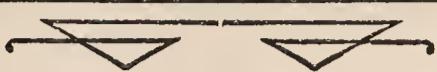


COUNTY BOROUGH OF WIGAN.



THE

Annual Report

OF THE

Medical Officer of Health,

FOR THE YEAR 1919.

TOGETHER WITH

*The Report of the Tuberculosis Officer,
The Report of the Chief Sanitary Inspector,
The Report of the Veterinary Inspector,
The Report of the School Medical Officer.*



WIGAN :

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1920.

THIS Report has been prepared in accordance with the instructions of the Local Government Board, as contained in the Sanitary Officers' (outside London) Order, 1910.

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HEALTH COMMITTEE.

From November, 1919, to November, 1920.

Chairman : Alderman M. BENSON, M.D., J.P.

Vice-Chairman : Councillor J. P'ANSON CARTWRIGHT, J.P.

THE MAYOR.

The EX-MAYOR.

Councillor W. ATHERTON

,, GEO. BURBRIDGE.

,, J. COUNSELL.

,, J. FORSTER.

,, J. FOSTER.

,, J. GORMAN.

Councillor J. HENDERSON.

,, T. HOLLAND J.P.

,, P. MURPHY.

,, F. REES.

,, E. YATES, J.P.

Committee meets on Third Thursday in each month at 3-45 p.m.

SANITARY WORKS COMMITTEE.

Chairman : Alderman W. H. ANGUS.

Vice-Chairman : Councillor T. TAYLOR.

THE MAYOR.

THE EX-MAYOR.

Councillor T. J. ARKWRIGHT, J.P.

,, G. BURBRIDGE.

,, M. CARMODY.

,, J. FOSTER.

,, R. GORE.

,, J. H. GREEN.

Councillor C. W. HEALY, J.P.

,, J. MITCHINSON.

,, F. REES.

,, J. ROSCOE.

,, W. L. WHITE, J.P.

Committee meets on Third Monday in each month at 4-30 p.m.

HOSPITALS SUB-COMMITTEE.

Chairman : Alderman : M. BENSON, M.D., J.P.

Vice-Chairman : Councillor J. P'ANSON CARTWRIGHT, J.P.

THE MAYOR.

THE EX-MAYOR.

Councillor J. FOSTER

,, J. GORMAN

,, T. HOLLAND, J.P.

Councillor P. MURPHY.

,, E. YATES, J.P.

Committee meets Monthly.

HOUSING AND INSANITARY HOUSES COMMITTEE.

Chairman : Councillor E. YATES, J.P.

Vice-Chairman : Councillor J. LOWE.

THE MAYOR.

THE EX-MAYOR.

Aderman T. ASHTON, J.P.

,, A. BYWATER., J.P.

,, E. DICKINSON, J.P.

,, A. S. HILTON, J.P.

Councillor J. P'ANSON CARTWRIGHT, J.P.

,, W. CATTERALL.

,, D. COWSER.

,, J. FORSTER.

,, J. FOSTER.

Councillor R. GORE.

,, J. GORMAN.

,, C. W. HEALY, J.P.

,, T. HOLLAND, J.P.

,, J. JOLLEY.

,, J. MCCURDY.

,, R. PRIOR,

,, A. SANTUS,

,, W. L. WHITE, J.P.

Committee meets on the Second Monday in each month at 3-30 p.m.

Medical Officer of Health's Department, 1919.



Medical Officer of Health,
 Medical Superintendent of Sanatoria,
 Superintendent School Medical Officer,
 Administrative Tuberculosis Officer:

FRED E. WYNNE, B.A., M.B., Ch.B., D.P.H., &c.

Assistant Tuberculosis Officer,
 Assistant School Medical Officer:
 A. AZIZ, M.B., Ch.B.

Chief Sanitary Inspector, &c. :
 CHARLES H. FRANCE (a) (b) (g) (h).

Sanitary Inspectors :
 FRED MARTLEW (b) (c), FRED G. BISHOP, JOHN ASHTON (b)
 Assistants :

ERNEST RICHARDSON.

Lady Health Visitors :
 A. MORT (d) (e) (g) (j), B. CROMPTON (d) (e), E. TOOTELL (b) (d) (h),
 E. RICHARDSON (d) (e) (g), A. NAYLOR, (b) (d) (g).

Tuberculosis Nurse :
 L. WEST (b).

Clerks :
 ARTHUR BYERS, W. J. LOE (Dispensary Clerk), THOMAS BROWN,
 JOHN ROUGHAN, M. M. WHITTLE.

Steam Disinfector Attendant :
 JAMES RISLEY.

Disinfectors :
 GEORGE CROSTON, HENRY PARKINSON, JOHN ARROWSMITH,
 ARTHUR MACKENZIE.

† Temporary Assistants.

(a) Sanitary Inspector's Certificate (Lond.), Royal Sanitary Institute.

(b) Sanitary Inspector's Certificate (Prov.), Royal Sanitary Institute.

(c) Meat Inspector's Certificate, Liverpool University.

(d) Certificate, Central Midwives' Board.

(e) Health Visitor and School Nurse's Certificate, Royal Sanitary Institute.

(f) Sanitary Inspector's Certificate, London Examination Board.

(g) Associate Royal Sanitary Institute.

(h) Member Sanitary Inspectors' Association.

(i) Associate Sanitary Inspectors' Association.

(j) Certificate of Hospital Training.

By order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall

“ prepare an Annual Report, to be made to the end of December in each
“ year, comprising a summary of the action taken during the year for
“ preventing the spread of disease, and an account of the sanitary state
“ of his district generally at the end of the year. The report shall also
“ contain an account of the enquiries which he has made as to conditions
“ injurious to health existing in his district, and of the proceedings in
“ which he has taken part, or advised under the Public Health Act, 1875,
“ so far as such proceedings relate to those conditions ; and also on
“ account of the supervision exercised by him or on his advice, for
“ sanitary purposes over places and houses that the Sanitary Authori-
“ ties have power to regulate, with the nature and results of any pro-
“ ceedings which may have been so required and taken in respect of
“ the same during the year. It shall also record the action taken by
“ him or on his advice, during the year, in regard to offensive trades,
“ and to factories and workshops. The report shall also contain
“ tabular statements (on forms to be supplied by the Local Govern-
“ ment Board, or to the like effect) of the sickness and mortality within
“ the district, classified according to diseases, ages, and localities.”

PUBLIC HEALTH DEPARTMENT,

King Street West,

Wigan,

April, 1920.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have the honour to present herewith my Annual Report on the health of your County Borough during the year 1919. As this is the first year in which it has been possible to attempt to make a return to peace conditions of work, your staff has been tested to the utmost.

I have no hesitation in saying that in view of the tremendous increase caused in the work of a Public Health Department by recent legislation and modern ideas of the functions and responsibilities of a Public Health Department, this experimental year has proved that the pre-war establishment of your Department is inadequate, both as regards staffing and equipment.

There is reason to believe that adequate premises both for clinics and offices will shortly be available, but increases will have to be made in the medical, inspecting, health-visiting, and clerical personnel, if the Public Health work of the Borough is to be carried on in conformity with modern requirements.

The Statistical Summary for the year shows, however, that the health of the population has on the whole been well maintained. The third wave of the pan-demic of Influenza occurred during the first quarter of the year, and was responsible for 170 deaths, but notwithstanding this the corrected death-rate is 16·13, as against 19·26 in 1918, and an average of 17·02 for the last 10 years, and the Infantile Mortality rate is 117 per 1,000 births, as against 122 in 1918.

This, though one of the lowest figures yet recorded for Wigan, is not yet satisfactory.

The marked decline in the Infantile Mortality rate during the War years is, of course, primarily associated with the lowered birth-rate during that period. But other factors have been, the comparative prosperity of the wage-earning classes during most of that period ; the influence of your Health Visitors and the educative work of the Infant Clinics ; the distribution of fresh and dried milk, which undoubtedly preserved many lives which would previously have been sacrificed ; and the measures taken to reduce the number of flies which have certainly helped to control the summer diarrhoea.

This comparative success is the more gratifying as the practical cessation of building and repairing work has, of course, resulted in an actual deterioration of housing and general sanitary conditions.

HOUSING.

While no progress in the actual erection of houses can as yet be recorded, this is by no means the fault of the Housing Committee of the Corporation, who have fought strenuously against the same influences which have obstructed housing progress throughout the country. In order to obtain accurate knowledge of the task before them the Corporation decided towards the end of the year to appoint twelve temporary inspectors to complete a Housing Survey of the Borough. These men carried out their work on the whole with admirable efficiency and expedition. I have already presented to the Housing Committee a Report on the results of this work, which will be found reprinted below in this Report. At the time of writing there is a real prospect that the erection of houses on the Beech Hill site will be commenced at a very early date. Until a sufficient number of new houses are erected, or some temporary accommodation for dis-housed persons is provided it is impossible to make any real progress with the reclamation of insanitary property.

STAFF.

I greatly regret to record the loss by death of Miss Vera Walsh who during the war had been a valued and most capable member of the clerical staff.

My thanks are due to Dr. Aziz for his excellent and painstaking work in connection with the School Inspection and Tuberculosis, and for much valuable help in the Hospitals.

To Mr. France and his staff, and to the Lady Health Visitors my thanks are due for constant and ungrudging work in face of conditions which are often most discouraging.

Again thanking you for your continued confidence.

I have the honour to be,

Gentlemen,

Your obedient Servant,

F. E. WYNNE,

Medical Officer of Health.

PART I

INTRODUCTION

AND

VITAL STATISTICS.

GENERAL CONSIDERATIONS

The County Borough of Wigan, including Pemberton, covers an area of 5,082 acres, and had a population at the 1911 census of 89,171. The estimated population on the 1st of July, 1919, was 83,944, on which figure the statistics in this report have been based. This population is essentially an industrial one, and is concentrated in densely populated areas in Wigan and Pemberton. A considerable portion of the area of the Borough is rural and agricultural, but the proportion of the population living under these conditions is inconsiderable. The presence of this agricultural community is none the less of great importance from the public health point of view, inasmuch as it supplies a large proportion of the milk consumed in the town; and the existence of farming operations in close proximity to densely populated areas is always fraught with a certain degree of danger.

The Borough area forms a considerable part of the Valley of the Douglas. This stream enters the Borough close to its most northern point, and practically traverses the old Borough from north to south, when it turns to the west and then bends northwards forming a loop. During its course through the Borough the stream falls considerably, the bench marks showing that its bed at entry is at a level of 150 feet above sea level, and near its exit 75 feet. It acts as a feeder to the Leeds and Liverpool canal—another waterway traversing the Borough, roughly, from east to west. The Douglas is already polluted on entering the Borough, and further sources of pollution within our area still persist. The periodical cleansing of its bed is a constant source of expenditure to the Sanitary Works Committee; and complaints of nuisance have in the past been dealt with by the application of large quantities of chloride of lime—an expenditure which it would be difficult to justify by results. Practically throughout its course the Borough rises steeply from the banks of the stream; the maximum elevation being 214 feet at Whelley, and 254 feet at the northern extremity of the Borough. The lowest level is in St. Andrew's Ward, near the Leeds and Liverpool canal where the land is liable to floods.

Geologically, the whole of the Borough rests on the Lower Coal-measures or Gannister Beds, which are here very superficial, and in fact outcrop in several parts of the district. The sub-soil is mainly clay, which in places has a depth of nearly 20 feet; but there is an important layer of sand covering a large part of the centre of the town, and extending northwards in the direc-

tion of Standish. In other parts of the Borough sand is found in "pockets." Much of the western portion of the Borough, beyond the Park, lies on a fairly extensive gravel bed.

Great alterations in the levels have taken place as a result of subsidence due to the colliery workings, and this is detrimental to the public welfare by causing accumulations of water in parts of the Borough and interfering seriously with the level of the sewers.

WATER SUPPLY.

The Borough is supplied with water from the Arley, Worthington, Adlington, and Whitley reservoirs, and a service reservoir having a total capacity of 255 million gallons. There is also a well at Wrightington which provides an occasional supply of water of very fine quality derived from the sandstone overlying the coal measures.

The Pemberton water supply is stored in three service reservoirs at Orrell, and an underground reservoir near Bispham Hall, Billinge. These reservoirs are largely replenished by pumping from Nicholson's well, which supplies a large quantity of very pure water. An adjuvant supply was derived by pumping from the Bispham Hall Colliery, but this was recently found by the Borough Analyst and myself to be unsatisfactory, and has been diverted to compensation purposes.

In addition to these supplies, the Corporation takes annually about 182 million gallons of Thirlmere water from the Manchester Corporation.

The daily consumption of water amounts on an average to about 1,610,000 gallons. The gathering ground from which the greater part of this water is derived is mainly agricultural land, but careful precautions are taken to prevent organic pollution as far as possible, and the system of filtration is adequate. Samples of water taken from various parts of the Borough are analysed every month, and the results on the whole are uniformly satisfactory. Particulars will be found in the Borough Analyst's report appended.

MILK SUPPLY.

A considerable proportion of the milk supply is derived from cows kept on farms within the Borough.

A larger amount is imported, chiefly from Lancashire, Cheshire, and North Wales; though a certain amount comes from as far as the neighbourhood of Carlisle.

There are 45 registered cowsheds in the Borough, which are under constant inspection. Under the supervision of your Veterinary Officer, Mr. Woods, these have been, with very few exceptions, reconstructed and brought into conformity with the Cowsheds, Dairies, and Milkshops Orders. Mr. Woods has effected a remarkable improvement by the exercise of constant pressure on the owners; but the condition of milk as delivered to the customer, in Wigan, as elsewhere, is still far from satisfactory.

As mentioned in my report for 1918 the Corporation has established its own herd at the Sewage Farm, and a large quantity of milk of excellent quality has been distributed from this source from the Corporation Depots. During this year arrangements have been made by which this milk is supplied to the Corporation Fever Hospitals, and of the rest the greater part is distributed through our Maternity and Child Welfare Organisation.

Samples of the milk are regularly taken and analysed under the Food and Drugs Acts, and particulars of the results will be found in the report of your Chief Sanitary Inspector.

SEWAGE DISPOSAL—REMOVAL OF NIGHTSOIL, &c.

The whole of the Borough, with the exception of the purely rural areas, is sewered and drained.

The sewage is conducted by a main outfall sewer, which runs in the valley of the River Douglas, to the Sewage Works and Farm at Hoscarr Moss. It is then treated by the addition of sulphate of iron and lime and conducted to long precipitation tanks, the effluent from which is distributed for land filtration on the farm. The nature of the soil, however, has proved unsuitable for this purpose, and the final effluent has been continuously unsatisfactory.

The whole of this question has been carefully considered by the Committees concerned, and is the subject of an exhaustive report by Mr. Midgley Taylor, published in the minutes of the Sanitary Works Committee for the 17th September, 1912, to which the readers of this report are referred. It is expected that the re-modelling of the Works suggested by Mr. Midgley Taylor will be commenced at an early date. It should be noted that Mr. Midgley Taylor's estimate of the filtration area required is based on the normal increase of population, but allowance should be made for an early increase in the normal flow which will have to be dealt with as soon as the water-carriage system becomes more widely adopted.

At present there are 1,611 privy middens in the Borough, all of which, with the exception of 7, are in Pemberton. The conversion of these to the water-carriage system is one of the most urgently required sanitary reforms of the district. Particulars of the number of conversions carried out in recent years will be found below.

There are 6,055 pail closets in the Borough, and 6471 water closets. While the capital cost of converting this large number would be very heavy, it would result in an actual saving to the rates, as during the year under review the cost of collecting, washing and distributing pails was £6,856 4s. 1d., while the indirect gain through the prevention of disease would be incalculable.

The contents of the pails and privy middens are at present discharged into tanks at the Miry Lane Depot, where they are mixed with sifted ashes to form a compost which is loaded into barges and conveyed by canal to farms. The material commands a good price as manure, but its storage and removal gives rise to a serious nuisance. There is a small destructor at the depot, but this can only deal with an insignificant fraction of the material handled. All dejecta from infected houses are dealt with in the destructor; but the whole system is antiquated and unsatisfactory.

VITAL STATISTICS.

STATISTICAL SUMMARY FOR 1918 & 1919.

	1919.	1918.
Civil Population estimated July 1st	83,944	83,859
<i>Births</i> —Males 1074 } Total	2,052	1,886
Females 978 }		
Annual rate of births per 1,000 of population.. ..	24.44	22.49
Ditto on Registrar General's estimated population for 1918-19	22.54	20.94
Ditto for England and Wales	18.5	17.7
Illegitimate births 82, or .97 per 1,000 of population, a percentage of	3.93	3.97
<i>Deaths</i> —Males 695 } Total	1,410	1,548
Females 715 }		
Recorded death-rate	16.79	18.45
Corrected death-rate, on Registrar General's estimated population	16.13	19.26
Ditto in England and Wales	13.8	17.6
Death-rate in 96 great towns	13.8	18.2
Excess of registered births over deaths	642	338
Total deaths from seven principal Zymotic Diseases..	67	123
*Total deaths from all Zymotic Diseases	242	297
Annual rate of mortality from seven principal Zymotic Diseases .. .. .	.78	1.53
Total deaths from Diarrhoea	30	45
Infantile-rate (deaths per 1,000 births)	117	122
Ditto for England and Wales	89	97
Ditto for 96 great towns	93	106
Deaths of infants under 1 day old, number.. .. .	36	23
" " " 1 year (legitimate).. .. .	234	223
" " " 1 year (illegitimate)	7	8

* Including Erysipelas and Influenza.

Acreage.—With an acreage of 5,082, and a civil population estimated at 83,944, we have 16.51 persons per acre.

The Birth-rate and Death-rate are calculated on the figures supplied for these purposes by the Registrar-General, namely, for the Birth-rate 91,028, for the Death-rate 87,384.

The estimated Population is 83,944.

Births.—The number of births registered during 1919 is 2052 (males 1074, females 978), the rate per 1,000 of the population being 24.44. The birth-rate compared with 1918 is 1.95 higher. The birth-rate estimated on the Registrar-General's population for Wigan, July 1st, 1919, is 22.54. The illegitimate births number 82, or 3.99 per cent.

The Mortality-rate.—The deaths for 1919 number 1,410 (males 695, females 715), being an excess of 20 females over males. The recorded rate per 1,000 of the population per annum is 16·79; in 1918, 18·45; thus on a population of 83,944 we have a decrease in deaths of 138 as compared with 1918. There is, therefore, a decrease in the death-rate of 1·66 per 1,000.

The death-rate for each quarter is as follows:—

1919	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes ..	27·13	13·21	10·88	13·35
Zymotics ..	7·65	1·48	1·42	·95

The Zymotic-rate, 2·88, shows a decrease of ·81 for 1919, in the previous year it was 3·69.

DEATH RATES, 1919.

Disease.	No. of Deaths.	Rate.
Enteric Fever	3	·03
Small-pox .. .. .	..	..
Measles	6	·07
Scarlet Fever.. .. .	9	·10
Whooping Cough	4	·04
Diphtheria and Croup	15	·17
Influenza	170	2·02
Erysipelas	5	·06
Phthisis (Pulmonary Tuberculosis)	90	1·07
Tuberculosis Meningitis	4	·04
Other Tubercular Diseases	12	·14
Cancer, Malignant Disease	53	·63
Rheumatic Fever	1	·01
Meningitis	14	·16
Organic Heart Disease	113	1·34
Bronchitis	162	1·92
Pneumonia (all forms)	173	2·06
Other Diseases of Respiratory Organs	4	·04
Diarrhoea and Enteritis (under 2 years)	37	·44
Appendicitis and Typhlitis.. .. .	3	·03
Cirrhosis of Liver	1	·01
Alcoholism .. .. .	..	..
Nephritis and Bright's Disease	31	·36
Puerperal Fever	3	·03
Other Accidents and Diseases of Pregnancy and Parturition	8	·09
Congenital Debility and Malformation (including Premature Birth)	95	1·13
Violent Deaths (excluding Suicides)	46	·54
Suicide	2	·02
Other Defined Diseases	282	3·35
Diseases ill-defined or unknown	64	·76
Total	1,410	16·79

TABLE 1.—WEEKLY RETURNS OF BIRTHS AND DEATHS FOR 1919.

1919. WEEK ENDING.				Deaths from all Causes	Annual Rate per 1000	Deaths from Zymotics	Zymotic- Rate	Births	Annual Rate per 1000
January	4	..	..	33	20.50	7	4.35	40	24.86
„	11	..	..	24	14.91	4	2.48	27	16.78
„	18	..	..	36	22.37	4	2.48	31	19.36
„	25	..	..	31	19.26	6	3.73	34	21.13
February	1	..	..	52	32.33	7	4.35	27	16.79
„	8	..	..	79	49.15	22	13.69	28	17.42
„	15	..	..	64	39.82	27	16.80	39	24.26
„	22	..	..	69	42.96	26	16.18	26	16.18
March	1	..	..	54	33.62	21	13.06	47	29.26
„	8	..	..	32	19.92	9	5.60	27	16.81
„	15	..	..	34	21.17	11	6.84	29	18.05
„	22	..	..	25	15.56	4	2.49	34	21.17
„	29	..	..	36	22.41	11	6.84	34	21.17
April	5	..	..	23	14.32	5	3.11	23	14.32
„	12	..	..	24	14.94	6	3.73	32	19.92
„	19	..	..	22	13.19	5	3.11	27	16.81
„	26	..	..	31	19.30	1	.62	33	20.54
May	3	..	..	12	7.46	..	..	28	17.42
„	10	..	..	26	16.17	2	1.24	32	19.92
„	17	..	..	22	13.67	1	.62	35	21.77
„	24	..	..	21	13.06	3	1.86	40	24.89
„	31	..	..	25	15.55	2	1.24	26	16.17
June	7	..	..	20	12.44	..	..	26	16.17
„	14	..	..	12	7.46	2	1.24	23	14.31
„	21	..	..	13	8.08	1	.62	32	19.90
„	28	..	..	23	16.16	3	1.86	33	20.52
July	5	..	..	26	16.16	..	..	36	22.38
„	12	..	..	16	9.94	1	.62	45	27.96
„	19	..	..	11	6.83	1	.62	37	22.99
„	26	..	..	14	8.69	1	.62	32	19.87
August	2	..	..	21	13.04	1	.62	30	18.63
„	9	..	..	12	7.44	1	.62	29	18.05
„	16	..	..	11	6.82	2	1.24	49	30.41
„	23	..	..	26	16.13	9	5.58	31	19.24
„	30	..	..	16	9.93	..	..	33	20.48
September	6	..	..	15	9.30	4	2.48	39	24.19
„	13	..	..	14	8.68	2	1.24	45	27.91
„	20	..	..	22	13.63	6	3.71	52	32.23
„	27	..	..	24	14.87	2	1.23	50	30.99
October	4	..	..	19	11.15	..	..	68	42.13
„	11	..	..	22	13.62	2	1.23	51	31.57
„	18	..	..	27	16.71	2	1.23	56	34.66
„	25	..	..	19	11.75	1	.61	58	35.27
November	1	..	..	14	8.65	1	.61	60	37.10
„	8	..	..	23	14.21	4	2.47	52	32.13
„	15	..	..	27	16.68	3	1.85	49	30.22
„	22	..	..	24	14.83	2	1.23	44	27.19
„	29	..	..	31	19.14	..	..	79	48.75
December	6	..	..	17	10.49	1	.61	60	37.03
„	13	..	..	22	13.57	1	.61	62	38.24
„	20	..	..	20	12.33	2	1.23	44	27.14
„	27	..	..	17	10.45	1	.61	34	20.91
Transferable	..	..	..	54	..	2	..	14	..

