		-			0	0.7
1st	93	9	5			6	27
2nd	70	6	1		1	8	3
3rd	23	11	10		2	8	
4th	34	18	9		3	15	
Totals	220	44	25		6	32	30

# WARD DISTRIBUTION OF INFECTIOUS DISEASES, 1911.

	Scarlet Fever.	Diphtheria & Membran- ous Croup.	Enteric Fever.	Continued Fever.	Puerperal Fever.	Erysip- elas.	Smallpox.
Moorside	67	19	11			10	28
East	44	8	5		5	8	5
Church	25	9	2		1	6	
Redvales	33	3				5	1
Elton	51	5	7			8	1
Totals	220	44	25		6	82	30

# Cases Removed to the Florence Nightingale Hospital from the various Wards.

	Scarlet Fever.	Diphtheria & Membran- ous Croup,	Enteric Fever.	Continued Fever.	Puerperal Fever,	Erysip- elas.	* Smallpox.
Moorside	58	12	9				23
East	38	7	5				5
Church	24	6	2				
Redvales	22						1
Elton	36	3	6				1
Totals	178	28	22				30

<sup>\*</sup>Removed to Ainsworth Hospital.

# SCARLET FEVER.

Number of cases notified	220	)
Number of deaths	IC	)
Case Mortality	4.5	5%

The number of cases notified show a decrease of 344 as compared with the number (564) notified in the previous year. Of the notified cases, 163 were reported during the first six months of the year, which appeared to be the end of the epidemic which started in the autumn of 1908. The comparative immunity of the Borough previous to the last two years appears to be largely responsible for the epidemic, in that an increased number of children were thus left susceptible to the disease, whilst in the meantime others were born and added to the number.

Admission to Hospital.—Of the 220 notified cases 178, or 80.91 per cent., were removed to the Florence Nightingale Hospital.

School Closure.—None of the schools in the Borough were closed during the year on account of this disease, as in no instance was a school infection sufficiently marked to call for any other measure than exclusion of scholars.

# QUARTERLY INCIDENCE.

	ıst Q	uarter	and	Quarter	3rd	Quart	er 4t	h Quarter
Notifications		93		70		23		34
Deaths		7		2		I		_

#### Age Distribution.

The youngest case notified was 18 days old, and the oldest 49 years.

	Under	1	r to 5	5 to 15	15 to	25	25 to 45	4	45 to	65	Over 65	Total
Notifications.	. 3		66	 120	 19		II		I			220
Deaths												

It will be seen from the chart on opposite page that the disease was most prevalent during the first quarter of the year, although the incidence reached a maximum in the fourth week in April. During the fourth week in July, the second week in September, and the first week in October, no cases were notified.

# WARD DISTRIBUTION.

22 22 23	Moorsi	de	East	Church	F	Redvales		
Notifications	 67		44	 25		33		51
Deaths	 2		4	 _		I		3

The epidemic which commenced in October, 1908, was not got under control until the middle of the year under review. The total number of cases notified during the four years 1908-11 was 1,271, and the number of deaths was 37.

Throughout the course of the epidemic the disease was generally of a very mild type. One cannot but regret the recurrence of epidemics of what are usually termed preventable diseases. There can be no doubt that school life plays a very important part in the spread of Scarlet Fever and other infectious diseases. The present method of fixing teachers' salaries and payment of grants is far from satisfactory from a Public Health standpoint. Another matter to which I should like to draw attention is that of giving prizes to children for regular attendance. There must be a great tendency under the present system for children to be in attendance at school when they are not really fit.

# DIPHTHERIA AND MEMBRANOUS CROUP.

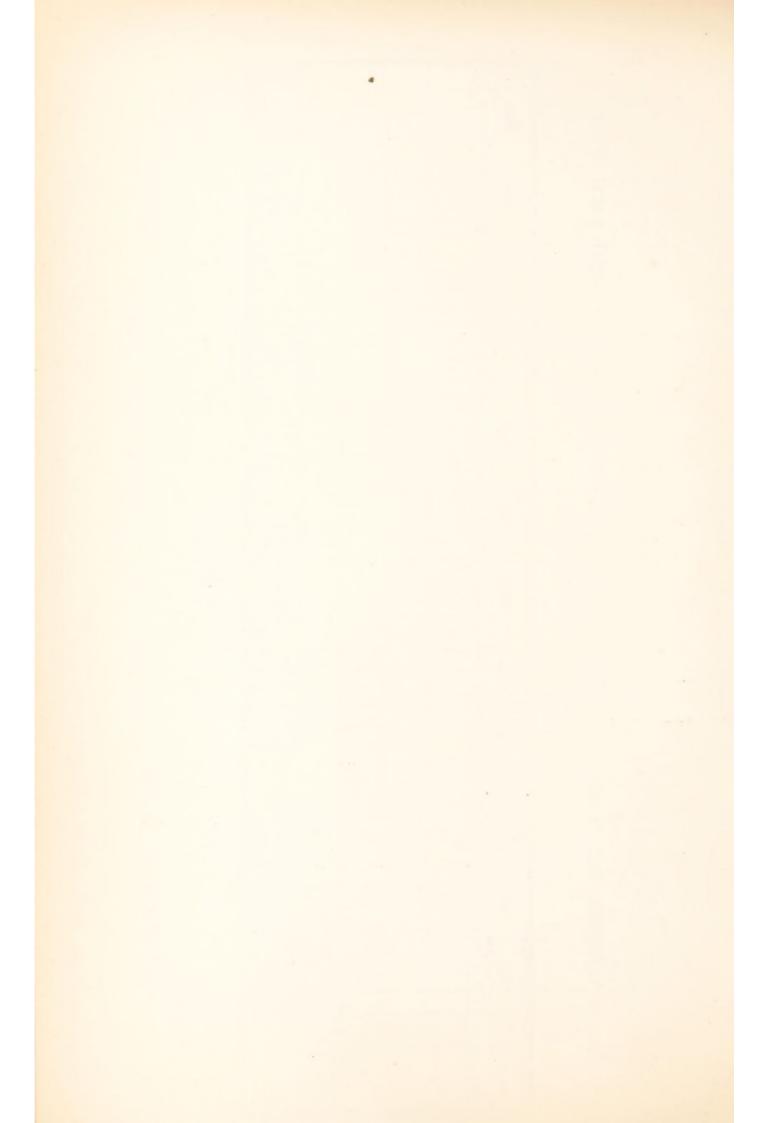
Number	of	cases	notified	 	 	 	 44
Number	of	deaths	s	 	 	 	 5

Forty-four cases of Diphtheria and Membranous Croup have been notified during the year, as compared with the same number during the year 1910, 59 in 1909, 52 in 1908, 48 in 1907, 35 in 1906, 55 in 1905, 73 in 1904, 107 in 1903, and 182 in 1902.

Five deaths have been recorded, representing a mortality rate of 0.09 per 1,000, as compared with eight deaths and a rate of 0.13 per 1,000 in the preceding year.

CHART SHEWING THE NUMBER OF CASES OF SCARLET FEVER NOTIFIED DURING EACH WEEK OF THE YEAR 1911.

	52			-			
	51.55					1	
Dec.	55						
0	9			1			
1	48 49			+			
	47 4		-	+-			
×.	40			+			
Nov.	10		-	+		1	
-	4		-	+-			
-	4			+-			
-	e4			+	-		
Oct.	-		-	+-	-		74
9	46 41 42 43 44 45 46		-	+-			
	98			+-			
ت				+	-		
Sept.	28		-	+	-		
03	5 37		-	+	-	-	
-	15	-		+-			
	34 25		-	+	-		
	100			-	-		
Aug.	23		-	+-	-		
~	60		-	+	_		
_	30 31		+-	+-	_		
	20		-	-		-	1
Š	53		-	+	_	-	
July.	1 28		-	+-	_	-	
	5 27		-	+			
	25 26			+-			
نه	0i		-	+	_	-	
June.	23 24		+	+-	_	_	
7	60		+	+	_	_	-
			+	+	_	-	
	0	-	+	+	_		
May.	69	-	+	+	_		
Z	- 60	-	+	+	_		1
	-		-	+	-		
	9		+	+	T		
April.	5		+	+	-		1
Ap	-	-	+-	+	-	-	+
	13 14 15 16 17 18 19 20 21	-	+	+	-	-	11
-	04		1				+
-	-		1	-	-	-	
March.	9 10 11 12		+	-	-	-	
王	6		+-	-		1	
-	00		-	+			1
	1	-	-	+			
Feb.	9		1	+			
111	100			+			1
	145		-	-			
÷	N		+	+		-	+.
Jan.	-		+	+			1000
	1 10		+	+	1		,
-	+		-	10	_	0	10 0
MONTH.	WEEK.		20	15		10	0
all.	1						



Of the 44 cases, 28 were removed to the Florence Nightingale Hospital. The admissions to hospital constitute 63.63 per cent. of the total cases notified, as compared with 56.80 per cent. in 1910, 61.02 in 1909, 51.92 per cent. in 1908, and 58.33 per cent. in 1907.

Of the 28 cases admitted to the hospital, two, or 7.14 per cent., proved fatal. Of the 16 cases treated at home three, or 18.75 per cent., died.

#### MONTHLY INCIDENCE.

Jan. Feb. Mar. April. May June. July. Aug. Sep. Oct. Nov. Dec. Total.
4 3 2 2 2 2 5 4 2 4 11 3 44

# QUARTERLY INCIDENCE.

#### WARD DISTRIBUTION.

				Redvales.			
Cases	19		8	 9	. 3	5	44
Deaths	—		3	 I	. —	I	5
Removed to hospita							

# NOTIFICATIONS AND DEATHS AT DIFFERENT AGES.

	U	nder	1.	1 and under	5. u	5 an	d 15. 1	15 and	d 85. u	25 and inder 4	5. ur	5 and der 6	5-	Total.
Cases														
Deaths														

Antitoxin.—Towards the end of last year sanction was obtained from the Council to supply the medical practitioners of the district with Antitoxin free, for patients suffering from Diphtheria within the Borough. It is gratifying to note that not only the curative but the prophylactic use of the serum is practised by medical men in the Borough, who have under their care the families whose members have been infected or exposed to infection.

In the Florence Nightingale Hospital the use of Antitoxin is a matter of routine; it is used early, in large doses, and repeated where necessary.

## CASE MORTALITY IN

	1911.	1910.	1909.	1908.	1907.		
Hospital cases	7.14	 28.00	 2.77		18.51		25.0
Home treated cases	18.75	 5.26	 17.39		20.0		15.0

# ENTERIC FEVER.

Cases notified	 	 	 	 	 	25
Deaths	 	 	 	 	 	0

Notifications of twenty-five cases of Enteric Fever were received at the Health Office during the year, as compared with eighteen cases in the preceding year. The following are the number of cases which have been notified during the last ten years:—

Of the twenty-five cases, twenty-two were removed to the Florence Nightingale Hospital. None of the notified cases proved fatal.

The monthly incidence was as follows:-

Jan. Feb. Mar. Ap. May Jun. July Aug. Sep. Oct. Nov. Dec. Total Notifications ... 3 — 2 — 1 2 — 8 5 3 1 25

# AGE PERIODS.

Under 1. 1 to 5. 5 to 15. 15 to 25. 25 to 45. 45 to 65. Over 65. Tot'l

Notifications... — 3 3 5 9 5 — 25

#### WARD DISTRIBUTION.

Moorside. East. Church. Redvales. Elton. Total. Notifications ... ... II ... 5 ... 2 ... 0 ... 7 ... 25

SEX INCIDENCE.—Of the cases notified, there were fifteen males and ten females.

Sanitary Condition of Infected Property.—The general sanitary conditions of the dwellings and surroundings of the 25 cases are summarised in the table on pages 40 and 41.

From this table it will be seen that one case occurred in a public institution (Bury Infirmary), and that of the 24 houses infected,

- 11 were provided with privy middens.
- I with a pail closet.
- 6 with waste-water closets.
- 6 with fresh-water closets.

Bacteriological Tests.—Specimens of blood of 25 cases of suspected Typhoid Fever were sent to the Public Health Laboratory, Manchester, with the following results:—

Ten gave positive results to Widal's test. Fifteen gave negative results.

Water Supply.—The water supply was directly from the public service, with the exception of one case, in which it was obtained from a private spring, and in no case was there any evidence of pollution.

MILK SUPPLY.—In no case was infection by this channel discovered.

Shellfish.—In no case was there a history of cockles, mussels, or oysters having been eaten previous to the onset of the disease.

Preventive Measures .- These, for some years now, have consisted generally in (i.) Isolation (a) at home, or (b) in hospital. (ii.) Disinfection or destruction of stools. In the case of patients treated at home, special pails are supplied by the Health Department for the reception of the excreta of patients. The pails are removed frequently and their contents burnt at the destructor. (iii.) Thorough disinfection of house, bedding, &c. (iv.) Disinfection of sanitary conveniences attached to the infected houses. (v.) Examination of drains, and defects if found, are remedied. (vi.) Conversion of midden ashpits, where these exist in connection with infected houses, to the water-carriage system. The last remedy is, in my opinion, a most important one in the prevention of the future spread of the disease. (vii.) The possibility of individuals acting as "carriers" of the infection is kept in mind. As these individuals may be an active source of infection to others, without themselves actually suffering from the disease, their supervision and education receive the necessary attention.

CASES OF ENTERIC FEVER.

			Cases in same	Nature of		Condition of		
No.	Sex.	Age.	house or vicinity.	Accommo- dation.	Yard.	Drains.	Closet or Ashpit.	REMARKS.
1	Ĕij.	00	None	P. & A.	Good order,	Good	Good, emptied	
	;	<	,	1 0 11	small	5	every 3 months	Total and tendential Total
24	M	9	None	F. & A.	None	Good	Good, emptied	rather had typnoid, Dec., 1910
60	M	10	Case No. 2	P. & A.	None	Good	Good, emptied	Do.
				1	,		every 2 months	
4	M.	25	Cases No. 2 & 3	P. & A.	None	Drained into field drains	Good, emptied every 2 months	Same block of houses as No. 2 & 3
10	된.	18	None	W.C.	Good, open, part	Good	Dry ashpit,	
					copple-paved		cleared weekly	
9	M.	99	None	W.C.	Good, open to 4	Good	Dry ashpit,	
					houses, cobbled pavem't defective		cleared weekly	
7	E4	34	Case No. 6	W.C.	. Do.	Good	Dry ashpit,	
							cleared weekly	
00	M.	34	Cases No. 6 & 7	W.C.	Do.	Good	Dry ashpit, cleared weekly	
6	M.	27	None	W.W.C.	Good order	Good on surface	Ashpit cleared	Had been unwell for a few weeks,
9.	34	00	None	S an an	Good order nest	Good on cawface	Weekly Day ashnit	returned from Blackpool fort-
01	M.	250	None	w.w.c.	flagged & cobbled	Good on surrace	cleared weekly	mgm perore
11	M.	20	Case No. 9	Pail	Small, well flag'd	Good	Ashpit, cleared	
9	Þ	01	Change of the	. 10	Onen mell dadid	Good on onwhoo	weekly.	
77	Τ.	18	Cases INO. 0, 1, 00 0	W.C.	and naved.	GOOD OH SHITAGE	cleared weekly	
13	F.	24	None	P. & A.	Good order, flag'd Good on surface	Good on surface	Ashpit, cleared	Stayed at St. Annes 3 weeks

. 414.	10	Casses IVO.	W. W. C.	Good order, like u	Good	Dry ashpit,	
	44	None None	P. & A.	Good order, paved Good on surface	Good on surface	Ashpit, cleared	Both families use same privy midden (next door neighbours)
편.	30	Case No. 15	P. & A.	Good order, flag'd	Good	Ashpit, cleared	
M.	49	Cases No. 15 & 16	P. & A.	passage, ouner portion unpaved Good order, paved	Good	Ashpit, in wet condition, cleared	
M.	14	Cases No.	P. & A.	Good order, paved	Good	every 10 weeks Do.	
표	11	Cases No.	P. & A.	Good order, paved	Good	Do.	
표.	45	None None	W.W.C.	Good order, part	Good	Dry ashpit,	
M.	00	Case No. 20.	W.W.C.	Good order, part	Good	Dry ashpit,	
F.	58	None	W.W.C.	Open, mostly	Good	cleared monthly Ashpit, cleared	
M.	25	None	:	earth surface	:	weekly	Public Institution
M.	26	None	P. & A.		Good on surface	Ashpit, cleared	
M.	49	None	W.C.	part paved Good order, flag'd	Good	every 8 weeks Ashpit, cleared every 8 weeks	

#### PUERPERAL FEVER.

Six cases of Puerperal Sepsis have been notified during the year, three of the cases proving fatal, as compared with four cases and two deaths in 1910. All the above cases were treated in their own homes.

# ERYSIPELAS.

Number	of	cases r	notified	 	 	 	 32
Number	of	deaths		 	 	 	 0

During the year thirty-two cases of Erysipelas were notified, being a decrease of eight cases as compared with the number (40) in the previous year. No deaths were attributed to this disease, as compared with one death in the previous year. No case was removed to the Florence Nightingale Hospital for treatment.

#### WARD DISTRIBUTION.

	N	Icorside.	East.	Churc	h.	Redvales	. Elto	n.	Total	
Notifications	 	10 .	 8 .	 6		5	. 3		32	

# QUARTERLY INCIDENCE.

	rst	Quarte	r. an	d Quar	ter. 3	rd Qu	arter.	4th Qu	arter.	Total.
Notifications	 	6		8		3		15		32

#### AGE INCIDENCE.

	Under 1. 1 to 5.	5 to 15. 15 to 25.	25 to 45.	45 to 65.	65 up. Total
Notifications		. 3 3	. IO	12	4 32

Sex.—As last year the incidence was greatest amongst females, 18 females and 14 males being attacked.

The reg	gions	of the	he	boo	ly	af	fec	ted	were	e as	folle	ows:—
Face												26 cases.
Legs	and	arms	S .									6

The majority of the cases occurred secondarily to some neglected injury, as a cut, scratch, or bruise.

On notification of the disease to the Health Department a thorough inspection of the premises is made, this frequently bringing to notice sanitary defects which otherwise would have escaped observation.

#### SMALLPOX.

# AGE AND SEX INCIDENCE.

	r t	0.5	5	to to	10	to 1	5 15	to 25	25	to 3	5 35	to 45	43	5 to 60	60 and upward	
Males	. (	) .		0		2		1		2		0		0	. 0	 5
Females		Ι.		0		3		10		I		5		5 .	0	 25
Totals.		I		0		5		ΙI		3		5		5	0	30

# Monthly Incidence and Ward Distribution.

	March	April	May
Moorside	22	І	 0
East			
Church			
Redvales	І	о	 0
Elton	І	0	 0

All the 30 cases occurred in private houses, no cases occurring in public institutions or common lodging-houses.

