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ANNUAL REPORT

ON THE

HEALTH

OF THE

County Borough of Wigan

FOR THE YEAR 1921.



HENRY WHITEHEAD, M.D., D.P.H. (VICT.), M.B., B.S. (LOND.).

MEDICAL OFFICER OF HEALTH.

CHIEF TUBERCULOSIS OFFICER.

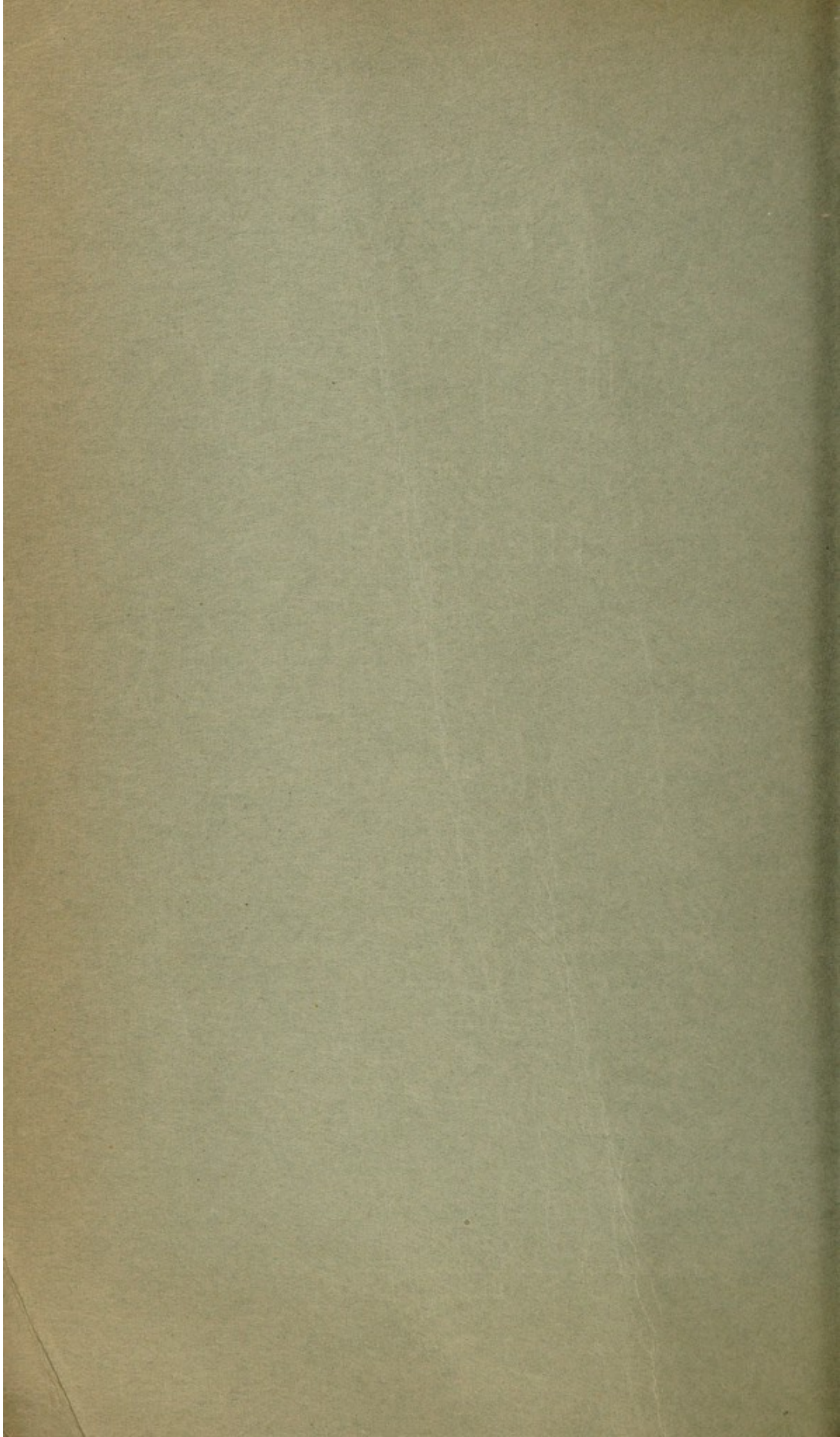
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MEDICAL SUPERINTENDENT OF CORPORATION
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1922.