Registrar-General's Estimated Population, 1919 :—

For Deaths, 87,385.

For Births, 91,028.

TABLE II.

MONTHLY LIST OF DEATHS FROM ALL CAUSES AND ZYMOTIC DISEASES WITH RATES PER 1,000
PER ANNUM FOR 1918 AND 1919.

Four Weeks Ending.	No. of Deaths from All Causes.		Annual Rate per 1,000 living.		No. of Deaths from Zymotic Diseases.		Annual Rate per 1,000 living.		Deaths of		
	1919	1918	1919	1918	1919	1918	1919	1918	Infants under 1 year.	Persons over 60 years.	
January 25th ..	124	115	19.94	17.77	21	19	3.41	2.93	23	33	34
February 22nd ..	264	104	41.68	16.06	82	18	13.06	2.77	39	64	19
March 22nd ..	145	112	22.56	17.29	45	8	6.99	1.23	17	39	25
April 19th ..	105	101	16.21	15.74	27	4	4.19	.62	7	32	34
May 17th ..	91	113	14.45	17.60	4	7	.62	1.08	13	28	34
June 14th ..	78	91	12.12	14.17	7	7	1.08	1.08	13	28	21
July 12th ..	81	101	12.58	15.71	5	5	.77	.77	17	34	30
August 9th ..	58	119	9.00	18.52	4	6	.62	.93	10	19	35
September 6th ..	68	87	10.54	13.52	15	21	2.32	3.26	21	18	18
October 4th ..	79	84	12.08	13.04	10	18	1.54	2.63	27	16	22
November 1st ..	82	179	12.68	27.79	6	73	.92	11.32	14	29	35
November 29th..	105	151	16.21	23.29	9	60	1.38	9.33	26	27	34
December 27th ..	76	131	11.71	20.35	5	49	.76	7.69	12	27	30
Transferable	54	60	..	..	2	2	..	..	2	7	10
TOTALS ..	1410	1548	16.79	18.45	242	297	2.88	3.69	241	401	389

TABLE III.

COMPARATIVE STATISTICS OF WIGAN AND OTHER TOWNS.

TOWN.	Population.	Birth-rate.	Death-rate.	Zymotic-rate.	Infantile death-rate per 1,000 births.	Pneumonia death-rate.	Other respiratory death-rate.	Phthisis death-rate.	Deaths from other forms of Tuberculosis.	Figures as to Venereal Diseases.
Accrington ..	43,658	14.0	15.4	0.48	114	1.26	2.93	0.66	0.20	* 45,479
Barrow-in-Furness	72,627	24.2	13.4	0.61	97.7	1.37	1.92	0.97	0.16	4 deaths from Syphilis under 1
Birkenhead ..	149,853	22.5	13.7	1.9	102	1.8	1.4	0.97	0.25	5 deaths from Syphilis. [year.
Bootle (civil)	76,962	23.87	15.0	1.03	96	2.22	3.62	1.04	0.39	80,172 (Total)
Bradford (civil)	282,714	13.40	16.27	0.31	113	1.13	3.21	1.10	0.21	294,504 (Total)
Burnley ..	102,391	15.6	15.16	0.61	117	0.75	2.92	0.91	0.31	
Burton-on-Trent	47,682	16.81	13.51	0.31	88	0.73	1.76	0.98	0.21	* 49,670
Dewsbury ..	55,257	19.0	17.5	0.58	117	1.4	3.9	0.7	0.19	
Halifax ..	106,036	13.0	15.4	0.37	97	—	2.99	1.04	0.22	
Huddersfield ..	105,818	12.66	15.74	0.23	94	1.41	3.56	1.04	0.28	7 deaths. * 118,036
Kingston-on-Hull	279,664	19.3	15.1	0.8	111	1.4	4.4	1.0	0.4	* 291,327
Rotherham ..	72,800	22.75	13.19	1.46	91	1.31	2.88	0.93	0.31	223 cases attended centre.
South Shields	111,502	26.9	17.0	1.04	118	1.56	1.78	1.30	0.63	9 deaths from * 116,152
Stalybridge ..	26,062	15.76	18.0	0.6	126	1.68	4.14	1.15	0.38	[Syphilis. * 27,150
Stockport (civil)	125,629	15.05	13.33	0.31	98.4	1.51	3.63	0.85	0.17	130,868 (Total)
Stockton-on-Tees	60,696	24.19	16.59	1.16	105	1.43	3.21	1.13	0.62	* 63,226
Stoke-on-Trent	239,316	22.5	16.2	1.07	111	1.48	4.02	1.14	0.32	* 249,296
Wolverhampton	96,280	21.9	15.8	0.7	100	2.0	4.4	1.1	0.2	
York ..	74,531	17.2	14.0	0.53	99	0.92	1.3	1.1	0.33	77,639
WIGAN ..	83,944	24.44	16.79	0.78	117	2.06	1.96	1.07	0.18	

* Populations for Birth Rates.

DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
14.55	18.27	15.92	18.42	17.09	19.17	15.42	16.18	18.45	16.79

Average for Ten Years, 17.02.

Infantile Mortality.—The number of deaths of children under one year is 241, or 117 per 1,000 births, and of children over one year and under five years 150, or 1.78 per 1,000 of the population.

These figures compare with 231 deaths under one year, a rate of 122 per 1,000 in 1918.

An analysis of these 241 deaths show that they may be grouped under the following headings:—

1. Premature Birth, Congenital Debility, Malnutrition, and Congenital Malformations	..	..	..	..	..	..	..	95
2. Diarrhœa	..	..	..	..	..	..	..	32
3. Bronchitis	..	..	..	..	..	..	..	25
4. Pneumonia	..	..	..	..	..	..	..	30
5. Whooping Cough	..	..	..	..	..	..	..	3
6. Tuberculous Meningitis	..	..	..	..	..	..	..	1
7. Atelectasis	..	..	..	..	..	..	..	1
8. Erysipelas	..	..	..	..	..	..	..	1
9. Meningitis	..	..	..	..	..	..	..	4
10. Eclampsia Convulsions	..	..	..	..	..	..	..	2
11. Gastritis	..	..	..	..	..	..	..	2
12. Suffocation	..	..	..	..	..	..	..	2
13. Other causes	..	..	..	..	..	..	..	43
								241

TABLE SHOWING METHOD OF FEEDING OF 241 INFANTS UNDER 1 YEAR, WHO DIED DURING 1919.

88	Entirely breast-fed.
25	Partly breast-fed.
8	Condensed Milk.
25	Cow's Milk.
19	Dried Preparations.
35	Miscellaneous.
41	No feeding (lived 1-2 days only).
241	

Senile Mortality.—The number of deaths of persons of 60 years of age and over is 401, or 4·77 per 1,000 of population.

NO. OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1919.

	Ward	Census Pop'ltn.	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Totals	Rate
St. George	1	4905	42	15	21	18	96	19·57
Lindsay	2	5295	44	13	6	15	78	14·73
St. Catherine	3	7586	56	23	20	20	119	15·68
St. Patrick	4	9795	62	48	27	33	170	17·35
St. Thomas	5	4382	43	22	10	15	90	20·53
Poolstock	6	5413	28	16	15	16	75	13·85
Victoria	7	4836	28	22	16	22	88	18·19
St. Andrew	8	12378	73	33	18	29	153	12·36
Swinley	9	7384	39	17	17	26	99	13·40
All Saints	10	3536	12	6	15	17	50	14·14
West Pemberton	11	4188	23	12	13	10	58	13·84
North Pemberton	12	7379	38	25	23	20	106	14·36
Central Pemberton	13	5962	44	16	14	26	100	16·77
South Pemberton	14	6113	37	9	13	15	74	12·10
Transferable Deaths .. ..	..	..	16	12	13	13	54	..
Total .. ..	..	..	585	289	241	295	1410	16·79

STATEMENT OF DEATHS OF NON-RESIDENTS OCCURRING IN WIGAN.

Deaths from—

Years.

Accidents	26	Under	1	..	..	..	1
Senile Dementia	5	1 and under	5	..	..	..	10
Senile Asthenia	11	5	15	..	..	..	8
Cancer	2	15	25	..	..	..	14
Appendicitis	5	25	35	..	..	..	11
Pneumonia	5	35	45	..	..	..	21
Heart Disease	12	45	55	..	..	..	24
Typhoid Fever	1	55	60	..	..	..	9
Influenza	2	60	65	..	..	..	10
Influenzal Pneumonia	1	Over	65	48
Bronchitis	8						
Suicides	5						
Syphilis	1						
Phthisis	4						
Other Diseases	69						

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MINISTRY OF HEALTH RETURNS.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1919 AND PREVIOUS YEARS.

Name of District—Wigan County Borough.

Year.	Pop'tion estimated to middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un-corrected number.	Number.	Rate.	Number.	Rate.	of Non-residents registered in the District.	of Residents registered in the District.	Under 1 year of age.	At all ages.	Rate	
1	2	3	4	5	6	7	8	9	10	11	12	13
1914..	92,868	2,690	2,710	29.18	1,527	16.44	105	166	377	139	1,588	17.09
1915..	86,329	2,375	2,384	26.13	1,598	18.51	94	151	390	163	1,655	19.17
1916..	83,203	2,095	2,018	23.28	1,318	15.84	114	80	240	113	2,108	15.42
1917..	83,110	2,010	2,024	21.84	1,424	17.13	145	66	240	118	1,345	16.18
1918..	80,365	1,871	1,886	20.94	1,653	20.56	165	60	231	122	1,548	18.45
1919..	83,944	2,038	2,052	22.54	1,512	17.30	156	54	241	117	1,410	16.13

* Calculated on Registrar-General's Estimated Population, July 1st, 1919—Deaths, 87,384; Births, 91,028.

Area of District in Acres (land and inland water), 5,082.

At Census, 1911: Total population at all ages, 89,152; total families or separate occupiers, 16,979. (Figures given in Census special volume for the County, also in Vols. I., VI., and VIII. of the reports of the Census of England and Wales).

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1919.

Name of District—Wigan County Borough.

Notifiable Disease.	Number of Cases Notified.						Total Cases notified in each locality (e.g., Parish or Ward) of the district.										Total cases removed to hospital.									
	At all ages.	At Ages—Years.					St George	2 Lindsay	3 St. Cath.	4 St. Patrick	5 St. Thoms.	6 Polstock.	7 Victoria.	8 St. Andrew.	9 Swinley.	10 All Saints.		11 W. Pemb.	12 N. Pemb.	13 C. Pemb.	14 S. Pemb.					
		Under 1	1 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.																45 and under 65 yrs.	65 and up'rds.			
Small-pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Scarlet Fever..	339	72	240	22	4	—	12	30	29	6	26	6	—	—	31	6	14	34	3	15	—	—	—	—	224	
Enteric Fever ..	21	1	12	3	5	—	—	2	—	—	—	—	—	1	2	3	—	3	3	—	—	—	—	—	21	
Diphtheria (including Membraneous Croup).	46	1	27	3	3	—	3	1	1	1	4	1	—	14	1	—	—	3	3	3	—	—	—	—	13	
Pneumonia ..	110	5	36	20	20	6	7	6	20	9	11	9	—	5	2	1	—	4	4	4	—	—	—	—	11	
Puerperal Fever ..	7	—	—	3	3	1	1	—	2	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	
Relapsing Fever (R)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Typhus Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Influenzal Pneumonia.	60	1	8	10	25	12	2	—	6	3	3	—	—	2	1	—	—	20	—	—	—	—	—	—	3	
Dysentery ..	6	—	—	—	4	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malaria	48	—	—	11	35	2	—	—	4	3	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Chicken-pox ..	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Poliomyelitis ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas ..	66	2	7	7	27	16	4	4	7	4	3	4	—	—	6	2	—	5	—	—	—	—	—	—	1	
Continued Fever (C)	3	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
Cerebro-Spinal Meningitis ..	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ophthalmia Neon.	26	26	—	—	—	—	—	3	3	3	—	—	—	—	—	3	—	2	—	—	—	—	—	—	—	
Measles ..	126	10	63	3	—	—	4	10	5	17	15	—	—	10	11	4	—	10	—	—	—	—	—	—	—	
EncephalitisLethargica	2	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pul. Tuberculosis ..	139	—	25	30	58	19	9	8	22	9	4	15	—	1	8	9	—	9	—	—	—	—	—	—	—	
Other Forms of Tuberculosis ..	70	3	36	12	8	1	1	4	8	8	2	2	—	1	3	8	—	13	—	—	—	—	—	—	—	
TOTALS ..	1,074	49	460	126	193	59	44	69	109	63	70	49	181	84	39	57	84	110	48	—	—	—	—	—	—	

Isolation Hospital or Hospitals, Sanatoria, &c.—Wigan Sanatorium, Pemberton Hospital, and Bowdon Sanatorium.

TABLE III.—DEATHS REGISTERED DURING THE CALENDAR YEAR 1919, CLASSIFIED BY AGE AND CAUSE.
Name of District—Wigan County Borough.

Causes of Death.	Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District.										Total Deaths whether of "residents" or "non-residents" in institutions in the district.
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.		
1											
All causes—Certified	2	3	4	5	6	7	8	9	10	11	
Uncertified	1410	241	75	90	85	216	328	300	323	..	
1—Enteric Fever	3	..	..	..	2	..	1	..	..	..	..
2—Small-pox	..	..	..	..	..	..	..	..	..	..	..
3—Measles	6	..	4	1	1	..	..	..	..	..	..
4—Scarlet Fever	9	..	1	3	5	..	..	..	..	..	..
5—Whooping Cough	4	3	1	..	..	..	..	..	..	..	..
6—Diphtheria and Croup	15	..	2	4	9	..	..	..	..	..	..
7—Influenza	170	11	8	18	14	9	42	45	23	..	..
8—Erysipelas	5	2	..	..	..	..	2	1	..	..	..
9—Phthisis (Pul. Tub)	90	..	..	..	5	21	34	29	1	..	..
10—Tuberculous Meningitis	4	1	1	..	2	..	..	..	..	..	..
11—Other Tubercular Diseases	12	..	2	2	2	4	2	..	..	..	..
12—Cancer (Malignant Disease)	53	..	..	..	..	..	10	29	14	..	..
13—Rheumatic Fever	1	..	..	..	1	..	..	..	..	..	..
14—Meningitis	14	4	2	5	3	..	..	..	..	..	..
15—Organic Heart Disease	113	2	..	..	6	12	24	40	29	..	..
16—Bronchitis	162	25	12	2	2	2	14	46	59	..	..
17—Pneumonia (all forms)	173	30	22	21	20	11	27	26	16	..	..
18—Other Diseases of Resp. Org...	4	..	..	1	1	..	..	2	..	..	..
19—Diarrhoea and Enteritis	37	32	5	..	..	..	..	..	..	..	..
20—Appendicitis and Typhilitis	3	..	..	..	..	1	..	..	..	..	..

TABLE IV.—INFANT MORTALITY, 1919. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.
Name of District—Wigan County Borough.

Cause of Death.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks & under 3 months	3 months & under 6 months	6 months & under 9 months	9 months & under 12 m'ths	Total Deaths under 1 year
All Causes—Certified ..	56	11	14	7	88	47	33	49	24	241
Uncertified ..	..	..	..	..	..	..	..	..	..	..
Small-pox ..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	1	..	1	1	3
Diphtheria and Croup ..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	..	..	..	..	..	..	..	1	..	1
Tuberculous Meningitis ..	..	..	..	..	..	..	..	1	..	1
Abdominal Tuberculosis ..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases ..	..	..	..	..	..	..	..	..	..	..
Meningitis (<i>not Tuberculous</i>) ..	..	..	..	..	..	..	1	1	..	4
Convulsions ..	..	..	1	..	1	1	..	..	..	2
Laryngitis ..	..	..	..	..	..	..	..	..	..	..
Bronchitis ..	..	2	..	..	2	6	7	9	1	25
Pneumonia (<i>all forms</i>) ..	..	..	1	..	1	5	2	12	10	30
Diarrhoea ..	..	..	1	..	1	5	7	9	5	27
Enteritis ..	..	..	..	..	..	3	1	..	1	5
Gastritis ..	..	..	..	..	..	1	..	1	..	2
Syphilis ..	..	..	..	..	..	..	..	..	..	..
Rickets ..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying ..	2	..	..	..	2	..	..	..	..	2
Injury at Birth ..	..	..	..	..	..	..	..	..	..	..
Atelectasis ..	1	..	..	..	1	..	..	..	..	1
Congenital Malformations ..	1	..	..	..	1	3	..	..	..	4
Premature Birth ..	30	6	5	..	41	4	..	..	..	45
Atrophy, Debility and Marasmus ..	13	2	3	4	22	12	6	3	..	46
Other Causes ..	9	1	3	3	16	5	9	11	2	43
TOTAL ..	56	11	14	7	88	47	33	49	24	241

Nett Births registered during the calendar year—Legitimate, 1,970; Illegitimate, 82.

Nett Deaths registered during the calendar year—Legitimate Infants, 233; Illegitimate Infants, 8.

Inquests and Uncertified Deaths.

The number of Inquests for 1919 is 130, against 124 for 1918, and 135 for 1917, and the following verdicts have been recorded:—

1.	Natural Causes	..	..	..	..	..	..	..	..	55
2.	Accidents—burnt	..	..	..	..	..	..	..	..	7
	„ scalded	..	..	..	..	..	..	..	..	5
	„ colliery	..	..	..	..	..	..	..	..	24
	„ run over	..	..	..	..	..	..	..	..	3
	„ falls	..	..	..	..	..	..	..	..	7
	„ railway	..	..	..	..	..	..	..	..	2
	„ fall downstairs	..	..	..	..	..	..	..	..	2
	„ others	..	..	..	..	..	..	..	..	14
3.	Suicides—cut throat	..	..	..	..	..	..	..	..	1
	„ railway	..	..	..	..	..	..	..	..	1
	„ drowned	..	..	..	..	..	..	..	..	2
	„ others	..	..	..	..	..	..	..	..	1
4.	Others	..	..	..	..	..	..	..	..	6
5.	Murder	..	..	..	..	..	..	..	..	..
										130

We have no uncertified deaths in 1919, against none in 1918 and none in 1917.

Acute Infectious Diseases.

I.—ZYMOTIC DISEASES.

The Mortality from the seven principal Zymotic Diseases, namely: Small-pox, Scarlet Fever, Measles, Whooping Cough, Fever (Enteric and Typhus), Diphtheria, and Diarrhoea, gives us a rate of .78 per 1,000 of the population, against 1.53 in 1918.

The deaths numbered 67, as against 123 in 1918.

The Zymotic-rate, 2·88, is made up as follows :—

DEATH-RATES PER 1,000.

	1919	1918
Small-pox .. .. .	..	..
Scarlet Fever	·10	·04
Measles	·07	·21
Whooping Cough	·04	·51
Typhus Fever .. .. .	..	..
Enteric Fever	·03	·09
Diphtheria	·17	·09
Diarrhoea	·35	·55
Erysipelas	·06	·01
Influenza	2·02	2·15

The Zymotic-rate during each of the four quarters was :—

	1919	1918
1st Quarter	7·65	2·15
2nd „	1·48	1·01
3rd „	1·42	2·19
4th „	·95	8·79

TABLE OF ZYMOTICS.

	Notified.	Died.	Case Mortality %.
Small-pox .. .. .	..	..	..
Scarlet Fever	339	9	2.65
Enteric Fever	21	3	14.28
Diphtheria	46	15	32.60
Measles	126	6	4.76
Whooping Cough .. .. .	..	4	..
Diarrhoea .. .. .	..	30	..
Erysipelas	66	5	7.57
Influenza	60	170	..

Number of Notifications, including Civil and Military Cases, compared with other years :—

Disease.	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Small-pox	0	7	0	0	0	0	0	0	0	0
Typhus	0	0	0	1	1	0	0	0	0	0
Scarlet	395	176	142	71	222	1608	820	231	174	339
Enteric	128	151	73	97	67	45	89	29	31	21
Continued	0	0	0	0	0	0	0	0	0	3
Diphtheria	38	66	38	34	43	37	37	40	29	46
Puerperal	4	7	4	6	5	4	6	4	5	7
Cholera	0	0	0	0	0	0	0	0	0	0
Erysipelas	70	84	47	56	82	83	60	48	43	66
Ophthalmia Neonatorum	0	0	6	0	0	1	13	23	13	26
Acute Poliomyelitis	0	0	6	0	0	1	0	3	3	1
Cerebro-Spinal Meningitis	0	0	0	0	1	0	0	2	3	2
Measles	0	0	0	0	0	0	285	2907	1055	126
Pulmonary Tuberculosis	0	0	217	207	236	233	178	188	197	139
Other Forms of Tuberculosis	0	0	0	61	124	107	92	134	84	70
Pneumonia	0	0	0	0	0	0	0	0	0	110
Influenzal Pneumonia	0	0	0	0	0	0	0	0	0	60
Dysentery	0	0	0	0	0	0	0	0	0	6
Malaria	0	0	0	0	0	0	0	0	0	48
Chicken-pox	0	0	0	0	0	0	0	0	0	2
Encephalitis Lethargica	0	0	0	0	0	0	0	0	0	2
Total	635	941	553	549	803	2151	1580	3609	1637	1074

ANALYSIS OF NOTIFICATIONS, 1919.

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Scarlet Fever	18	20	13	16	10	13	32	29	29	51	60	48	339
Enteric Fever	0	0	0	2	2	1	0	3	2	6	3	2	21
Diphtheria	2	2	3	3	10	4	2	3	4	2	5	6	46
Puerperal Fever	0	0	0	0	2	0	1	1	0	0	3	0	7
Erysipelas	2	4	1	4	3	10	9	4	1	6	10	12	66
Cerebro-Spinal Meningitis	0	0	0	1	0	1	0	0	0	0	0	0	2
Ophthalmia Neon.	1	0	2	1	1	3	4	3	7	2	0	2	26
Acute Poliomyelitis	0	0	0	0	0	0	1	0	0	0	0	0	1
Measles	16	13	12	6	8	5	5	7	5	8	7	34	126
Phthisis	16	17	16	12	9	13	15	3	13	5	10	10	139
Other Tubercular Diseases	4	5	7	14	9	4	8	2	6	4	3	4	70
Pneumonia	0	0	17	34	11	15	4	3	5	3	10	8	110
Influenzal Pneumonia	0	0	47	9	4	0	0	0	0	0	0	0	60
Dysentery	0	0	3	0	0	0	0	0	0	0	3	0	6
Malaria	0	0	3	3	7	2	11	2	2	1	6	11	48
Continued Fever	0	0	0	0	0	0	0	0	0	0	3	0	3
Chicken-pox	0	0	0	0	0	0	0	0	0	1	1	0	2
Encephalitis Lethargica	1	0	0	0	0	0	0	0	1	0	0	0	2
Total	60	61	124	105	76	71	92	60	75	89	124	137	1074

SMALL-POX.