Vaccination.—The condition with reference to Vaccination of infected persons was:—

Unvaccinated			8
Re-vaccinated after infection			
Vaccinated in infancy			9
Not Vaccinated until after infection	1	200	4

During the year 30 Smallpox cases have been notified after an absence of the disease for five years. The first three cases were notified on March 7th. (The particulars of vaccination, dates of notifications, &c., of all cases will be found on the chart opposite page 48.) In the first instance only two cases were notified, the mother (case 1) and daughter (case 2), and on enquiring at the home it was found that another daughter (case 3) was being treated by her medical attendant for a skin disease. This girl (case 3), aged 15, was unvaccinated, and was employed as a weaver in a cotton mill, where she had been engaged nine days. Prior to commencing work as a weaver, she was engaged in the cardroom of another local cotton mill, and it was at this

mill she commenced to be ill, and was then treated by her medical attendant. Immediately I found that she was being treated for a skin disease I telephoned to the mill for the girl to be sent home (which was opposite the mill in the same street), and, on examination, found her to be suffering from Smallpox, and in about the third week of the disease. In the same weaving shed in which the girl worked were 300 operatives who must have been in contact with this unrecognised case of Smallpox.

After the removal of the three cases to the Smallpox Hospital at Ainsworth, every precaution was taken to prevent further spread of the disease by means of vaccination, re-vaccination, disinfection, &c. The owners of the mill rendered valuable assistance in the matter, not only by closing the whole of their works for them to be disinfected (including the machinery and goods), but advised their workpeople to be vaccinated or re-vaccinated.

In spite of these precautions three more cases were notified on March 13th (cases 4, 5, and 6). These were of two girls and one man, aged 18, 15, and 32 years respectively, all working at the same mill. Case 4 had been in the warehouse at the same time as case 3, but did not speak to her. Case 5 was companion to case 3, and was therefore practically in contact with her daily, and case 6 assisted her at her work. Between March 14th and April 6th, inclusive, twenty-two cases were notified, and on referring to the table it will be seen that all these cases worked at the same mill as case 3.

The outbreak was dealt with systematically, all the families in which cases occurred were put in quarantine, and as far as possible all the other operatives of the mill were kept under observation. This, of course, was a big work, but fortunately practically all the cases were from one district, and the private practitioners did their best in keeping careful eyes on their particular areas.

The probable source of the outbreak was infection from the cotton, but at the same time no direct evidence could be traced to this. It will be noted that the first case was not brought to light until more than a week after the symptoms developed; meanwhile

the sufferer was going about as usual, and coming in daily contact with two to three hundred operatives working at the same mill, apart from the people she came into contact with when outside the mill. It was, of course, urged in objection to the view that the infection was conveyed in raw cotton that the operative first attacked by the disease was a weaver, and that the probabilities were greatly against cotton retaining any infection up to the weaving stage, but when the patient began work at the weaving shed where she was found, she already had the disease, and that previously she was employed in another mill as a can-tenter, and in that capacity came in contact with the raw cotton in an atmosphere impregnated with cotton dust, and assuming there was infection in the cotton there was every liability of a susceptible person inhaling it. All the cotton the girl had to deal with came from the southern States. It may be stated here that the man who dealt directly with the cotton from the bales had only been vaccinated once, but he showed extremely good cicatrices on his arm. The infection (still assuming that it was in the cotton) was probably too attenuated to affect a vaccinated person, and it was unfortunate that a totally unvaccinated girl should have been in contact with the raw material. At the time the girl changed her employment and began weaving there were pustules all over her face. These were seen by her fellow-operatives.

On April 20th a girl, aged three years, was notified as suffering from Smallpox, but on investigation no direct source of infection could be traced, but the companion to the child's mother worked at the same weaving shed as case 3, and was therefore the probable cause of carrying the infection to this house; and on May 23rd another case was notified, a boy, aged 12 years, who had been in contact with this girl, both the children living in the same street.

All the cases made a good recovery.

Summary of Smallpox Cases notified during the year 1911.

No. of Case	Date of Notification.	Initials. Sex. Age	Sex.	Age	Address.	Source of Inf'ction	Particulars of Vaccination.	Date of Recovery.	Remarks.
-	March 7th, 1911	1 A.Y.	E.	45	26, Maskill Street	Case 3	Infancy.	May 13th, 1911	Mother of case 3.
C1	March 7th "	L.Y.	Ħ.	13	66	**	Unvaccinated.	May 6th	Sister of case 3.
00	March 7th "	B.Y.	E.	15	**	Primary Case	÷	April 12th	Commenced to be ill on February 15th. Medical Attendant called in on Feb.
4	March 13th ,,	M.A.S.	F.	18	5, Canning Street	Case 3	÷	May 19th	Works at the same mill as case 3.
10	March 13th "	P.A.	F.	15	24, Charles Street	**	March 7th, 1911	May 2nd	Works at the same mill as case 3, also her
9	March 13th "	H.N.	M.	35	9, Massey Street	"	Infancy and March 15th, 1911	April 12th	Works at the same mill and assisted case 3.
-	March 14th "	E.F.	Ħ.	55	13, Geoffrey Street	44	Infancy and March 15th, 1911	April 13th	Works at the same mill as case 3.
œ	March 14th ,,	E.B.	F.	54	34, Birch Street	,,	Infancy and March 8th 1911		Works at the same mill and next to case 3.
6	March 15th ,,	A.F.	Œ.	55	15, Raven Street	"	Infancy and Merch 15th 1911	:	Works at the same mill as case 3.
10	March 15th "	R.B.	M.	30	21, Lucas Street	**	Infancy and March 16th 1911	April 25th	
=	March 15th "	C.H.	H.	25	22, Regent Street	. "	Infancy and March 14th, 1911	April 13th	44 44
12	March 15th ,,	L.S.	표.	47	43, Hornby Street	"	Infancy and March 16th, 1911	;	:
13	March 16th ,,	M.A.A	E	44	12, Buckley Street	. "	Infancy	:	11 11 11
14	March 16th	A.A.	F.	18			Unvaccinated	***	66 66

				-		18, Hamilton Street	"	March 10th, 1911	May 2nd	Works at the same mill as case 3, vaccinated after contact.
-	March 1	March 16th ,, 4	E.H.	더	42	34, Bell Lane	**	Infancy	April 13th	Works at the same mill as case 3.
	March 16th ,,	6th ,,	E.H.	더		14 2a, Cateaton Street	,,	Unvaccinated	April 26th	**
	March 16th "	6th "	н.с.	M.		14 4, Charles Street			May 6th	Works at the same mill and had been near
	March 16th ,,	6th ,,	A.0.	뇬		49 5, Swan Street		Infancy	May 10th	Works at the same mill as case 3.
	March 16th "	6th ,,	B.M.	E.		22 14, Albion Street		66	April 13th	66 66
	March 17th ,,	7th ,,	E.F.C. F.	Œ.	15	4, Linton Street	,	Infancy, not successful, and	May 19th	
	March 17th "	7th "	S.N.	Fi	35	22, Fern Street		March 9th, 1911 Infancy	April 19th	66 66
	March 17th "	7th ,,	F.H.	된	25	48, Ingham Street	**	*.	April 14th	**
	March 18th "	8th ,,	M.A.M.	F.	67	71, Kay Street	"	•	April 15th	16 66 66
	March 19th "	9th ,,	H.S.	E	41	32, Denton Street		6	April 26th	Contact with case 3 at mill on February 27th, 28th, and March 6th. Not been
	March 22nd ,,	2nd ,,	P.R.	댇	35	27, Maskill Street		Infancy and	April 19th	Well for three weeks.  Had been in the house of case 3, and worked
	March 28th ,,	8th ,,	J.S.	균.	17	16a, Cateaton Street		March 15th, 1911	May 19th	Works at Mans and and contact with
	April 6th	,, d	H.S.	M.	18		**	March 23rd, 1911	May 23rd	Brother of case 27.
	April 20th	th ,,	M.P.	표.	60	20, Deal Street	6-	Unvaccinated.	,,	
	May 23rd	,, b	A.F.	M.	12	M. 12 31. Deal Street	6		June 20th	

Placards were posted in various parts of the Borough, and handbills, of which the following is a copy, were distributed in the affected area:—

#### COUNTY BOROUGH OF BURY.

#### SMALLPOX.—IMPORTANT NOTICE.

Owing to the renewed outbreak of Smallpox in the Borough the public are earnestly requested to avail themselves of the protection afforded by vaccination.

You may now at any time be exposed to the infection of the disease without even seeing the person who gives it to you.

Unless you have been successfully vaccinated within the last few years your only safety is to be re-vaccinated at once.

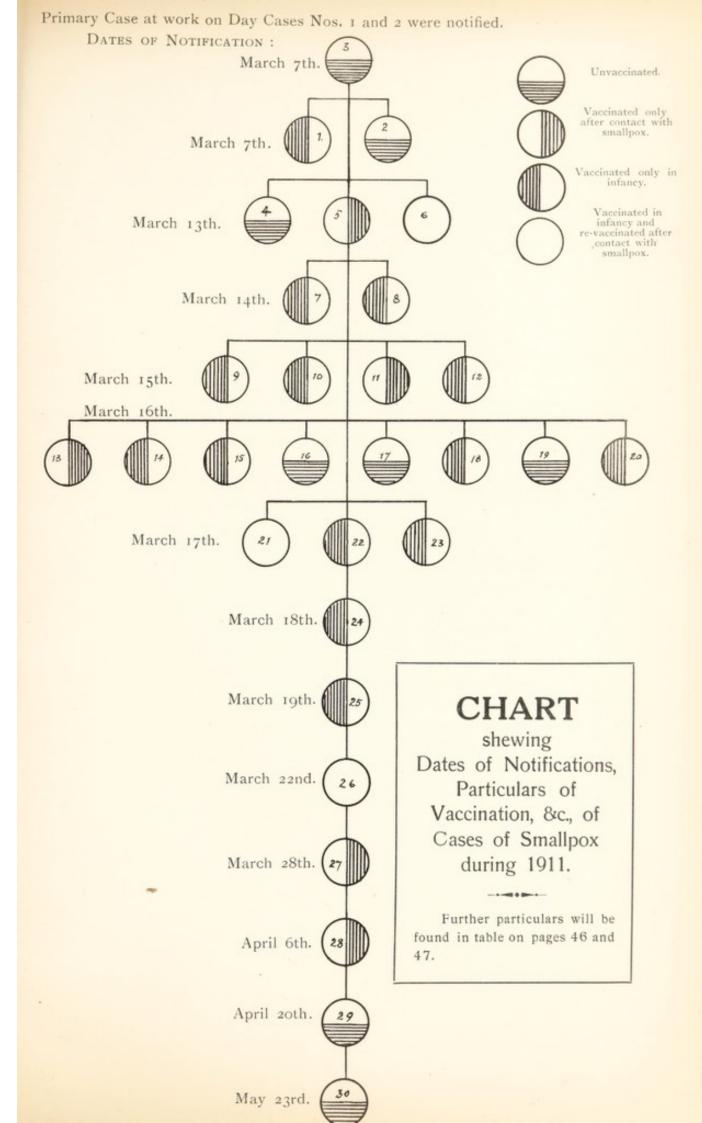
Many even who object to Vaccination admit that when once you have been exposed to the infection the only possible way to prevent your developing the disease is to be vaccinated.

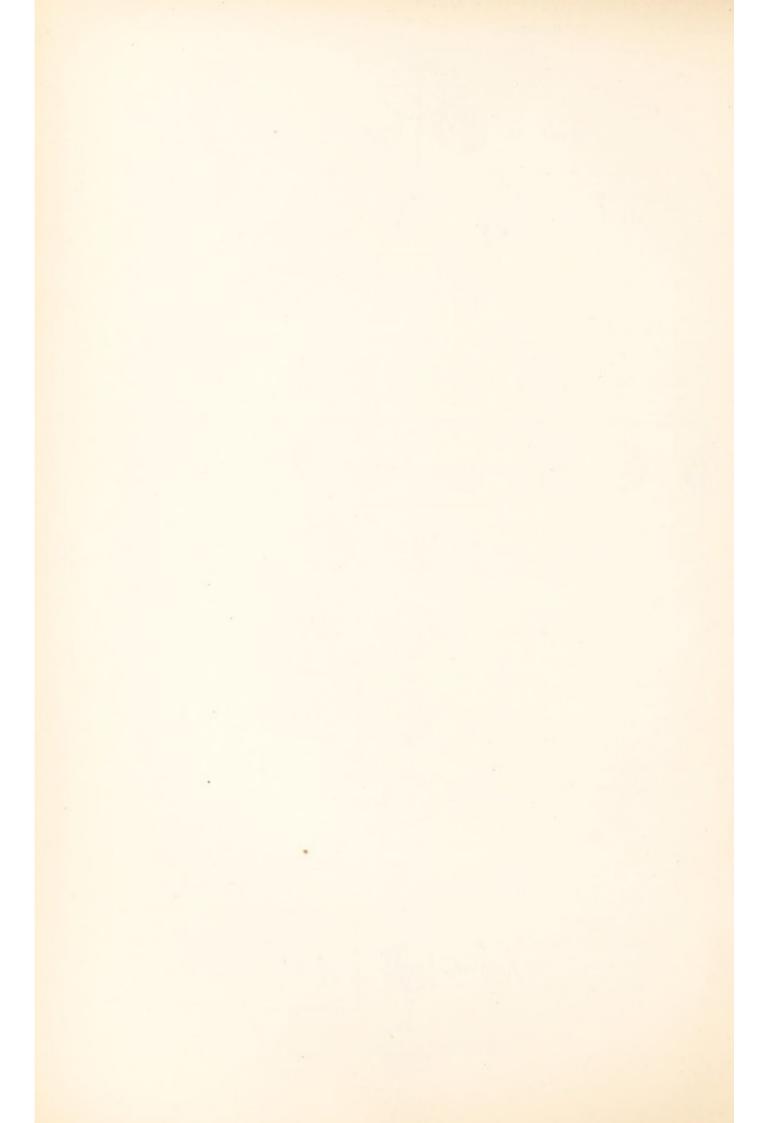
If you do not need to be re-vaccinated, then the re-vaccination will not take any effect upon you. If it "takes" it shows that you needed it; and then you will be safe from the disease. You cannot find out whether you need re-vaccination or not without trying whether it takes effect upon you.

Remember! Smallpox takes 12 days before it begins to make you feel ill. If you are vaccinated before the third day of that period you are quite safe; if you leave it till the fourth day or later vaccination is quite useless.

# Signs of Smallpox.

Smallpox usually begins suddenly with headache, pains in the back, vomiting, and fever. In children there may be convulsions. These symptoms are usually followed on the third day by the rash, which is first noticed on the forehead and backs of the wrists, soon spreading over the face, body, and lower extremities. This begins as small red spots about the size of a pin's head





which feel shotty under the fingers, and soon become raised. In a day or two the spots become filled with fluid, which is clear at first, then thick like "matter," and the skin around each becomes red and swollen (sometimes a rash resembling Scarlet Fever or Measles breaks out before the distinct Smallpox rash).

It is very important, therefore, that a doctor should be called in if a case shows any suspicious symptoms, especially in the case of a rash affecting the face as above. It is especially advisable that a doctor be called in to all cases considered to be Chicken Pox.

You may not mind getting the disease yourself, but please think of the danger to others; for, if you have the disease you may give it to other people, and they may consequently die.

Fresh calf lymph only is used in vaccination. The law does not allow human lymph to be made use of, therefore there is no risk of your taking any disease from it.

The public vaccinators for Bury are:-

- Dr. Mellor, Bolton Road, for Elton and adjacent portion of the Borough as far as the railway.
- Dr. Liddell, Walmersley Road, for the rest of the Borough.

Information as to the occurrence of suspected cases of Smallpox, or of any person who has been in contact with a real or suspected case, or whose clothing or other articles have been exposed to the infection, should be at once sent to the Health Office. The authorities at once undertake all necessary disinfection, &c., and will endeavour to ensure that no loss results from such preventative measures as are deemed desirable.

> ROBERT BURNET, Medical Officer of Health.

Public Health Office, Bury.

# SMALLPOX AND VACCINATION.

Return showing the number of births, deaths (under one year), vaccinations, conscientious objections, and the number unvaccinated for the year ending August 31st, 1911:—

## BOROUGH OF BURY.

Births		Bury South 37 I		Total 1282
Vaccinated	243	 73	 112	 428
Insusceptible of Vaccination	3	 1	 2	 6
Conscientious Obj'ct'n Certificates	242	 169	 142	 553
Dead, Unvaccinated	80	 36	 24	 140
Postponed by Medical Certificate	8	 _	 4	 12
Removal to districts known	8	 8	 1	 17
Removal to districts unknown	7	 38	 6	 51
Unaccounted for	9	 46	 20	 75

Table showing percentage of Vaccination, and also comparison with the years 1910, 1909, 1908, 1907, 1906, 1905, 1904:—

			Ye	ear endin	g Augus	t 31st.		
Number of Births	1,282	1,288	1,303	1,433	1,370	1,278	1,308	1,368
Vaccinated	33'39	41.07	40'44	42'08	52.40	59.31	68.13	64.40
Con. objection Cert's	43'14	41.77	41'21	36'14	24.89	16.66	10.63	10.00
Unaccounted for	5.85	2.64	3.91	4'12	5 47	5.48	3.51	7 67

From the above table it will be seen that the percentage of children Vaccinated shows a decrease of nearly 8 per cent., as compared with the previous year; whilst the percentage of objection certificates granted shows an increase of nearly 2 per cent.

# SCHOOLS AND INFECTIOUS DISEASES, 1911.

During the year 1,074 notifications were received at the Health Office from the Headmasters and Headmistresses of the various schools within the Borough, of the existence of Infectious or Contagious Diseases among the scholars attending their schools. Of this number, 989 were certified as suffering from one or other of the under-mentioned ailments:—

Measles	434
Mumps	273
Whooping Cough	175
Chicken-pox	54
Ringworm	16
Eczema	11
Sore head	10
Ophthalmia	9
Impetigo	4
Otorrhœa	2
Bronchitis	1

The number of notifications received from the various schools during the years 1907, 1908, 1909, and 1910 were 730, 684, 989, and 589 respectively.

The following are the schools from which notifications were received in the order of number of the notifications:—

Brunswick School.
St. Joseph's School.
St. John's School.
All Saints' School.
Chesham School.
St. Paul's (Bell) School.
Parish Church School.
St. Mark's School.
Wood Street School.
Holy Trinity School.
East Ward Council School.

Clerke Street School.
Guardian Angels' School.
St. Mary's School.
Christian Church School.
George Street School.
St. Chad's School.
St. Stephen's School.
Walmersley School.
St. Paul's (Huntley) School.

Elton Council School.