COUNTY BOROUGH OF WIGAN.



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Officer of Health.*



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ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

THE HEALTH DEPARTMENT.

Library Street,

Wigan,

May, 1922.

To the Mayor, Aldermen, and Councillors of the County Borough of Wigan.

I have the honour to present my Annual Report on the health conditions of the Borough and on the work of the Health Department during 1921.

Dr. F. E. Wynne was Medical Officer of Health, etc., until 27th April, 1921, and on May 2nd I undertook the various duties of that office.

The Ministry of Health in a circular dated 28th December, 1921, suggest that Annual Reports for 1921 be considerably curtailed and known as "ordinary reports." "Annual Reports of a full and detailed character will normally be required at intervals of not more than five years." These will be known as "Survey Reports."

"The Annual Reports for 1919 and 1920 will be treated as constituting the first of the series of Survey Reports." My report for 1921 is, therefore, an "ordinary report."

The outstanding feature of the year is the fact that the death-rate is the lowest ever recorded in the Borough, namely, 14.28.

The Infantile Mortality is 116, the second lowest figure recorded. This comparatively low rate is to some extent accounted for by the excellent work done under the Maternity and Child Welfare Scheme, and to the fact that there was not a single death from Measles. For 96 great towns the rate is 87, so there is ample room for improvement in Wigan.

In the Summer months of 1921 the death-rate from Infantile Diarrhoea (children under two years of age) was greater than in any other large town. No efforts should be spared in trying to reduce this high mortality. The causes and possible remedies are discussed in the body of the report.

The birth-rate and marriage-rate are both considerably lower than those of last year, which can in some measure be explained by the bad times through which we have passed during 1921, and which still exist at the time

of writing. The people of Wigan have suffered acutely during the coal crisis, and from the great amount of unemployment which followed. Great credit is due to the staff of the Health Department for the magnificent way in which they have worked in connection with the scheme for free milk for babies and nursing mothers under the direction of the Maternity and Child Welfare Committee.

During the Coal Crisis when something like 3,000 persons were being supplied, the routine work of the Department was interfered with to a considerable extent. Later the number gradually diminished to about 400, and the Health Visitors, with the Maternity and Child Welfare clerk, were able to deal with the greater part of this work.

No extra staff was provided for all this extra work, and therefore the Health Visitors' work proper has had to be modified accordingly.

There is no doubt that the free milk which the Corporation has supplied and is supplying to large numbers of necessitous cases has done a great deal of good and has saved many babies from disease and perhaps starvation, and the best thanks are due to the Maternity and Child Welfare Committee for their efforts and sympathy extended to the mothers and babies of Wigan, and to the staff of the Health Department for the organisation and carrying out of the scheme.

A notable feature of the year is the passing of the Wigan Corporation Act, 1921. In it, there are many clauses which relate to Public Health matters, giving new and additional powers to the Corporation.

I am glad to say that there is now a definite scheme in sight for the conversion of privies and pail closets to the water carriage system, and I hope that it will soon materialise, so that the medieval methods of dealing with human excreta may be abolished for all time. Then such disease-producing institutions as Miry Lane Depot will exist only as unpleasant memories.

The work of the Infectious Diseases Hospitals has been highly satisfactory, and the Matron (Miss Moss) is to be congratulated on her efficient and economic management. Many improvements have been made and many contemplated in connection with the institutions.

Sister McCartan, at Pemberton Hospital, continues by her good work, kindness, and sympathy to make the patients as happy and contented as they can be in the circumstances.

I would suggest that a set of meteorological instruments be provided and kept at Whelley Sanatorium. Then useful and instructive records could be kept of sunshine, atmospheric temperature, pressure and moisture, rainfall and prevailing winds.

My suggestions with regard to the possibility of repairing the old high-pressure disinfectant at Miry Lane Depot, and its removal to Whelley Sanatorium have borne fruit. There it will be more efficient and far more economical to work.

The adaptation of the Royal London Insurance Buildings is going on apace, and soon the Health Department will be vastly improved. In addition to the office accommodation and store room the School Clinic and Maternity and Child Welfare Clinic will be transferred from Rodney Street, and there will be a Bacteriological Laboratory, an Eye-Testing room and a Dental Department.

It is hoped that at some future date extensions will be made to the building to accommodate the Tuberculosis Dispensary, and so centralise the various branches of the Department.