We have had no case of Small-pox during the year.

VACCINATION RETURNS, 1917-1918.

The following Vaccination Returns have been supplied to me by the Vaccination Officer, Mr. R. Halliwell, J.P. :—

	1918	1917
Births Registered	1337	1448
Successfully Vaccinated	465	619
Insusceptible	4	3
Exemptions, Section 2, 1899	668	689
Died, Unvaccinated	98	99
Postponed by Certificates	2	..
Left Town and Reported to other Districts	3	..
Cannot Trace	6	2
Refusals and Not Accounted for	91	36

Total Number of Successful Vaccinations (all ages)	1910	1266
"	1911	1118
"	1912	1153
"	1913	895
"	1914	860
"	1915	860
"	1916	769
"	1917	736
"	1918	617
"	1919	484

The continued decline in the number of infants vaccinated is most regrettable, and should Small-pox appear in the Borough will have its inevitable consequence.

SCARLET FEVER.

Number of Notifications	339
Number of Deaths	9
Death-rate per 1,000	·10

The number of notifications of this disease is, for 1919, 339, against 174 in 1918. Nine deaths occurred, giving a rate of ·10, as against 4 deaths with a rate of ·04 in 1918.

1919.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notifications	18	20	13	16	10	13	32	29	29	51	60	48	339
Removed to Hospital	14	16	15	8	8	9	19	21	17	41	31	32	231
Deaths	1	1	0	1	0	0	0	4	0	1	1	0	9

The percentage of removals to Sanatorium has been 68·14, against 67·81 in 1918 and 70·01 in 1917.

We have 9 deaths amongst those notified; 9 occurred in hospital, giving a fatality-rate of 4·01 of hospital-treated cases as against 1·69 in 1918.

This increase in the fatality of the disease was due to a marked alteration in the character of the disease as compared with recent years. Nephritis was present in more than half the cases, and severe streptococcal infections of the throat were common. The latter, with general toxæmia, was the cause of death in most of the fatal cases.

AGE INCIDENCE OF SCARLET FEVER.

	MONTHS												YEARS												Total
	1-3	3-6	6-9	9-12	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-15	15-20	20 & over									
Ages .. .. .	..	..	..	1	3	9	26	34	34	34	43	26	22	81	20	6	339								
Total Number of Notifications	72												159												107
Under 1 year	1																								
From 1 to 5 years																									
" 5 to 10 years																									
Over 10 years																									
Sickness rate per 1,000 of the Population at each age .. .. .	..	..	..	.01	.03	.10	.30	.40	.40	.40	.51	.30	.26	.84	.23	.07									
Deaths at different ages .. .. .	..	..	..	..	1	3	..	..	..	2	2	..	1	..	..	..	9								
Percentage Mortality .. .. .	..	..	..	..	33.3	33.3	..	..	..	5.88	4.65	..	4.54	..	..	..	2.65								
All under 1 year	0																								

MEASLES.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Deaths in 1919 ..	3	1	1	0	1	0	0	0	0	0	0	0	6
Deaths in 1918 ..	0	0	1	0	6	4	4	2	0	0	0	0	17
Notifications, 1919..	16	13	12	6	8	5	5	7	5	8	7	34	126

WHOOPING COUGH.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Trans	Tot.
Deaths in 1919	0	0	0	0	0	2	1	0	0	0	1	0	0	4
Deaths in 1918	17	15	5	2	1	0	0	0	1	0	6	0	0	41

ENTERIC FEVER.

Number of Notifications	..	..	..	21
Number of Deaths	..	..	..	3
Mortality per 1,000 of Population	..	..	..	.03
Removed to Sanatorium	..	..	..	21

We have for 1919 21 notifications against 31 in 1918, and 29 in 1917. Several of the cases removed to the Sanatorium turned out to be cases of other febrile diseases.

Enteric Fever was the cause of 3 deaths during the year, as against 8 in 1918, and none in 1917.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Trans	Tot.
Notifications ..	0	0	0	2	2	1	0	3	2	6	3	2	0	21
Removed to Sanatorium..	0	0	0	2	2	1	0	4	3	4	3	2	0	21
Deaths.. ..	0	0	0	0	0	0	0	0	0	1	1	1	0	3

We had 22 specimens of blood examined at the Thompson-Yates Laboratory, Liverpool, with the following result:—Positive re-action, 4; negative re-action, 18.

INCIDENCE OF ENTERIC FEVER FOR TEN YEARS.

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919			
Notified Cases	128	151	73	97	67	45	89	29	31	21
Deaths	26	29	12	13	17	10	19	—	8	3
Death rate per 1,00027	.32	.13	.14	.18	.11	.22	—	.09	.03

The continued decline in the incidence of Enteric Fever and the mortality from this cause is very gratifying. Had it not been for outbreak in Hopwood Street, Newtown, referred to below, there would have been no deaths from Enteric during the year. There can be little doubt that the inoculation of the large number of men who served in the army has contributed to this result, and one cannot but wish that preventive inoculation were commoner amongst the civilian population. A considerable number of cases from outside districts were treated in the Sanatorium and there is some reason to think that workers in certain collieries are liable to infection. Of the 21 cases notified in the Borough and one doubtful case whose blood was tested, it will be seen that only four cases gave a positive result. Of the rest several were clinically typical of Enteric Fever, but a number of others recovered without developing typhoid symptoms.

A peculiar feature of the cases occurring during the Autumn was the prevalence and persistence of albuminuria.

The following is a copy of the Report sent to the Ministry of Health on the occurrence of cases of Enteric Fever and Continued Fever at Hopwood Street, Newtown :—

March 9th, 1920.

SIR,

CASES OF CONTINUED FEVER AT HOPWOOD STREET,
NEWTOWN, PEMBERTON.

As requested I beg to report as follows *re* the above :—

Between August 6th and November 1st, 1919, 8 cases from houses in Hopwood Street were notified as suffering from Enteric Fever and admitted to the Corporation Isolation Hospital under my care.

As the majority of these cases did not appear clinically to be Enteric, and the agglutination reaction were negative to B Typhosus, while the cases presented several unusual features, I saw the practitioners concerned and suggested that any further cases arising in this street or the immediate neighbourhood should be sent into the Isolation Hospital and notified provisionally as "Continued Fever."

Three more cases were accordingly notified on November 3rd and 8th, and admitted into the Hospital on those dates. I append a tabulated statement of the course and results of these eleven cases. From this it will be seen that among the peculiarities of the outbreak were the high incidence among female children, the early appearance of lung symptoms suggesting tuberculosis, the presence of more or less persistent albuminuria in seven cases out of 11, and the high proportion of cases in which the clinical signs and symptoms were not characteristic of Enteric Fever and the Agglutination reaction was negative.

ACTION TAKEN.

An inspection of all the houses in Hopwood Street revealed a number of sanitary defects. Of these the most important was the fact that the houses are served by privy-middens which are emptied on to an unpaved road at the rear of the property. This road has a highly absorbent surface, and in wet weather the polluted moisture drains down into the imperfectly paved yards, where in many cases stagnant pools could be observed. It is evident that infected material can thus easily be conveyed into the houses. These conditions were at once reported to the Insanitary Houses Committee, who themselves visited the premises and interviewed the various owners.

Notices were served for the remedying of the sanitary defects, and the conversion of the privy-middens. All the minor repairs, etc., specified have now been carried out, but the conversion of the privy-middens is still awaiting the provision of a sewer. The attention of the Insanitary Houses Committee was again called to this condition of affairs on the 16th February.

I am,

Your obedient Servant,

F. E. WYNNE,

Medical Officer of Health.

The Principal Medical Officer,
Ministry of Health,
Whitehall.

Name.	Age.	Sex.	Address.	Date of Admission.	Provisional Diagnosis.	Condition on Admission	Widal Reaction.	Complications.	Result.	Remarks.
J. C.	9	M.	29, Hopwood Street	1919. Aug. 3rd.	Enteric.	Non-typical.	Negative.	Lungs Tuberculosis	Discharged Oct. 3rd.	Probably Tuberculosis.
J. F.	12	F.	" "	Aug. 21st.	Enteric.	Typical.	Positive.	Lungs, Albuminuria. Defective Teeth.	Discharged Oct. 3rd.	Albuminuria. Persisted for three weeks. Recovery complete.
K. F.	11	F.	" "	Aug. 21st.	Enteric.	Non-typical.	Negative.	Transient Albu- minuria.	Discharged Oct. 3rd.	Moderate Pyrexia for 22 days. Probably mild Enteric.
E. B.	6	F.	" "	Sept. 10th.	Enteric.	Non-typical.	Negative.	Lung. Mitral Sys- totic murmur. Albuminuria.	Discharged Nov. 21st	Dullness of L. Base cleared. Mitral murmur present at time of discharge. Developed Albuminuria on 23rd day of disease. Clear on 34th day.
C. D.	7½	F.	" "	Sept. 24th.	Enteric.	Non-typical.	Negative.	Lungs, Albuminuria. Irregular action of heart.	Discharged Nov. 7th.	Lungs clear on discharge. Albuminuria present on discharge. Persisted to 29th day of disease.
L. B.	9	F.	" "	Sept. 30th.	Enteric.	Non-typical.	Negative.	Slight dullness L. upper lobe. Mitral systotic murmur. Albuminuria.	Discharged Nov. 28th.	Lung clear on discharge. Developed Al- buminuria on 14th day of disease. Clear on 38th day.
M. D.	10	F.	" "	Oct. 14th.	Enteric.	Non-typical.	Negative.	Lungs. Jaundice. Albuminuria.	Died Oct. 27th.	Admitted on 8th day of disease. Jaundice 14th day. Albuminuria 17th day. Per- forations 19th day. Death 20th day.
M. F.	19	M.	" "	Nov. 1st.	Enteric.	Non-typical.	Negative.	Lungs, Albuminuria. Irregular action of heart.	Discharged Jan. 20th	Very severe illness. Developed suspicious spots and enlarged spleen 14 days after admission (34th day of discharge. Probably Tuberculosis.)
M. F.	14	F.	" "	Nov. 3rd.	Continued.	Typical.	Negative.	Enlarged Thyroid. Pneumonia.	Died Dec. 3rd.	Very severe illness. Death was due to Pneumonia. Probably Enteric.
J. F.	20	M.	" "	Nov. 8th.	Continued.	Typical.	Positive.	Lungs. Mitral sys- totic murmur.	Discharged Jan. 20th.	Severe illness. Definite Enteric systems. Probably Tuberculosis also.
R. P.	6	M.	" "	Nov. 8th.	Continued.	Non-typical.	Doubtful. plus 1/20. 1/40. —1/80.	None.	Discharged Dec. 5th.	Probably mild Enteric.

DIARRHŒA.

Number of Deaths	1919	1918
Mortality per 1,000 of Population	30	45
	·35	·55

AGE INCIDENCE, 1918.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
0-1 year	-	-	-	-	-	1	2	11	8	4	1	-	27
1-5 years	-	-	-	-	-	-	-	-	1	-	1	-	2
Over 5 years	1	-	-	-	-	-	-	-	-	-	-	-	1
Total	1	-	-	-	-	1	2	11	9	4	2	-	30

DIPHTHERIA.

Number of Notifications	46
Number of Deaths, including Croup	15
Mortality per 1,000 of Population	·17

We have had a larger number of cases notified, namely, 46, against 29 in 1918; and the mortality is ·17 per 1,000 of the population, against ·09 in 1918.

The following table shows the number of cases notified and the number of deaths :—

1919.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notified	2	2	3	3	10	4	2	3	4	2	5	6	46
Deaths	1	1	-	2	3	-	-	1	2	-	3	2	15

The following is the result of the examinations bacteriologically made at the Thompson-Yates Laboratory :—

Number of Swabs	37
Diphtheria present in	1

DIPHTHERIA CASES, 1919.

Cases in Houses—Sanitary Defects	2
„ „ No Defects	44

Although the number of cases notified as Diphtheria shows an increase as compared with 1918 only one swab out of the 37 examined showed the presence of true Diphtheria bacilli.

Several cases treated in the Sanatorium were pneumo-coccal and streptococcal infections, and should probably be included among the group of diseases generally described as “Influenza.”

II.—OTHER INFECTIOUS DISEASES.

CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS.

Two cases of Cerebro-spinal Fever and one case of Poliomyelitis were notified.

ERYSIPELAS.

Number of Cases Notified	..	..	..	..	66
Number of Deaths	..	..	..	..	5
Mortality per 1,000 of Population	..	..	..	..	·06

We have a larger number of notifications than in 1918, and we have 5 deaths.

Cases in Houses with Insanitary Surroundings	..	..	..	..	1
„ Defects	..	..	..	..	1
„ No Defects	..	..	..	..	64

PUERPERAL FEVER.

Number of Cases Notified	..	..	..	..	7
Number of Deaths	..	..	..	..	3
Mortality per 1,000 of Population	..	..	..	..	·03

VENEREAL DISEASES.

The scheme for the Diagnosis and Treatment of Venereal Diseases is now fully established, and particulars will be found below:—

ROYAL ALBERT EDWARD INFIRMARY,
WIGAN,

VENEREAL DISEASES.

ANNUAL RETURN by the Medical Officer of Health of the Treatment Centre. To the Medical Officer of Health of the County or County Borough of Wigan.

Return relating to persons residing in the County or County Borough of Wigan who were treated at the Treatment Centre at Wigan Infirmary during the year ending on the 31st December, 1919.

Borough. County.

(a) Number of persons from each area dealt with during the year at or in connection with the Out-Patient Clinic for the first time and found to be suffering from :—

Syphilis	134	..	95
Soft Chancre	6	..	5
Gonorrhœa	49	..	42
Conditions other than Venereal	17	..	16
Total	206	..	158

(b) Total number of attendances at the Out-Patient Clinic of all patients residing in each area 2111 .. 909

(c) Aggregate number of " In-patient days " of all patients residing in each area 205 .. 78

(d) Number of doses of Salvarsan substitutes given to patients residing in each area in the :—	}	(1) Out-patient Clinic	775	..	540
	}	(2) In-patient Department	30	..	20

(e) Give the names of Salvarsan substitutes used in the treatment of syphilis and the usual initial and final doses .. Neokharsivan, .45, .6, and .75 gms.
 Neovarsenobillon, .45, .6, .75, and .3 gms.
 Hectine, 40 gms.
 Galyl, 20 gms, 30 gms., and 40 gms.

(f) State the number of doses of Salvarsan substitutes usually given in a full course of treatment 7 doses.

(g) State in what proportion of cases, approximately, Salvarsan substitutes are used in the treatment of syphilis .. 100 per cent.

(h) State the nature of tests applied in deciding as to discharge of patientsNo patients have been discharged, as in the doctor's opinion they require further treatment.

THE WORK OF THE HOSPITALS.

I.—HOSPITAL FOR ACUTE INFECTIOUS CASES. WHELLEY.

84 Beds.

RESIDENT STAFF IN 1919.

Matron.

2 Sisters.
1 Nurse.
9 Probationers.
1 Laundress.
1 House-maid
1 Waitress.

1 Cook.
2 Ward-maids.
1 Kitchen-maid.
1 Porter and Gardener.
1 Assistant Gardener.

	Notifications	Removed to Hospital		Died in Hospital	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Scarlet Fever	339	224	7	8	1
Enteric Fever	21	21	4	2	..
Diphtheria and Memb. Croup ..	46	13	..	8	..
Pneumonia	110	11	..	3	..
Influenzal Pneumonia	60	3	..	..	..
Dysentery	6	..	..	..	..
Malaria	48	1	..	..	..
Chicken-pox	2	..	..	..	..
Poliomyelitis	1	..	..	..	..
Erysipelas	66	1	..	1	..
Continued Fever	3	3	..	1	..
Cerebro-Spinal Meningitis ..	2	2	..	1	..
Ophthalmia Neonatorum	26	..	..	..	..
Pulmonary Tuberculosis	139	..	..	..	..
Other forms of Tuberculosis ..	70	..	..	..	..
Measles	126	..	..	..	..
Encephalitis Lethargica	2	..	..	..	..
Puerperal Fever	7	..	..	..	..
Others .. .. .	..	..	1	..	..
Totals	1074	279	12	24	1
			291		25

In the Whelley Hospital on December 31st, 1919, there were 43 patients, namely, Scarlet Fever 37, Enteric Fever 5, other diseases 1.

Whelley Hospital.	Small-pox.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1919	20	..	..	20
Admitted in 1919	231	25	35	291
Discharged ,,	205	18	20	243
Died ,,	9	2	14	25
In-patients, Jan. 1, 1920	37	5	1	43

The number of deaths in the Whelley Hospital was 24; 8 died from Scarlet Fever, 2 from Enteric Fever, and 14 from other diseases, as against 2 deaths from Scarlet Fever, 11 from Enteric Fever, and 6 from other diseases, in 1918.

WHELLEY SANATORIUM—TABLE OF ADMISSIONS AND DISCHARGES FOR 1919.

1919.	Admitted.					Discharged.					Died.							
	Small-pox	Scarlet Fever	Enteric	Typhus	Others	Total	Small-pox	Scarlet Fever	Enteric	Typhus	Others	Total	Small-pox	Scarlet Fever	Enteric	Typhus	Others	Total
January	14	1	..	..	15	..	15	..	..	15	..	..	1	..	..	..	1
February	16	..	..	9	25	..	13	..	..	14	..	..	..	..	..	3	3
March	15	..	..	5	20	..	15	..	10	25	..	..	1	..	..	..	1
April	8	2	..	2	12	..	15	..	1	17	..	..	1	..	..	..	1
May	8	2	..	3	13	..	9	..	2	13	..	..	..	..	..	4	4
June	9	2	..	4	15	..	8	..	1	9	..	..	..	..	..	..	..
July	19	1	..	1	21	..	7	..	2	11	..	..	1	..	..	1	2
August	21	4	..	4	29	..	15	..	2	17	..	..	4	..	..	2	6
September	17	3	..	2	22	..	21	..	1	23	..	..	..	..	..	1	1
October	41	4	..	..	45	..	17	..	1	22	..	..	1	1	..	..	2
November	31	3	..	3	37	..	32	..	5	37	..	..	..	..	..	2	2
December	32	3	..	2	37	..	38	..	1	40	..	..	..	1	..	1	2
Total	231	28	..	35	291	..	205	18	20	243	..	9	2	14	..	25	

7 Scarlet Fever, 4 Enteric Fever, and 1 other Disease were removed from Out-Districts to the Sanatorium, and are included in the Table.

2.—PEMBERTON CONSUMPTION HOSPITAL.

22 Beds.

STAFF

Sister-in-Charge.

2 Assistant Nurses.

Ward-maid.

Cook.

Porter-Gardener.

Laundress.

Assistant-Gardener.

Kitchen-maid.

PARTICULARS OF ADMISSIONS AND DISCHARGES.

BOROUGH PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	35	13	5	8	3	9	73
Discharged	29	11	3	4	2	6	55
Died	7	4	—	3	—	—	14

COUNTY PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	4	—	—	4	—	1	9
Discharged	5	1	—	4	1	1	12
Died	—	—	—	—	—	—	—

TOTAL PATIENTS TREATED.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	39	13	5	12	3	10	82
Discharged	34	12	3	8	3	7	67
Died	7	4	—	3	—	—	14

Patients in on January 1st, 1919..	..	..	..	..	22
„ admitted 1919..	..	..	..	..	82
„ discharged 1919..	..	..	..	..	67
„ died 1919..	..	..	..	..	14
„ remaining Jan. 1st, 1920..	..	..	..	..	23

1 patient left the Hospital without permission.

CONDITION OF DISCHARGE.

BOROUGH PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved	19	4	2	1	2	3	31
Non-Improved	10	7	1	3	—	3	24
Total	29	11	3	4	2	6	55

COUNTY PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved	1	1	—	2	—	—	4
Non-improved	4	—	—	2	1	1	8
Total	5	1	—	4	1	1	12

TOTAL PATIENTS DISCHARGED.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved	20	5	2	3	2	3	35
Non-improved	14	7	1	5	1	4	32
Total	34	12	3	8	3	7	67

MATERNITY AND CHILD WELFARE.

The work in this connection has again been confined to Home Visiting, and the work of the Infant Clinics which have been open regularly throughout the year at Rodney Street and Pemberton on four afternoons per week. Three of your Lady Health Visitors are in attendance at each session, and the Medical Officer of Health attends for the examination of all Infants and Mothers referred to him. All the children attending are weighed, and advice is given as to feeding, clothing, etc. ; minor ailments are in some cases treated, but no medicines are dispensed or prescribed. All suitable cases are referred either to a private practitioner, to the Wigan Infirmary, or other Institution. In this way it may be claimed that a good deal of real preventative work is done by the discovery of disease in its early stages, and by ensuring that some form of treatment is obtained, or healthier conditions established, in many cases which would otherwise have been neglected and would have drifted into incurable disease.

The existing Clinic at Rodney Street, is, however, still imperfectly equipped, and now altogether overcrowded. No further development of the work, and no special clinic for ante-natal conditions, can be carried out until the new premises are ready for use. The whole future usefulness of this branch of our activities, as well as of our work for the school children, and all dental work, depends on adequate accommodation for Clinics being provided in the premises recently acquired by the Corporation.

The number of cases referred to Private Practitioners which would not otherwise have sought their advice is much in excess of cases treated who might have gone to their own doctor. As far as possible any form of treatment is limited to persons who cannot afford private medical fees. In this way the Clinics, so far from competing with private practitioners, must considerably increase their clientele. On the other hand, everything possible is done to wean mothers from the traditional and ingrained reliance on "the bottle of medicine" in Infantile Disorders. It is to be hoped that the practice of medicine will eventually be so organised that private practitioners will be able to support this educational propaganda without detriment to their own legitimate interests.

My experience in these Clinics has convinced me that more illness among infants, especially digestive and respiratory disease, is caused by the orchaic

method of dressing infants, which is almost universal, even than by the faulty methods of feeding which are so common. Persistent efforts have been made to remedy this, with very happy results in many cases.

No "Baby Week" celebration was held, as it was found that the passing interest excited did not qualify the time and labour in organising, which fell mainly on your Health Visitors and seriously interfered with their regular and much more valuable duties.

A Christmas Tree and Summer Pic-nic for persons attending the Clinics were held, and these certainly advertised our work, and did good by encouraging mothers to attend regularly.

Much valuable voluntary work has been rendered to the Clinics by Sister Amabel of the All Saints' Mission House, and by Mrs. Watts. I am glad to have this opportunity of extending my sincere appreciation of their work and cordial thanks:

A most important feature of the work of preserving infant life has been the distribution of fresh and dried milk, free and at cost price, and I have no hesitation in saying that this has been one of the factors in the reduction of our Infant Mortality.