# SCHOOL CLOSURE.

During the year the Mixed Departments of seven public elementary schools, and the Infants' Departments of 20 public elementary schools have been closed at different periods, on account of the prevalence of Infectious Diseases amongst the scholars. The following is a list of schools, showing the period during which they were closed and reason for closing:—

School.	Dept. F	Period Closed.		Disease
All Saints'I	nfantsJan	. 10th to 30th	1	Measles
St. Paul's (Huntley)	,,	,,		,,
St. John's	,,	,,		,,
Holy Trinity	,, Jan	. 12th to 30th	1	,,
Brunswick	,,	,,		,,
Wood Street	,, Jan	. 13th to 30th	1	,,
St. John's	MixedJan	. 20th to 30th	1	,,
CheshamI	nfantsJan	. 24th to Feb	. 13th	,,
St. Mark's	,,	,,	,,	,,
St. Mark's	MixedJan	. 26th to Feb	. 13th	,,
Parish ChurchI	nfantsFeb	. 16th to Mar	. 13th	,,
St. Paul's (Bell)	., Mai	r. 2nd to 20th		Mumps
St. John's	,, Mai	r. 8th to 20th	Smallpo	x (contact)
St. John's				
St. Mark's I	nfantsMax	r. 14th to Apr	ril 3rd	Mumps
St. Mark's	Mixed	**	,,	,,
East Ward Council! I				
St. Paul's (Bell)	,, Mar	. 20th to Apr	ril 3rdMumps a	nd Measles
St. John's	,,	,,	"Smallpo	x (contact)
St. John's	Mixed	,,	,,	,,
East Ward Council				
WalmersleyI	nfantsMar	r. 27th to Apr	ril 13th	Mumps
Walmersley	Mixed	,,	,,	,,
East Ward CouncilI	nfantsNov	7. 28th to Dec.	23rd Whooping	Cough and
St. Paul's (Bell)	,, Dec	. 1st to 25th.	,	,,
All Saints'	,, Dec	. 5th to 25th		ping Cough
St. Thomas's	,, Dec	e. 6th to 25th		"

# DISINFECTION.

In each case after the closure of a school the walls, desks, floors, &c., have been sprayed with a solution of formalin or "Chloros," the rooms afterwards being fumigated with sulphur, special attention being given to the books, &c., used by the scholars.

Mention might also be made of the co-operation of the School Managers with the Health Department in their endeavours to prevent and control infectious diseases. Much valuable assistance has also been rendered by clergymen and others to the Department by not holding classes in the schoolrooms on Sundays during the period of closure of the day school for an infectious disease.

#### MEASLES.

Number of	cases	notified	by	School	Authorities	 	469
Number of	deaths					 	26

Measles was very prevalent during the first quarter of the year. The Moorside and East Ward portions of the town were most affected. The mortality rate was equal to 0.44 per 1,000 of the population, as compared with a rate of 0.13 during the preceding year.

Measles is looked upon far too lightly by parents. usually considered a trivial ailment and one which every child must have sooner or later. But when one considers that during the last ten years (1901-10) 184 deaths were caused by Measles alone in Bury, whilst during the same period only 58 deaths were attributed to Scarlet Fever, which is looked upon by the public as a far more dangerous disease, the seriousness of Measles is at once apparent.

Measles is a "preventable disease," but, unfortunately, it is extremely infectious before the rash appears and the true nature of the disease becomes evident. In its earlier stages it resembles a common cold, and thus children are often sent to school in an infective condition.

The older the child is when it contracts Measles the better are its chances of recovery, as is evident from the fact that out of the 26 deaths from the disease during the year 1911, 25 occurred in children under five years of age.

# WARD DISTRIBUTION OF FATAL CASES. East. Church. Redvales. Elton. 9 ..... 3 ..... 6 ..... – ..... 8 ..... 26

# MONTHLY RECORD OF DEATHS.

Moorside.

#### SCHOOL CLOSURE.

During the first quarter of the year the Infants' Departments of eight schools, and both departments of two schools, were closed. on account of the prevalence of Measles amongst the scholars. The following is a list of schools closed:—

All Saints' Infants' Dept	Jan. 10th to Jan. 30th.
St. Paul's (Huntley) Infants' Dept	Jan. 10th to Jan. 30th.
St. John's Infants' Dept	Jan. 10th to Jan. 30th.
St. John's Mixed Dept	Jan. 20th to Jan. 30th.
Brunswick Infants' Dept	Jan. 12th to Jan. 30th.
Holy Trinity Infants' Dept	Jan. 12th to Jan. 30th.
Wood Street Infants' Dept	Jan. 13th to Jan. 3oth.
Chesham Infants' Dept	Jan. 24th to Feb. 13th.
St. Mark's Infants' Dept	Jan. 24th to Feb. 13th.
St. Mark's Mixed Dept	Jan. 26th to Feb. 13th.
Parish Church Infants' Dept	Feb. 16th to Mar. 13th.
St. Paul's (Bell) Infants' Dept	Mar. 20th to April 3rd.
(Als	so for Mumps.)

PRECAUTIONARY MEASURES.—The following precautionary measures are adopted in dealing with the outbreaks of Measles:—

- (i.) Notification of the disease by School Teachers on printed forms supplied by the Health Department. (469 cases of Measles were thus notified during the year, and of these 434 were verified by the Health Department).
- (ii.) Each case is visited, where possible, by the Health Visitor, who leaves handbills, and gives advice as to the precautions to be taken in each instance.
- (iii.) Closure of Schools, chiefly the Infants' Departments, affected by the disease. A request is made also to the Sunday School Authorities to have this portion of the School closed during the period of closure of the Day School.
- (iv.) Disinfection of houses affected, by means of formalin spray, &c., where consent can be obtained.
- (v.) Thorough disinfection of affected Schools, with special attention to books, desks, &c.

#### WHOOPING COUGH.

Number of	cases notified	through	School Authorities	187
Number of	f deaths			12

During the year 12 deaths were attributed to Whooping Cough, which is equivalent to a rate of 0.20 per 1,000, as compared with no deaths in the previous year. The rate of mortality for the year compares favourably with the rate (0.21) for England and Wales, and also with the rate (0.24) for the 77 Great Towns.

DEATHS FROM WHOOPING COUGH DURING THE LAST TEN YEARS.

1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	Average.	1911
0	10	7	42	I	6	27	6	13	0	11.2	12

# AGE DISTRIBUTION.

Under 1	1 and	under	 a and	under	5	All Ages.
4		6	 	2 .		12

#### WARD DISTRIBUTION.

Ward.	No. of Death	ıs.
Moorside	 I	
East		
Church	 І	
Redvales	 І	
Elton	 I	

#### MONTHLY INCIDENCE.

Jan. Feb. Mar. Apr. May. June. July. Aug. Sep. Oct. Nov. Dec. Total.

— — — — I I 2 3 — I 4 12

# QUARTERLY INCIDENCE.

rst Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
	I	6	5	I 2

School Closure.—During the year it was found advisable to close the Infants' Departments of two schools on account of the prevalence of Whooping Cough, also the Infants' Departments of two schools owing to the prevalence of Whooping Cough and Chickenpox. The following are the particulars of the closures:—

East Ward Council ... Nov. 28th to Dec. 23rd...Whooping Cough and Chickenpox.

St. Paul's (Bell) ... ... Dec. 1st to Dec. 25th...Whooping Cough and Chickenpox.

All Saints' ... ... Dec. 5th to Dec. 25th... Whooping Cough. St. Thomas's ... ... Dec. 6th to Dec. 25th... Whooping Cough.

Handbills, of which the following is the text, were extensively distributed at different periods during the year:—

#### WHOOPING COUGH.

Whooping Cough is a very serious disease, and is especially fatal in children under the age of five years. During the year 1900 Whooping Cough caused over six times the number of deaths that resulted from Scarlet Fever.

Whooping begins like a common cold or chest cough, which lasts a week or more, then fits of coughing set in, each of these finishing with a long drawn "whoop." These fits are usually worse at nights, and are more liable to occur if the child be startled or agitated. Vomiting commonly occurs at the end of a fit. Bleeding at the nose and bloodshot eyes may result. The disease usually lasts two months or more. Babies and young children take Whooping Cough most readily; the disease often follows Measles.

Whooping Cough is very infectious, being readily conveyed from one child to another. Articles of Clothing and domestic animals may also convey the infection.

Precautions.—The patient should be isolated and kept warm in a room at an even temperature. If the patient cannot be isolated it is desirable that other children in the same household be sent away, more particularly those under the age of seven years. If a doctor be called in early the disease can often be "cut short" or the cough modified to a great extent. Discharges from the nose and eyes should be received on small pieces of clean linen

rag, which should be immediately burnt. A damp cloth wrung out of disinfectant solution should be used to cleanse any surface on which the discharges (vomit, &c.) have come into contact.

The patient should not attend school until all cough has disappeared, a period usually of at least eight weeks. Children from the house in which there is a patient suffering from Whooping Cough should on no account attend either day or Sunday school for at least three weeks after isolation of the sufferer.

Mothers with children in arms should not visit houses in which Whooping Cough is known to exist, and should use every endeavour to prevent young children from going near such houses.

Disinfectants can be obtained on application to the Health Department, Parsons Lane, and at the Gas Works, Elton. Disinfection of rooms, clothing, &c., will be undertaken by the Health Department, free of charge.

G. GRANVILLE BUCKLEY,

MEDICAL OFFICER OF HEALTH.

# DIARRHŒA.

Sixty-five deaths have been recorded from Diarrhœa during the year, as compared with 25 deaths in the previous year. The rate of mortality is equal to 1.11 per 1,000 of the population, as compared with a rate of 0.42 per 1,000 in the previous year. The rate of mortality is not quite so satisfactory as in the previous year. An unsatisfactory feature is the large proportion of deaths which occurred in children under one year of age, as out of the 65 deaths 45, or 69.08 per cent., occurred in infants during the first year of life, and all these occurred amongst infants who were being fed by the bottle.

# MONTHLY INCIDENCE.

January	_
February	
March	_
April	1
May	_
June	2
July	_
August	28
September	26
October	5
November	I
December	2

# WARD DISTRIBUTION.

Ward	Number of Deaths.	
Moorside	15	
East	21	
Church	12	
Redvales	7	
Elton	10	
	_	
Whole Borough	65	

#### AGE PERIODS.

Under 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 upwards	All Ages
45	7	5	0	I	I	I	5	65

# COMPARATIVE MORTALITY RATES IN 1911.

The death-rate from Diarrhœa in Bury compares very favourably with the mortality rates in the other large towns, the rates for the Lancashire towns being as follows:—

 1.56
 1.53
 2.00
 2.42
 1.11
 1.8
 0.96
 1.47
 1.9

It will thus be seen that the Diarrhœa death-rate in Bury is, with one exception, the lowest of the rates for the Lancashire members of the 77 Great Towns of England and Wales.

CLEANING OF STREETS, &c.-With a view of minimising to some extent the various factors which have been considered to have a causal relation to Summer Diarrhœa, the following special methods of cleansing were adopted during the period from May to the end of September: -(a) The sweeping of streets was carried out during the night-time, the combined street-watering and brushing machines being used (except in wet weather). (b) The collection of stable refuse, &c., during the daytime, by men with handcarts (orderly men), was extended to all the streets. addition to the principal thoroughfares, special attention was paid to the watering of secondary and other streets. (d) Special attention to the emptying of sanitary conveniences, especially those of the "Pail" and "Privy Midden" types. (e) After the emptying of contents from the latter types of conveniences the interiors of same were limewashed by means of a sprayer, with a sanitary lime. (f) The emptying of street gullies direct into a tank cart, the gulley afterwards being sealed with clean water, to which had been added a soluble disinfectant.

#### INFLUENZA.

Eight deaths were attributed to Influenza during 1911. This represents a mortality rate of 0.13 per 1,000 as compared with seven deaths and a rate of 0.12 per 1,000 in the previous year.

Deaths from Influenza during 1911 as compared with the ten preceding years:—

AGE DISTRIBUTION.—Two deaths have occurred under one year of age, one between 15 and 25, three between 45 and 65, and two were of persons over 65 years of age.

WARD DISTRIBUTION-

Moorside	East	Churc	h Redvale	es. Elton	Whole Borough
I	. 5	2	—	—	8
Quarter	RLY IN	CIDENCE-	-		
1st Quarter	and Q	uarter 3	rd Quarter	4th Quarter	Whole Year
2		I	. I	4	8

# TUBERCULOUS DISEASES.

#### PHTHISIS.

Phthisis caused 57 deaths, of which 30 were of males and 27 females. The rate of mortality was 0.97 per 1,000, as compared with a rate of 1.23 per 1,000 in the previous year. Six of the deaths occurred in the Union Workhouse, one in the County Asylum, St. Helens, and one in a private residence at Coleham.

The age and sex distribution of the cases was as follows:—

Under 1 1 to 5 5 to 15 15 to 25 25 to 45 45 to 65 65 upwards Total

Males ... ... — ... — ... 1 ... 6 ... 9 ... 13 ... 1 ... 30

Females... ... — ... 2 ... 5 ... 14 ... 5 ... 1 ... 27

Mean	Age	AT	DEATH	FROM	Рнтн	HISIS.
Males						41.2
Famal	00					25 4

# WARD DISTRIBUTION OF DEATHS FROM PHTHISIS.

	Moorsi	de	East	(	Church	Re	dval	es	Elton	Total
Males	5		10		8		I		6	 30
Females	10		3		9		2		3	 27

# DEATH RATES FOR PHTHISIS IN THE SEVERAL WARDS.

Moorside	East	Church	Redvales	Elton
1.03	 1.09	 2.33	 0.28	 0.64

# QUARTERLY INCIDENCE OF PHTHISIS.

ıst Quarte	r and	Quarter	3rd	Quarter	4th	Quarte	er Wh	ole Year
14		IO .		19		14		57

DISINFECTION.—Thirty-three rooms in 13 houses have been disinfected with the fumes of formalin, and the walls of 48 rooms in 17 houses have been sprayed with a solution of formalin after the occurrence of deaths from Phthisis.

# Occupations of Persons Dying from Phthisis during the Years 1901-1911.

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Cotton Operatives	24	13	16	ΙI	10	13	15	9	16	13	11
Woollen Operatives	3	0	2	0	1	0	0	0	0	I	0
Felt Hat Workers	2	3	2	2	I	3	0	1	0	3	0
Paper Mill Workers	3	2	2	0	0	1	4	0	2	2	I
Iron Operatives	0	ΙI	8	6	8	2	6	5	6	6	2
Stone Masons	2	2	0	5	2	3	2	0	3	I	0
Dressmakers and Tailors	0	3	0	2	5	I	1	1	0	0	3
Joiners and Cabinetmakers	2	2	2	3	2	2	0	2	0	3	I
Shoemakers and Cloggers	0	2	0	2	0	0	0	0	2	1	0
Clerks	0	0	2	1	I	1	0	0	3	0	0
Outdoor Labourers & Carters	8	10	6	25	7	16	13	19	12	6	7
Other or no employment	49	27	29	40	36	32	25	26	27	37	32
Totals	93	75	69	97	73	74	66	63	71	73	57

The class "outdoor labourers and carters" cannot be taken as an accurate description of the real occupation of the fatal cases so described, for many of them, who originally followed other employment, changed it for an outdoor one later, on medical advice.

Voluntary Notification of Phthisis.—This system, which has been in use in Bury since September 5th, 1901, resulted last year in 27 fresh cases being notified, making a total of 340 notifications since the first adoption. All the notified cases were visited by the Lady Sanitary Inspector, who advised as to the nursing of the patients, and prevention of the spread of infection; hand-bills on "How to Prevent Consumption" and "Fresh Air and Ventilation" were left at the houses.

# AGE AND SEX OF THE NOTIFIED CASES :-

	Under 5	5 to 15	15 to 25	25 to 45	45 to 65 65	Upwards	Total
Males	—	—	2	5	. 4		ΙI
Females	—	—	4	11	. I		16

OTHER TUBERCULOUS DISEASES.—Twenty-six deaths resulted from tuberculous diseases other than Phthisis, as compared with 20 deaths in the previous year.

The age distribution was as follows:-

Tuberculosis, therefore, was responsible for 83 deaths altogether, which is equivalent to a rate of 1.41 per 1,000.

In other words, one out of every eleven deaths in Bury is due to some form of Consumption.

Bacteriological Examination of Sputum.—The sputa of 49 suspected cases of Phthisis were sent in special tins to the Public

Health Laboratories, Manchester. Tubercle Bacilli were found in 16 cases, and a negative result was obtained in 33 cases.

DEATHS FROM PHTHISIS IN BURY DURING THE PAST 10 YEARS :-

The number of persons engaged in the cotton trade in Bury at the \*1901 census was 11,035, of which 3,155 were males and 7,880 females.

\*The figures relating to the 1911 census are not yet to hand.

#### PHTHISIS RATE.

# PUBLIC HEALTH (Tuberculosis) REGULATIONS, 1908. PUBLIC HEALTH (Tuberculosis in Hospitals) REGULATIONS, 1911.

The Public Health (Tuberculosis) Regulations is an Order of the Local Government Board, and makes compulsory the notification to Medical Officers of Health of cases of Phthisis occurring in Poor Law Institutions, or amongst persons in charge of District Medical Officers. The Order came into force on January 1st, 1909, and during the year 59 notifications were received at the Health Office, as follows:—

FORM D.—Notifications from Relieving Officers of change of address of Phthisis patients in their districts ... ... o

After notification, where possible the cases were visited by Nurse Walton, and suitable advice given re methods of dealing with sputum and prevention of spread of the disease. Pamphlets dealing with Light, Ventilation, and Consumption were also left at the patients' houses. Disinfectant solutions, paper handkerchiefs, and spittoons were supplied gratis to the patients. Subsequent visits were also paid by the Lady Inspector to ensure that the instructions were being carried out, and to give advice about the nursing of the patients, many of whom were in the last stage of the disease.

Of the 59 notified cases, 41 were males and 18 females.

Notification was still further extended by the Regulations as to Tuberculosis in Hospitals, 1911. This Order came into force on May 1st, 1911, and contains the following provisions:—

ARTICLE IV.—(1) A Medical Officer of any hospital, within the period of 48 hours after his first recognition of Pulmonary Tuberculosis in a person upon whom he is in medical attendance at the hospital, shall complete, sign, and transmit a notification of the case in the form shown in the Schedule to this Order to the Medical Officer of Health for the area within which the hospital is situate.

(2) A Medical Officer of Health who receives a notification relating to a patient whose residence as described in the notification is not within the area for which he is Medical Officer of Health, shall forthwith transmit the notification to the Medical Officer of Health for the area in which the patient's residence is situate, and shall at the same time inform the Medical Officer of the hospital that he has done so, and shall give to him the name and address of the Medical Officer of Health to whom the notification has been sent. Any expenses incurred by a Medical Officer of Health in carrying out the duties imposed upon him by this subdivision shall be defrayed by the Council of the area for which he is Medical Officer of Health.