On the resignation of Dr. Aziz, Dr. MacMahon was appointed Clinical Tuberculosis Officer and Assistant Medical Officer of Health. He is keenly interested in the work, and has been most useful in assisting in Public Health work generally.

I wish to thank Mr. Martlew, Chief Sanitary Inspector, for his great assistance to me personally, and also for the able and energetic manner in which he has carried out his exacting duties, and the whole of the staff of the Health Department for their loyal support.

Mrs. Watts has continued to give very valuable voluntary help at the Rodney Street, Maternity and Child Welfare Centre, and the thanks of the Committee and the Department are extended to her.

In January, 1922, by the death of Councillor Cartwright the Corporation lost one who took a lively interest in the work of the Department, and who never spared himself in trying to improve the health of the people. As Vice-Chairman of the Health Committee, and Chairman of the Hospitals Subcommittee, his kindly help and straight dealing were greatly appreciated by the whole of the Staff.

Many thanks are due to the Chief Officials for their co-operation in the work of the Health Department.

It is my pleasant duty to record my appreciation of the support and confidence of the Chairman of the Health Committee, Alderman Benson, whom we are all pleased to see restored to health; of Councillor Holland, who acted as Deputy Chairman during Dr. Benson's prolonged illness; and of the Vice-Chairman (the late Councillor Cartwright); and to tender my thanks for the courtesy and good feeling of the members of the various Committees under whom I serve.

I have the honour to be,

Your obedient Servant,

HENRY WHITEHEAD,

Medical Officer of Health

1.—GENERAL STATISTICS.

Area (acres)	5,082
Population (1921)	91,200
Number of inhabited houses (1921)	17,747
Number of families or separate occupiers (1921)	19,485
Rateable value	£415,955
Sum represented by a penny rate.	£1,543

2.—EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total.	M.	F.	
<i>Births</i> —(Legitimate) ..	2422	1242	1180	} Birth rate (R.G.) 27·75 per 1,000 population.
(Illegitimate) ..	109	59	50	

2,531 1,301 1,230

	Total.	M.	F.	
<i>Deaths</i> —	1,303	674	629	— Death-rate (R.G.) 14·28 per 1,000 population.
Number of women dying in, or in consequence of child-birth				{ from sepsis .. 1 from other causes.. 10

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

	Legitimate	117	Illegitimate	100	Total	116
Deaths from Measles (all ages)	Nil.
„ „ Whooping Cough (all ages)	35
„ „ Diarrhoea (under two years of age)	65

VITAL STATISTICS OF WHOLE DISTRICT DURING 1921 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.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents registered in the District.	Under 1 year of age.		At all ages.	
			Number.	Rate.					Number	Rate per 1,000 nett births.		Number	Rate
1		3	4	5	6	7	8	9	10	11	12	13
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	17.39	156	54	241	117	1,410	16.13
1920..	90,866	2,791	2,782	30.61	1,512	16.63	123	58	346	124	1,447	15.92
1921..	91,200	2,548	2,531	27.75	1,249	13.69	93	147	296	116	1,303	14.28

* Calculated on Registrar-General's Estimated Population, July 1st, 1921—91,200 ;
Area of District in Acres (land and inland water), 5,082.

At Census, 1921 : Total population at all ages, 89,447.

No. of separate sets of premises intended or used for habitation, 17,747.