This distribution of milk has, of course, been a considerable cost to the rates, and on this ground has been subject to much uninformed criticism by persons who have made no attempt to ascertain what in fact are the conditions under which milk is issued by the Health Department. Statements have been made to the effect that milk has been given indiscriminately to persons who could afford to pay for it, but *no individual case of the sort has ever been reported to myself or any of my staff, in spite of repeated requests that such action should be taken.*

In every case where free milk has been granted the applicant's statement as to income has been verified by application to the employers. The following is a copy of the form in which these details are ascertained :—

PUBLIC HEALTH OFFICE,

WIGAN.

NOTICE.—FOR MAKING FALSE STATEMENTS, PERSONS ARE
LIABLE TO BE PROSECUTED.

ENQUIRY FORM.

Name

Address

Number in Family

Adults.....Children.....Lodgers.....

Amount of money coming into house.....

From family

„ Lodgers

„ Insurance(Lloyd George)

„ Pension

„ Allowance

Number Working Names.....

.....

.....

.....

If in pit, Number of Pit..... Tally Number

Name of Underlooker

Rent of House

Signature

Date

For EMPLOYER ONLY.

Statement of Wages—Confirmed by Employer

Signature of Employer

Date.....

It is unfortunately the case that in the present state of public opinion and morality, attempts are made by unpatriotic persons to abuse this provision for the really necessitous, but no efforts have been spared by your Health Visitors to prevent such abuse. I have also to thank the Employers of Labour in the district for the ungrudging help they have given by supplying the information asked for, both in connection with this matter and the payment of midwifery fees.

Quite recently one large firm has had to decline to give the information on the ground that their employees objected to the amount of their wages being divulged.

Since that the form has in every case been handed to the applicant, and milk has only been issued when it has been returned with the Employer's Signature. This places the onus of supplying the information on the applicant and saves both time and postage to the Employers and your Staff.

A regrettable feature is the amount of the time your Health Visitors which is thus absorbed in purely almoner's work.

The following are the details of the amount of fresh and dried milk distributed, and the actual cost to the Corporation :—

DISTRIBUTION OF FRESH AND DRIED MILK, 1919.

Total amount of Fresh Milk distributed free	5275 $\frac{1}{8}$ gallons.
Total cost to Corporation	£779 13s. 9d.
Persons receiving Free Milk at beginning of year	14
Persons receiving Free Milk at end of year	124
	T. C. Q. lb.
Total amount of dried Milk distributed free	7 8 2 24
	£ s. d.
Total Cost	1654 16 0
Total amount received from Sales	632 5 11
Nett Cost to Corporation	£1,022 10 1
Average number receiving Dried Milk free per week	45
Quantity given per week per person (free)	2 lb.

In all suitable cases parents are urged to use fresh milk, but dried milk has a great advantage, from the point of view of the hard-pressed mother, that a week's supply can be taken home at once. Dried milk has also a uniform constitution, which is a great advantage where accurate dilution is required, and it is also less liable to contamination and to fermentative changes. It has now been shown that even the vitamins of milk are not all destroyed by the drying process, and the experience of very large numbers prove that children fed exclusively on dried milk are quite as well nourished as any others. This can be absolutely demonstrated in our own Clinics, and I am satisfied that the use of dried milk as a substitute for fresh milk, especially in times of epidemic diarrhoea, and in houses where there are no facilities for clean and cool storage of fresh milk, is absolutely essential to the welfare of the children. We have had no case of rickets among the children fed on dried milk, possibly because in all these cases the parents are instructed as to the necessity of fresh air in the growth of the child.

MATERNITY AND CHILD WELFARE.

The following table gives a summary of the visits of the five women Health Visitors during 1919.

TABLE 1.—TOTAL VISITS IN WIGAN.

Wards.	Births.	Revisits.		Deaths.		Diarrhoea Deaths.		Midwives.	Measles.	Ophthalmia.	Other Infants' Diseases.	Special Visits.	Still-births.	Total.
		Under 12 months.	Over 12 months.	Under 12 months.	Over 12 months.	Under 12 mon's.	Over 12 mon's.							
1. St. George ..	152	178	168	14	10	5	—	—	5	—	97	27	4	660
2. Lindsay ..	102	191	113	13	11	2	1	7	36	3	—	24	3	506
3. St. Catharine ..	220	322	103	19	15	4	—	21	2	3	64	62	13	848
4. St. Patrick ..	260	266	130	18	15	2	—	28	3	3	—	72	10	807
5. St. Thomas ..	113	140	190	15	13	2	1	3	33	3	—	32	8	553
6. Poolstock ..	90	220	232	13	11	1	—	13	28	—	—	55	6	669
7. Victoria ..	136	220	228	20	10	3	—	7	7	1	123	19	8	782
8. St. Andrew ..	233	296	342	26	13	—	—	6	32	5	—	20	5	978
9. Swinley ..	83	75	85	8	8	—	—	—	14	—	—	10	5	288
10. All Saints ..	80	150	18	3	4	—	—	3	16	—	14	238	1	527
11. W. Pemberton ..	126	276	103	14	10	2	—	5	62	3	—	17	4	622
12. N. Pemberton ..	217	406	239	21	9	3	—	—	10	1	102	71	9	1088
13. C. Pemberton ..	118	209	115	16	6	—	—	6	11	2	3	43	3	532
14. S. Pemberton ..	115	128	258	12	8	3	—	15	4	2	50	8	9	612
	2045	3077	2324	212	143	27	2	114	263	26	453	698	88	9472

70 sanitary defects were reported to the Chief Sanitary Inspector.

CLINICS.

The following Tables give statistical details of the work done by the Clinics :—

TABLE 2.

ATTENDANCE AT BABY CLINIC.

Total attendances of Babies and Mothers	..	15,529
Primary attendances of Babies and Mothers	..	1,088

TABLE SHOWING ATTENDANCES.

Weekly	..	..	..	..	..	..	420
Fortnightly	..	..	..	..	..	..	68
Monthly	..	..	..	..	..	..	65
Irregularly	..	..	..	..	..	..	456
Once only	..	..	..	..	..	..	578
Total	..	..	..	..	..	..	<u>1,587</u>

670 cases seen by the Medical Officer of Health during 1919. Eight deaths among children attending Clinics.

The children came from the following Wards :—

<i>Ward.</i>	<i>No. of Children</i>
No. 1.—St. George	72
No. 2.—Lindsay	79
No. 3.—St. Catharine	163
No. 4.—St. Patrick	260
No. 5.—St. Thomas	99
No. 6.—Poolstock	156
No. 7.—Victoria	128
No. 8.—St. Andrew	179
No. 9.—Swinley	25
No. 10.—All Saints	52
No. 11.—West Pemberton	41
No. 12.—North Pemberton	118
No. 13.—Central Pemberton	88
No. 14.—South Pemberton	92
Outside the Borough	35
Total	<u>1,587</u>

MIDWIVES ACT, 1902.

Forty-one midwives were registered, as practising within the Borough, all of whom have been regularly visited at their homes, and followed when out to their cases. Their bags and appliances were also examined.

Twenty-six cases of Ophthalmia Neonatorum were notified, and careful instruction was given to the mothers as to the correct way to carry out the Doctor's treatment.

The following Table shows particulars of Notifications of Births received :—

	41 MIDWIVES.			
	Doctors.	29	12	
		Qualified.	Unqualified.	Total.
No. of Births attended by..	297	.. 1391	.. 462	.. 2150
Parentage	13·81	.. 64·60	.. 21·48	.. —
No. of Medical Aid Forms received	—	.. 303	.. 79	.. 382
No. of Still-births notified..	6	.. 62	.. 20	.. 88

Of the 41 Midwives, 8 reside outside the Borough.

The reasons for sending for medical aid, as far as can be ascertained, are as follows :—

(1) Complications of pregnancy, namely: Antenatal conditions (undefined), 4; Abortion, 6; Miscarriage, 2; Prematurity, 36. Total, 48.

(2) Abnormal Presentations, 22.

(3) Complications of Labour, namely: Delayed Labour, 96; Contracted Pelvis, 2; Uterine Inertia, 5; Ante-partum Hæmorrhage, 3; Adherent Placenta, 4; Post-partum Hæmorrhage, 12; Ruptured Perineum, 32; Rigid Perineum, 4; Adherent Membrane, 5; Retained Membrane, 4. Total, 167.

(4) Complications of Puerperium and other Illnesses of Patient, namely: Rise of Temperature and Rapid Pulse, 16; Inflammation of Breast, 3; Patient Ill (undefined), 16; Puerisy, 1. Total, 36.

(5) Illness and Abnormalities of Child, namely: Malformation, 5; Baby Ill (undefined), 22; Itcerus Neonatorum, 4; Dangerous Feebleness, 18; Baby's Eyes, 34; Circumcision, 6; Asphyxia, 4; Spina Bifida, 1; Convulsions, 2; Rash on Baby, 4; Pemphigus, 3; Septic Funis, 1; Hæmorrhage Bowel, 1. Total, 105.

PUERPERAL FEVER.

There have been 7 cases and 3 deaths from Puerperal Fever, as compared with 5 cases and 4 deaths in 1918.

III.—TUBERCULOSIS.

The number of deaths from Phthisis is 90, against 99 in 1918 and 122 in 1917. The number of deaths from other Tubercular affections is 16, against 14 in 1918 and 35 in 1917.

The rates are as follows :—

Phthisis Pulmonalis 1·07 per 1,000 of population.

Other Tuberculous Diseases. ·19 ,, ,,

If taken together as Tuberculous affections, we have 106 deaths, or a rate of 1·26 per 1,000 of population.

PULMONARY PHTHISIS AND TUBERCULOUS DISEASES.

The deaths occurred in the following Wards :—

Wards.	Phthisis.	Other Tubercular Diseases.	Total.—
No. 1—St. George	2	—	2
No. 2—Lindsay	7	1	8
No. 3—St. Catharine	7	—	7
No. 4—St. Patrick	8	3	11
No. 5—St. Thomas	4	1	5
No. 6—Poolstock	4	—	4
No. 7—Victoria	9	—	9
No. 8—St. Andrew	8	3	11
No. 9—Swinley	6	1	7
No. 10—All Saints	5	—	5
No. 11—West Pemberton	1	2	3
No. 12—North Pemberton	4	—	4
No. 13—Central Pemberton	7	4	11
No. 14—South Pemberton	3	—	3
Transferable Deaths	15	1	16
Totals	90	16	106

The following table shows the Comparative figures for 1915, 1916, 1917, 1918, and 1919, as regards Pulmonary cases :—

	1915	1916	1917	1918	1919
Number of Notifications	233	178	188	197	139
Deaths	95	86	122	99	90
Fatality-rate per cent.	40·77	48·31	64·89	50·51	64·74
Death-rate per 1,000	1·10	1·03	1·46	1·23	1·07

COUNTY BOROUGH OF WIGAN.
PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1911 & 1912.

SUMMARY OF NOTIFICATION DURING 1919.

Age Periods.	Number of Notification on Form A.										Total Notifications (i.e., including cases previously notified by other doctors)	Number of Notification on Form B.			Number of Notifications on Form C.			
	Primary Notifications.											Total Notifications (i.e., including cases previously notified by other doctors)	Poor Law Institutions.	Sana- toria.				
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65					65 & up- wds.	Tot		
Pul. Males	..	1	4	3	5	9	17	10	6	4	..	59	66	..	1	2	4	6
,, Females	..	3	7	6	9	7	18	10	3	3	3	69	76	..	2	4	..	11
Non-pul. Males	2	4	5	1	5	1	1	2	..	1	..	22	23	1	7	3	1	1
,, Females	1	5	3	7	1	3	4	..	..	..	..	24	27	..	7	3	..	1

(Signature) FRED E. WYNNE, B.A., M.B., D.P.H.,

MEDICAL OFFICER OF HEALTH.

CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1919.

Wards.	Population, Census 1911	Pulmonary Tuberculosis	Other forms of Tuber'losis.	Totals
No. 1—St. George	4,905	9	1	10
No. 2—Lindsay	5,295	8	4	12
No. 3—St. Catharine	7,586	8	2	10
No. 4—St. Patrick	9,795	22	8	30
No. 5—St. Thomas	4,382	9	8	17
No. 6—Poolstock	5,413	4	2	6
No. 7—Victoria	4,836	15	2	17
No. 8—St. Andrew	12,378	21	13	34
No. 9—Swinley	7,384	5	1	6
No. 10—All Saints	3,536	8	3	11
No. 11—West Pemberton..	4,188	9	8	17
No. 12—North	7,379	9	1	10
No. 13—Central	5,962	9	13	22
No. 14—South	6,113	3	4	7
Totals	89,152	139	70	209

The work of the Dispensary is described in the report of the Tuberculosis Officer.



Twenty-five of the applicants gave a history of having been in the army, and 7 of these were received direct from the Insurance Commissioners. The total number of discharged tuberculous sailors and soldiers who have been dealt with through the Insurance Committee to the end of 1919 was 75. Two of these were on our books previous to joining the army. If their general condition rendered a period of institutional treatment desirable, they received priority, without any marked detriment to the claims of the civil population. It is noticeable that cases received direct through the Insurance Commissioners are usually in a comparatively early stage of the disease, and the prospects of restoration of working capacity are correspondingly good.

Owing to the fact that Bowdon Sanatorium is now reserved for women and children, informal arrangements were made whereby male cases have been sent to Crossley and Stanhope Sanatoriums. As, however, a considerable number of cases are still in an advanced stage of the disease when application is made for sanatorium benefit, the Pemberton Pulmonary Hospital continues to be of the greatest value. Many patients are restored to some degree of working capacity, and they and their friends obtain practical instruction in the principles of treatment. Advanced bed-ridden patients are obviously better cared for than is possible in their own homes in many instances, and when the home conditions are unsatisfactory the spread of infection is likely to be prevented by their removal to an institution.

One of the applicants for sanatorium benefit died shortly after examination, and of the remaining 75 at time of first examination by a Tuberculosis Officer :—

19 were in Stage I. (Turban's Stadia).
 10 " " II.
 29 " " III.
 12 were non-pulmonary.
 1 was a doubtful case.
 4 were not suffering from tuberculosis.

Thus 30 of the applicants were in Stage III. on application.

Recommendations were made to the Insurance Committee as under :—

TUBERCULOSIS OFFICER'S RECOMMENDATIONS.

	Males.	Females.	Total.
Number of applicants	45	31	76
Sanatorium Treatment	7	3	10
Pemberton Hospital	18	18	36
Special Nourishment	3	1	4
Domiciliary Treatment only	13	8	21
Died, immediately after examination	1	—	1
Not Phthisis	3	1	4

Special nourishment was also recommended in 20 other cases where the patients were recommended for institutional treatment. Of these 11 were ex-service men.

Special nourishment was also granted to 36 old cases. Of these 28 were ex-service men.

In the case of ex-service men, special nourishment is provided by the Local War Pensions Committee on my recommendation.

In all cases the panel doctor is asked to give domiciliary treatment pending examination by a Tuberculosis Officer and the decision of the Sub-Committee.

Particulars of admission and discharge of patients to and from residential institutions are given below :—

Institution.	Admitted.	Discharged.	Left without Permission.
Stanhope Sanatorium	2	1	—
Crossley Sanatorium	4	2	—
Bowdon Sanatorium	5	2	3
Pemberton Hospital	51	54	—

Of the above admissions to Crossley Sanatorium three men were discharged soldiers. One of the patients admitted to Stanhope Sanatorium was a discharged soldier. Of those admitted to Pemberton Hospital 24 were ex-service men.

The conditions of patients on discharge is shown as under :—

Institution.	Improved.	Not		Total.
		Improved.	Died.	
Stanhope Sanatorium	1	—	—	1
Crossley Sanatorium	2	—	—	2
Bowdon Sanatorium	2	3	—	5
Pemberton Hospital.. .. .	35	11	10	54

Patients receive domiciliary treatment from their panel doctors both before and after treatment in an institution. They receive in addition dispensary supervision of their hygienic routine and home surroundings. Those who are fit to attend the dispensary are encouraged to do so regularly, and each case is reconsidered with a view of modification of treatment every two months. At the end of the year 201 insured persons were under supervision and 377 non-insured, as compared with 184 insured and 324 non-insured at the end of 1918.

The total number of tuberculous cases under supervision or treatment at the end of the year was 578, including 44 ex-service men. Special attention has been given to these latter and close co-operation has been maintained with the Local War Pensions Committee. A whole-time Health Visitor devotes all her time to assisting at the dispensary and visiting the patients at their homes with a view to instructing the patients and their friends.

The importance of early diagnosis cannot be over-estimated, as no form of treatment is of much avail for advanced cases. Patients need encouragement to consult their panel doctors as soon as they feel unwell, and the doctors for their part have at their disposal the resources of the dispensary for the early diagnosis of doubtful cases. The danger of waiting until tubercle bacilli have been found in the sputum is that by this time the disease is usually advanced. The diagnosis should be made before the tissue begins to break down, *i.e.*, before tubercle bacilli can be found.

Sanatorium Benefit commenced in July, 1912, and 644 applications were received to the end of the year.

Of the 644 applicants, 543 were actually suffering from tuberculosis, and of these it was possible to trace 201 who were alive at the end of the year, the condition of 80 being uncertain owing to removal, enlistments, etc. Of the 201 traced :—

95	were on or fit for full work	} at the end of 1919.
34	„ „ light work	
72	were unfit for any work	

i.e., the working capacity was fully or partially restored in at least 129 cases, or practically 63·5 per cent. of those traced. On the other hand 262 were known to be dead, and it is significant that many were in stage III. (*i.e.*, cases with extensive lung disease) at the time of first examination by me. Most of these cases gave a history of having been treated and certified for

varying periods as suffering from anæmia, bronchitis, influenza, debility, gastric catarrh, &c.

Seeing that these five diseases or symptoms frequently accompany the earliest stages of pulmonary tuberculosis their continuance should always suggest the possible existence of tuberculosis as the real disease.

The following analysis of the deaths from tuberculosis occurring in insured persons in the Borough during the past few years is instructive, as showing the length of time between application for Sanatorium Benefit and the death of the patient :—

Total applications for Sanatorium Benefit to end of 1919, 644.
The number actually suffering from tuberculosis was 543.
Of these latter 262 were dead at the end of the year.

The deaths occurred as follows :—

31	deaths	within one month of application for Sanatorium Benefit.
43	„	between two and three months of application for Sanatorium Benefit.
44	„	between three and six months after application for Sanatorium Benefit.

Total of 121 deaths within six months of application for Sanatorium Benefit.

65	deaths	within one year of application for Sanatorium Benefit.
49	„	between one and two years of application for Sanatorium Benefit.
13	„	between 2 and 3 years of application for Sanatorium Benefit.
14	„	over three years of application for Sanatorium Benefit.

Thus, out of 262 deaths occurring in insured patients since the commencement of Sanatorium Benefit in July, 1912, to the end of 1919, 121 or 46·2 per cent., occurred within six months of application for Sanatorium Benefit, as compared with 106 deaths or 48·8 per cent. to the end of 1918. In the Borough of Wigan practically every insured case is assisted to apply for Sanatorium Benefit, and does actually apply within a few days of notification by a general practitioner or diagnosis by a Tuberculosis Officer. The above figures may be taken as comparable with tables showing the length of time between notification and time of death. There is this advantage in taking the applications for Sanatorium Benefit as our “fixed point,” viz. : that notification to the Medical Officer of Health is insufficient to bring a patient into Sanatorium Benefit, as the patient must first make application to the Insurance Committee. The above percentages are still too high to be accounted for by acute or “galloping” cases, and furnishes absolute proof

of the necessity for close co-operation between the panel doctors and the Tuberculosis Dispensary. It is noteworthy that similar figures are available for a great many other towns and districts, and this appears to be due to delay on the part of some patients to consult their panel doctor at the onset of the illness as well as to difficulty in diagnosis.

Sanatorium Benefit has now been in existence for nearly eight years, but its progress has been hampered owing to the fact that the Local Schemes of Authorities, which were for the most part not ready when it came into operation, have been further delayed owing to the late war. The war was, of course, responsible for reducing the number of medical practitioners available for the civilian population, thereby throwing an increased burden on those who remained, while, in addition, speaking generally, there has been a tendency towards an actual increase in the amount of tuberculosis. The war also hindered the extension and development of existing schemes. In spite of these difficulties, however, much has been accomplished, and definite advances have been made in the following directions :—

- (1) The provision of facilities in early diagnosis in connection with the Tuberculosis Dispensary. There is evidence that these facilities are becoming appreciated more and more every year, as it becomes realised that consumption is a curable disease if diagnosed in the early stages. Arrangements have lately been made, through the Borough Council, for X-ray examinations when considered necessary by a Tuberculosis Officer.
- (2) Facilities are provided for treatment in sanatoria, the Pemberton Pulmonary Hospital, and at the patients' homes. Whatever may be the shortcomings of the present system, it is far in advance of what obtained before the commencement of sanatorium benefit. The large number who applied for sanatorium benefit when in an advanced stage of the disease, and have since died, certainly received far more humane treatment and ended their days more comfortably than was formerly possible.
- (3) Special efforts have been made to prevent the spread of infection, and there is reason to believe that these efforts have been generally successful, judging by the few secondary cases that have been reported in homes where dispensary supervision has been undertaken.

There are many developments and extensions worth consideration, but it appears to me that the Insurance Committee has done as well as possible with its available income. The problem of tuberculosis is not merely one of treatment but also one of prevention. The improvement of the conditions under which people work and live will doubtless receive attention in the near future, as well as the provision of a milk supply free from tubercle bacilli. There is much to be said for the provision in new housing schemes of a proportion of dwellings with special bedroom accommodation, etc., for families, where there is a case of tuberculosis.

NON-INSURED PERSONS.

Much of what has been said above as regards insured persons, applies equally to the non-insured. These cases receive precisely similar care and attention from the Dispensary Staff, and no distinction is made, apart from that necessarily involved in the keeping of two sets of records. They receive, as in the cases of insured persons, home treatment from their own doctors, together with dispensary treatment and supervision, as well as periods of treatment in the institutions available whenever this is required.

Particulars of admission and discharge of patients to and from residential institutions are given below :—

Institution.	Admitted.	Discharged.	Left without Permission.
Stanhope Sanatorium	—	—	—
Crossley Sanatorium	—	—	—
Bowdon Sanatorium	7	6	—
Pemberton Hospital	22	15	—

The condition of patients on discharge is shown as under :—

Institution	Improved.	Not Improved.	Total.
Stanhope Sanatorium	—	—	—
Crossley Sanatorium	—	—	—
Bowdon Sanatorium	6	—	6
Pemberton Hospital	8	3	11*

*Four Patients died in Pemberton Hospital.

PROVISION FOR PRE-TUBERCULOUS AND NON-INFECTIOUS
CAUSES OF TUBERCULOSIS IN CHILDREN.

It is now generally recognised that in Wigan, as elsewhere, residential accommodation for a limited number of such children is urgently required. A Residential Open-air School of Recovery, on the lines advocated by the Board of Education, would go far towards meeting the need. The chief difficulty has hitherto been a financial one, but substantial grants could be obtained from public monies.

Day open-air schools and classes would, of course, go far towards reducing the number of beds likely to be required for the above.