ARTICLE VII.—(1) Nothing in these Regulations shall have effect so as to apply, or so as to authorise or require a Medical Officer of Health, or a Council, or any other person or authority, directly or indirectly, to put in force with respect to any patient in relation to whom a notification in pursuance of these Regulations has been transmitted to a Medical Officer of Health, any enactment which renders the patient, or a person in charge of the patient, or any other person, liable to a penalty, or subjects the patient to any restriction, prohibition, or disability affecting himself, or his employment, occupation or means of livelihood, on the ground of his suffering from Pulmonary Tuberculosis.

- (2) Subject as aforesaid, a Council on the advice of their Medical Officer of Health, in the case of a patient in relation to whom a notification in pursuance of these Regulations has been transmitted to the Medical Officer of Health, may—
  - (i.) take the necessary measures to secure the disinfection of infected articles and the cleansing or disinfecting of premises which have been used by the patient;
  - (ii.) take the necessary measures for the safe disposal or destruction of infectious discharges of the patient;
  - (iii.) supply all such reasonable assistance, facilities, and articles as will tend to diminish the risk of infection arising from the conditions affecting the use or occupation of any room, when used or occupied by the patient as a sleeping apartment;
  - (iv.) furnish, for the use of the patient, on loan, or otherwise, any appliance, apparatus, or utensil which may be of assistance in preventing the spread of infection; and
  - (v.) appoint such officers, do such acts and make such arrangements as may be requisite for giving advice and for carrying out the provisions of these Regulations, and of the Public Health (Tuberculosis) Regulations, 1908:

Provided that nothing in this sub-division shall be deemed to authorise a Council to take any of the measures herein mentioned at any hospital.

(3) A Council, on the advice of their Medical Officer of Health, may provide and publish or distribute in the form of placards, handbills, or leaflets, suitable summaries of information and instruction respecting Pulmonary Tuberculosis, and the precautions to be taken against the spread of infection from that disease.

Under these Regulations eight notifications have been received, five of which were males and three females.

#### AITKEN SANATORIUM.

During the year under review 74 patients have been admitted to the Aitken Sanatorium at Holcombe Brook. The function of the Sanatorium is twofold, viz.: (a) Educational and (b) Curative.

Each patient admitted to the Institution is there educated in all matters appertaining to his general health, and avoidance of spread of infection to others. He is given an abundance of good food, and practically lives in the open air. His stay in the Sanatorium varies from a month upwards, at the discretion of the Medical Superintendent.

When the patient is discharged a note is sent to the Medical Officer of Health, and the case is periodically re-visited by the Health Visitor.

The table on pages 68 and 69 gives some particulars of the 86 patients from Bury who have been admitted to the Sanatorium since its opening in August, 1910, and discharged before December 31st, 1911.

Enquiries were made in December, 1911, as to the state of health of the patients at that time, and the results are given in the 13th column. From this it will be seen that 13 of them (15.12 per cent.) had died in the meantime, while, as shown in the last column, three others have died since the enquiries were made.

Report of Investigation after discharge from Aitken Sanatorium, on condition of persons suffering from Phthisis.

REMARKS	Died in Africa  Re-admitted December, 1911  Three children, notified cases of phthisis  Removed  Removed to Heywood  Since deceased  Mother died of phthisis  Re-admitted to Sanatorium Nov., 1911  Removed  Remov	16
Period of Working since Discharge	Irregular  Regular Irregular Irregular Irregular Irregular Irregular Regular Regular Regular Regular Regular Regular Irregular Regular Regular Irregular Regular Regular Irregular Regular	14
Present State of Health (Dec. 1911)	Deceased Good Fair Food Beceased Deceased Deceased Very Good Good Fair Fair Fair Fair Fair Fair Fair Fair	13
Condition on Discharge	Greatly improved Greatly improved Unchanged Unchanged Improved	12
No. of days m'teneS ni	\$\$\$\$287258525852585888888888885855588558858858	=======================================
Date of Discharge	Oct. 27, 1910 Oct. 27, 1900 Oc	10
Date of Admissi'n to Sanatorium	Aug. 25, 1910 Sep. 1, Sep. 1, Sep. 1, Sep. 1, Oct. 27, Oct. 27, Sep. 28, Se	6
No. in Family	440000000040000000000000000   4000440400040   400044	80
No. of Rooms in House	H often management of the first	1
Home circum- stances	Poor Poor Poor Poor Poor Poor Poor Poor	9
Occupation	None School None None None None School None Weaver None Weaver None None School	9
Married or Single.		4
Age	84 1854884055514884288824288858488482855555	00
Sex	医班里尼亚亚亚亚亚亚亚亚亚亚亚亚巴西西西西西西西西西西西西西西西西西西西西西西西西西	67
No.	100040000001121242312818818888888888888888888888888	1

15	Gone to Australia Since deceased Phthisis both sides of family Since deceased Phthisis on mother's side of family Sister and brother-in-law died of phthisis Father and mother died of phthisis	Sister at present in sanatorium  Two children at present in sanatorium  Father said to be suffering from phthisis  Removed—Left town  Removed—Common lodging house
14	Regular Regular Regular Regular Regular Irregular Irregular Regular Not work'g	Irregular  Regular  Regular  Regular  Regular  Not work'g
13	Good Good Very Good Very III Peceased Good Good Good Good Regular Good Regular Good Regular Good Regular Good Regular Good Regular Beceased Undertreatmint Not work'g Infrmary Deceased Fair Good Very Good Fair Good Not wirk'd Bad Not wirk'd	Fair Deceased Good Good Good Good Fair Good Fair Fair Fair Pery III Fair Fair Good
12	Greatly improved Greatly improved Slightly improved Improved Improved Greatly improved The proved No improved Greatly improved The proved Greatly improved The proved The prove	Improved No improvement Slightly improved Greatly improved Greatly improved
Ξ	252 252 253 253 253 253 253 253 253 253	24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
10	Mar. 22, 1911 Mar. 23, 11 Mar. 23, 11 April 3, 11 April 23, 11 April 23, 11 April 23, 11 May 3, 11 May 13, 11 May 19, 11 May 21, 11 May 21, 11 June 7, 11 June 7, 11	Aug. Aug. Aug. Sep. 13. Sep. 1
6	Dec. 22, 1910 Jan. 26, 1911 Jan. 16, Mar. 16, Dec. 23, 1910 Dec. 23, 1910 Jan. 26, Jan. 26, Jan. 26, April 27, Mar. 2, Mar. 2, April 13, April 13, April 13, April 6, April 6,	Feb. 16, Aug. 12, April 1, April 1, Aug. 1, Aug. 2, Aug. 29, Aug. 14, Aug. 26, Aug. 26, Nay 11, Aug. 26, Nov. 26, Nay 11, Fune 29, Nov. 26, Nay 11, Fune 29, Nov. 26, Nov. 26, Dec. 6,
œ		00   000445 br-0   0480000000000
1-	444460444444444444444444444444444444444	Hotel 12244444444444444444444444444444444444
9	Good Fair Good Fair Fair Good Good Good Good Fair Fair Fair Fair Fair Fair Fair Fair	Good Fair Good Good Good Fair Fair Fair Fair Fair Fair Fair Fair
20	Butcher School School Spinner Insurance Agent Weaver Bleachworks Winder Bleachworks Weaver Reaver Weaver Labourer School Weaver None Housewife Hatworks Weaver	School School Waiter Labourer Weaver Housewife None School School Carter Spinner Hatter Labourer Boot Repairer Cardroon Hand Hatworks Fitter Fitter Roundry Greengroeer Barber Barber Barber Barber School
4	我我我我我我就就就就就	SON MAN MAN MAN MAN MAN MAN MAN MAN MAN MA
00	27282888888888888888888888888888888888	6158458888888888888888888888888888888888
Ç4	MANANANANAN MANANAN	HAMMANAMANAMANAMANA
1	\$4444848888888	888888888888888888888888888888888888888

#### CANCER.

During the year 46 deaths (equal to a mortality of 0.78 per 1,000) were registered as due to various forms of malignant disease. Of these deaths, 16 were males and 30 females.

Sex and Age.	Uı	ider	35.	35	to 4	5-	45 to	55	55 to 6	5. 6	5 to 75.	(	ver 75	ş-	Total.
Males		1			1		. 5	5	 3		5		1		16
Females.		I			3		. 7	7	 ΙI		5		3		30

The following table gives the ward distribution of these deaths, and the rate of mortality in each ward, as compared with the corresponding figures for each of the four preceding years:—

	No. F	907. Rate per	No.	1908. Rate pe	er	No.	1909. Rate pe	er		910. Rate p	No.I	gii. Rate per
Ward.	10	000		1000.			1000.		T	000.		.000
Moorside	15	1.05	 8	0.24		15	1.01		8	0.24	 17	0'29
East	10	0.83	 12	1.08		8	0 66		9	0.74	 12	1.01
Church	7	0.95	 8	1.08		14	1,00		11	1'49	 5	0.68
Redvales										0.64		
Elton										0.49	 5	0.32
Totals	52	o·88	57	0.96		57	0.06		42	0.41	46	0.48
	-					-			-			

Character of the disease as described on the returns :-

	Males.		emales.
"Cancer"	7		19
"Malignant Disease"	_		_
Carcinoma	7		9
Epithelioma	I		_
Sarcoma			
Organs Affected.	Males.	F	emales.
Mouth	2		I
Œsophagus			-
Stomach	I		4
Intestine	4		I
Rectum	I		_
Liver	. 4		3
Gall Bladder	_		
Breast	_		8
Uterus	_		II
Peritoneum	_		I
Throat			-
Neck	I		-
Lungs			_
	_		_
	16		30

#### DISINFECTION.

The following is a summary of the disinfection carried out during the year in the reported cases of Infectious Diseases:—

396 rooms in 287 houses were disinfected with the fumes of either sulphur or formaldehyde, and the walls of 591 rooms in 299 houses sprayed with a solution of either formalin or carbolic acid.

245 rooms in 51 houses have been fumigated with sulphur, at the request of either the tenant or owner.

Twenty-three public schools have been fumigated with sulphur, and the desks, books, walls, &c., sprayed with a solution of formalin, the rooms afterwards being disinfected with the fumes of formaldehyde.

In addition the walls of the Dispensary Hospital have several times during the year been sprayed with a solution of formalin, the rooms afterwards being disinfected with the fumes of formaldehyde.

Thirty-three rooms in 13 houses have been disinfected with the fumes of formalin, and the walls of 48 rooms in 17 houses sprayed with a solution of formalin, after the occurrence of deaths from Phthisis.

Eight parcels of infected clothing and 310 sets of infected bedding have been disinfected by steam.

It may be said that in the disinfection of rooms—the spraying of floors, walls, ledges, &c., with either formalin or carbolic or other disinfectant solution before fumigation, is now the routine procedure.

#### WATER SUPPLY.

Public Supply.—The public service of the Borough is derived from three of the Reservoirs belonging to the Bury and District Joint Water Board. The Board represents the following Authorities:—Bury, Radcliffe, Ramsbottom, Tottington, Haslingden, Rawtenstall, Whitefield, Little Lever, and Bury Rural. The area supplied is 80 square miles.

The three Reservoirs supplying Bury are:-

Gin Hall (situated in Bury), supplying 10,224 houses.

Calf Hey (situated in Haslingden Borough), supplying 1,967 houses, chiefly in the districts of Limefield, Bell Lane, and Blackford Bridge.

Hapton (situated partly in Rawtenstall Borough, partly in Burnley district, supplying 1,525 houses, chiefly in Chesham and Walshaw districts.

The total number of houses supplied at December 31st, 1911, was 13,595.

#### RAINFALL.

	1911.	1910.	1909.	1908.
Gin Hall	40.44	 49.48	 48.66	 44.17
Calf Hey	46.65	 55.18	 52.41	 44.35
Hapton	53.48	 58.15	 48.97	 39.87

An average of 46.86 inches, as compared with 54.27 in 1910, 50.01 in 1909, and 42.79 in 1908.

DISTRIBUTION.—173 yards of 2-in., 196 yards of 3-in., 1,280 yards of 4-in., 218 yards of 6-in., and 519 yards of 15-in. main have been laid as follows:—

Yards.	1	nches.	Situation.
43		2	Back Parsonage Street.
50		2	Back Manchester Road, off St. Marie's Place.
80		2	Cross Street to Rock Street.
20		3	Church Street, Walshaw.
50		3	Back Church Street, Walshaw.
59		3	Back Walmersley Road and Vernon Street.
67		3	Back Porter Street.
3		4	Crostons Road, opposite Webb Street.
57		4	Rectory Lane, Jericho.
81		4	Rochdale Old Road, Jericho.
85		4	Ainsworth Road, Elton.
115		4	Manchester Road and Dumers Lane.
127		4	Back Chesham Road.
226		4	Denton Street and Back Walmersley Road.
218		6	Wellington Street, Elton.
519		15	Walmersley Road (Bassfield to Gin Hall).
2386			

186 yards of 2-in. main, private lane to Oaklands, Walmersley; 114 yards of 4-in. main, Back Newbold Street; 83 yards of 4-in. main, Harper Street; 204 yards of 4-in. main, Brook Street from Brookshaw Street to Cannon Street; 220 yards of 4-in. main, Chesham Road to Haslam Street; and 17 yards of 6-in. main, Wellington Street, Elton, have been renewed.

Flushing operations have been carried out periodically, and several "dead ends" have been renewed.

From January 1st to December 31st there were 122 houses connected to the public service and 19 houses disconnected.

Water Closers.—During the year the water supply has been connected to 132 baths and 346 water closets, in accordance with the regulations of the Water Works Department.

PRIVATE WATER SUPPLY.—At the end of the year 1911 there were seven houses, 102 cottages, and two schools supplied with water from private sources. The following list shows the situation and the number of houses supplied:—

- 4 cottages, Well Brow.
- 1 cottage, Holebottom.

School, Woodgate Hill.

- 1 house, Green Bank.
- 1 house, Chesham.
- 1 house, Chesham Green.
- 1 cottage, Cinder Hill.
- 1 house, South View.
- 2 cottages, Chesham Green.
- 3 cottages, Cinder Hill.
- 1 cottage, Gipsy Brook.
- 1 cottage, Chesham.
- 2 cottages, Birchen Bower.
- 2 cottages, Lowes.

- 1 house, Broom House.
- 4 cottages, Duckworth Fold
- 2 houses, Springs.
- 2 cottages, Spring Cottages.
- 4 cottages, Springs.
- 9 cottages, School Street.
- 1 cottage, Bury Ground.
- 3 cottages, near Bury

Reservoir.

- 3 cottages, Woodhill Fold.
- 12 cottages, Yates Terrace.

School, Woodhill.

- 44 cottages, Woodhill.
  - 3 cottages, Stag Houses.

# FACTORIES AND WORKSHOPS.

Factories.—During the year nine notices have been received from His Majesty's Inspector of Factories, all of which have been complied with.

Workshops.—The duty of supervising the workshops in which males are employed is carried out by Inspectors Haworth and Kay, and the Female Inspector (Nurse Walton) has charge of the workshops in which females only are employed. The Inspectors have paid 441 visits to the workshops during the year.

General Sanitation.—The workshops, as regards cleanliness, light, air space, &c., have been found to comply with requirements. From a sanitary point of view the conditions under which work is carried on in these rooms is very satisfactory, and it is pleasing to record that any suggestions for further improvement have been carried out by the owners. The number of workshops in the Borough is 409, a decrease of 62 as compared with the previous year.

Bakehouses.—The number of bakehouses on the register is 84, as compared with 83 in the previous year. Inspector Openshaw, who has the bakehouses under supervision, reports that the businesses have been conducted in a very satisfactory manner, a pleasing feature being that no complaints have been received from residents in the vicinity of bakehouses of the excessive emission of smoke.

During the year one cellar bakehouse has been registered, making a total number of two cellar bakehouses within the Borough.

Shop Hours Acts.—The duties of carrying out the provisions of these Acts, also the provisions under the Seats for Shop Assistants' Act, have been entrusted to Nurse Walton and Inspector Haworth. The Inspectors have paid 465 visits to the various shops in the performance of these duties, and have found that the requirements of the Acts were being carried out.

HOME WORK.—Lists containing the names and addresses of home workers have been received from several firms and entered in the register. The Inspector (Nurse Walton) has paid 82 visits to the homes in which the work is carried on, and she reports that in the majority of cases the work is performed under satisfactory conditions.

Extract from Copy of Table sent to the Home Office at the request of the Secretary of State.

Annual Report of Medical Officer of Health for 1911, for the County Borough of Bury.

# FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

#### 1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

	Number of								
Premises.	Inspections.	Written Notices,	Prosecutions.						
Factories (Including Factory Laundries	28	18							
Workshops	164	8							
Workplaces (other than Outworkers' premises)	11	5	**						
Total	203	31							

#### 2.—DEFECTS FOUND.

	Nu	Number		
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	of Prosecutions.
Nuisances under the Public Health Acts:—				
Want of cleanliness	13	13		
Want of ventilation	1	1		
Overcrowding				
Want of drainage of floors				
Other nuisances	13	13		
Sanitary (insufficient	3	3		
accommodation (unsuitable or defective)	8	7	1	
not separate for sexes				
Offences under the Factory and Workshop  Act:—				
Illegal occupation of underground bakehouse (S. 101) Breach of special sanitary requirements				
for bakehouses (SS. 97 to 100.) Failure as regard lists of outworkers	••			
(S. 107)				
be done in (S. 108)				
premises which are infected (S.110)				
Allowing wearing apparel to be made				
in premises infected by scarlet			-	
fever or smallpox (S. 109)				
Other offences				
Total	38	37	1	

77 OTHER MATTERS.

Class.	N	umber.
Matters notified to H.M. Inspectors of Factories:—		_
Failure to affix Abstract of the Factory & Workshop Act (S.	133)	3
Action taken in matters referred by H.M.  Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)  Notified by H.M.  Inspector  Reports (of action taken) sent to taken) sent to H.M. Inspector	M. on	9
Other	and the same of	_
Underground Bakehouses (S. 101):—  Certificates granted during the year		1 2
Homework:—	Nu	mber of
List of Outworkers (S. 107):-	Lists.	Outworkers
Lists received:—Twice in the year Once in the year		59 6
Addresses of outworkers { forwarded to other Authori received from other Authori Inspection of Outworkers' Premises		82
Homework in unwholesome or infected premises:—	Wearing Appare	Other.
Notices prohibiting homework in unwholesome pren (S. 108)		
Cases of infectious disease notified in homewor	102570370	_
Orders prohibiting homework in infected premises (S.	110) —	_
Boot and Shoe Makers and Repairers 40 Cloggers	4 5 6 6 6 6 8 8 8 6 9 9 9 9 9 9 9 9 9 9	00
Total number of workshops on register	4	.09

#### THE HOUSING PROBLEM.

In the past the Housing Committee have devoted much time and attention to the solution of this important matter. At the close of 1910 the Local Government Board sanctioned a scheme for the erection of dwellings for the working classes. Sanction was also given for the borrowing of £31,000, being the estimated cost of acquiring a plot of land off Bolton Road, and erecting thereon 132 houses.

The Committee decided to erect six types of houses, as follows:—

	10	houses	known	as	type A.		
	2	,,,	,,	,,	amended	type	
	60	,,	,,	,,	,,	,,	В.
	12	,,	,,	,,	,,	,,	C.
	20	,,	,,	,,	,,	,,	D.
	28	,,	,,	,,	,,	,,	E.
	132						
-							

Many of these houses were almost completed by the end of 1911.\*

I may mention here that provision should, if possible, be made for those people who have been displaced by the closing of houses under the Housing, Town Planning, &c., Act, 1909. Several of the houses which have been closed were small houses of the backto-back type, containing two rooms only, and were let at very low rentals—as little as 1s. 6d. per week in some cases. Some of these have been made into through houses, and are now let at a higher rental. Others are so situated that it is impossible to make them fit for human habitation. In some cases the tenants have still remained in the houses at higher rentals, in others they have managed to find houses at approximately the same figure, while a few have, I understand, gone to live in furnished rooms. This last is, of course, a very undesirable state of affairs. The urgency of the matter will become more pronounced as time goes on and the work of House Inspection proceeds.

<sup>\*</sup> At the time of writing (June, 1912), the whole of the houses are completed and tenanted.

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

The first list of these houses to be inspected under the Housing and Town Planning Act was submitted to the Health Committee on June 14th, 1911, and was as follows:—

1, 2, 3, and 4, Plantation Square.

11, 13, 15, 17, 19, and 21, Moor Street.

5, 6, 7, 8, and 9, Back Moorgate.

1 and 2, Pipe Fold.

3, 5, and 7, Crescent.

1, 3, 5, and 7, Spencer's Yard.

1, 3, 5, 7, 9, and 11, Spencer's Court.

2, 4, 6, 8, 10, and 12, Flint Street.

1, 3, 5, 7, and 9, Bazaar Street.

1, 3, and 5, Britannia Yard.

55, 57, and 59, Paradise Street.

2, 4, 6, 8, 10, 12, 14, and 16, Back Eden Street.

3, 4, 5, and 6, Moorside Fold.

1 and 3, and 2 and 4, Downham's Yard.

1 and 3, Franklin Court.

1, Back Franklin Street.

49 and 51, Hornby Street.

7 and 9, Brunswick Street.

1, 2, 3, 4, and 5, Taylor's Court.

6, 8, and 10, Barrett Street.

6, 8, and 10, Back Barrett Street.

6 to 38, Livsey Street.

2 to 12, Back Tenters Street.

1, 3, 5, and 7, School Street

9 to 13, Nuttall Yard.

1 to 19, Howard's Yard.

2, 4, 6, and 8, Mitchell Court.

2, 4, and 6, Irwell Court.

1, 3, and 5, Stott's Court.

1 and 3, Foundry Court.

A total of 114 houses.

It was deemed advisable to proceed slowly with the inspections at first until some little experience of the results of the action taken had been gained. During the year the following houses have been dealt with under the Act:—

1, 2, 3, and 4, Plantation Square.

11, 13, 15, 17, 19, and 21, Moor Street.

5, 6, 7, 8, and 9, Back Moorgate.

1 and 2, Pipe Fold. 3, 5, and 7, Crescent.

1, 3, 5, and 7, Spencer's Yard.

2, 4, 6, 8, 10, and 12, Flint Street.

1, 3, 5, and 7, Bazaar Street.

The Town Council issued closing orders in respect to all the above houses, with the exception of—

- 6, Flint Street,
- 3, Bazaar Street,
- 3, Crescent,

which were dealt with under Section 15, notices being served upon the landlords requiring the execution of the works necessary to make them in all respects reasonably fit for human habitation.

The position with regard to these houses is, at the time of writing, as follows:—

- 1 and 2, Pipe Fold: Made into through houses with 28 and 30, Bell Lane. New windows inserted and made to open. Bedroom fireplace fixed. Structural repairs carried out. Houses decorated. Closing orders determined.
- 4, 5, 6, and 7, Plantation Square: Closed.
- 3 and 5, Crescent, 1, 3, 5 and 7, Spencer's Yard: 3 and 5, Crescent, made into through houses with 1 and 3, Spencer's Yard. Structural repairs carried out. Water closet provided for each house. Closing orders determined. 5 and 7, Spencer's Yard, closed.
- 7, Crescent: Notice served under Section 15. Necessary work carried out.
- 2, 4, and 6, Flint Street: Closing orders made.
- Simpson Street, 1 and 3, Bazaar Street: Work of rendering fit for human habitation now in hand.
- 8, 10, and 12, Flint Street: Closing orders made.
- 5, 7, and 9, Bazaar Street: Work of rendering fit for human habitation now in hand.
- 11 to 21, Moor Street: Closed.
- 5, 6, 7, 8, and 9, Back Moorgate: Closed.
- 1, 2, 3, 4, and 5, Downham's Yard: No. 5 made into through house with No. 14, John Street. Nos. 1, 2, 3, and 4 closed.

#### HOUSES LET-IN-LODGINGS.

("Furnished Rooms.")

These houses, which are under the supervision of Inspector Haworth, have been kept in a fairly clean state. Four houses have been given up during the year, and twelve have been opened, the number of these houses now on the register being 42. Speaking generally, this method of housing the poorer classes is far from satisfactory, but until some other provision is made in the shape of the erection of a cheaper type of house suitable for this class of people, either by the Corporation or by private enterprise, we shall have to endure what, in my opinion, constitutes a blot on the Sanitary Administration of the town.

#### COMMON LODGING-HOUSES.

The number of Common Lodging-houses in the Borough is 24, the same number as in the previous year, all of which are subject to annual registration in accordance with Section 40 of the Bury Corporation Act, 1901 (now consolidated in the Bury Corporation Act, 1909). The houses have been kept clean, and have been limewashed twice in the year in accordance with requirements. Two of the houses have been transferred to other owners during the year.

# MEAT INSPECTION. THE PUBLIC ABATTOIRS.

The returns for the year 1911 show an increase in the number of animals slaughtered compared with the year 1910, bringing the figures nearer to those (30,136) recorded in 1907:—

	1910.	1911.		
Beasts	4038	 4110	 Increase	72
Sheep and Lambs	20335	 20221	 Decrease	114
Pigs	4290	 4725	 Increase	435
Calves	1010	 930	 Decrease	80

From the above table it will be observed that the number of animals slaughtered (29,986) at the Public Abattoirs during the year 1911, shows an increase of 313, as compared with the number slaughtered (29,673) in 1910.

Inspector Openshaw reports Tuberculosis in 67 carcases examined during the year ending December 31st, 1911, as compared with 73 carcases in 1910, 74 in 1909, 63 in 1908, and 62 in 1907. Of these carcases, 40 were of beasts and 27 were pigs, as compared with 49 beasts and 24 pigs affected with the disease in the previous year. Voluntary surrender of the affected organs or carcase (when necessary) was obtained. The quality of the meat generally maintained the standard of previous years.

During the year one case of Anthrax occurred in the Borough. The animal affected (a bull) was slaughtered in emergency at the Abattoirs, when the nature of the disease being apparent on post mortem, the carcase was reported in the usual way, and cremated on a spot near by. The necessary disinfection of the premises was carried out.

#### FARMS AND MILK SUPPLY.

The number of registered farms within the Borough at the end of the year was 63. Applications for registration under the Dairies, Cowsheds, and Milkshops Order were received from three persons.

The farms within the Borough have been regularly and systematically visited by Inspector Openshaw, with the result that the majority of the farm buildings are now in a very good sanitary condition. Several important improvements have been carried out, e.g., the provision of new shippons, &c., and from a reference to the Inspector's report it will be seen that other sanitary improvements, such as ventilation, drainage, lighting, &c., have been carried out.

MILK.—The quality of milk supplied in the Borough, as judged by the samples submitted for analysis, has been fairly good. Fifty-seven samples were taken by the Inspector (Mr. Cass) and submitted to the Borough Analyst, and with the exception of two samples were pronounced genuine. The two samples referred to above showed a deficiency of 10 per cent. and 20 per cent. of fats respectively.

Number of samples of milk taken in the past ten years:-

Year			Samples	Ad	lulter	ated	Percentage Adulterated
1911		 	57		2		3.51
1910		 	52		0		
1909		 	60		4		6.6
1908		 	51		2		3.9
1907		 			0		_
1906	* * *	 	73		7		9.6
1905		 	76		9		11.8
1904		 	51		2		3.9
1903		 	40	•••••	3		7.5
1902		 	46		2		4.3

#### FOOD AND DRUGS.

The number of samples submitted to the Borough Analyst during the year was 195, an increase of 42 from the number in 1910. The number of samples taken in 1909 was 148, and in 1908 110.

With the exception of five samples of butter and two samples of milk, all the samples submitted were genuine. The percentage of adulteration is equal to 3.59 per cent. of the total samples submitted. In the preceding ten years the percentage of adulteration was as follows:—

Year.	N	Number of Sa	imples.	Percentage of	of Adulteration
1910		153			0.65
1909		148			4.05
1908		110			1.82
1907		121			_
1906	***************************************	142			7.0
1905		130			10.6
1904		113			3.54
1903		97			11.49
1902		78			3.8
1901		94			4.2

#### SMOKE OBSERVATIONS.

The number of observations taken was 108, which is an increase of sixty-nine observations, as compared with the previous year. Of these 107 were of 60 minutes' duration and one of fifteen minutes' duration. The time limit of five minutes "black" smoke per hour was exceeded in 23 instances.

Legal Proceedings.—Legal notices were served upon 23 firms, and two prosecutions were taken for non-abatement of the nuisance, the result being that magistrates' orders for abatement were made, and the firm fined in each case 40s. and costs.

#### MIDWIVES' ACT.

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The number of midwives on the register at the end of the year was 25, an increase of two from the total at the end of the year 1910. Four new midwives were registered during the year.

There is nothing to report regarding the conduct of the midwives, but some still find difficulty in the use of the clinical thermometer, and some being unable to write have to rely upon others to enter up their registers; these latter, fortunately few in number, are untrained and uneducated. The standard of midwifery work now carried out in Bury shows a higher state of efficiency, due, doubtless, to the supervision of the Central Midwives' Board, and the provisions contained in the Midwives' Act of 1902.

During the year 35 notices were received from midwives requesting the help of medical practitioners.

STILL BIRTHS.—Six still births were notified by medical men, 32 by midwives, and one by the parent during 1911, a decrease of three on the number notified during 1910.

Legislation as to the procedure to be adopted in the interment of still-born babies is desirable, in order to minimise the possibility of the occurrence of crime.

TABLE 1.

Table showing Number of Deaths and Rates of the Principal Infectious Diseases for the past Ten Years.

	19	1902	19	1903	1904	24	1905	25	19061	90	1907	20	61	8061	1909	60	19	0161	19	1161
	No. of Deaths	Rate per 1000																		
Smallpox	ω.	0.02	9	01.0	61	0.03	I	10.0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	17	0.56	25	0.43	27	0.46	9	01.0	51	28.0	I	0.18	15	0.25	17	0.58	00	0.13	26	0.44
Whooping C.	IO	91.0	7	0.12	42	0.71	I	0.01	9	0.10	27	0.46	9	0.10	13	0.55	0	0	12	0.30
Scarlet F'v'r	10	90.0	00	0.13	10	91.0	3	0.02	5	0.03	I	10.0	co	0.02	4	90.0	19	0.32	10	41.0
Diphtheria	34	0.28	25	0.43	7	0.12	ro.	80.0	9	01.0	IO	21.0	10	91.0	5	80.0	00	0.13	10	60.0
Fever	4	20.0	4	20.0	7	0.12	11	0.18	10	0.08	32	80.0	4	20.0	4	20.0	3	0.02	0	0
Puerperal F.	1	10.0	-	0.01	e	0.02	I	10,0	4	20.0	9	0.10	CI	0.03	CI	0.03	61	0.03	3	0.02
Erysipelas	I	10.0	П	10.0	0	0	co	0.02	3	0.02	1	0.01	61	0.03	0	0	I	10.0	0	0
Diarrhœa		14 0'24	49	0.84	45	22.0	44	0.75	46	84.0	14	0.34	30	0.20	15	0.25	25	0.43	65	11.1
Influenza	9	0.10	w	0.08	11	0.18	10	91.0	. 7	0.12	10	41.0	13	0.55	10	41.0	7	0.12	00	0.14

#### TABLE II.

Table Showing the Comparative Numbers of Sanitary Conveniences in the Borough in the Years 1902 and 1911.

1911.		1902.
3668		5458
515		795
4414		1909
2713		1569
11310		9731
13721		12692
	3668 515 4414 2713 11310	3668 515 4414 2713

#### TABLE III.

List of Registered Midwives, corrected to February 1st,

- \*Collinge, Mrs. Jane, 74, Chesham Road.
- \*Greenhalgh, Mrs. Bertha, 34, Old Doctor's Farm, Tottington.
- \*Hampton, Miss Annie, 66, Vernon Street.
- \*Carrington, Mrs. Mary Jane, 4, Richard Burch Street.
- \*Pennington, Miss Sarah, 60, Walmersley Road.
- \*Dodd, Miss Emily, 130, Walmersley Road.
- \*Ingham, Mrs. Jane Parkinson, 94, Rochdale Road.
- \*Howarth, Miss May, 35, Irwell Street.
- \*Crompton, Miss Bertha, 145, Tottington Road.
- \*Hacking, Mrs. Miriam, 116, Booth Lane, Tottington.
- \*Haslam, Mrs. Elizabeth, 123, Bury New Road, Bolton.
- † James, Mrs. Annie, 251, Bolton Road.

Pickup, Mrs. Mary Ann, 1, Chesham Road.

Arstall, Mrs. Mary Ann, Breightmet Fold, Bolton.

Taylor, Mrs. Ellen, 35, Union Square.

Nabb, Mrs. Esther, 1, Regent Street.

Morrison, Mrs. Louisa, 52, Manchester Old Road.

Cotterill, Mrs. Sophia, 108, Wash Lane.

Whiley, Mrs. Ellen, 20, School Street.

Rostron, Mrs. Harriet, 48, East Street.

Isherwood, Mrs. Elizabeth, 9, Shepherd Street.

Fitzpatrick, Mrs. Mary, 72, Whalley Road, Ramsbottom.

Cook, Mrs. Louisa, 46, Holland Street, Radcliffe.

Berry, Mrs. Eliza A., 7, Statter Street, Hollins.

- \* Trained and certificated by examination.
- † Has received some training, but has passed no examination.

#### TABLE IV.

LIST OF REGISTERED KEEPERS OF COMMON LODGING-HOUSES,

Griffin, Lucy, 9, Parkhills Street, and 20, Earl Street.

Wright, John, 38, King Street, and 41-43, Union Square.

Dodd, Lily, 16, Union Square.

Slattery, Elizabeth, 52, Union Square.

Taylor, Thomas G., 25, King Street.

Crossley, Benjamin, 18, Union Street.

Johnstone, Robert, 24, Clerke Street.

Tattersall, William, 26 and 28, Clerke Street, and 12, John Street.

Whitehouse, Samuel and John, 10, 12, and 14, Earl Street, and 56, Union Square.

Lees, Heaton, 5, 7, 9, and 11, Clerke Street.

Hindle, James, 2, 4, 6, 8, 10, and 12, Rochdale Road.