It is to be hoped that in the near future some definite steps will be taken in the direction of providing special open-air day and residential accommodation for these children. It appears to me that this is most likely to be effected by combined action between the Education Authority (which is responsible for the education of children, even if delicate and tuberculous), and the Health Committee, which is responsible for the actual treatment of tuberculosis occurring in children as well as in adults.

CARE COMMITTEE.

The Care Committee has continued to do useful work, as will be seen from the following summary :—

SUMMARY OF ASSISTANCE GIVEN BY THE CARE COMMITTEE.

Nourishments only	..	..	..	..	..	..	..	..	50
„ with loan of bed, bedding and bedpan	..	..	..	..	..	..	..	..	4
„ and articles of clothing	..	..	..	..	..	..	..	..	2
Loan of bed and bedding	..	..	..	..	..	..	..	..	6
„ bedpan	..	..	..	..	..	..	..	..	1
Articles of clothing	..	..	..	..	..	..	..	..	5
									—
									68
									—

PERSONS RECEIVING ASSISTANCE DURING 1919.

Insured.	Non-insured (Adults).	Non-insured (under 16 years).
27	13	28

The Committee have met monthly and have granted assistance to 68 persons during the year, on the recommendations of the Tuberculosis Officers and Tuberculosis Health Visitor, who attend the meetings. The work of the Committee is greatly hampered by lack of funds.

The following tables summarise the work of the dispensary in various directions :—

TABLE 1.—NEW CASES EXAMINED (AT DISPENSARY AND HOME).

	Tuberculous.				Non-Tuberculous.				Totals.			
	1916	1917	1918	1919	1916	1917	1918	1919	1916	1917	1918	1919
Insured	71	112	110	95	35	63	71	58	106	175	181	153
Non-Insured	43	26	58	86	36	47	38	39	79	73	96	125
Totals	114	138	169	181	71	110	109	97	185	248	277	278

TABLE II.—SPUTUM EXAMINATIONS.

	1916	1917	1918	1919
Positive Results	39	60	51	53
Negative Results	132	153	242	230
Totals	171	213	293	283

Two specimens of urine were also examined.

TABLE III.

	Insured.	Non-Insured.	
(1) Total number of persons suffering from Tuberculosis under treatment or supervision during 1919	261	465	
(2) Number of persons under treatment or supervision 31st December, 1919	201	377	
(3) Visits by Dispensary Health Visitor :—			
	Ordinary Civil Population.	Ex-Service Men.	Totals.
(i.) No. of New Cases visited ..	193	25	218
(ii.) Total No. of visits paid ..	2,302	358	2,660
(4) No. of Disinfections carried out after removal to sanatorium or death	—	—	106

Special attention has been given to improving the home conditions, especially the sleeping arrangements.

TABLE IV.—GENERAL STATISTICS.

	Insured.				Non-Insured.				Totals.			
	1916	1917	1918	1919	1916	1917	1918	1919	1916	1917	1918	1919
I.—DISPENSARY ATTENDANCES :—												
(i.) New Patients	138	151	158	136	25	65	91	113	163	216	249	249
(ii.) Cases examined on discharge from an Institution	64	80	54	39	2	8	14	12	66	88	68	51
(iii.) Old cases examined ..	659	524	524	535	65	55	107	214	624	579	631	749
(iv.) Contacts examined ..	—	—	—	—	—	—	—	—	8	14	31	30
(v.) Total Attendances ..	861	755	736	710	100	142	242	339	961	897	978	1079
II.—TUBERCULOSIS OFFICERS' VISITS	23	30	31	27	3	8	5	15	26	38	36	42
III.—TUBERCULOSIS OFFICERS' ATTENDANCE AT MEETINGS	—	—	—	—	—	—	—	—	46	38	33	34

In conclusion I wish to thank the Town Clerk (Mr. W. H. Tyrer) for helpful advice on various occasions. The presence of Dr. A. Aziz has been most helpful, and my thanks are due to him for his co-operation. Excellent work has been done by Miss L. West (Tuberculosis Health Visitor), who has carried out her duties with care and thoroughness. The assistance I have received from Mr. W. J. Loe, dispensary clerk, who has been responsible for the preparation of the tables in this report, is likewise deserving of mention.

My thanks are also due to the Committee for their constant encouragement and support.

I am,

Your obedient Servant,

GEORGE JESSEL,

Consulting Tuberculosis Officer.

February 28th, 1920.

General Sanitary Work

INTRODUCTORY.

FACTORY AND WORKSHOP ACT, 1901.

SHOP HOURS ACT, 1892 TO 1905.

SHOPS ACT, 1912.

SHOP HOURS ACT, 1904, CLOSING ORDER.

MEAT INSPECTION AND SLAUGHTER-HOUSES.

DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885 AND 1886.

HOUSING AND TOWN PLANNING ACT, 1909.

REMOVAL OF NIGHTSOIL, &c.

OFFENSIVE TRADES.

EDUCATION ACT, 1902, 1904.

PUBLIC ANALYST REPORT.

RAINFALL.

INTRODUCTORY.

The general sanitary circumstances of the Borough are similar to those fully described in previous reports, and the usual description is omitted this year.

The water supply has been obtained from the usual sources, and has been of satisfactory quality.

Milk Supply.—Full particulars will be found in the Borough Analyst's report as to the quality of the samples taken.

FACTORY AND WORKSHOP ACT, 1901.

The workshops have been regularly and systematically visited by your Inspectors; and also the factories, on receipt of report from H.M. Inspectors. The bakehouses have been regularly visited and any nuisances arising have been promptly dealt with. The regulations as to limewashing, cleanliness, etc., have been enforced. The underground bakehouses have been kept in a sanitary condition.

1.—INSPECTION.

Premises.	No. of Inspections.	No. of written Notices.
Factories (including Factory Laundries)	71	13
Workshops (including Workshop Laundries)	268	16
Workplaces .. .. .	..	..
Total	339	29

2.—DEFECTS FOUND.

Particulars.	No. of defects found.	No. of defects remedied.
<i>Nuisances under Public Health Acts :—</i>		
Want of Cleanliness	17	17
Want of Ventilation .. .. .	..	..
Overcrowding	1	1
Want of Drainage of Floors. .. .. .	..	..
Other Nuisances	5	5
Sanitary } insufficient .. .. .	..	..
Accommo- } unsuitable or defective	15	11
dation } not separate for sexes .. .. .	..	..
<i>Offences under the Factory and Workshop Act :—</i>		
Illegal occupation of unflerground bakehouse .. .. .	..	..
Breach of special sanitary requirements for bakehouse	26	26
Other offences	9	9
Total	73	69

Notices from H.M.I., 5 ; Escapes in case of fire, in three cases no action necessary. and in two cases certificates had been issued, that means are sufficient,

3.—HOME WORK.

Nature of Work.	OUTWORKERS' LISTS, SECTION 107.						Notices served on occupiers as to keeping or sending lists (8)
	Lists received from Employers.						
	Sending twice in the year.			Sending once in the year.			
	Lists. (2)	Outworkers.		Lists. (5)	Outworkers.		
Con-tractors (3)		Work-men (4)	Con-tractors (6)		Work-men (7)		
WEARING APPAREL :							
(1) Making, etc.	23	6	170	1	1	..	12
(2) Cleaning, etc.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Workshops	320
Bakehouses	116
Domestic Workshops (not Outworkers)	8
Total Number of Workshops on Register	444

5.—OTHER MATTERS.

Class.	Number.
<i>Matters Notified to H.M. Inspector of Factories :—</i>	
Failure to affix Abstract to the Factory and Workshop Act (s. 133) ..	1
Notified by H.M. Inspector	30
Report (of action) sent to H.M. Inspector	44
<i>Underground Bakehouses (s. 101) :—</i>	
Certificates granted during the year .. .. .	..
In use at the end of the year	5

TRADES FOR WHICH REGISTERED WORKSHOPS ARE USED.

Dressmaking	39	Joiners	5
Boot Repairing	36	Cycle Repairers	5
Clogging	29	Tripe Dressers	2
Tailoring	36	Marine Store Dealers.. .. .	4
Millinery	47	Coffin Maker	1
Clothing	18	Ginger Beer Works	1
Saddlers	5	Clay Pipe Maker	1
Jewellers	5	Hard Confectionery	2
Plumbers	13	Mantle Making	4
Painters	9	Bottlers.. .. .	4
Shoeing Smiths	6	Rope Walker	1
General Smiths	2	Coach Builders	2
Wheelwrights	5	Tin-plate Workers	5
Cabinet Makers	4	Tarpaulin Sheet	
Ice Cream Makers	2	Manufacturers	1
Scale Repairers	2	Carver	1
Laundries	2	Watch Repairers	3
Knitting	2	Piano Repairer	1
Picture Framers	3	Upholsterer	2
Wreathes	2	Monumental Mason	1
Electrical Works	1	Basket Maker	1
Waste Paper Dealer	2	Cigarette Maker	1
Pickle Works	1		
Coopers	1		
		Total	320

NUMBER OF WORKS ON REGISTER.

1919.	1918.	Increase.
320	315	5

NUMBER OF DOMESTIC WORKSHOPS ON REGISTER.

1919	1918	1917	1916
8	10	14	9

FACTORY AND WORKSHOP ACT, 1901.

Notices received from H.M. Inspector	30
Section 5—Sanitary defects	25
Complied with	21

(Five re-escapes, 3 no action necessary, 2 had sufficient means at time of notice).

NUMBER OF BAKEHOUSES ON REGISTER.

1919	1918	Increase.
116	114	2

Nine are certified underground bakehouses, and are as follows:—

22, Earl Street.	36, Wigan Lane (<i>not in use</i>).
32, Market Street.	108, Wallgate (<i>not in use</i>).
58, Market Street.	12, Wallgate (<i>not in use</i>).
10, Standishgate.	Woodcock Street (<i>not being used as</i>
34, Wigan Lane	<i>bakehouse</i>).

OUTWORKERS' LISTS (SECTION 107).

No. of Visits to Outworkers' Premises	17
„ Nuisances arising	—

SHOP HOURS ACT, 1892–1905.

SHOP ACTS, 1912 AND 1913.

The work done under this Act is given fully in the Chief Sanitary Inspector's report. The infringements were complied with upon warning from the Inspectors.

INFRINGEMENTS.

Notices not exhibited	4
Other infringements	30
	—
	34
	—
No. of Observations (day)	85
„ „ (night)	38
„ Visits (day)	31

SHOP HOURS ACT, 1904 (CLOSING ORDER).

(HAIRDRESSERS AND BARBERS).

The work done under this Order is given in your Inspector's report.

No. of Infringements	—
„ Observations (day)	51
„ „ (night)	32

SLAUGHTER-HOUSES AND MEAT INSPECTION.

There are 24 registered slaughter-houses in the Borough, and 1 licensed slaughter-house. Most of these slaughter-houses are unsatisfactory, and in default under the Bye-laws. They are generally in close proximity to dwellings, but unfortunately cannot be closed on this account. Many of them are ill-paved, improperly drained, and insufficiently lighted. The middens in connection with the slaughter-house constitute a serious nuisance, and as breeding-places for flies constitute a real danger to health.

The Health Committee has enforced more strictly the provisions of the Public Health Acts, and the Local Bye-Laws, that deal with the removal of manure, as it is obvious that these breeding-places for flies cannot be allowed to remain unchecked.

The fact that the work of slaughtering is distributed among 25 slaughter-houses in different parts of the Borough renders the work of meat inspection difficult. It is to be hoped that in the near future the provision of the Municipal Abattoir already decided upon by the Council may be accomplished. At present, however, no definite steps have been taken for various reasons, but a Sub-Committee has been appointed to endeavour to find a suitable site.

Cases of Tubercular or other disease in meat are reported to the Health Department by the butchers, and are then examined by Inspectors, who refer doubtful cases to your Medical Officer.

Independently, the slaughter-houses are regularly visited by the Inspectors and any suspicious carcasses found are reported to the Medical Officer.

Particulars of meat and other foodstuffs surrendered and destroyed will be found in your Chief Sanitary Inspector's report.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

REPORT OF THE VETERINARY INSPECTOR UNDER THE DAIRIES AND COWSHEDS ORDER FOR THE YEAR 1919.

28, STANDISHGATE,

Wigan.

I have to report that again this year three cases of Tuberculosis of the udder have been discovered and satisfactorily dealt with. I have also had two cases just outside the Borough, one of which was giving a fair quantity of apparently normal milk, the sale of which was stopped at once on my advice and the animal destroyed. The Tuberculosis Order has still not been re-enacted, so that these cases can only be dealt with by the voluntary consent of the owners. The question of a clean Milk supply is still being much discussed, and will probably in time lead to useful legislation.

At the Congress of the Royal Sanitary Institute held at Newcastle-on-Tyne, Mr. John Malcolm, Veterinary Inspector for the City of Birmingham, gave some interesting particulars of the efforts of the Birmingham Corporation to procure Tubercle free herds at the farms supplying Birmingham with milk. Broadly the scheme provided that any dairy farmer whose farm is situated within a specific distance of Birmingham, and whose milk is sent to Birmingham, should have his cows tested with Tuberculin, free of cost by Veterinary Surgeons appointed by the Corporation, on his undertaking to immediately isolate and subsequently dispose of re-actors (in what manner was not stated); to bring in only Tubercle free cows and to house them only in approved, well ventilated sheds. These scheme has been in operation for 7 years, and at the present time there are 20 tubercle free herds.

Mr. Malcolm gave figures of a farm which at first furnished 57.7 per cent. of reactors and in successive years the percentages were 25, 12, 6, 2, 5, 2, 1, 0, thus taking 7 years to eradicate the disease. The delay he explains was due to (a) the retention on the farm in immediately adjoining buildings of a number of reactors that were good milkers, and (b) the mixing of reactors and non-reactors at grass, (c) the periodic purchase and introduction into the herd of cows and heifers, a number of which were not tested till some time after their introduction. Anyone thinking over the difficulty of perfect isolation in both shed and field will realise that in this district also it would probably take a long time to procure the desired result. The final report of the Departmental Committee appointed by the Government on the production and distribution of Milk has been issued, in which the importance of pure milk in securing health for the nation's children is emphasised. It is pointed out how this importance is insufficiently recognised by the Public, and incidentally they point out the inherent difficulties of securing both pure and clean milk at a price within the reach of the poorest consumer. This last is the crux of the question. A pure and clean supply can be obtained, but only at great expense.

Yours obediently,

WM. WOODS.

HOUSING AND TOWN PLANNING.

In spite of the activities of the Housing Committee which has been almost constantly in session throughout the year, the elimination and even the improvement of insanitary housing conditions has continued to be almost at a standstill. This is due entirely to a deadlock caused by overcrowding. It is impossible either to demolish or close, or even materially alter houses while they are perforce occupied. Up to the present it has not been possible even to begin building owing to circumstances too well-known to need recapitulation here.

We have, therefore, been reduced to the necessary of dealing with all insanitary conditions in connection with houses as Nuisances. The number of such Nuisances reported month by month by your Chief Sanitary Inspector, and dealt with by service of Notices under Sec. 91 of the Public Health Act, 1875, is a fair measure of the activity of your Inspecting Staff. Unfortunately

the service of the Notice is by no means always followed by abatement of the nuisance, and this naturally causes great dissatisfaction among those of the public affected. The cost of repairs has increased enormously, so that under the Rents Restriction Act many owners of property are genuinely unable to carry them out, and others have a plausible excuse. There is also if not an absolute shortage of labour, a difficulty in obtaining men for work of this sort which does not mean regular and continuous employment. These difficulties of course we share with the rest of the country, and it is not in Wigan alone that the result is attributed by the unthinking and ignorant, to negligence on the part of the Local Authority and its officers. Thanks to the action of the Housing Committee and the Health Committee in appointing 12 special temporary inspectors we have, however, the advantage of knowing, with an unusual degree of accuracy, the extent to which insanitary conditions prevail, the number of new houses, and the amount of reconstruction required. I append a copy of the report on the results of the Housing Survey which has already been circulated to members of the Housing Committee.

HEALTH OFFICE,

Wigan,

May 10th, 1920.

To the Chairman and Members of the Housing and Insanitary Houses Committee.

GENTLEMEN,

Herewith I beg to present a statement of some of the results of the recent Housing Survey, tabulated in Wards under the headings which I believe will give most of the information required by members. I regret that the figures as to population cannot be regarded as even approximately accurate, owing to the reluctance of a considerable proportion of the inhabitants to divulge the true state of affairs to your enumerators. During the course of the enquiry, when we had reason to doubt certain statements made, we checked them by further enquiries and by comparison with ration cards, &c. In every case we found that the number of inhabitants had been understated, in some cases grossly so. It was, however, impossible to do this in every case with the time and staff at our disposal, and in considering the question of over-crowding we must take our present estimated population of 90,000. The figures will, of course, be known precisely next year from the Census Returns.

Taking the number of dwelling houses as 17,411, and the population as 90,000, gives us a figure of 5.1 persons per house, as against 4.5, which is generally accepted as the standard for adequate housing accommodation.

Even this figure, however, is not a true Measure of Overcrowding, as we have included in the total number of dwellings the residences of the well-to-do and middle-classes, and 183 public-houses, which are occupied, but seldom overcrowded.

Table II., which gives the houses classified according to the number of rooms shows generally what proportion of the population are housed in dwellings of the poorer class.

TABLE II.

<i>Rooms.</i>							<i>No. of Houses.</i>
1 room only							16
<i>Living rooms.</i>	<i>Sleeping rooms.</i>						
1 ..	1 ..	..	..	..	..	642
1 ..	2 ..	..	..	..	..	3188
1 ..	3 ..	..	..	..	..	745
1 ..	4 ..	..	..	..	..	136
2 ..	1 ..	..	..	..	..	29
2 ..	2 ..	..	..	..	..	4907
2 ..	3 ..	..	..	..	..	6046
2 ..	4 ..	..	..	..	..	227
3 ..	1 ..	..	..	..	..	3
3 ..	2 ..	..	..	..	..	48
3 ..	3 ..	..	..	..	..	744
3 ..	4 ..	..	..	..	..	120
4 ..	1 ..	..	..	..	..	1
4 ..	3 ..	..	..	..	..	2
4 ..	4 ..	..	..	..	..	14
Other houses with rooms more than in detailed list						543	
Total						17,411	

In estimating the task before this Committee we must take first the fact that there are no less than 1,781 houses at present occupied by more than one family. These are all houses intended for the occupation of a single family only, and it may safely be assumed that practically all of these are overcrowded.

In addition to these there are 202 back-to-back houses. Even if all these could be made habitable their conversion into through houses would create a further deficit of 101 houses. Of houses without through ventilation or otherwise insanitary there are no less than 1375. A certain number of these are fit only for demolition, but even in those which could be made habitable by structural alterations nothing can be done until temporary or other accommodation for the displaced tenants can be provided.

The Heading "Insanitary Districts" requires some explanation. These are courts, yards, or other small groups of houses in which repairs and in some cases partial demolition are required. Such alterations could be carried out under the provisions of the Housing and Town-Planning Act, of 1909, but do not demand a reconstruction scheme such as is provided for in Part I. of the Housing of the Working Classes Act of 1890.

Of Insanitary Areas in the latter sense we have scheduled only three, namely Bottling Wood, Marsh Green, and Part of Lamberhead Green.

In addition to these Housing Defects the sanitary conditions most urgently calling for remedy, and coming under the purview of this Committee are 1964 part-paved yards, 367 unpaved yards, 6,655 pail-closets and 1,611 privies, requiring conversion to the water-carriage system.

To carry out all of this work involves much time and great cost, both to the public funds and to private owners of property.

Until the programme is completed, however, it cannot be expected that the health conditions of the Borough will be satisfactory.

I am,

Yours truly,

FRED E. WYNNE, M.B.,
Medical Officer of Health.

TOTAL OF WIGAN AND PEMBERTON WARDS.	Total.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
No. of Public Houses ..	183	22	6	8	18	20	5	10	10	10	33	11	11	8	11
No. of Business Premises ..	871	63	23	29	56	57	19	47	34	49	384	44	46	10	10
No. of Shops and Dwelling- Houses.. ..	1146	117	54	102	133	80	42	78	92	95	106	67	73	67	42
No. Vans and Common Lodg- ing Houses	20	—	—	1	9	3	3	—	—	—	5	—	—	—	—
Dwelling Houses ..	11682	742	991	1357	1580	744	1016	880	2358	1511	538	740	1384	1145	1096
Adults, Males ..	24647	1184	1478	2040	2526	1164	1578	1288	3571	2155	826	1222	2074	1761	1780
Adults, Females ..	27807	1390	1600	2259	2850	1302	1669	1419	4124	3041	943	1254	2153	1963	1840
Children, Male ..	12073	664	721	1110	1448	675	726	782	1572	777	321	629	1112	746	790
Children, Female ..	11847	657	711	1071	1412	587	738	779	1596	705	312	649	1029	854	747
Lodgers, Male ..	3920	242	167	385	467	243	234	242	474	220	168	128	320	296	334
" Female ..	3373	199	135	341	311	227	200	250	423	150	229	100	278	261	269
" Children, Male..	475	74	—	109	18	—	—	—	15	33	26	14	40	62	84
" Children, Female	535	67	1	118	21	—	—	—	15	31	25	16	53	92	96
Houses keeping lodgers..	4138	249	173	426	421	248	249	281	526	202	220	126	356	320	341
Houses occupied by more than one family ..	1781	135	49	201	174	—	119	120	226	101	80	57	170	156	193
of Back-back Houses..	202	6	9	10	—	33	26	56	10	10	—	6	2	22	18
Houses with no through ventilation	254	29	19	5	3	38	19	22	2	48	32	9	22	2	4
of Insanitary Houses ..	1121	80	156	29	43	281	45	79	12	137	37	100	41	37	44
of Insanitary Districts...	22	1	7	—	1	7	—	1	—	2	—	1	1	—	1
Private Paved Yards ..	7533	261	614	693	1006	203	662	268	667	1337	291	193	599	470	269
Private Part-paved Yds	1569	41	19	120	30	14	82	47	1527	7	38	127	188	454	375
Private Unpaved Yards.	132	—	5	17	10	3	2	4	26	13	—	22	01	2	27
Common Paved Yards...	800	79	59	81	101	91	41	83	45	23	82	21	34	17	33
Common Part-paved Yds	395	43	27	32	42	42	4	36	64	6	15	43	30	5	6
Common Unpaved Yards	235	—	7	47	13	6	—	3	34	15	—	25	32	22	31
Water Closets	6471	191	335	476	429	176	197	215	1355	1372	422	230	471	355	247
Waste W.C.'s	840	18	28	84	174	—	86	26	334	84	—	6	—	—	—
Pail Closets	6655	544	618	788	1061	431	739	548	861	644	412	—	12	—	7
Privies	1611	—	—	—	—	—	—	—	—	—	—	250	407	482	472

No. of houses in respect of which Closing Orders were still operative on January 1st, 1919	71
No. of Demolition Orders made, and not complied with, on January 1st, 1919	35
No. of houses reported as unfit for human habitation in 1919 ..	31
No. of houses inspected during 1919	31
No. of Closing Orders made during 1919	24
No. of Closing Orders not made during 1919	7
No. of Closing Orders determined during 1919	7
No. of Demolition Orders made during 1919 .. .. .	..
No. of houses demolished in compliance with Demolition Orders ..	..
No. of houses converted to store after Demolition Order during 1919 ..	..
No. of houses made habitable after Demolition Orders during 1919 ..	..
No. of houses in respect of which Demolition Orders remained operative on December 31st, 1919	35
No. of houses in respect of which no Orders have been made remaining on books December 31st, 1919:	99
No. of houses in respect of which Closing Orders remained operative on December 31st, 1919	88
The number of houses made habitable during the year is.. .. .	7
The number of back-to-back houses converted into through houses is ..	..