# TABLE V.

# DEATHS FROM PHTHISIS DURING THE YEAR 1911.

Moorside East Moorside East Moorside Elton East Church Church East Church Moorside Church Elton Elton Elton Elton Elton Elton Elton Church Church Church Elton Church East Church Moorside Moorside East Church Moorside East Church Elton Church East Church Church Elton Church Elton Church Elton Church Elton Church Elton Church Moorside						Age.	Occupation.
East Moorside East Moorside Elton East Church East Church Church Church Church Church Church Church Church Elton Church Elton Church Elton Church Elton Elton Church Elton Elton Church Elton Esst East East Elton Church Elton Church Elton Church Elton Church Esst East Church Moorside Esst Elton Church Moorside Church Church Church Church Moorside Church Church Moorside	30, Franklin Street				F	60	Widow
Moorside East Moorside Elton Church Moorside East Church Elton Elton Elton Elton Elton Elton Elton Church Church Church Church Church East East Moorside Moorside Moorside Moorside Elton Church East Church Church East Church East Church Moorside Elton Church East Church Moorside Elton Church East Church Moorside Elton Church East Church Moorside Church Church Elton Church Elton Church Moorside Church Church Church Church Moorside Church Church Church Moorside	157, Wash Lane				M	49	Cotton Weaver
East Moorside Elton East Church Church East Church Moorside Church Church Moorside East Church East East East East East East East East	13, Maskill Street				M	61	Labourer
Moorside Elton East Church Church Church East Church East East East East East East East East	22, Percy Street				F	23	Spinster, Tailoress
Elton East Church Elton Elton Elton Elton Elton Elton Church Church Church Church Church East East East Church Church Elton Church Elton Church Elton Church Elton Church Elton Church Esast Church Moorside East East Church Moorside East Church Church Elton Church Elton Church Moorside	32, Buckley Street				M	23	Cotton Piecer
East Church Church Church Church East Church East East East East Moorside Elton Elton Elton Elton Elton Elton Elton Elton Church Church Church Church Elton East East Moorside Moorside Moorside Moorside Elton Church East East Church Church East Church East Church Moorside Elton Church East Church Church East Church Moorside Church Church Elton Church Elton Church Elton Church Moorside Church Church Moorside Church Church Church Moorside	135, Crostons Road				F	40	Spinster
Church Church Church Church Church Moorside Church Church Moorside East Church East East East East East East Hoorside Moorside Moorside Moorside Elton Church East Church Church East Church East Church East Church East Church East Church Church East Church Church East Church Moorside Church Church Church Church Moorside	Brown Cow, Fairfield				M	25	Cotton Weaver
Church Church East Church Moorside Church East East East East East East Moorside Moorside Moorside Elton Elton Church Church Church Elton Elton Elton Moorside Moorside Moorside East Church Church East East Church Church Elton Church East Church Church East Church Moorside East Church Church Church Church Church Church Elton Church Moorside Church Church Church Moorside	7, Cecil Street				M	38	Labourer, Paper Mill
Church East Church Moorside Church Moorside Church Church Moorside East Church Church Church Church Elton East East Moorside Elton Elton Elton Elton Church Church Church Church Elton East East Moorside Moorside Moorside Moorside Elton Church East Church Church East Church East Church Church East Church Church East Church Church Church Elton Church Elton Church Elton Church Church Church Elton Church Moorside Church Church Church Church Moorside	2, Frederick Street				F	34	Wife
East Church Moorside Church Church Church Moorside East Church Church Church Church Elton Moorside Moorside Moorside Elton Church East East Elton Church Esast Church Moorside Elton Church East Church Elton East Church Elton Moorside East Church Church Elton Elton Church Elton Church Elton Church Elton Church Elton Church Elton Church Moorside	36, Wyndham Street	- T			M	54	Innkeeper
Church Moorside Church Church Moorside East Church Church Church Church Church Church Church Church Church East East East East Moorside Elton Elton Elton Elton Elton Elton Elton Elton East Church Church Eston Elton Moorside Moorside Moorside Elton Church East Church East Church East Church East Church Elton Moorside East Church Church Elton Church Elton Church Elton Church Elton Church Churc	8, Barrett Street				M	21	Bottler in Brewery
Moorside Church Church Moorside East Church Church Church Church Church Eston Elton Elton East East East Moorside Moorside Blton Moorside Hoorside Moorside East Church East Church East Church East Church East Church East Church Church East Church Moorside Moorside Elton Church East Church Church Church Church Elton Moorside East Church Church Church Church Church Church Elton Moorside Church	Union Square				M	59	Labourer
Church Church Moorside East Church Church Church Church Church Eston East East Moorside Elton Elton Elton Elton Elton Elton East Moorside Moorside Moorside Hoorside East Church East Church East Church East Church East Church Church East Church Church East Church East Church Church Elton Elton Church Elton Church Elton Church	10, Regent Street				M	34	Crane Driver
Church Moorside East Church Church Church Church Elton Elton East East East East East Moorside Moorside Moorside Moorside Hoorside Elton Church Elton Elton Church Elton Church Elton Church Elton Church Elton Church East Church Moorside Moorside Moorside Elton Church Elton Church Elton Church Elton Moorside Church Church Elton Church Elton Church Elton Moorside East Church Moorside	Caravan Dwelling, Fa	Porrom	nd	**	F	25	Spinster, Hawker
Moorside East Church Church Church Church Church Church Elton Elton East East Moorside Moorside Moorside Elton Elton Elton Moorside Moorside Elton Church East Church Moorside East Church Moorside East Church Moorside East Church Moorside East Church Church Elton Moorside East Church Moorside East Church Church Elton Moorside East Church	Clerke Street				M	60	Bricklayer
East Church Church Church Church Church Eiton Eiton East East East East Hoorside Moorside Elton Elton Moorside Elton East Church East Church East Church East Church East Church East Church Elton Moorside Moorside Ehon Church Church Church Elton Moorside East Church Church Elton Moorside East Church Church Church Church Elton Moorside East Church	12, Hamilton Street	**			F	30	Wife
Church Church Church Church Church Elton Elton East East Moorside Elton Moorside Moorside Elton Church East Church East Church East Church East Church East Church Elton Church Elton Church Moorside Church Church Church Moorside	28, Bambury Street			**	F	63	Widow
Church Church Church Church Elton Elton East East East Moorside Elton Moorside Moorside Moorside Moorside Moorside Elton Church East East East Elton Church Moorside East Church Elton Church East Church Elton Moorside East Church Church Church Church Church East Church	Knoweley Hotel How	manleo	t Ciment	**	F	45	Wife
Church Church Church Elton Elton East East East East Elton Elton Elton Elton Elton Elton Elton Elton Moorside Moorside Moorside Elton Elton Church East East East Elton Church Elton Moorside East Church Moorside East Church Elton Elton Moorside East Church Elton Moorside East Church Elton Moorside East Church Elton Moorside East Elton Church Elton Church	Knowsley Hotel, Hay			0.0	F	37	Spinster, Cotton Rover
Church Elton Elton East East East East Elton Elton Elton Elton Moorside Moorside Moorside Elton Church East Church Moorside East Church Elton Moorside East Church Church Elton Church Elton Church Elton Moorside East Church Church Church Elton Moorside East Church Church Elton Moorside East Church					M	69	Labourer
Elton Elton Elton East East  Moorside Elton Elton Elton Elton Moorside Moorside Elton Church East Church Moorside East Church East Church Elton Elton Church Elton Moorside East Church Elton Moorside Elton Church Elton Redvales Church Moorside Church	16, Union Square			* *		37	Salt Hawker
Elton East East  Moorside Elton Elton Moorside Moorside Moorside Moorside Elton Church East Church Moorside East Church East Church East Church Elton Elton Church Church Church Church Church East Church Elton Moorside East Church Church Church Church Church Church Moorside Church Church Moorside Church	49, Union Square			**	M		Son Son
East East East East East  East  Moorside Elton Moorside Moorside Moorside Elton Church East Church Moorside East Elton Moorside  Moorside East Church Elton Elton Elton Moorside East Elton Elton Church Elton Moorside East Elton Church Elton Moorside East Elton Church Church Church Moorside Church Moorside Church Moorside Church Moorside Church Church Church Church Church Church Church Moorside	10, Merton Street				M	8	
East East Moorside Elton Elton Moorside Moorside Moorside Moorside Elton Church East Church Moorside East East Church Elton Moorside East Church Elton Moorside East Church Elton Moorside East Church Church Elton Moorside East Church Church Church Church Church Church Moorside Church	20, Dearden Fold	* *		* *	M	49	Cotton Weaver
East Moorside Elton Blton Moorside Moorside Moorside Moorside Moorside Elton Church East Church Moorside Moorside East Elton Church Church Church East Church Church Elton Moorside East Church Elton Moorside East Church Church Church Church Church Moorside Church Church Moorside Church Moorside Church Moorside Church Moorside Church Church Church Church Church Church	43, Shaw Street				M	21	Crofter, Bleachworks,
Moorside Elton Blton Moorside Moorside Moorside Moorside Moorside Elton Church East Church Moorside East Church East Church East Church Elton Church East Church Elton Moorside East Church Church Church Church Church Church Moorside Church	57, Wash Lane				M	58	Iron Dresser
Elton  Elton  Moorside  Moorside  Moorside  Elton  Church  East  Church  Moorside  East  Church  Moorside  East  Elton  Elton  Church  East  Church  Elton  Moorside  East  Elton  Moorside  East  Elton  Moorside  East  Elton  Moorside  East  Elton  Moorside  Church  Church  Moorside  Church  Moorside  Church  Moorside  Church  Moorside  Church  Church  Church  Church  Moorside	Horse and Jockey, He	otei			M	50	Licensed Victualler
Elton Moorside Moorside Moorside Moorside Elton Church East Church Moorside  East Church Moorside East Elton Elton Moorside East Church Elton Moorside East Elton Church Church Church Church Church Church Church Church Church Moorside Church Church Moorside Church Church Church Church Church Moorside Church Church Church Moorside	3, Haslam Street				F	51	Wife
Moorside Moorside Moorside Moorside Elton Church East Church Moorside East Church Moorside East East Church Elton Moorside East Church Moorside Church Moorside Church Moorside Church Church Moorside Church Church Moorside Church Church Moorside	- 1 h				M	47	Joiner
Moorside Moorside Elton Church East Church Moorside East Church East Church East Church East Church East Church Elton Moorside East Elton Redvales Church Moorside Church Moorside Church Moorside Church Church Church Church Church Church Moorside					M	57	Labourer
Moorside Moorside Elton Church East Church Moorside East Church Elton Moorside East Elton Moorside East Elton Moorside East Elton Church Church Moorside Church Church Moorside Church Church Church Church Moorside Church Church	11, Fox Street	4.0			M	24	Cotton Weaver
Moorside Elton Church East Church Moorside East Church Elton Moorside East Elton Moorside Eat Elton Church Church Church Church Moorside Church Moorside Church Moorside Church Church Church Church Moorside	Taylor Street 26, Garston Street	* *			F	7	Daughter
Elton Church East Church Moorside East Church Elton Moorside East Elton Moorside East Church Church Church Church Moorside Church Moorside Church Moorside Church Church Church Church Moorside Church Church Church	26, Garston Street				F	36	Wife
Church East Church Moorside East Church Elton Moorside East Church Elton Moorside East Church Church Church Moorside Church Moorside Church Church Church Church Moorside	40. Cateaton Street	4.0			F	68	Widow
East Church Moorside East Church Elton Moorside East Elton Church Elton Church Church Church Moorside Church Church Church Church Moorside Church Church Church					F	20	Cotton Operative
Church Moorside East Church Elton Moorside East Elton Church Church Church Church Moorside Church Moorside Church Church Church Moorside Church	Union Square				M	53	General Labourer
Moorside Moorside East Church Elton Moorside East Elton Redvales Church Moorside Church Church Church Church Moorside	2, Trimble Court		::		M	39	Fish Hawker
Moorside Moorside East Church Elton Moorside East Elton Redvales Church Moorside Church Moorside Church Church Church Moorside	3, Margaret Street				F	43	Widow
East Church Elton Moorside East Elton Redvales Church Moorside Church Church Church Church Church Church	Hornby Street				M	39	Licensed Beerseller
Church Elton Moorside East Elton Redvales Church Moorside Church Church Church Moorside	17, Lathom Street				F	33	Wife
Church Elton Moorside East Elton Redvales Church Moorside Church Church Moorside Church	EE - D-13 Stan				M	18	Son
Elton Moorside East Elton Redvales Church Moorside Church Church Moorside	35, South Garden Stre	et			F	19	Cotton Weaver
East Elton Redvales Church Moorside Church Church Moorside	377, Bolton Road				F	42	Wife
East Elton Redvales Church Moorside Church Church Church Moorside	19, Britannia Yard				F	28	Wife
Elton Redvales Church Moorside Church Church Church Moorside	94, Bell Lane				M	55	Brewers' Traveller
Redvales Church Moorside Church Church Moorside	176 Tottington Road				M	27	Whitesmith
Church Moorside Church Church Moorside	1, Bradford Terrace				M	43	Master Tailor
Moorside Church Church Moorside	11, South Garden Str				F	19	Cotton Weaver
Church Church Moorside	46, Hamilton Street				F	57	Fent Sorter
Church Moorside	T.C. Th. A. S. 133. (51				M	56	Iron Core Maker
Moorside	39, South Garden St				F	14	Cotton Operative
	Or to a contract				F	39	Spinster, Hatworks
Cost.	7, Back High Street				F	19	Cotton Spinner
East Redvales	3.6 700		* *		F	33	Wife
C111		**			F	43	Wife
Church	33, Trinity Street	**		**	M	24	
East				* *			Labourer
Elton Redvales	253, Tottington Road 37, Gigg Lane				M F	39 29	Labourer Dressmaker

# TABLE VI.

#### CHRONOLOGICAL ORDER OF

# DEATHS FROM CANCER DURING THE YEAR 1911.

WARD.	ADDRESS.	s	EX.	AGI	E.DESCRIPTIO	N.	ORGAN AFFECTED		OCCUPATION.
East	Workhouse		F	44	Cancer		Uterus		Wife
Church	29, George Street	4	F	70	Cancer		Lower Jaw		Widow
Moorside	Topping Street		M	62	Cancer		Liver		Umbr'la Maker
Moorside	39, Bedford Street		F	63	Cancer		Intestines		Wife
Elton	99, Wood Street		F	50	Cancer		Uterus		Wife
Moorside	39, Hardman Street		F	57	Cancer		Breast & Lun	828	Wife
East	49, Brick Street		F	52	Cancer		Uterus		Wife
Redvales	53, Tenters Street		F	57	Carcinoma		Uterus		Wife
East	Bridge Hall Fold		F	80	Cancer		Liver		Widow
Elton	44, Lord Street		F	82	Cancer				Widow
Moorside	10, Franklin Street		F	43	Carcinoma		Liver Mammæ	-	Spinster-
									Dressmaker
Moorside .	64, Woodfield Terrace		M	85	Cancer	• •	Throat		Retired Brass Finisher
Moorside	161, Walmersley Road		F	65	Carcinoma		Uterus		Wife
Moorside	4, Salford Street		M	67	Carcinoma	2.4	Intestines		Stationary
	4								Engine Driv'r
Moorside	Pump Street		M	63	Epitheliom	a	Mouth		Cotton Worker
East	10, Barnes Yard		F	62	Cancer		Wh.		Widow
East	Crescent		M	66	Cancer		T.1		Labourer
Church	38, South Garden Street		F	62	Cancer		***		Widow
East	167, Rochdale Road		M	47	Cancer		Œsophagus		Independent means
Moorside	34, Birch Street		M	44	Carcinoma		Large Int'sti	ne	Cotton Op'tive
Elton			M	65	Carcinoma		was No.		Joiner
East			F	47	Cancer		WW.		Wife
Meorside.			F	81	Carcinoma		Gall Bladder		Widow
Redvales	48. Andrew Street		F	57	Cancer		77		Wife
East	6. Back Kay Street		F	49	Carcinoma				Wife
Moorside			F	69	Cancer		90		Wife
Moorside	13. Hanson Street		M	63	Carcinoma		T Inches		Joiner
Moorside			F	34	Carcinoma				Cotton Op'tive
Redvales	104, Spring Street		F	48	er .		WYA		Wife
Moorside			F	64	Sarcoma				Widow
Church	29. South Garden Street		F	59	Cancer		***		Widow
Moorside	233, Walmersley Road		M	50	Carcinoma		Pleura		Clerk
Redvales	25. Tenters Street		F	59	Cancer		Stomach		Widow
Elton	Pleasant View Inn		M	52	Carcinoma	11	W1		Beerseller
W 1 4	16, Dearden Fold		F	73	494 T		Uterus		Widow
Redvales	88, Spring Street	::	M	52	Carcinoma		Liver	• •	Cotton Worker
F1 .	25, Maxwell Street		M	66	Cancer		Th		Iron Dresser
	Bury Union		F	52	Cancer		Liver	• •	Wife
Moorside			M	47	Cancer		2.1		Iron Grinder
Redvales	74, Heywood Street		F	41	Sarcoma		Breast		Wife
Church	5 George Street		M	33	Cancer				Tailor
**	5, George Street Bury Union		F	59			-		Widow
		••	F	71	Cancer		775 6		
Redvales			M	68	Cancer				Widow
Moorside	Walmersley Road 52, Rochdale Old Road		F	61	Sarcoma		Upper Jaw		Labourer
East			-		Cancer		***		Wife
Redvales	119, Manchester Road	* *	F	50	Carcinoma		Uterus		Widow

TABLE VII.

THE BURY AND DISTRICT JOINT WATER BOARD.

# RAINFALL AT WORKSHOP YARD, PARSONS LANE.

																								1	ľ	
	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1836	1897	1896	1839	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
January	65-9	242	1.37	2.5	5.06	62.53	4.10	1.55	3.16	3.65	1.85	3-09	3.48	5.88	6.72	5.24	3.45	3.29	3.56	2.13	5.39	2.22	4.26	5-86	5.65	1.59
February	0.88	0.78	1.49	3.65	0.45	0.48	2.81	5.64	6.58	0-20	2.19	2.67	3.84	1.66	3-30	1.84	1.94	3.87	3.86	2.43	3-71	2.74	3.87	2.67	4.87	5.02
March	3-45	2.27	3.11	3.05	4.19	1.87	1.00	1.00	4-29	3.70	5.37	4.14	2:14	2.73	89.0	88.53	2.48	4-72	2.57	3-44	3-51	3.82	3.37	3.39	0.88	2.11
April	2-59	1.31	1.82	2-01	1.19	2.58	1.31	0.65	1.46	1.76	1.61	2-91	2.15	3-90	2.54	2.57	2.37	2.51	5.64	3.20	2-27	1.85	2.50	3.63	2.71	2-93
May	5-69	2.06	0.82	3.11	2.39	2.92	4 30	5.36	3.45	0.83	0.41	2-07	4.19	3.18	1.79	0.88	3.00	4-50	2.56	0.52	3.60	4.38	3.16	2:35	3.30	2.46
June	2-03	1.23	2.81	1.34	3-75	5.56	3.26	2.32	3.29	5.06	2.54	4.74	2.93	1.69	3.57	1.95	1.28	1.66	1.29	3.53	1-97	7.62	2.02	5-69	3.31	3.04
July	3-91	1.72	7.52	4-01	2-73	3.87	3.45	2-95	3.85	5.33	2.64	1.76	0.56	2-07	2.73	1-56	2,88	3.81	1.86	2.36	1-96	2.81	5-02	6-83	4.14	0.55
August	2-47	1.39	4.65	6.41	4-44	7-21	5.01	3.39	5.03	25.4	2.85	3.97	7.50	1.42	92.9	2.49	3.16	5.36	4.85	5.10	4-75	4.46	3.45	3.24	90.9	2.47
September	4-24	5.14	1.62	3.83	2.07	5.99	4.63	4.52	0.62	1.81	9.43	4.30	1.37	61.9	1.53	1.70	1.80	5.45	1.45	2.70	1.57	1.30	3.93	2.65	0.21	4.03
October	5.32	2.55	2.36	3.06	3.69	5.16	5.18	4-15	4.40	4-07	4.39	2.30	4.37	3.19	61.9	2.85	4.67	9-24	2.38	3.54	2.08	4-09	1.83	99.9	3.38	3.74
November	3.34	1.79	*5.48	2:16	6-77	4-30	3.64	3.68	2.93	3.74	1.49	5.14	3.26	1.48	3-73	6.01	2.39	3-90	4-20	4.49	3.59	3.56	3.03	1.52	5.43	4-50
December	6.34	3.30	2.93	3.82	0.16	7.52	3.15	4-27	4:30	5.04	5.97	5.43	4.33	3.21	5.50	3.18	3.48	5.06	3.08	69.0	5.01	4.24	3.12	8.01	13.	7.25
TOTAL	46-85	25.62	36.04	37-70	36.89	44-75	41.81	36-48	43.36	37-03	40-71	41.52	40-12	36.60	45.54	30-62	32-90	50.04	34-30	34.13	44-41	42-99	39-56	45.52	43.86	39-36

#### ANNUAL REPORT OF THE BOROUGH ANALYST.

# ANALYTICAL LABORATORIES,

54, Arcade Chambers, St. Mary's Gate, Manchester,

15th January, 1912.

To the Chairman and Members of the Health Committee of the Corporation of Bury.

#### Gentlemen,

In accordance with Section 19 of the Sale of Food and Drugs Act, 1875-1899, I herewith beg to report upon the various samples examined by me for the year ending December 31st, 1911.

During the 12 months your Inspector, Mr. H. C. Cass, has submitted to me 195 samples, consisting of the following articles:—

Butter	91
Milk	57
Milk (Skimmed)	3
Cheese	4
Lard	5
Margarine	1
Coffee	3
Pepper	2
Flour	1
Spirits	10
Drugs	10
Tinned Foods	8
Total	195

I made a careful examination of each of these samples, and found seven of them to be adulterated, viz.: Three of the butters contained an excess of water, amounting to 4 per cent., 5.6 per cent., and 10.15 per cent. above the legal limit of water allowed, and two of the butters were found to be margarine. I found two

of the milks to be deficient in milk fats, equal to an abstraction of 10 per cent. (No. 580) and 20 per cent. (No. 747) respectively. All the other samples were found to be genuine.

The adulteration is equal to 3.59 per cent.