The following table shows the number of houses reported to the Committee, the number of Closing Orders made, and the number of houses demolished in each year since the passing of the Housing and Town Planning Act, 1909 :—

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Houses reported ..	8	32	42	281	97	162	29	..	7	73	31
Closing Orders ..	5	14	13	245	83	83	39	11	..	12	24
Houses demolished ..	5	13	..	14	23	2	13	12	5	..	..

UNPAVED YARDS AND PASSAGES, &c.

The following have been dealt with for defective surfaces of yards and passages :—

20, Turner Street.	69, Beech Hill Lane.
43, Princess Street.	10, Marsh Street, P.
23, Hopwood Street, P.	Marsh's Court.
24, Pottery Road.	39, Poolstock Lane, P.
55, Kendal Street.	1, Morpeth Street, P.
29, Hopwood Street, P.	22, Westminster Street, P.
38, Victoria Street, P.	65, Scot Lane, P.
178, Billinge Road, P.	4, Norfolk Street, P.
3, Vere Street.	89, Warrington Road, P.
269, Ormskirk Road, P.	7, Kendal Street.
Royal George Lodging House.	123, Gidlow Lane.

CONVERSION OF CLOSETS.

Middens or pail closets converted into water closets in each of the following years :—

1904	..	..	..	..	8	1912	..	..	..	..	44
1905	..	..	..	..	28	1913	..	..	..	..	47
1906	..	..	..	..	23	1914	..	..	..	..	62
1907	..	..	..	..	26	1915	..	..	..	..	99
1908	..	..	..	..	21	1916	..	..	..	..	42
1909	..	..	..	..	60	1917	..	..	..	..	9
1910	..	..	..	..	5	1918	..	..	..	..	10
1911	..	..	..	..	86	1919	..	..	..	..	13
					Total	..	..	..	..	..	583

OFFENSIVE TRADES.

These have been kept under close supervision, and certain improvements and alterations that were urgently necessary, have now been carried out. There have, in consequence, been few complaints of nuisance since.

RAINFALL, 1919.

AT WORTHINGTON.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	4.48	20
February	1.05	7
March	6.27	19
April	2.18	20
May	1.53	11
June	2.56	18
July	1.54	12
August	4.07	19
September	1.99	13
October	3.11	13
November	2.83	19
December	6.03	27
Total	37.65	198

The mean average rainfall for the past 62 years, 37.52 inches.

RAINFALL, 1919.

AT BISPHAM.

Month.	Rainfall in inches and Tenths.	No. of days on which rainfell, being .01 of an inch or more.
January	2.94	21
February	0.93	5
March	5.41	19
April	1.83	17
May	1.39	8
June	1.82	17
July	2.40	12
August	4.25	17
September	2.39	12
October	2.19	12
November	2.24	13
December	6.39	27
Total	34.21	180

Average consumption per head per day, Wigan and Pemberton (estimated population, 84,259) was 21.30 gallons.

THE CLIFF,

Higher Broughton,

Manchester,

July 1st, 1920.

To the Chairman and Members of the Health Committee, Wigan.

GENTLEMEN,

REPORT OF THE PUBLIC ANALYST FOR THE YEAR 1919.

I herewith submit a brief account of the work carried out under the various Acts, during the year 1919.

During the year I have analysed 116 samples of foods and drugs, as described herewith.

Articles.	Milk	Coffee	Epsom Salts	Margarine	Sugar	Ginger	Cheese	Camphorated Oil	Total.
Number.	89	6	5	4	3	3	3	3	116

Of the 116 samples analysed, six were reported against, viz., 5 milks and 1 Epsom salts. Three of the milks were deficient in fat to the extent of 3.3, 5.0 and 10.0 per cent. respectively, whilst two samples contained 3.5 and 9.4 per cent. respectively of extraneous water.

The sample of Epsom salts contained 10 parts per million of arsenic or just double the maximum quantity allowed.

The following table illustrates the quality of the milk supply, judging by the fat content :—

Milks containing under 3.0 per cent. of fat	4	or 4.5 %.
„ „ 3.0 % fat, not over 3.5 %	45	„ 50.5 %.
„ „ 3.6 % fat, not over 4.0 %	31	„ 34.8 %.
„ „ Over 4.0 % of fat	9	„ 10.2 %.

Of the 89 samples of milk analysed, 49 (equal to 55 per cent.), have a fat content of 3.5 per cent. and under; all the samples were free from preservatives.

With the exception of the Epsom salts already referred to, the remaining samples were of satisfactory commercial quality. One camphorated oil was prepared with refined mineral oil instead of olive oil—a war emergency measure—but all samples contained the requisite amount of camphor. The coffees and gingers were microscopically above suspicion and free from foreign vegetable additions.

FERTILISERS AND FEEDING STUFFS ACT, 1906.—Under this Act, two samples (Indian corn and bran) were examined and found to be of average composition.

RAG FLOCK ACT, 1912.—Four samples were submitted with a view of ascertaining their degree of cleanliness. The amounts of chlorides present were 18, 30, 42 and 50 parts per 100,000 respectively determined by the official tests. The two latter samples exceeded the permissible maximum of 30 parts per 100,000, and were therefore reported against,

WATER SUPPLY.—During the year 18 samples of water have been examined. With the exception of the samples taken in January, February and September, the quality of the supply has been fairly constant and of a highly satisfactory degree of organic purity.

In January and February the figure recorded as “Albuminoid Ammonia” was excessive. This was due to the ingress of water containing excessive traces of organic matter of vegetable origin. The water improved after a short time.

In September, the supply in one district showed the presence of heavy traces of suspended matter containing a high non-bacterial population which was most probably due to a disturbance of the deposit in the water main. This unsatisfactory condition disappeared after the pipe had been cleaned.

In conclusion I desire to record my appreciation of the support and co-operation which has always characterised one's relations with my colleagues of the Health Department, and of the encouragement consistently shown by your Committee.

I remain, Gentlemen,

Your obedient Servant,

S. ERNEST MELLING,

County Analyst.

Annual Report of the Chief Sanitary Inspector, 1919.

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HEALTH DEPARTMENT,

King Street West,

Wigan,

April, 1920.

To the Chairman and Members of the Health Committee.

Sir and Gentlemen,

I have very great pleasure in submitting for your approval my Eighth Annual Report of the work carried out by the Staff under my supervision during the year 1919.

The work has still been very heavy, and a great amount of leeway still remains. At the latter part of the year 12 discharged Soldiers and Sailors were appointed as Temporary Enumerators, and were engaged in collecting information for the Housing Survey required by the Ministry. During the Survey numerous complaints required the attention of the regular staff, and this accounts for the great increase in the number of visits paid under

the heading "Nuisances discovered and abated," and also the "number of notices issued." Attention to the Public Health is increasing—the obligations placed upon Local Authorities will require a larger staff in order to carry and maintain to a degree of satisfaction, and such will require your serious consideration. Further, when the National Closing Order for Shops is removed and the Local Closing Orders automatically come into operation, a further burden will be placed on the Department. The disinfection work of premises has been lighter this year, and has enabled attention being given to other branches of departmental work.

The repairing of property has not been carried out as expeditiously as in past years owing chiefly to the great cost and shortness of labour. A perusal of the tables will enable you to estimate the valuable work done. I have again confined the report chiefly to tables.

I must indeed thank you for your courtesous help and consideration extended to the Staff and myself. To Dr. Wynne, the Medical Officer of Health, my thanks are due to his ready help, advice and collaboration upon health matters, and to the Inspectors and Staff I express my appreciation of their loyal service.

To all Chief Officials I tender my thanks for the services rendered to me in the execution of my duties.

I am, Sir, and Gentlemen,

Your obedient Servant,

C. H. FRANCE,

M.S.I.A., A.R.S.I., &c.,

Chief Sanitary Inspector, &c.

NUISANCES.	1918.	1919.
Houses and premises inspected and visited <i>re</i> nuisances and complaints	1017	1714
Nuisances discovered	836	2164
Nuisances abated	499	1022
Notices issued (preliminary)	425	922
" " (formal)	325	535
Re-visits to nuisances	1980	3254
Other visits made	1880	1681
Visits to premises (testing of drainage)	17	43
Letters issued <i>re</i> nuisances	237	264
Nuisances remaining on books, December 31st, 1918	810	1952

DESCRIPTION OF NUISANCES DEALT WITH.

	1918.	1919.
Defective drainage	18	29
Choked drainage	123	209
Defective and foul gullies	11	21
Gullies requiring grids	3	6
Want of slopstones and pipes	6	10
Slopstones and slopstone pipes defective	30	47
Soil pipes or connections defective	3	5
Defective or choked water closets	42	57
Defective water supply to closet	12	7
Defective sink waste pipes (connected to drains)	5	1
Defective condition of closets (roof, walls, door, seat, or floor)	52	91
Want of doors to closets	14	8
„ „ ash-house	9	12
Defective condition of ash-houses (roof, walls, door or floor)	7	39
Defective or choked waste water closets	15	28
Houses with defective floors	19	57
Defective water supply to houses	3	1
Want of ash tubs	3	14
Workshops require limewashing	5	3
Defective water closet cisterns	29	34
Slopstone pipes connected to drain	0	2
Want of closet accommodation	0	3
Defective spouts (eaves or down)	135	282
Want of spouting to premises	4	19
Defective roofs	110	271
Defective flagging or paving (yards and passages)	12	30
Houses overcrowded or keeping of lodgers	4	7
Houses and premises filthy	1	25
Houses with filthy closets	1	6
„ filthy yards and entries	7	12
„ damp and defective walls	52	226
Defective middenstead	3	7
Want of middensteads	1	1
Accumulations of manure	7	17
„ rubbish	5	12
Keeping of animals	8	20
Miscellaneous	61	316

Conversions have been carried out in the following properties from privies and pails to water closets :—

750, Ormskirk Road, Pemberton, 1 privy to 1 water closet.

51, 53, 55, 57, 59, 61, and 63, Soho Street, Pemberton, 4 privies to 7 water closets

52a, Bottling Wood, 1 pail closet to 1 water closet.

148, Wigan Lane, 1 pail closet to 1 water closet.

109, 111, and 113, Scholes, 2 pail closets to 6 water closets.

1, 2, 3, and 4, Sayer's Yard, Scholes, 4 pail closets to 4 water closets.

COMMON LODGING HOUSES.

No. of common lodging-houses in the Borough	15
„ lodgers allowed nightly	601
„ visits by day	1154
„ „ night	—
„ lodgers reported as being received (per returns) ..	134,289
„ letters sent out	2
„ houses on register end of 1918	15
„ houses given up during the year	2
„ houses remaining on register end of 1919 ..	13

HOUSES LET-IN-LODGINGS.

No. of houses on register	15
„ visits by day	138
„ letters sent out .. .. .	..

SLAUGHTER-HOUSES, OFFENSIVE TRADES, AND
MARKETS.

No. of slaughter-houses in the Borough registered ..	24
„ „ „ licensed ..	1
„ offensive trade premises in the Borough ..	7
„ knackers' yards in the Borough (licensed) ..	2
„ visits to slaughter-houses	1517
No. of visits to offensive trade premises	89
„ „ markets	381
„ „ butchers and other food shops ..	332
„ letters sent out	4
„ certificates issued (condemned food)	231

The following animals were examined as to their fitness for sale :—

	Passed.	Condemned.	Part passed and part condemned.
Beasts ..	191	22	9
Sheep	4	9	1
Pigs	2	1	—

FOOD CONDEMNED, 1919.

No. of Beasts condemned	22
„ part passed and part con- demned	9
„ Sheep condemned	9 and 1 part.
„ Pigs condemned	1
„ Rabbits.. .. .	464
„ Hindquarters of meat	1
„ Bags of Meat	1
„ Corned Beef	6lb.
„ Beef	1 flank portion and 1 clot.
„ Frozen Mutton	980lb.
„ Mutton	15cwts. 2 qrs. 2lb., and 3 trunks.
„ Tongue	1 Lunch and 6lb.
„ Hams	73—3 cases and 11 pieces.
„ Sausage.. .. .	16lb.
„ Tins of Brawn	2
„ Boxes of Plaice	61
„ „ Mackerel	40
„ „ Kippers	98
„ „ Finnon Haddocks.. .. .	32
„ „ Conger Eels	1
„ „ Eels	82
„ „ Mixed Fish.. .. .	1 and 1½cwt.
„ „ Haddocks	16½qrs.
„ „ Skate	3
„ „ Cod	5
„ Barrels Herrings	3
„ Barrels Maws	1
„ Boxes of Dates	43
„ Barrels of Grapes	10
„ Boxes of Tomatoes	221
„ Boxes of Prunes	3
„ Cases of Bananas	1 and 7 crates.
„ Hampers of Apples	3
„ Eggs	732 and portion of crate.
„ Meat Pies	35
„ Butter	3 tubs and 119lb.
„ Mushrooms	41 boxes and 1 basket.
„ Cheese	16lb.

The following statement shows the quantities of unwholesome food and shellfish and other refuse destroyed at the Miry Lane Depot during the year :

	T.	C.	Q.
Beef	11	12	2
Pork	0	7	3
Fish	7	3	0
Fish Refuse and Shell Fish	37	19	1
Sundry Refuse	268	2	2
	<hr/>	<hr/>	<hr/>
	325	5	0
	<hr/>	<hr/>	<hr/>

CANAL BOATS ACTS, 1877 AND 1884.

A census was taken at the end of the year of the boats that have been registered at Wigan, as to how many were still in use or otherwise. The result of the enquiries is given below:—

No. of Boats that have been registered at Wigan..	..	295
„ still in use or available..	..... ..	29
„ not in use .. ..	.. ..	32
„ broken up .. ..	.. ..	104
„ that cannot be traced, sold, or dispensed with		93
„ re-registered with other Authorities .. ..	.. ..	14
„ re-registered at Wigan .. ..	.. ..	18
„ registered but not legally required .. ..	.. ..	5
„ Applications for registration and re-registration during the year .. ..	.. ..	—
„ Applications granted .. ..	.. ..	—
„ Boats re-registered .. ..	.. ..	—
„ Inspections .. ..	.. ..	68
„ Notices issued .. ..	.. ..	13
„ Notices complied with .. ..	.. ..	13
„ Contravention of regulations .. ..	.. ..	14
„ Letters sent out .. ..	.. ..	5
„ Certificates renewed.. ..	.. ..	—

Copy of the Annual Report to the Ministry of Health as to the execution of the Canal Boats Acts during 1919 :

1. INSPECTION OF BOATS.

The inspection is undertaken by Mr. C. H. France, Chief Sanitary Inspector, Wigan. Remuneration reckoned in salary.

2. NUMBER OF BOATS INSPECTED.

68. Condition of Boats and Occupants, good.

3. INFRINGEMENTS OF THE ACTS AND REGULATIONS.

Certificates require renewing .. ..	.. ..	2
Certificates not produced .. ..	.. ..	4
Markings .. ..	.. ..	1
Leaky Cabins .. ..	.. ..	4
No Water Cask .. ..	.. ..	1
Want of double bulk-head.. ..	.. ..	1
Painting of Cabin .. ..	.. ..	1

4. LEGAL PROCEEDINGS.

None taken.

5. STEPS TAKEN TO SECURE COMPLIANCE WITH ACTS AND REGULATIONS.

Notices and letters issued in each case.

6. CASES OF INFECTIOUS DISEASE.

None.

7. DETENTION OF BOATS FOR CLEANSING AND DISINFECTION.
None.

8. TOTAL NUMBER OF BOATS ON REGISTER.

Total Registered	295
No. of Boats still in use or available	29
„ not in use	32
„ broken up	104
„ that cannot be traced, sold, or dispensed with	93
„ re-registered with other Authorities	14
„ re-registered at Wigan	18
„ registered, but not legally required to be	5

9. NUMBER OF BOATS REGISTERED IN 1919.

None.

(Signed), CHARLES H. FRANCE,

Chief Sanitary Inspector.

SMOKE NUISANCES.

Owing to the heavy work in other branches of the Department no observations were taken. The attention of the Employers of the Factories in the town is being drawn to the amount of dense smoke and their co-operation in minimising any nuisances which may arise [in this direction is being asked for, and the danger to health of the nuisances from smoke is being pointed out to them.

No observations were taken.

INFECTIOUS DISEASES (PREVENTION) ACTS, &c.

The work in this branch, though not so heavy as in former years, has required a daily administration. The disinfectors have continued to do good work and the improvements made in the previous year have merited the expense thus incurred.

Library books from infected houses have been secured by the Department, disinfected and returned direct to the Library, with the information that such book or books have been disinfected, except in such cases where the Medical Officer of Health has directed the destruction of any book.

No. of houses disinfected	523
„ rooms disinfected	698
„ beds disinfected	558
„ mattresses disinfected	157
„ sheets and quilts disinfected	1370
„ other articles disinfected	4353
„ premises cleansed and limewashed after infectious disease	262
„ visits to houses <i>re</i> limewashing and cleaning, &c.	512
„ „ „ infectious disease	1345
„ letters sent out <i>re</i> infectious disease	4
„ „ „ limewashing	84
„ library books disinfected	76
„ schools disinfected	2

SALE OF FOOD AND DRUGS ACTS; MARGARINE ACTS;
PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912 & 1917.

All the samples were submitted to the Public Analyst.

Milk.—Samples were obtained from shops, railway stations, and milk carts. In cases of adulteration, further samples were obtained from the farmer, the farms visited, and all appliances, etc., carefully inspected. Every sample was examined by the Public Analyst for preservatives.

No. of samples obtained for analysis	..	..	..	116
„ „ genuine	..	..	..	110
„ „ adulterated	..	..	..	6
„ „ (informal)	..	..	..	8
„ letters sent out	..	..	..	43
„ samples obtained (not sent for analyses)	..	..	..	—

PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912 & 1917.

		<i>New Milk.</i>	<i>Cream.</i>
1.—MILK AND CREAM NOT SOLD AS PRESERVED CREAM.			
No. of samples examined for the presence of a preservative	.. .. .	89	—
No. in which a preservative was reported to be present	.. .. .	—	—
2. CREAM SOLD AS PRESERVED CREAM.			
(a) Correct statements made (as per label)	.. .. .	—	—
(b) Above 35 per cent. (milk fat)	.. .. .	—	—
(c) No. of instances where regulations contravened	.. .. .	—	—

3. THICKENING SUBSTANCES.

No evidence of addition.

<i>Article.</i>	<i>Samples.</i>	<i>Genuine.</i>	<i>Adulterated.</i>	<i>Not formal.</i>
Milk.. ..	89	84	5	1
Margarine	4	4	—	—
Coffee	6	6	—	—
Sugar	2	2	—	—
Brown Sugar	1	1	—	1
Camphorated Oil	3	3	—	3
Cheese	3	3	—	—
Ground Ginger	3	3	—	—
Epsom Salts	5	4	1	3
	116	110	6	8

Name of Article.	No.	Result of Analysis.	If any legal proceedings were instituted under the Sale of Food and Drugs Acts, state result, showing fines and costs separately.	If any legal proceedings were taken under Acts other than the Sale of Food & Drugs Acts, state the result showing fines and costs separately.	If no legal proceedings were instituted state briefly the course adopted in regard to each sample.	Information if any, as to previous convictions.	Remarks on any point of special interest.
Epsom Salts	2	Epsom Salts, 99.999 per cent. . . . Arsenious Oxide, .001 per cent. Contaminated 10 parts per million Arsenious Oxide.	Pay costs, 5s.	..	..	..	..
New Milk	11	Deficient in fat to extent of 5 per cent. Milk-fat .. 2.85 Non-fatty solids .. 9.10 Water .. 88.05	..	..	Warned.	..	..
New Milk	18	9.4 per cent. added water. Milk-fat .. 3.2 Non-fatty solids .. 7.7 Water .. 89.1	Fined £15. Costs 10/6	..	..	..	..

Name of Article.	No.	Result of Analysis.	If any legal proceedings were instituted under the Sale of Food and Drugs Acts, state result, showing fines and costs separately.	If any legal proceedings were taken under Acts other than the Sale of Food & Drugs Acts, state the result showing fines and costs separately.	If no legal proceedings were instituted state briefly the course adopted in regard to each sample.	Information if any, as to previous convictions.	Remarks on any point of special interest.
New Milk ..	20	3.5 per cent. added water. Milk-fat .. 2.95 Non-fatty solids .. 8.20 Water .. 88.85	Fined £10 Costs 10/6	..	..	..	..
New Milk ..	46	Deficient in fat to extent of 3.3 per cent. Milk-fat .. 2.9 Non-fatty solids .. 8.6 Water .. 88.5	..	..	Warned by Town Clerk.	..	..
New Milk ..	47	Deficient in fat to extent of 10 per cent. Milk-fat .. 2.7 Non-fatty solids .. 8.6 Water .. 88.7	..	..	Warned by Town Clerk	..	..

OFFENCES OTHER THAN ADULTERATION.

e.g.,

Obstructing Inspector.
 Attempting to Bribe Inspector.
 Refusing to serve Inspector.
 No Name on Milk-can.
 Condensed separated or skimmed milk unlabelled
 Breaches of the Margarine Act, 1887.
 Breaches of the Butter and Margarine Act, 1907.

MARGARINE AND MARGARINE CHEESE.

Under the above 12 persons are registered as Wholesale Dealers for 15 premises.

FERTILISERS AND FEEDING STUFFS ACT, 1906.

During the year two informal samples were obtained.

SAMPLES.

Maize	..	..	..	..	..	1
Bran	..	..	..	..	..	1

						No. 1.	No. 2.
Oil	..	..	..	..	..	4.4	3.8
Albuminoids	..	..	..	..	..	11.8	15.66

MISCELLANEOUS VISITS.

Visits to Fair Vans..	..	..	..	..	183
Letters sent out	..	..	..	..	162

FACTORY AND WORKSHOP ACT.

No. of workshops on register	..	..	..	..	..	320
„ bakehouses on register	..	..	..	..	..	116
„ domestic workshops on register	..	..	..	..	..	8
„ visits to outworkers' premises	..	..	..	..	..	17
„ „ factories	..	..	..	..	..	71
„ „ workshops..	..	..	..	..	..	268
„ defects dealt with	..	..	..	..	..	73
„ letters sent out	..	..	..	..	..	6
„ underground bakehouses	..	..	..	..	..	5

During the year the following factory was granted a certificate as being provided with sufficient means of escape in case of fire:—

Brown and Haigh, Wood Street.

SHOP ACTS, 1912 & 1913.

No. of shops on register	2173
„ visits to shops (day)	31
„ „ (night)	2
„ „ <i>re</i> Closing Order, barbers and hair-dressers (day)	51
„ „ <i>re</i> Closing Order, barbers and hair-dressers (night)	32
„ observations (day)	85
„ „ (night)	38
„ letters sent out	6

REPORT OF OFFICERS, 1919.

Cautioned for not exhibiting Closing Notice	4
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DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

No. of cowsheds on register	45
„ dairies on register	6
„ milkshops on register	103

DISEASES OF ANIMALS ACTS.

The provision of these Acts so far as relate to this Department have been given the attention required.

AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDERS, 1912, &c.

The markets have been regularly visited and the fruit shops supervised during the season of this fruit.

RAG FLOCK ACT, 1911.

REGULATIONS, 1912.

The provisions of this Act have been carried out. Samples have been obtained. Following the circular issued by the Local Government Board dated May 26th, 1919, respecting the item "flock manufactured from rags," and drawing attention to the case decided in High Court "Cooper and Smith," I procured four informal samples, 2 each of Carpet Flock and Wool Flock. Carpet Flock was a flock which may be assumed to come within the bearing of the case. The result of analysis I append. It is interesting to note that a sample of Wool Flock contained such a degree of contamination which goes to show that all flock should come within a standard of cleanliness.

Article 1 of the Regulations states : "Flock shall be deemed to conform to the standard of cleanliness for the purposes of Sub-section (1) of Section 1 of the Act when the amount of soluble Chlorine, in the form of Chlorides removed by thorough washing with distilled water at a temperature not exceeding 25 degrees centigrade from not less than 40 grammes of a well-mixed sample of flock, does not exceed 30 parts of chlorine in 100,000 parts of the flock.

	<i>Chlorine (combined as chloride).</i>
	<i>Parts per 100,000.</i>
No. 2 Carpet Flock	18
No. 3 Carpet Flock	42
No. 4 Black Wool Flock	50
No. 5 Brown and Red Wool Flock.. .. .	30

Nos. 3 and 4 exceed the standard.

HOUSING AND TOWN PLANNING ACT, 1909.

No. of visits to premises <i>re</i> Housing and Town Planning Act	27
„ re-visits to premises <i>re</i> Housing and Town Planning Act	104
Property reported upon, 1919	31
„ on books, January 1st, 1919	203
Property with C. and D. Orders on, January, 1919.. .. .	111
„ Preliminary Notices on, January, 1919	22
„ no Orders on, January, 1919	70
„ Notice (Section 15) on, January, 1919	-
„ Closing Orders on, but not let for human habitation by agreement, January, 1919	-
	<hr/> 203 <hr/>
Made habitable, 1919	7
Demolished, 1919	-
Made into through houses, 1919	-
Not used for human habitation, 1919	-
Done away with, but re-construction, 1919	-
Converted to outhouse, 1919	-
	<hr/> 7 <hr/>
Property still on books, December 31st, 1919	227

PROSECUTIONS, 1919.

Case 1.—March 6th. Food and Drugs Act. Selling to the prejudice of the purchaser 6 packets Epsom Salts, not of the nature, etc., demanded. Pay costs. 5/—.

Case 2.—May 15th. Food and Drugs Acts. Selling to the prejudice of the purchaser, 1 pint new Milk, not of the nature, &c., demanded. Fined £15 and costs, 10/6.

Case 3.—Ditto. Ditto.
Fined £10 and costs, 10/6.

Cases 4, 5, 6.—Sept. 4th. Public Health Act. Non-compliance with notice to abate nuisances. *Case 4* withdrawn on payment of costs; work done since summons issued.

Cases 5 and 6.—Adjourned for 14 days; work done. Payment of costs, both cases.

APPENDIX.

HEALTH OFFICES,

Wigan,

September, 1919.

Sir and Gentlemen,

I have much pleasure in placing before you a brief report of the Conference of Sanitary Inspectors held in Birmingham, July 17th, 18th, and 19, and to thank you sincerely for appointing me your delegate to the Conference. The proceedings were of a pure business character, and good work was done in compiling material that will be the nucleus of the setting of standards beneficial to the public health.

Thursday was the General Meeting Day of the Association, and Friday the Conference proper opened with the Presidential Address of Sir James Crichton Browne, M.D., LL.D., F.R.S., prior to which the delegates were welcomed by the Lord Mayor of Birmingham, Sir David Brooks, G.B.E., J.P. Following the Presidential address a paper was read by Mr. H. W. Bladon, Sanitary Inspector, Birmingham, upon Sanitary Progress in Birmingham. Then followed a series of resolutions which the mover introduced by short paper. I had the honour of being named for seconding the resolution upon the Housing Question.

The resolutions being placed under the following heads:—

The future of Inspectorial Service.

The Housing Problem.

The future of Public Health Administration.

The Housing Problem naturally was the tit-bit of the Conference, and a series of proposals were adopted concerning the term "house reasonably fit for human habitation," and also the strengthening of power in carrying out the Housing and Town Planning Act.

The Conference was attended by nearly 300 delegates. During the Conference a visit was paid to the Bournville Estate, on the kind invitation of Messrs. Cadbury.

I can assure you that the serious interest and consideration given to the Proceedings of the Conference augurs well for the Public Health and its service.

Again thanking,

I remain, Sir and Gentlemen,

Your obedient Servant,

CHARLES H. FRANCE,

Chief Sanitary Inspector.

County Borough of Wigan.



Education Department.



Annual REPORT

OF THE

SCHOOL MEDICAL OFFICER,

FOR THE

Year ended 31st December, 1919.



WIGAN :

Thomas Wall and Sons Ltd., Printers, "Observer" Office,

1920.

Medical Inspection Department.

SUPERINTENDENT SCHOOL MEDICAL OFFICER :

FRED E. WYNNE, B.A., M.B., D.P.H.

ASSISTANT SCHOOL MEDICAL OFFICER :

A. AZIZ, M.B., Ch. B., D.P.H.

SCHOOL NURSES :

MISS M. PLUMPTON AND MISS M. A. BIRCHNALL.

CLERK :

MISS H. W. TURNER.

County Borough of Wigan.



Education Committee.



THE MAYOR (Councillor J. WALKDEN).

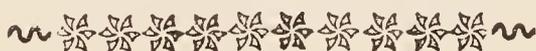
Councillor A. E. BAUCHER (*Chairman*).

Councillor A. GUEST (*Vice-Chairman*).

Aldermen : William H. Angus, Matthew Benson, John Cheetham, Edward Dickinson, Richard T. Fletcher, Alexander S. Hilton.

Councillors : Robert Alstead, Walter Atherton, Richard Bamford, James Cavey, John Counsell, Henry Farr, Wm. Glover, Patrick Murphy, Ferdinand Rees, Walter Watmough, G. Burbridge, D. Cowser, J. McCurdy, F. Pagett, A. Santus, A. Smith, T. Holland.

Miss Elizabeth Berry, Very Rev. Dean O'Donoghue, J. T. Gee, Rev. C. D. Wood, S. C. Laws, Mrs. W. S. Watmough, J. Heaton. P. J. Garrick, Miss Livesey, V. Ball.



School Attendance and Medical Inspection Sub-Committee.



THOMAS HOLLAND (*Chairman*).

A. GUEST (*Vice-Chairman*).

The Chairman of the Education Committee, Alderman J. Cheetham, Miss Livesey, W. Anderson, W. H. Angus, J. Cavey, E. Dickinson, A. Guest, J. O'Donoghue, A. E. Baucher, M. Carmody, Very Rev. Dean O'Donoghue, A. Santus, P. Murphy, D. Cowser.

School Medical Officer's Report.



April, 1920.

To the Chairman and Members of the Education Committee.

Ladies and Gentlemen,

I beg to report as follows on the Medical Inspection and Treatment of School Children during the year 1919.

As pointed out in my last annual report our experience up to that time showed that it was only possible with the existing staff to carry out the Inspection of Entrants and Leavers, leaving the "Code Groups" uninspected.

No increase has yet been made in the Staff, and the experience of a full year's working has shown that it has only been just possible to examine the whole of the Entrants and Leavers. Even for the re-examination of children found to be suffering from defects we have had to depend on the Clinic, and enquiries made at the homes of the children or at the schools, in cases referred to Institutions or private practitioners.

The arrangements for treatment continue to be altogether inadequate. With the increased work resulting from routine inspection the accommodation at the present Clinic has proved quite insufficient. With our present Staff and equipment it has not been possible to undertake more than the treatment of minor ailments. For the treatment of such conditions as Enlarged Tonsils and Adenoids, Defective Vision, cases requiring X-rays, &c., we have had to depend on the old haphazard arrangement with the Wigan Infirmary, to which Institution we are indebted for the considerable amount of work done for which this Authority is now liable.

No provision was made for Dental Treatment during the year.

Table *A* shows the number of defects found and the number who obtained treatment.

One can only regard this as a measure of the amount of work that must be undertaken in the future.

TABLE A.
DEFECTS FOUND AND CASES TREATED.

NAME OF SCHOOL.	Total Number of Defects found.	Referred to Dentist.	Obtained Dental Treatment.	Referred to Infirmary.	No. obtained Treatment at Infirmary.	Referred to own Doctor.	No. obtained Treatment at own Doctor.	No. referred to Clinic.	No. obtained Treatment at Clinic.	Total Number obtained Treatment.	Tonsils and Adenoids referred for Treatment.	No. obtained Treatment at Infirmary.	Defective Vision referred to Infirmary.	Number obtained Treatment.
St. Patrick's ..	206	94	-	82	21	45	26	30	30	77	7	3	53	27
St. Catherine's ..	108	75	7	38	11	19	13	34	34	65	7	-	37	9
Whelley ..	54	38	5	10	5	20	12	14	14	36	4	1	7	4
St. George's ..	108	51	1	44	20	13	11	15	15	47	25	5	45	16
St. John's R.C. ..	58	26	-	19	7	13	3	13	13	23	7	1	16	5
St. John's C.E. ..	90	38	1	24	9	28	17	16	16	43	18	6	19	12
St. Cuthbert's ..	57	52	3	26	18	16	5	7	7	33	13	8	14	13
Sacred Heart..	37	32	2	8	3	9	3	2	2	10	6	2	4	1
Presbyterian ..	14	9	-	3	1	6	1	-	-	2	-	-	1	-
Poolstock ..	53	31	1	11	10	10	4	8	8	23	9	7	13	13
St. Paul's ..	82	24	14	28	9	30	14	19	19	19	11	1	25	11
Pemberton Colliery ..	88	43	6	24	3	20	1	18	18	18	14	5	13	3
Worsley Mesnes ..	19	8	2	6	2	5	2	4	4	10	2	1	3	3
Beech Hill ..	45	29	2	10	4	7	1	-	-	7	4	1	7	-
St. Andrew's ..	87	59	5	31	5	14	8	2	2	20	15	1	19	9
National & Blue Coat	127	57	5	50	9	23	23	16	16	53	44	13	27	4
St. Michael's ..	49	34	4	12	5	13	7	2	2	18	5	1	8	3
St. Joseph's ..	115	54	3	53	6	16	3	19	19	31	10	2	44	10
St. Mary's ..	56	41	2	18	4	5	2	2	2	10	11	1	5	2
Caroline Street ..	112	51	2	40	-	21	3	2	2	7	12	2	16	3
Clayton Street ..	61	39	5	21	12	5	6	32	32	55	6	3	25	12
Warrington Lane ..	101	52	2	37	11	29	5	1	1	19	16	3	40	9
Wesleyan ..	74	49	8	25	14	9	7	9	9	38	12	6	18	11
Marylebone ..	17	10	3	6	1	5	-	-	-	4	3	1	4	2
Totals ..	1818	996	83	626	190	381	177	265	265	715	261	83	462	185

There is now a prospect of obtaining premises for an adequate and properly equipped Clinic, and with a sufficient medical staff the work of treatment could be greatly expanded.

The services of a dentist have also been secured this year for three half days per week, and this will enable us, at all events, to make a beginning of dental treatment.

Definite arrangements will have to be made either with the Infirmary or at an improved clinic for the treatment of enlarged tonsils and adenoids, defective vision, and other conditions which cannot at present be satisfactorily treated.

Examinations of defective children in the special classes have been carried out, but much remains to be done in this direction. There are a number of children still in the ordinary classes who would greatly benefit by special methods of instruction. The system of having graded classes for more or less defective children in at least all the larger schools is worthy of the careful consideration of the Committee.

The establishment of at least one open air school is another matter which should at once be proceeded with

Many children have at present to be excluded who would benefit both mentally and physically from instruction in a suitable environment.

The prevalence of vermin in the children's heads continues to be deplorable. It causes a serious loss of attendances and is often the commencement of more serious trouble.

The introduction of septic matter into the scalp causes enlargement of the glands in the neck, and the glands thus weakened are naturally prone to tubercular infection.

The condition will never be eradicated until a healthier public opinion prevails in the matter. People do not yet realise that the presence of "nits" is impossible without the living lice whose eggs they are. Nor do they understand that where children are congregated together, infection may take place in spite of the utmost cleanliness.

The result of this ignorance is that too often notifications of the condition are regarded as insults and are received with indignation instead of a desire to co-operate in curing.

Much good could be done by systematic instruction of the older girls in the schools on the nature of these parasites, and the proper methods of preventing and destroying them.

Table *B* gives an analysis of the work done in the Clinic :—

CLASSIFICATION OF CONSULTATION AND TREATMENT
AT SCHOOL CLINIC, 1919.

	Inspection at Clinic.	Treated at Clinic.	Referred to Infirmary.	Obtained Treatm't at Infirmary.	Referred to own Doctor.	Obtained Treatment from own Doc'or.	Total Number of Attendances at Clinic.
Enlarged Tonsils, Adenoids and Enlarged Glands ..	169	63	44	24	62	62	537
Ear Disease & Deafness ..	227	212	14	14	1	—	2510
Defective Vision	83	—	83	63	1	1	117
Squint	35	—	22	13	—	—	79
External Eye Disease....	284	277	5	5	2	2	3496
Ringworm, Scalp & Body.	154	147	5	4	2	2	3795
Impetigo.....	587	585	1	1	1	1	5439
Scabies	172	172	—	—	—	—	1946
Eczema	33	33	—	—	—	—	293
Other Skin Diseases	99	74	12	12	13	13	834
Tubercular, Lung and General	87	50	28	28	9	9	243
Heart and Circulation ...	6	—	3	3	3	3	15
Verminous Conditions....	56	56	—	—	—	—	446
Other Defects.....	827	739	27	23	70	56	5332
Dental Caries	47	—	46	28	1	1	97
Total Attendance	2976	2499	290	218	165	150	25179

An encouraging feature is the increasing number of parents who attend. The confidence thus established will be of value when this work can be organised on a proper basis.

It has not yet been possible to effect any marked improvement of the sanitary conditions of the schools.

A number of cases of neglect, malnutrition, defective clothing, and verminous conditions have been referred to the N.S.P.C.C., and dealt with by them with a great degree of success. I wish to express my gratitude to the Society and especially to Inspector J. Westmoreland for his energetic and most valuable co-operation.

I have again to thank Dr. A. Aziz, Assistant School Medical Officer, for his painstaking and excellent work, both in the Schools and the Clinic. My thanks are also due to Nurse Plumpton and Nurse Birchnall, to Miss Turner and Mrs. McQuaid for the patient and continuous work carried on by them under difficult and discouraging conditions.

I am,

Your obedient Servant,

FRED E. WYNNE, M.B., D.P.H.,
SUPERINTENDENT SCHOOL MEDICAL OFFICER.

INFECTIOUS DISEASES.

Influenza was again very prevalent during the first quarter of the year, and necessitated somewhat rigorous closure of schools. The following is a list of the schools closed and the period during which closure remained in force :—

LIST OF SCHOOLS CLOSED DURING 1919.

<i>Schools.</i>	<i>Department.</i>	<i>Date Closed.</i>	<i>No. of Days Closed.</i>
St. George's	All Departments ..	Jan. 30th ..	18
St. Mary's	" ..	" 30th ..	18
Wesleyan	Infants' Department	" 30th ..	18
St. Patrick's	All Departments	Feb. 4th ..	14
St. Catharine's	All Departments ..	" 3rd ..	14
Warrington Lane Council..	" ..	" 3rd ..	14
St. James's, Worsley Mesnes	" ..	" 3rd ..	14
Sacred Heart	" ..	" 6th ..	18
St. Thomas's, Clayton St...	" ..	" 7th ..	17
National	" ..	" 7th ..	17
Whelley	" ..	" 7th ..	17
Wesleyan	Mixed Departments	" 8th ..	16
St. Michael's	All Departments ..	" 8th ..	16
Marylebone	" ..	" 8th ..	16
St. Andrew's	" ..	" 8th ..	16
St. Joseph's	" ..	" 8th ..	16
St. John's R.C.	" ..	" 8th ..	16
Beech Hill Council	" ..	" 8th ..	16
St. Thomas's, Caroline St...	" ..	" 8th ..	16
Presbyterian	" ..	" 9th ..	15
Woodford Street Tempor- ary Council School	" ..	" 9th ..	15
St. John's Pemberton	" ..	" 9th ..	15
St. Cuthbert's Pemberton	" ..	" 9th ..	15
Poolstock	" ..	" 9th ..	15
St. Paul's, Pemberton	" ..	" 9th ..	15
Pemberton Colliery	" ..	" 9th ..	15
St. Mark's, Pemberton	" ..	" 9th ..	15
Scot Lane Council	" ..	" 9th ..	15
St. Michael's	" ..	" 24th ..	7
Marylebone	" ..	" 24th ..	7
St. Andrew's	" ..	" 24th ..	7
St. Joseph's	" ..	" 24th ..	7
St. John's R.C.	" ..	" 24th ..	7
Beech Hill Council	" ..	" 24th ..	7
St. Thomas Caroline St.	" ..	" 24th ..	7
Scot Lane Council	" ..	" 24th ..	7
St. Mark's, Pemberton	" ..	" 24th ..	7
Sacred Heart	" ..	" 24th ..	7
St. Thomas's, Clayton St.	" ..	" 24th ..	7
National	" ..	" 24th ..	7
Whelley	" ..	" 24th ..	7

LIST OF SCHOOLS CLOSED DURING 1919—*Continued.*

<i>Schools.</i>	<i>Department.</i>	<i>Date Closed.</i>	<i>No of Days Closed.</i>
Wesleyan	Mixed Departments	Feb. 24th ..	7
Pemberton Colliery ..	All Departments ..	„ 24th ..	7
Presbyterian	„ ..	„ 24th ..	7
St. John's, Pemberton ..	„ ..	„ 24th ..	7
Woodford Street Tem- porary Council, Pemb....	„ ..	„ 24th ..	7
St. Cuthbert's Pemberton..	„ ..	„ 24th ..	7
Poolstock	„ ..	„ 24th ..	7
St. Paul's, Pemberton ..	„ ..	„ 24th ..	7
Wesleyan	Infants' Department	„ 17th ..	14
St. Patrick's	All Departments ..	„ 17th ..	14
St. Catharine's	„ ..	„ 17th ..	14
Warrington Lane Council..	„ ..	„ 17th ..	14
St. James's, Worsley Mesnes	„ ..	„ 17th ..	14
St. George's	„ ..	„ 17th ..	14
St. Mary's	„ ..	„ 17th ..	14
St. George's	„ ..	Mar. 3rd. ..	14
Warrington Lane Council..	„ ..	„ 3rd ..	14
St. Cuthbert's, Pemberton.	„ ..	„ 3rd ..	14
National	„ ..	„ 3rd ..	14
Wesleyan	„ ..	„ 3rd ..	14
St. Patrick's	„ ..	„ 3rd ..	14
St. Catharine's	„ ..	„ 3rd ..	14
St. James's	„ ..	„ 3rd ..	14
St. Paul's	„ ..	„ 3rd ..	14
Presbyterian	„ ..	„ 3rd ..	14
St. John's, Pemberton ..	„ ..	„ 3rd ..	14
Woodford Street Tem- porary Council, Pemb....	„ ..	„ 3rd ..	14
Poolstock	„ ..	„ 3rd ..	14
St. Mary's	„ ..	„ 3rd ..	14
St. John's R.C.	„ ..	„ 3rd ..	14
St. Joseph's	„ ..	„ 3rd ..	14
St. Andrew's	„ ..	„ 3rd ..	14
Marylebone	„ ..	„ 3rd ..	14
St. Michael's	„ ..	„ 3rd ..	14
Pemberton Colliery ..	„ ..	„ 3rd ..	14
Whelley	„ ..	„ 3rd ..	14
Scot Lane Council P. ..	„ ..	„ 3rd ..	14
Beech Hill Council ..	„ ..	„ 3rd ..	14
St. Thomas's, Clayton St.	„ ..	„ 3rd ..	14
St. Thomas's, Caroline St.	„ ..	„ 3rd ..	14
St. Mark's, Pemberton ..	„ ..	„ 3rd ..	14
Sacred Heart	„ ..	„ 3rd ..	14

The only other disease which assumed a markedly epidemic form was Scarlet Fever. Several examinations for suspicious cases and contacts were carried out and all such were excluded. It was not found necessary to resort to school closure on this account.

The following table shows the number of cases and deaths occurring during the year among children of school age.

SCARLET FEVER.

AGES :

	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	Total.
No. of Notifications	34	34	43	26	22	21	18	17	17	8	240
No. of Deaths	.. -	2	2	-	1	-	-	-	-	-	5

LIST OF THE PUBLIC ELEMENTARY SCHOOLS OF THE
BOROUGH WITH THE AVERAGE ATTENDANCE
AND ACCOMMODATION, 1918-1919.

<i>School.</i>	<i>Accommodation.</i>	<i>Average Attendance</i>
SENIOR DEPARTMENTS :—		
St. Andrew's (Mixed)	407 ..	392
Beech Hill (Sr. Mixed)	200 ..	218
St. Catharine's (Boys) {	401 ..	420
St. Catharine's (Girls) }		
Whelley (Mixed)	285 ..	272
St. Cuthbert's (Mixed)	200 ..	216
St. George's (Mixed) ..	534 ..	485
Marylebone (Mixed)	62 ..	88
Worsley Mesnes (Mixed)	190 ..	137
St. John's C.E. (Mixed)	320 ..	279
St. John's R.C. (Boys)	319 ..	170
St. John's R.C. (Girls)	288 ..	132
St. Joseph's (Boys)	342 ..	322
St. Joseph's (Girls)	342 ..	291
St. Mark's (Boys)	322 ..	289
St. Mark's (Girls)	300 ..	268
St. Mary's (Boys)	295 ..	187
St. Mary's (Girls)	295 ..	175
St. Michael's (Mixed)	368 ..	267
National and B.C. (Boys)	337 ..	195
National and B.C. (Girls)	402 ..	231
St. Patrick's (Sr. Boys)	287 ..	329
St. Patrick's (Sr. Girls)	337 ..	311
St. Paul's (Boys)	274 ..	191
St. Paul's (Girls)	188 ..	149
Pemberton Colliery (Boys)	237 ..	230
Pemberton Colliery (Girls)	240 ..	230
Poolstock (Mixed)	235 ..	250
Presbyterian (Mixed)	310 ..	89
Sacred Heart (Mixed)	200 ..	230
Caroline Street (Mixed)	476 ..	394
Clayton Street (Mixed)	439 ..	408
Scot Lane (Sr. Mixed)	350 ..	294
Warrington Lane (Mixed)	440 ..	430
Wesleyan (Mixed)	330 ..	374
Total	10,552 ..	8,943

LIST OF PUBLIC ELEMENTARY SCHOOLS OF THE
BOROUGH, THE AVERAGE ATTENDANCE, AND
ACCOMMODATION, 1918-1919.