Out of the 195 samples received, 103 of them were "informal, or test samples." That is, they were collected by the Inspector or his agents, who would not carry out the formalities prescribed by the Sale of Food and Drugs Acts. No sample found to be adulterated, taken in this manner, could form the basis of a prosecution against the vendor, but they gave some idea as to the quality of the articles sold over the counter in an ordinary everyday manner.

In the cases of the informal samples of butter herewith referred to, the discovery of three of them containing an excess of water, led to the Inspector taking three official samples, which were found to be genuine, while in the case of the butter, found to be margarine, the official sample proved to be margarine also. The vendor was prosecuted, convicted, and fined 40s. and costs.

Of the 57 samples of milk examined, 80 per cent, were of excellent quality, but the remainder came so near the standard limits in both fats and non-fatty solids, as to suggest that the vendors had profited by a study of the question of standards.

One of the samples (No. 580) was found to be 10 per cent. deficient in milk fats, and another (No. 747) was deficient to the extent of 20 per cent. of milk fats.

In the case of the three samples of skimmed milk, the Local Government Board's Regulations stipulate that skimmed milk shall not contain less than 9 per cent. of milk solids, and I here give you the particulars of analysis of each of the three samples which have come under my notice during the year:—

		No. 709	9.	No. 739.	No. 742.
Milk fats		 1.5%		2.4%	 2.0%
Milk solids, not	fats	 9.2%		9.1%	 9.3%
Total milk	solids	 10.7%		11.5%	 11.3%

These figures appear to have some significance. Milk is assumed to be genuine if it contains not less than 3 per cent. milk fats, and 8.5 per cent. milk solids not fats, whilst skimmed milk containing 9 per cent. of milk solids need not of necessity contain any milk fat at all. Judged, therefore, by the standards required for milk, these samples of skimmed milk would be as follows:—

No. 709 would be milk deficient to the extent of 50% fats.

I understand your Inspector only paid the price prevailing in this district for skimmed milk, but the quality of the articles sold to him, particularly in the cases of Nos. 739 and 742, would suggest that any ordinary member of the milk-purchasing community might have to pay the price of milk. The addition of skimmed or separated milk to new milk has become very prevalent, and as it is likely to lead to fraudulent practices notice should be taken of the unnecessarily rich qualities of samples of so-called skimmed milk. We have had occasional cases similar to these before, but not quite so marked as the cases here referred to.

I have found no trace of the usual "preservatives" used in the milk trade in any of these samples.

I found the tinned foods submitted to me to be perfectly sweet and wholesome. There was, however, a minute trace of tin discovered in the pineapple and in one of the salmons, but not in sufficient quantity as to be injurious to health.

These tinned samples consisted of-

3 samples of salmon.

- sardines.
- I ,, herrings.
- I ,, lobster.
- ,, pineapple.

The ten samples of drugs examined were as follows:-

1 sample of glycerine.

I ,, olive oil.

I ,, cod liver oil.

1 ,, castor oil.

I ,, bees' wax.

1 ,, gentian root.

1 ,, spirits of nitre.

1 ,, camphorated oil.

1 ,, liquorice powder.

1 ,, Gregory's powder.

Of these the samples of glycerine, olive, cod liver and castor oils were found to be genuine and taken as a whole of first-class quality. The spirits of nitre contained 1.75 per cent. ethyl nitrite, which is the lowest amount permissible, whilst the camphorated oil, liquorice powder, and Gregory's powder fully conformed to the prescriptions of the British Pharmacopæia.

I remain,

Yours faithfully,

THOS. J. HUTCHINSON, F.I.C.,

Borough Analyst, County Borough of Bury

## INSPECTION OF CANAL BOATS.

PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY,

January 10th, 1912.

To Dr. G. Granville Buckley, Medical Officer of Health.

Dear Sir,

CANAL BOAT ACTS, 1877 AND 1884.

In accordance with the above Acts, I have pleasure in submitting to you the Annual Report directed to be made by the said Acts.

I have to report that no boats registered under the above Acts have visited the wharf at Bury Bridge during the year 1911.

I am,

Yours faithfully,

SAMUEL KAY,

Canal Boat Inspector.

# REPORT OF NURSE WALTON.

#### PUBLIC HEALTH DEPARTMENT,

PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee.

### Gentlemen,

I beg to present to you the following report, being a summary of the work carried out during the year 1911:—

#### SUMMARY OF VISITS.

- 1104 visits to houses where births have been registered.
- 200 visits to houses in which deaths in infants under one year of age have occurred.
- 238 visits to workshops where women are employed.
  - 82 visits to homes of outworkers.
- 648 visits to homes in which cases of suspected Measles, Whooping Cough, Ringworm, &c., existed.
  - 33 visits to houses for disinfection after Phthisis and Puerperal Fever.
  - 6 Puerperal cases visited.
  - 59 notifications of Phthisis visited under the Public Health (Tuberculosis) Regulations, 1908.
- 53 visits to patients notified as suffering from Phthisis by voluntary notification.
- 80 visits to patients discharged from Aitken Sanatorium.
- 139 visits under the Shop Hours Act.
- 121 visits under the Shop Assistants (Seats) Act.
- 465 re-visits to babies during the Summer Diarrhœa season.
- 249 visits to Midwives.
  - 6 visits to uncertified women, practising as Midwives, who have previously been cautioned.
- 30 visits to investigate complaints of dirty homes and surroundings.
- 455 Smallpox contacts.

BIRTHS.—During the year I have been able to obtain information in 1,104, or 92.77 per cent., of the total (1,190) births registered as regards the feeding, &c., of the infants. Advice has also been given where necessary with regard to the feeding and general care of the children.

FEEDING.—631, or 58.06 per cent., of the infants were being fed naturally; 296, or 25.90 per cent., were fed by bottle; 162, or 14.67 per cent., being fed partly by breast and partly by bottle. 15, or 1.36 per cent., were fed by spoon.

From the above it will be seen that the percentage (25.90) of the bottle-fed children shows a slight increase as compared with the previous year (20.74). This is a very unsatisfactory feature. But it is pleasing to record that of the children fed by bottle it is only on very rare occasions that the old style of bottle with its long filthy tube is met with.

Of the 1,190 births registered, 145 died before the end of the year. Of these 10, or 6.89 per cent., occurred in breast-fed children; 84, or 57.93 per cent., occurred in bottle-fed children; 1, or 0.68 per cent., occurred in children partly fed by breast and partly by bottle; 12, or 8.28 per cent., occurred in children fed by spoon; 38, or 26.20 per cent., died within a few days of birth.

Deaths.—200 deaths have been recorded of children under one year of age. The following is an analysis of the nature of feeding:—

133, or 66.50 per cent., were bottle-fed.

13, or 6.50 per cent., were fed naturally.

4, or 2.00 per cent., were partly breast and partly bottle fed.

12, or 6.00 per cent., were spoon-fed.

38, or 19.00 per cent., died almost immediately after birth.

Of the above deaths (200), 45 were attributed to Diarrhœa, and from the information obtained it was found that all of these occurred in bottle-fed children.

Summer Diarrhea.—In the early part of the year special note was made of the bottle-fed, delicate, and seemingly neglected

babies, and during the Diarrhœa season I re-visited all such cases, gave the necessary advice as to the cleanliness of homes, bottles, &c., and practical instruction in the preparation of infants' foods. Particulars were taken after the occurrence of deaths from this disease.

#### DIARRHŒA DEATHS.

Year.	No.	of Deaths	. В	Bottle-fed.			Breast-fed.	
1905	******	33	27, or 8	1.82 per	cent	6, or	Breast-fed. 18.18 per e	cent.
1906		43	35, or 8	1.40 per	cent	8, or	18.60 per	cent.
1907		9	6, or 6	6.60 per	cent	3, or	33.40 per	cent.
							35.00 per (	
1909		12	11, or 9	1.67 per	cent	I, or	8.33 per 6	cent.
1910		19	17, or 8	9.47 per	cent	2, or	10.53 per 6	cent.
1911		45	45, or 10	00.00 per	cent	o, or	0.00 per	cent.

MIDWIVES.—As regards Midwives practising in the Borough, speaking generally, they have complied with the rules and regulations according to the Midwives' Act.

PUERPERAL FEVER.—I have investigated in every case the Midwife's mode of procedure for some time before and after any case of Puerperal Fever which may have occurred in her practice, and have supervised the disinfection of bag and appliances, also personal cleanliness. In each case the Midwife was interviewed by the Medical Officer of Health.

Workshops.—During the year I have paid 238 visits to workshops where women are employed, and it is pleasing to record that the conditions under which the work is carried on are very satisfactory as regards cleanliness, light, ventilation, and provision of suitable sanitary conveniences. In cases where limewashing has been advised, such work has been carried out at the earliest convenience.

SHOP ASSISTANTS' (SEATS) ACT.—121 visits have been paid to shops, and in each case it was found that the sections contained in the above Act were being complied with.

SMALLPOX.—In connection with the outbreak of Smallpox which occurred in the early part of the year, at the request of the Medical Officer of Health, I visited 455 houses in respect to the

supervision and control of persons who had been in contact with patients suffering from Smallpox. I also assisted the Medical Officer of Health with a number of patients (female) who were either being vaccinated or re-vaccinated at the Public Health Office. I also undertook the disinfection of the clothing of all female contacts.

Outworkers.—Three lists of outworkers were received during the year, containing 65 names and addresses, to which I have paid 82 visits. In the majority of cases I found the respective rooms in which the work was being carried on in a very satisfactory condition. In a few instances, however, I have recommended that the workroom be cleansed and limewashed, and in each case the necessary work has been carried out.

Overcrowding.—During the year, in the course of my visits, the following houses have been found in which overcrowding occurred.

The following are particulars of the cases:- \*

- (1) This house was of the back-to-back type, two up and two down. Occupied by mother aged 56 years, son 24 years, son 16 years, and daughter 21 years. This family sleep in one bedroom containing three beds. Also married daughter, husband, and three children aged eight years, five years, and four months; and husband and wife, with daughter aged 16 years. These two latter families sleep in one room containing two beds. The house is dirty and badly ventilated. On the same day of visit the third family removed, and shortly afterwards the first family removed.
- (2) The house consists of a living room with a small scullery attached, and two rooms upstairs, and was occupied by the following:—Mother, aged 65 years; husband, 69 years; uncle (brother to mother), 56 years (Phthisis case); married daughter, 35 years; husband, 37 years; boy four years, and girl two years; married daughter,
  - boy four years, and girl two years; married daughter, 30 years; and also two children said to be on a visit. The Phthisis case was removed to the Union Infirmary, and the family of four removed to another house.

(3) This house consists of one room up and one room down, and was occupied by the following:—Wife, aged 36 years; husband, 39 years; daughter, 15 years; son, 13 years; son, 11 years; son, nine years; son, seven years; son, four years; baby, 13 months. It was arranged that the daughter should sleep with a relative, and the eldest son with a neighbour until a larger house was procured.

Visits to investigate complaints of dirty homes and surroundings were made. In many instances the homes were in a dirty condition. These houses were afterwards kept under observation, with a result that a decided improvement soon became manifest.

In cases where the children were found to be verminous, it was reported to the Inspectors of the Society for the Prevention of Cruelty to Children.

During the course of my visits to Houses let in Lodgings for the purpose of enquiring as to the feeding of infants, &c., I found these rooms, speaking generally, to be in a fairly clean condition.

# PHTHISIS (NOTIFICATION).

Under the Public Health (Tuberculosis) Regulations, 1908, 59 notifications have been received, 22 being on Form A, 32 on Form B, and 5 on Form C. Eight notifications have been received under the Public Health (Tuberculosis in Hospitals) Regulations, 1911, and 27 notifications under the voluntary system in vogue in the Borough.

Much valuable information has been obtained from the notifications, as will be seen from the under-mentioned list:—

- Female. Aged 52. Husband said to be suffering from Phthisis.
- Male. ,, 5½. Father suffering from Phthisis.
- Female. ,, 38. Lodged with brother who died of Phthisis three months ago.
- Male. ,, 38. Wife died of Phthisis four years ago.
- 5. Female. ,, 57. Husband and two sisters died of Phthisis

6.	Female.	Aged 25	. Parents died of Phthisis, four children also suffering from Phthisis.
7.	Male.	,, 39-	Mother died of Phthisis, four other mem- bers of family suffering from Phthisis.
8.	Female.	,, 19.	Mother and brother-in-law died of Phthisis.
9.	Male.	,, 45	Four members of family suffering from Phthisis.
IO.	Female.	,, 28.	Father died of Phthisis.
II.	Male.	,, 49-	Wife suffering from Phthisis.
12.	Female.	,, 17	Phthisis on both father and mother's side of family.
13.	Female.	,, 37	Father died of Phthisis.
14.	Female.	,, 28	Father died of Phthisis.
15.	Male.	,, 46.	First wife died of Phthisis.
16.	Male.	,, 30.	Father died of Phthisis.
17.	Female.	,, 26	Father and grandfather died of Phthisis.
18.	Female.	,, 18.	Father died of Phthisis. Brother suffer- ing from Phthisis.
19.	Female.	,, 41	Mother died of Phthisis, father (aged 28) died of Phthisis, brother (aged 46) died of Phthisis, daughter (aged 8) suffering from Phthisis.

I remain, Gentlemen,

Yours obediently,

LILIAN E. WALTON.

#### REPORT OF MEAT INSPECTOR.

PUBLIC HEALTH DEPARTMENT,
PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee of the County Borough of Bury.

Gentlemen,

I have pleasure in submitting to you my report for the year ending December 31st, 1911, on the inspection of Meat, Dairies, Cowsheds, Bakehouses, &c.

During the past year the various animals, carcases, &c., passing through the Public Abattoirs have been carefully examined, both before and after slaughter, and, generally speaking, the meat retailed in the Borough has been of a high standard, and fully equal to that of the past few years.

During the year it was found necessary to pay special attention to 86 carcases, of which number 67 were affected with Tuberculosis in varying degrees. These consisted of 19 cows, 6 bulls, 11 heifers, 4 bullocks, and 27 pigs. The remaining 19 were variously affected.

Of the cattle affected with Tuberculosis in only one instance was it found necessary to destroy the entire carcase and organs, the disease being extensive and generalised. In several instances considerable portions of the carcases and the whole of the internal organs were destroyed, and of the remainder the affected parts or organs were destroyed, after careful stripping had been carried out.

Of the pigs found to be affected, two entire carcases were destroyed (the disease being generalised), in several instances the heads and portions of the forequarters, and in the remainder the heads and such of the internal organs as were diseased.

It was also found necessary to condemn and destroy the carcases of six sheep (died or slaughtered while in a moribund condition) and one bull (Anthrax), this bringing the number of entire carcases destroyed to ten.

The following organs (variously affected) were also destroyed, viz.:—26 beast livers, two beast lungs, two beast kidneys, two beast udders, 13 pig livers, 10 sheep livers, and one sheep lungs.

On three occasions I have been called upon to inspect carcases slaughtered in emergency upon farms in the Borough. In each of these slaughter had been performed sufficiently early to enable the carcase being passed as fit for food.

I have also to report that one case of Anthrax occurred in the Borough during the year. This was a bull which was slaughtered in emergency at the Abattoirs, when the nature of the disease being apparent on post-mortem, the carcase was reported in the usual way and the necessary disinfection and cremation carried out.

During the same period the butchers' shops, fish shops, &c., have been constantly kept under supervision, regular and frequent visits having been paid to the same; the meat, fish, &c., coming under observation having been, with few exceptions, of satisfactory quality.

One hind quarter of frozen beef (bonestink), one box of frozen beef livers (putrid), three hind quarters of frozen beef (putrid), 2-cwts. flats and briskets (English, putrid), and one box of codfish (unsound) were destroyed at my request.

In every instance where the extent or nature of the disease has rendered the carcase doubtful, it has been reported to the Medical Officer of Health, and his advice sought thereon, this necessitating the attendance of him on several occasions.

#### FARMS.

of which there are 63. These have been kept in a fair state of cleanliness, and show steady improvement in their sanitary condition.

It was, however, necessary to warn one occupier for neglecting to limewash, and one occupier for the offence of slaughtering pigs on farm premises. At Barlow Fold Farm the entire drainage has been taken up and re-laid in a satisfactory manner, and at several other farms minor alterations have been carried out, especially with regard to ventilation.

#### BAKEHOUSES.

The bakehouses have been kept under observation, and have been carried on in a satisfactory manner, there being no complaints to record. One application was received for permission to use a cellar as a bakehouse, this being granted by your Committee.

#### OFFENSIVE TRADES.

180 visits have been paid to the various offensive trade establishments in the Borough. No complaint has to be recorded against any of these premises, which have been carried on in a satisfactory manner.

#### ICE CREAM AND MILK SHOPS.

These have been kept under observation, one person being warned to cease the manufacture of ice cream owing to his premises not being satisfactory.

#### KNACKER'S YARD.

Regular and frequent visits have been paid to the knacker's Yard, generally three times weekly.

The business has been carried on with as little nuisance as possible, having regard to the nature of the work.

The number of animals received during the year was: 127 cows and 228 horses.

Of the cattle 75, or 59.05 per cent., were returned as tuberculous; 48, or 37.80 per cent., as due to some form of inflammation; and 4, or 3.15 per cent., to various causes.

I am, Gentlemen,

Your obedient servant,

W. P. OPENSHAW, Cert. San. Inst.,
Inspector of Meat and other foods.

# REPORT OF INSPECTOR HAWORTH, INSPECTOR OF NUISANCES.

PARSONS LANE, BURY.

To the Chairman and Members of the Health Committee.

Gentlemen.

I have pleasure in presenting to you my tenth annual report, this being a summary of the work done in the Sanitary Department.

#### REMOVAL OF NUISANCES.

In the removal of nuisances connected with privy and pail closets progress is still being made in the conversion of these to the water-carriage system; only the fresh-water system, in accordance with your recommendations, has been encouraged. One of the chief drawbacks to this system is the extra rate which is charged by the Joint Water Board on the property when the conversion is made. If the general water rate included one water closet, I have no doubt we should soon see the end of the privy and pail closets in this town. The following table gives the number of conversions which have been made during the past ten years:—

Fresh-water closets... 218 188 261 137 131 121 209 191 107 107
Waste-water closets... — 16 54 70 161 204 199 120 139
218 188 277 191 201 282 413 390 227 266

In practically all cases of conversions it has been found necessary to re-drain the houses on account of the drains passing through the yards of the adjoining houses; new connections have been made to the sewer and each house separately drained. The old gullies have been taken out, and self-cleansing gullies with channel dishbricks substituted. The middens in connection with the same, if good structurally, are filled up to a height of about nine inches above the adjoining ground, and a door 4-ft. by 2-ft. fixed to facilitate cleansing. In cases where structural alterations

have to be made the ashbin system is adopted in lieu of the ashpits, the ash-bins allowing a more speedy collection, and preventing
an accumulation of filth and other objectionable matter. In 18
houses the drains have been re-laid and connected separately to the
sewers; junctions have been made for branches to w.c.'s, thus
minimising the cost when conversions are made. The average cost
to the property owner, even when fittings (pedestal and cistern)
have been provided free, amounts to the sum of five pounds,
without any structural alteration.

The work of examining and testing drains and sanitary fittings on receipt of complaints, or at the occupiers' or owners' request, is carried out by applying the smoke and chemical tests. In all cases where defects have been found the drains have been re-laid, and thin cast-iron soil pipes substituted by heavy metal pipes, the joints of the pipes being made in a satisfactory manner.

#### NOTICES.

Housing and Town Planning Act, 1909.

30 closing orders have been served under Section 17 of the Act, and three notices under Section 15.

Public Health Acts, 1875 to 1907.

Thirty-one statutory notices have been served during the year in connection with the following matters:—

#### FACTORIES AND WORKSHOPS.

Eighteen to abate smoke nuisances.

One to abate nuisance caused by insanitary privy closets.

One to provide more efficient ventilation.

#### DWELLING HOUSES.

Three to abate nuisance in connection with privy closets.

One ,, ,, ,, choked drains.

One ,, ,, ,, defective drains.
One ,, ,, ,, damp houses.
Nine ,, ,, ,, dirty houses.
One ,, ,, insanitary wash-house.
One

One ,, ,, ,, insanitary stable.
One ,, ,, ,, an accumulation of stable manure.

Preliminary notices are served in all cases, and if possible personal interviews are made, before a legal notice is served, this course having the effect of getting the nuisances abated at once without the necessity of having to report them to the Health Committee.

Number of preliminary notices served	113
Number of letters in lieu of preliminary notices	252
Number of verbal notices	158
Number of letters sent other than notices	248
Number of special reports re sanitary fittings and	
drains	16
Number of notices served on occupiers	24
Number of notices served on occupiers of factories	
and workshops	15
Number of notices received from H.M. Inspector of	
Factories and Workshops, and copies served on	
occupiers	9

#### PROSECUTIONS.

Two prosecutions were taken for non-abatement of the smoke nuisance. Fines of 40s. and costs and an abatement order were made in each case.

Three summonses were taken against a landlord of a house let in lodgings, for non-compliance with the Bye-laws. Fines of ros. and costs were made in each case. The following table gives particulars of nuisances occurring in which preliminary notices have been served:—

Number of Notices.	Affect- ing.	NUISANCES.	Houses Affected
		Factories and Workshops.	
5	18	Workrooms requiring limewashing	_
4	24	Pail closets in a defective condition	
3 1		Insufficient closet accommodation Water closet without a sufficient supply of water	_
1		Water closet cistern out of order	192
2		Water closet drains choked	
2		Defective drains	
1		Insufficiently drained	-
2		Discharging steam into sewer	-
1		Defective eaves-troughing	_
3		Accumulation of refuse	_
1		Effluvium nuisance	-
1		Burning offensive refuse in yard	-
2		Dangerous places	-
		Dwelling-Houses.	
4	4	Damp houses due to defective or without	
		damp-proof courses	4
. 3	3	Damp houses due to being without cavity	3
7	7	,, ,, ,, defective house roofs	
12	17	,, ,, ,, troughing	
		and spouts	17
27	27	Houses to cleanse	27
27	88	Houses to repair	40
2	2	Houses overcrowded	2
	1	Defective gas mains	1
8	8	Defective chimney stacks	11
5	5	Animals kept so as to be a nuisance	5
15	15	Accumulation of manure and refuse	12
15	15	Defective yard surfaces	17
10	12	Foul yard surfaces	28
5	5	Dangerous places	6
8	13	Water supplies insufficient	27
16	16	Choked passage drains	
56	71	Choked yard drains	129

NUISANCES.

Number of Notices. Affecting. Houses Affected.

28	40	Choked water closet drains	97
87	44	Choked waste-water closet drains	70
33	85	Choked rain-water pipes and drains	48
26	64	Defective drains	81
7	17	Untrapped drains	27
2	10	Defective traps to drains	11
9	9	Defective waste pipes	11
1	1	Untrapped waste pipes	1
3	3	Waste pipes connected direct to drains	5
8	3	Defective sanitary fittings	8
86	39	Defective rain-water pipes	48
30	39	Defective eaves troughing	48
12		Without proper eaves troughing	15
15	17	Closets without accommodation	30
24	84	,, structurally defective	104
4	4	,, and approaches foul	. 5
20	22	,, cisterns out of order	47
8	5	,, water pipes burst	14
7	9	" without a proper water supply	15
3	8	" with defective pedestals	9
5	5	,, with defective flush pipes	10
3	8	,, with defective soil pipes	8
		,, with defective ventilators	8
17	18 112	Tippler closets out of order	22
38 30	75	Privy closets offensive	155
17	21	Pail closets defective	111
13	100000	Ashpits—insufficient	27
18	13 24	Ashpits without proper doors	24
4	5	,, ,, ,, fastenings	41
8	0	,, to empty (added areas)	18
0	-	Miscellaneous nuisances	

with old property ... ... ... ... ... ... 218

Privy middens altered and converted to dry ashpits ... 60

Privy middens pulled down and ashbins substituted	20
Number of ashbins provided (galvanised iron)Fixed	19
,, ,, ,,Portable	40
Number of dry ashpits provided	63
Number of defective ashbins replaced by new ones	24
Ashpits provided with new doors or repaired	32
Ashpits and privy middens repaired or modified	13
Pail closets repaired structurally	29
New pails provided to pail closets	54
Fresh-water closets put in order (cisterns 22, pipes 13)	35
Waste-water closets put in order	17
Traps of waste-water closets unstopped	379
Traps of fresh-water closets unstopped	78
Water closet pedestals, soil pipes, and ventilating pipes	
renewed	5
Sanitary fittings (other than water closets) repaired or	
renewed	2
Choked drains unstopped and cleansed-cellars 2,	
passages 17, yards 58, rain-water pipes 26,	
water closets 39, waste-water closets 52	194
Defective drains taken out and new drains re-laid	_
Waste pipes trapped and repaired	14
Defective rain-water spouts renewed	42
Defective eaves gutters renewed	34
Rain-water pipes and drains—intercepting traps fixed	41
Defective yard pavement repaired 13, yards cleansed 11	24
Houses in which repairs to plaster, roof, and woodwork	
have been carried out	43
Houses cleansed and limewashed	25
Cases of overcrowding dealt with	I
Defective fireplaces and chimney flues repaired	7
Animals and fowls removed	5
Foul accumulations removed	15
Nuisances of a miscellaneous character dealt with	17
Buildings taken down	4

#### SMOKE OBSERVATIONS.

108 smoke observations of the mill chimneys have been taken, 107 being of 60 minutes and one of 15 minutes' duration. The aggregate amount of black smoke evolved was 432 minutes, which is equal to an average of four minutes' black smoke for each observation. The time limit (five minutes in the hour) permitted by your Council has been exceeded 23 times by 19 firms, the aggregate amount of black smoke emitted by these firms being 299 minutes, which is equal to an average of 13 minutes for each observation.

As early as convenient after each observation a copy thereof is forwarded to the firm in question. This courtesy is much appreciated by the management, as it enables them to at once ascertain the cause of any abnormal emission of black smoke.

The following table gives the result of the twenty-three observations exceeding the limit:—

Initials of Firm.	Black	smoke.	Mode	rate.	No	one.
Initials of Firm.	mins.	secs.	mins.	secs.	mins.	secs
J. K. S. & Co	6	30	35	0	18	30
B. P. M. Co. Ltd	16	0	28	0	16	0
Н. & С		30	30	0	15	30
S. S. & S. (Wat. St.)	21	30	23	0	-15	30
B. D. Co. Ltd	20	30	28	0	II	30
W. L. & S		30	25	45	23	45
S. S. & S. (Heap Bridge)	7	45	28	15	24	0
W. L. & S	5	15	32	0	22	45
O. B. Ltd	20	0	33	0	7	0
*H. & C	27	0	22	0	II	0
C. W. & Co. Ltd	IO	30	21	0	28	30
Y. B	6	30	35	30	18	0
W. P		30	15	0	37	30
J. R. C. & Bros. Ltd	9	0	45	0	6	0
J. W. & S	II	50	31	30	16	50
H. S	IO	0	35	0	15	0
B. F. M. Co. Ltd	5	30	23	30	31	0
B. C. S. & M. Co	9	0	51	0	0	0
P. S. & M. Co	15	0	41	30	3	30
O. B. Ltd	7	30	5	30	2	0
*O. B. Ltd		30	30	0	2	30
S. S. & Sons	23	30	26	30	10	0
J. W. & S	6	30	32	0	2 I	30

Legal notices were served under Section 94, Public Health Act, 1875.

\*Prosecuted for non-observance of notice.

Two prosecutions were taken for non-abatement of the nuisance, the result being that magistrates' orders for abatement were made and the firm fined in each case 40s. and costs.

#### INFECTIOUS DISEASES.

1,174 visits have been made to houses in which cases of infectious diseases have occurred, and to contacts with patients who were suffering from an infectious disease, and notified to the Medical Officer of Health, the number of notifications received being:—

Smallpox	30
Scarlet Fever	220
Diphtheria	
Enteric Fever	
Erysipelas	32

On receipt of each notification the home is visited, and the patient is isolated, either by removal to the Hospital or placed in a separate room at their own home. If the patient is kept at home, instructions are given as to isolation and disinfection, and the house is revisited during the period of convalescence. The sanitary condition of the house is ascertained, and when defects are found the owners are communicated with, and a report of each case is submitted to the Medical Officer of Health.

The practice of notifying the owner and requesting him to adopt the water carriage system of closets in lieu of the privy midden type is carried out, when a privy midden is found in connection with a house in which a patient is suffering from Enteric Fever or Diphtheria.

During the epidemic of Smallpox, each family was kept isolated at their home for a period of 14 to 18 days after the case had been notified, your Inspector visiting each house daily and supplying them with the necessary food, &c. In only one case was there a person infected during the period of isolation.

#### COMMON LODGING-HOUSES.

There are 24 houses on the register of Common Lodginghouses, and to these places 130 visits were made during the year.

Generally speaking the houses are kept in a fairly clean condition, and will bear comparison with the standard of cleanliness found in private houses.

All the houses were limewashed, in compliance with the Public Health Act, during the first week in April and October.

The following nuisances were dealt with during the year, and for which letters or notices were sent:—

- 5 in connection with water closets choked.
- 3 ,, insanitary closets and ashpits.
- 3 ,, structural defects.
- 4 to repair defective eave gutters and rain-water pipes.
- 5 in connection with choked and defective drains.
- I for house not having a sufficient supply of water.

In one instance the structural defects were such that the complaint was dealt with as a dangerous building, by notice, and part of the structure rebuilt.

During the year the Health Committee have appointed, under Section 85 of the Public Health Act, 1875, one police-sergeant and two constables as additional inspectors of Common Lodginghouses. This course is appreciated by your Sanitary Inspectors, who have long recognised the necessity for the supervision of these houses on other than sanitary matters.

Two transfers of the licence as registered keepers were sanctioned by the Health Committee during the year.

#### HOUSES LET IN LODGINGS.

The number of houses on the register at the end of the year is 42, four having been given up and twelve added during the year, the number of rooms being 212, which are registered for 471 adults and 82 children.

The houses are inspected periodically by your Inspectors and the plain clothes police officer appointed for this purpose. The rooms have been kept clean, and the following notices have been served to abate nuisances:—

3 in connection with insufficient closet accommodation. foul privy midden. defective water closets. 2 choked drains. 3 defective waste pipe. 1 defective rain-water spout. Ι defective pavement in yard. 2 foul passages and yard. 2 ,, defective flag passage. Ι defective ashbin. 1 ,, accumulation of refuse. (room verminous) to fumigate and - 9 9 cleanse. limewashing and stripping paper off 3 walls.

The houses are limewashed at the specified time in accordance with the Bye-laws, a copy of which has been presented to each landlord.

It was necessary in one case to take legal proceedings to get the abatement of nuisances caused by defective water closet, insufficient number of water closets, and unpaved yard surface at one house. The landlord was fined 10s. and costs in each case, and he subsequently gave up the house.

#### EXPLOSIVES ACTS.

Forty-three persons were registered for the sale of explosives during the year as required by these Acts, 40 being for the sale of fireworks as mixed explosives, two for the sale of gunpowder, and one licence was granted to store explosives for quarry purposes. The sale of fireworks lasts only for a short time, i.e., about three weeks in the latter end of October and the beginning of November. All the shops are visited during this period. Dummy fireworks are now exposed for advertising purposes. Gunpowder sold by the ironmongers and locksmiths is kept in the safes in small quantities.

### PETROLEUM ACTS.

Under these Acts two licences have been granted for the keeping of petroleum, six for petrol, and three for calcium carbide. One application was transferred to a Sub-Committee to inspect the proposed store, and after inspection and the carrying out of certain suggestions, the licence was granted.

#### SHOP HOURS ACTS.

The shops within the Borough are periodically visited. In several instances the notices required under Section 4 of the Shop Hours Act were absent. The occupiers, on being informed of the breach of the Act, quickly obtained the notices from the Health Office. The number of hours which Section 3 of the Act allows, i.e., 74 hours, is seldom attained, the hours being regulated by the respective trade associations. The hairdressers' and butchers' shops are governed by Closing Orders.

### SUMMARY OF VISITS.

Infectious and contagious diseases	1174
Common lodging-houses	130
Houses let in lodgings	139
Factories and workshops	203
Shop Hours Act	205
Canal boats (wharf)	3
Premises to cleanse and repair	178
Re Housing and Town Planning Act	116
,, Houses without a proper supply of water	8
,, Houses overcrowded	28
,, Flooded cellars	30
,, Houses damp	6
7, Defective rain-water spouts and eaves gutters	210
,, Drains choked, dilapidated, and untrapped	541
,, Defective waste pipes	7
,, Testing drains and fittings	14
,, Water closets	298

Re	Privy middens and ashpits	288
,,	Accumulation of refuse	41
,,	Foul ditches, water courses, &c	5
,,	Smoke nuisances	2
,,	Dangerous buildings	3
,,	Work in progress	396
,,	Appointments and nuisances of a general	
	character	583

In conclusion I have to express my sincere thanks to Inspector Kay for the most able services which he has rendered in the carrying out of the work embodied in this report. I also wish to express my thanks to you for your kind consideration.

I am, Gentlemen,

Your obedient servant,

JOHN HAWORTH, M.S.I.A.,

Certified Inspector of Nuisances and Sanitary Engineer.

## INDEX.

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	PA	GE
Abattoirs	81-	82
Acreage of the Borough		9
Ages, Mortality at Different		21
Aitken Sanatorium		-69
Analysis, Milk		83
Annual Rate of Mortality		9
Annual Rate of Mortality compared with other Towns		25
Antitoxin in Diphtheria		37
Bacteriological Examinations 39,	62-	63
Bakehouses		75
Births		
Births Notification Act	-	30
Bronchitis		-
Calf Hey Reservoir—Rainfall		= 0
Canal Boat Inspector, Report of		72
Cancer		95 89
Cause of, and Ages at, Death		17
Chart—Scarlet Fever, Measles, and Whooping Cough		32
Chart—Scarlet Fever: Weekly Notifications		36
Chicken-Pox		31
Committee, Health		3
Common Lodging-Houses		81
Contents		7
Coroner's Inquests		
Croup, Membranous		
		0,
Dairies, Cowsheds, and Milkshops		82
Deaths of Non-residents		
Deaths, Number of		14
Deaths, Uncertified		-
Density of the Population		24
Diarrheea		9
Diphtheria and Membranous Croup	26	37
Diseases of the Respiratory System	21	22
Disinfection		71
District Mortality Rates		16

	A 41	OL
Elevation of the Borough Enteric Fever	38-	9-41
Erysipelas Estimated Population		42
Factory and Workshop Act		77 82
Feeding of Infants		29
Florence Nightingale Hospital—Cases Removed to		34
Food and Drugs Act		83
Gin Hall Reservoir		72
Greenwich Observatory, Rainfall		12
oreenven observatory, Mannan		
Hapton Reservoir		72
Haworth, Report of Inspector 10	5-1	116
Homeworkers		75
Hospital for Infectious Diseases, Number of Cases treated i	n	34
Houses Let in Lodgings		81
Housing of the Working Classes		78
Housing Problem		78
Housing, Town Planning, &c., Act, 1909	70-	
Trousing, Town Training, act, Act, 1909	19	00
Illegitimacy		
Infant Mortality		13
Infant Mortality Analysis of	20-	18
Infant Mortality, Analysis of		
Infant Mortality of Chief Lancashire Towns		27
Infectious Diseases, Notification of		-34
Infectious Diseases—Deaths and Rates in former years		85
Influenza		60
Inquests		
Inspector Haworth, Report of 10	05-1	116
Inspector Openshaw, Report of 10	)2—1	104
Insurance of Infants		29
Legal Summary		
Lodging-Houses	81,	87
Longevity		23
M-1:		0
Malignant Disease		100
Marriages		14
Measles	53-	
Meat Inspection		81
Membranous Croup	200	-37
Midwives' Act, 1902		84
Midwives' Roll		86
Milk Supply		82
Mortality, Annual Rate of		9

	PA	GE
Mortality, at different ages		21 25
Mortality, in Various Wards		18
Natural Increase of Population		15 30
Notification of Infectious Diseases	I —	34
Notification, School		51
Occupation and Phthisis 60—	40.0	88
Occupation of Mothers		29
Officials of Health Department		4
Outworkers Overcrowding		77 78
Openshaw, Report of Inspector 102		
Phthisis 22, 60—		
Population, Estimated		22 II
Population, Natural Increase of		15
Premature Births		30
Public Elementary Schools and Epidemic Diseases 5	1-	-57
Public Health (Tuberculosis in Hospitals) Regulations,	3-	
D I D	31,	
		42
Quarterly Returns of Infectious Diseases		34
Rainfall	12,	19
Report of Borough Analyst, Summary of		83
Report of Borough Analyst Report of Canal Boat Inspector	)1-	94
Respiratory System, Diseases of 21,	22,	28
Report of Inspector Haworth	. 1	105
Report of Inspector Openshaw	5—1	104
Sale of Food and Drugs Acts		83
Sanatorium, Aitken 6	57-	-69
Sanitary Conveniences, Conversion of		86 -36
School Closures		52

	PA	GE
School Disinfection School Notification of Infectious Diseases 31— Shop Hours Act	-32, 43—  62—	53 51 75 49 50 84 -63 9
Town Planning, &c., Act, 1909, Housing  Tuberculosis Regulations, 1908  Tuberculosis Regulations (in Hospitals), 1911  Tuberculous Diseases  Typhoid Fever	79— 63— 64—  38—	-64 -66 28
Vaccination		24 50 19
Walton, Report of Nurse	96—1  	13 16 34
Ward Distribution, Pneumonia Water Supply Watering of Streets Whooping Cough Workshops	72—  55—	74 59 -57 -77
Zymotic Diseases		27