<i>School.</i>	<i>Accommodation.</i>	<i>Average Attendance.</i>
INFANTS' DEPARTMENTS :—		
St. Andrew's	215 ..	199
Beech Hill (<i>Junior Mixed</i>)	148 ..	111
St. Catharine's	405 ..	352
Whelley	158 ..	133
St. Cuthbert's	165 ..	143
St. George's	470 ..	297
St. James's, Worsley Mesnes	246 ..	82
St. John's C.E.	260 ..	173
St. John's R.C.	288 ..	79
St. Joseph's	241 ..	192
St. Mark's	222 ..	184
St. Mary's	220 ..	111
St. Michael's	225 ..	107
National and Blue Coat	344 ..	165
St. Patrick's (<i>Junior Boys</i>)	293 ..	224
St. Patrick's (<i>Junior Girls</i>)	376 ..	342
St. Paul's	203 ..	176
Pemberton Colliery	204 ..	176
Poolstock	156 ..	150
Caroline Street	191 ..	124
Clayton Street	168 ..	133
Scot Lane (<i>Junior Mixed</i>)	300 ..	162
Warrington Lane	130 ..	116
Wesleyan	143 ..	98
Woodford Street (<i>Junior Girls</i>)	188 ..	188
<hr/>		
Total in Junior Departments	5,959 ..	4,217
Total in Senior Departments	10,552 ..	8,943
<hr/>		
Grand Total	16,511 ..	13,160
<hr/>		

WORK OF SCHOOL NURSES.

During the year the two Nurses have been engaged upon the duties set out in the last report. The growth of the work of the Clinic has kept them fully occupied until after 12 each morning. The rest of their time has been fully taken up in visiting schools with reference to infectious disease, as already described, in general cleanliness inspections, and in "following up" cases at home. The following table gives particulars of their work:—

No. of visits paid to homes <i>re</i> following up of cases ..	2,217
„ cases obtained treatment	935
„ visits paid to schools in connection with general cleanliness	53
„ children inspected <i>re</i> general cleanliness	13,717
„ visits paid to schools for re-inspection <i>re</i> general cleanliness	19
„ children re-inspected <i>re</i> general cleanliness	1,518
„ visits paid to schools <i>re</i> Infectious Diseases ..	47
„ children inspected <i>re</i> Infectious Diseases ..	9,483
„ visits paid to schools for other purposes ..	36
„ visits paid to homes <i>re</i> Infectious Diseases ..	65
„ visits paid to Schools <i>re</i> Medical Inspection ..	122

TABLE C.

Schools Medically Inspected during 1919.

Schools Medically Inspected during 1919.	No. Examined.	Clothing : Clean, Sufficient.	Boots Unsatisfactory.	Nutrition : Abnormal.	Condition, Head.	Condition, Body, Verminous, &c.	Teeth Carious.	Adenoids.	Tonsils Enlarged.	Glands enlarged.	Disease of Nose.	Disease of Ear.	Hearing.	External Eye Disease.	Defective Vision.	Speech.	Heart : Circulation.	Disease of Lungs.	Disease of Nervous System.	Skin Disease.	Tubercle.	Ricketts.	Deformities.	Infectious Disease.	PREVIOUS HISTORY.								
																									Parents Present.	Measles.	Whooping Cough.	Scarlet Fever.	Diphtheria.	Rheumatic Fever.	Chicken Pox.	Other Diseases.	Other Defects.
St. Patrick's	207	6	5	-	15	7	56	1	6	2	-	3	2	8	53	1	5	2	-	7	4	-	-	-	64	152	73	22	3	1	45	4	1
St. Catharine's	192	2	5	-	14	4	83	-	7	25	-	3	1	6	37	-	6	2	-	9	3	1	1	-	52	157	64	16	4	3	32	-	1
Presbyterian	20	-	-	-	-	-	11	-	-	4	-	-	1	2	1	-	1	-	-	1	-	1	1	-	7	16	5	5	-	3	-	-	-
Whelley	95	-	-	-	2	-	38	-	4	9	-	3	-	-	7	-	1	1	-	1	-	1	3	-	33	59	10	3	-	15	2	1	1
Warrington Lane	175	-	-	-	17	-	58	7	9	19	-	5	8	3	40	1	8	3	-	6	3	1	3	-	55	11	54	17	-	4	40	1	4
Marylebone	32	-	-	-	-	1	12	-	3	5	-	-	-	1	4	-	2	-	-	-	-	-	2	-	3	21	11	-	-	8	-	-	-
St. Michael's	87	-	-	-	2	1	37	1	4	8	-	-	-	4	8	-	4	1	-	2	-	-	2	-	17	31	58	13	1	19	2	1	1
Beech Hill Council	77	-	-	-	3	-	37	-	4	3	-	1	-	1	7	-	1	1	-	-	-	-	-	-	23	51	34	10	13	1	28	1	9
Sacred Heart	76	-	-	-	13	1	32	3	3	6	-	-	-	1	4	-	2	-	-	1	-	-	-	-	22	53	22	12	1	19	1	1	-
St. Andrew's	179	-	-	-	3	3	62	2	13	3	-	3	3	4	19	3	4	2	-	3	1	1	1	-	35	140	95	17	-	151	31	1	31
Wesleyan	139	-	-	-	1	-	48	3	9	5	-	4	6	3	18	-	5	-	-	4	-	-	-	-	250	128	58	20	1	148	1	3	3
St. John's R.C.	100	1	-	-	13	3	27	5	2	2	-	-	3	7	16	-	11	1	-	7	-	2	-	-	437	70	34	14	2	30	1	2	1
St. Mary's	132	-	-	-	8	1	44	4	7	1	1	3	1	10	5	-	4	1	-	2	1	1	-	-	31	92	45	17	2	27	1	1	1
Caroline Street	152	1	-	-	6	1	43	3	9	1	-	4	1	3	16	-	2	2	-	4	-	-	-	-	46	111	35	19	2	125	3	3	3
St. George's	226	3	1	4	46	4	59	7	18	15	4	8	6	17	45	3	14	12	1	8	-	-	1	-	66	184	46	19	4	139	3	2	2
St. Joseph's	206	6	-	2	18	15	68	-	10	6	19	3	3	17	44	-	5	7	-	14	-	1	1	-	7	125	27	19	-	20	4	4	4
Clayton Street	164	3	-	-	20	9	47	-	6	3	3	19	3	14	25	-	7	-	-	14	-	-	-	-	56	121	57	18	2	29	4	15	15
National	210	-	-	-	10	2	63	4	40	3	8	8	2	12	27	-	8	5	-	5	-	-	1	-	53	123	62	24	5	35	5	3	3
St. Cuthbert's	110	1	1	1	10	1	26	2	11	3	1	1	5	2	14	-	7	3	-	2	-	3	3	-	24	69	23	9	2	18	-	6	6
St. John's C.E.	160	-	2	-	17	2	39	-	18	9	-	3	1	6	19	-	3	3	-	5	-	2	2	-	46	121	58	21	2	46	2	8	8
Pemberton Colliery	180	-	-	-	15	2	50	1	13	5	-	5	3	10	13	1	2	5	-	11	-	3	-	-	63	122	52	19	2	58	1	4	4
St. Paul's	152	2	-	-	26	3	50	1	10	7	1	8	2	6	25	1	5	1	-	6	-	1	-	-	12	120	38	13	2	35	1	1	1
Poolstock	95	-	-	-	1	-	34	-	9	2	1	2	4	7	12	1	1	-	4	4	-	-	-	-	29	79	30	10	1	31	1	2	2
Worsley Mesnes	35	-	-	-	1	-	9	-	2	2	-	1	1	2	3	-	1	2	-	1	-	1	-	-	7	26	15	3	-	9	-	-	-

TABLE OF VERMINOUS CASES
AS FOUND AT GENERAL CLEANLINESS INSPECTIONS.

<i>School.</i>	<i>Total No. Examined.</i>	<i>Pediculi of Head.</i>	<i>Pediculi of Body.</i>	<i>Verminous.</i>
Marylebone	83	4	—	4
National	638	40	2	42
Pemberton Colliery	440	30	2	32
Poolstock	442	46	4	50
Presbyterian	98	11	—	11
Sacred Heart	183	17	1	18
St. Andrew's	497	27	—	27
St. Catherine's	850	102	10	112
St. Cuthbert's	427	44	—	44
St. George's	900	118	4	122
St. James's, Worsley Mesnes	168	18	—	18
St. John's C.E.	535	56	2	58
St. John's R.C.	241	22	—	22
St. Joseph's	753	70	2	72
St. Mark's	776	43	3	46
St. Mary's	374	45	1	46
St. Michael's	349	23	—	23
St. Patrick's	820	66	7	73
St. Paul's	413	35	—	35
Caroline Street	499	31	—	31
Clayton Street	413	25	1	26
Scot Lane C.	399	16	2	18
Warrington Lane C. ...	438	37	—	37
Wesleyan	420	20	—	20
Whelley	214	20	2	22
Beech Hill C	363	21	—	21
Woodford Street	89	14	4	18
Totals	11,821	1,001	47	1,048

CASES OF INFECTIOUS DISEASE

<i>School.</i>	<i>Dept.</i>	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Typhoid Fever.</i>	<i>Measles.</i>
St. Andrew's	M.	—	—	—	—
St. Andrew's	I.	—	—	—	—
Beech Hill	Sr. M.	3	—	—	—
Beech Hill	Jr. M.	1	—	—	—
St. Catharine's	M.	1	—	—	—
St. Catharine's	I.	—	—	—	—
Whelley	M.	6	—	—	2
Whelley	I.	8	—	—	—
St. Cuthbert's	M.	2	—	—	—
St. Cuthbert's	I.	—	—	—	1
St. George's	M.	—	—	—	—
St. George's	I.	—	—	—	—
Marylebone	M. & I.	1	—	—	—
Worsley Mesnes	M.	—	—	—	—
Worsley Mesnes	I.	—	—	—	—
St. John's C.E.	M.	—	—	—	—
St. John's C.E.	I.	1	—	—	11
St. John's R.C.	B.	—	—	—	—
St. John's R.C.	G.	2	—	—	1
St. John's R.C.	I.	2	—	—	1
St. Joseph's	B.	—	—	—	—
St. Joseph's	G.	—	—	—	—
St. Joseph's	I.	—	—	—	—
St. Mark's	B.	—	—	—	—
St. Mark's	G.	—	—	—	1
St. Mark's	I.	—	—	—	—
St. Mary's	B.	—	—	—	—
St. Mary's	G.	—	—	—	2
St. Mary's	I.	—	—	—	—
St. Michael's	M.	—	—	—	—
St. Michael's	I.	2	3	—	1
National and B.C. ..	B.	4	—	—	—
National and B.C. ..	G.	6	—	—	3
National and B.C. .	I.	2	—	—	3

NOTIFIED BY HEAD TEACHERS.

<i>Whooping Cough.</i>	<i>Chicken Pox.</i>	<i>Mumps.</i>	<i>Impetigo.</i>	<i>Scabies.</i>	<i>Ringworm.</i>	<i>Miscell- aneous.</i>
—	—	—	—	—	—	—
—	3	24	1	—	—	—
—	—	—	—	—	—	—
—	—	26	—	—	1	—
—	—	8	1	—	—	1
—	—	23	8	—	1	3
—	2	13	1	—	1	—
5	11	20	1	1	—	1
—	2	—	—	—	—	—
—	9	1	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
3	5	1	—	—	—	—
—	—	—	—	—	—	—
3	33	22	3	3	—	9
—	—	—	—	—	—	—
—	—	1	—	—	—	—
1	—	4	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
8	—	1	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	8	8	2	—	—	1
—	—	4	—	2	—	1
—	—	2	—	—	—	—
—	—	2	—	—	—	—

CASES OF INFECTIOUS DISEASE

<i>School.</i>	<i>Dept.</i>	<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Typhoid Fever.</i>	<i>Measles.</i>
St. Patrick's	Sr. B.	—	—	—	—
St. Patrick's	Sr. G.	—	—	—	—
St. Patrick's	Jr. B.	—	—	—	—
St. Patrick's	Jr. G.	—	—	—	—
St. Paul's	B.	1	—	—	—
St. Paul's	G.	—	—	—	—
St. Paul's	I.	1	1	—	1
Pemberton Colliery .	B.	5	—	—	—
Pemberton Colliery .	G.	5	—	—	—
Pemberton Colliery .	I.	7	1	—	1
Poolstock	M.	—	—	—	—
Poolstock	I.	5	—	—	—
Presbyterian	M. & I.	—	—	—	1
Sacred Heart	M. & I.	—	—	—	—
Caroline Street	M.	—	—	—	—
Caroline Street	I.	—	—	—	11
Clayton Street	M.	—	—	—	—
Clayton Street	I.	2	—	—	—
Scot Lane C.	Sr. M.	—	—	—	—
Scot Lane C.	Jr. M.	—	—	—	—
Warrington Lane C.	M.	4	—	1	—
Warrington Lane C.	I.	—	—	—	—
Wesleyan	M.	—	—	—	—
Wesleyan	I.	—	—	—	—
Woodford Street	Jr. G.	2	—	—	—
Totals		70	5	1	40

NOTIFIED BY HEAD TEACHERS.

<i>Whooping Cough.</i>	<i>Chicken Pox.</i>	<i>Mumps.</i>	<i>Impetigo.</i>	<i>Scabies.</i>	<i>Ringworm.</i>	<i>Miscell- aneous.</i>
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	1	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	3	—	—	—	—	—
—	—	—	1	1	1	—
4	49	14	—	2	3	12
—	—	—	—	—	—	—
—	6	—	—	—	—	—
—	—	6	—	—	—	—
—	1	34	4	1	1	2
—	—	1	—	—	—	—
1	5	20	—	1	1	1
—	—	3	—	1	3	—
1	16	16	—	—	5	3
—	—	—	—	—	1	—
—	10	4	—	1	—	2
—	—	—	—	—	—	—
—	—	—	3	—	1	4
—	—	—	—	—	—	—
—	—	—	—	—	—	—
2	4	4	2	—	—	—
28	167	263	23	13	19	40

GRAND TOTAL 669

TUBERCULOSIS IN SCHOOL CHILDREN.

Cases of Tuberculosis of glands, bones, joints, etc., requiring operation can usually only be dealt with at the local Infirmary. They rarely can derive benefit from attendance at an ordinary school until more or less cured. All cases of Tuberculosis of the lungs are handed over to the Tuberculosis Officer of the Borough, who keeps them under observation and gives instructions as to isolation and treatment.

Residential and open-air schools are urgently required for these children.

There are a large number of children in what is known as the "Pre-tuberculous" stage, who might be saved from inevitable disease by the establishment of such schools. Regular attendance in ill-ventilated classrooms is practically a death-sentence for many of these children.

The following particulars as to Tuberculosis in children of school age have been supplied by the Tuberculosis Officer.

TUBERCULOSIS REPORT, 1919

	From last year, 1918.		Notified.		Improved.		Unchanged.
BOYS.							
Pulm.....	26	..	7	..	29	..	4
Non. Pulm	68	..	7	..	70	..	5
GIRLS.							
Pulm	13	..	7	..	18	..	2
Non. Pulm	28	..	9	..	32	..	5

AREA.—WIGAN COUNTY BOROUGH.

TABLE I.—NUMBER OF CHILDREN INSPECTED,
1918—1919.

(A) CODE GROUPS.

Age.	ENTRANTS.					Total.
	3	4	5	6	Other Ages.	
Boys	—	—	697	—	—	—
Girls	—	—	718	—	—	—
Totals	—	—	1415	—	—	—

Age.	Intermediate Group.	LEAVERS.					Grand Total.
		8	12	13	14	Other Ages.	
Boys	—	—	788	—	—	—	—
Girls	—	—	805	—	—	—	—
Totals	—	—	1593	—	—	—	—

(B) GROUPS OTHER THAN CODE.

(1)	Intermediate Group (other than 8 years). (2)	Special Cases. (3)	Re-examinations (i.e., number of children. re-examined). (4)
Boys	—	89	—
Girls	—	96	—
Totals	—	185	—

TABLE II.—RETURN OF DEFECTS FOUND IN THE COURSE
OF MEDICAL INSPECTION IN 1919.

DEFECT OR DISEASE.	CODE GROUPS.		SPECIALS.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
<i>Skin :</i>				
Malnutrition	7	—	4	—
Uncleanliness	—	—	—	—
Head	261	—	2	—
Body	60	—	—	—
Ringworm :				
Head	6	—	1	—
Body	3	—	1	—
Scabies	10	—	4	—
Impetigo	30	—	3	—
Other Disease	49	—	4	—
<i>Eye :</i>				
Defective Vision and Squint	432	—	41	—
External Eye Disease	177	—	25	—
<i>Ear :</i>				
Defective Hearing	52	—	10	—
Ear Disease	37	—	11	—
<i>Teeth :</i>				
Dental Disease (<i>see Note below</i>) ...	996	—	7	—
<i>Nose and Throat :</i>				
Enlarged Tonsils	215	—	21	—
Adenoids	44	—	6	—
Enlarged Tonsils and Adenoids ...	—	—	—	—
Defective Speech	11	—	3	—

IN.B.—It will be observed that the headings “Clothing” and “Footgear” have been omitted. A short reference should be made to these in the body of the report. As regards “Teeth,” particulars should be given in the statements of the working of schemes of dental inspection and treatment where a scheme is in operation.

[TABLE II.—Continued.]

RETURN OF DEFECTS FOUND IN THE COURSE
OF MEDICAL INSPECTION IN 1919.

DEFECT OR DISEASE.	CODE GROUPS.		SPECIALS.	
	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)	(2)	(3)	(4)	(5)
<i>Heart and Circulation :</i>				
Heart Disease :				
Organic	109	—	11	—
Functional	—	—	—	—
Anæmia	—	—	—	—
<i>Lungs :</i>				
Pulmonary Tuberculosis :				
Definite	15	—	5	—
Suspected	—	—	—	—
Chronic Bronchitis	—	—	—	—
Other Disease	51	—	—	—
<i>Nervous System :</i>				
Epilepsy	—	—	—	—
Chorea	—	—	2	—
Other Disease	4	—	14	—
Non-pulmonary Tuberculosis :				
Glands	158	—	8	—
Bones and Joints	—	—	—	—
Other Forms	6	—	—	—
Rickets	5	—	1	—
Deformities	17	—	3	—
Other Defects or Diseases	—	—	9	—

N.B.—It will be observed that the headings "Clothing" and "Footgear" have been omitted. A short reference should be made to these in the body of the report. As regards "Teeth," particulars should be given in the statements of the working of schemes of dental inspection and treatment where a scheme is in operation.

AREA.....

TABLE III. NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1919.

		Boys.	Girls.	Total.	
Blind (including partially blind)	Attending Public Elementary Schools				
	Attending Certified Schools for the Blind.....	2		2	
	Not at School				
Deaf and Dumb (including partially deaf).	Attending Public Elementary Schools				
	Attending Certified Schools for the Deaf	5	5	10	
	Not at School	1	1	2	
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools	20	18	38
		Attending Certified Schools for Mentally Defective Children	1		1
		Notified to the Local (Control) Authority during the year			
	Imbeciles.	Not at School			
		At School			
		Not at School			
Idiots.					
Epileptics.	Attending Public Elementary Schools				
	Attending Certified Schools for Epileptics.....				
	Not at School				
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools			
		Attending Certified Schools for Physically Defective Children	3		3
		Not at School			
Other forms of Tuberculosis.	Cripples, others than Tubercular.	Attending Public Elementary Schools			
		Attending Certified Schools for Physically Defective Children	3		3
		Not at School			
Dull or Backwards*	Retarded 2 years				
	Retarded 3 years				

* Judged according to age and standard.

TABLE IV.—TREATMENT OF DEFECTS OF CHILDREN DURING 1919.

Condition.	No. of defects found for which Treatment was considered necessary.		No. of defects for which no report is available.	No. of defects treated.	Results of Treatment.			No. of defects not treated.	Percentage of defects treated.	
	From previous year.	*New			Total.	Remedied	Improved			Unch'gd.
Clothing ..		25		25	—	—				
Footwear ..		14		14	8	6				
Cleanliness of Head ..		1322		1322	978	344				
Cleanliness of Body ..		105		105	86	10	9			
Nutrition ..		7		7	—	7				
Nose and Throat ..		538		301	301	—				
External Eye Disease ..		430		312	150	162				
Ear Disease ..		312		229	—	229				
Teeth ..		1043		164	164	—				
Heart and Circulation ..		115		41	—	41				
Lungs ..		138		—	—	—				
Nervous System ..		5		3	—	3				
Skin ..		1153		1123	1123	—				
Rickets ..		5	5	—	—	—				
Deformities ..		17		3	—	—	3			
Tuberculosis (non-pulmonary).	96	87		37	—	32	3			
Speech ..		11	11	—	—	—	5			
Mental condition ..		27		—	—	—				
Vision and Squint ..		515		—	—	—				
Hearing..		53		14	—	—	14			
Miscellaneous ..		929		814	—	—	14			
Total ..		6851								

* The return should show comprehensively all defects found during the year, from whatever source derived, which required treatment.

AREA.—WIGAN COUNTY BOROUGH.

TABLE V.—INSPECTION, TREATMENT, &c., OF CHILDREN DURING 1919.

(1)	The total number of children Medically Inspected (whether Code Group, special or ailing child)	6,159
(2)	The number of children in (1) Suffering from Defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	—
(3)	The number of children in (1) who were Referred for Treatment (excluding uncleanliness, defective clothing, etc.)	2,263
(4)	The number of children in (3) who Received Treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	1,366

PHYSICAL TRAINING.

Miss Bentham, who is in charge of the above, has kindly forwarded the following report:—

SPRINGFIELD HOUSE,

Abram, near Wigan,

The time given up to the Physical Exercises in all Elementary Schools is one hour per week, for each class, *i.e.*, three lessons each of 20 minutes.

The lesson consists of drill taken from the Board of Education Syllabus, with games. In the Infant Schools, more time is given to the Physical Exercises and games form a greater part of the work.

I visit each school at least twice a year, and at present am giving demonstrations classes on the new Syllabus.

The work in the Girls' High School is carried out on the same lines, combined with apparatus work. Hockey, Rounders, and Net Ball are played throughout the School, and in the year 1919 the School was successful in winning the Shield of the Liverpool and District Games League.

G. E. O. BENTHAM.