TABLE OF DEATHS DURING THE YEAR 1921 IN THE COUNTY BOROUGH OF

Causes of Deaths.	Deaths at the sub-joined ages of "Residents" whether occurring in or beyond the District.												
	All Ages.	Under 1 year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	5 and under 10.	10 and under 15.	15 and under 20.	20 and under 35.	35 and under 45.	45 and under 65.	65 and over.
Enteric Fever	8	..	..	..	..	..	2	2	2	1	1	..	..
Small-Pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	8	..	..	1	1	..	2	1	3	..	..	..	..
Whooping Cough	35	18	14	..	..	2	1	..	..	..	..	..	..
Diphtheria and Croup	5	..	..	1	1	1	..	1	..	1	..	..	..
Influenza	18	..	2	1	..	..	2	..	1	..	1	7	4
Erysipelas	3	..	..	..	..	..	..	..	2	..	..	..	1
Phthisis (Pul. Tub.)	97	..	..	..	..	..	3	4	12	29	21	27	1
Tuberculous Meningitis	7	..	1	..	..	..	2	1	..	3	..	..	..
Other Tubercular Diseases	9	..	2	..	..	..	3	..	1	1	..	2	..
Cancer (Malignant Disease)	56	..	..	..	..	..	..	1	3	4	28	20	..
Rheumatic Fever	6	..	..	..	..	..	1	2	1	..	..	2	..
Meningitis	8	..	2	..	..	..	..	3	1	..	2	..	..
Organic Heart Disease	88	..	..	..	..	..	..	6	4	10	12	27	29
Bronchitis	147	14	2	2	1	1	..	..	..	3	7	54	63
Pneumonia (All Forms)	105	25	20	7	1	..	8	2	3	5	9	12	13
Other Diseases of Respiratory Organs	8	3	..	..	..	..	..	..	..	1	1	1	2
Diarrhoea and Enteritis (under 2 years)	80	60	20	..	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	4	..	..	..	..	..	..	..	1	2	1	..	..
Cirrhosis of Liver	2	..	..	..	..	..	..	..	..	..	1	1	..
Alcoholism	1	..	..	..	..	..	..	..	..	..	1	..	..
Nephritis & Bright's Disease	31	..	..	..	1	1	2	1	2	3	6	7	8
Puerperal Fever	1	..	..	..	..	..	..	..	..	1	..	..	..
Other Accidents & Diseases of Pregnancy & Parturition	10	..	..	..	..	..	..	..	..	5	3	2	..
Congenital Debility & Malformation, Inc.: Prema'e Birth	133	133	..	..	..	..	..	..	..	..	..	..	..
Violent Deaths, Excl'g Suicide	45	1	2	1	1	1	3	3	5	7	5	12	4
Suicides	11	..	..	..	..	..	..	..	1	1	1	6	3
Other Defined Diseases	322	29	9	4	3	1	4	2	5	20	25	76	144
Diseases Ill-defined or Un- known	55	13	12	..	..	..	..	2	1	3	2	11	11
TOTALS	1303	296	86	17	9	7	33	30	44	101	102	275	303

WIGAN, CLASSIFIED ACCORDING TO DISEASES, AGES AND LOCALITIES.

Deaths at all Ages of "Residents" belonging to Localities, whether occurring in or beyond the District.

St. George Ward.	Lindsay Ward.	St. Catharine Ward.	St. Patrick Ward.	St. Thomas Ward.	Poolstock Ward.	Victoria Ward.	St. Andrew Ward.	Swinley Ward.	All Saints Ward.	West Pen-ber-ton Ward.	North Pen-ber-ton Ward.	Central Pen-ber-ton Ward.	South Pen-ber-ton Ward.	Total Deaths whether of Residents or Non-Residents in institutions in the district.
..	..	..	..	..	1	..	..	..	1	3	3	..	..	7
..
..	1	1	..	..	1	..	1	1	..	1	..	1	1	7
3	1	5	6	5	..	3	3	..	2	1	2	..	4	..
..	..	..	1	..	1	..	1	2	..	..	..	..	..	4
..	..	2	..	..	2	1	2	4	..	1	3	3	..	..
7	5	9	16	9	2	9	13	2	4	6	5	7	3	19
1	..	1	..	2	..	1	..	..	1	..	1	..	..	2
1	1	1	1	1	..	1	..	..	..	1	..	..	2	8
5	2	6	7	2	3	5	11	4	2	..	5	2	2	11
..	..	1	..	..	2	..	..	..	..	1	1	..	1	..
..	..	..	1	..	..	2	1	..	..	..	1	..	3	3
6	2	9	14	12	3	4	10	6	2	4	5	9	2	4
7	6	20	23	15	6	9	15	12	7	5	13	5	4	2
8	5	9	10	9	6	8	6	9	5	9	11	7	3	13
..	..	..	1	2	..	..	1	2	..	..	1	1	..	..
5	1	7	6	3	3	12	2	1	4	6	17	4	9	1
..	..	1	..	..	..	..	..	2	..	1	..	..	..	14
..	..	..	..	1	..	..	1	..	..	..	..	..	..	..
..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
1	..	1	4	3	4	2	6	6	1	1	..	1	1	5
..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
1	..	1	1	1	..	..	1	1	..	1	1	2	..	2
11	7	11	15	15	9	16	11	3	2	9	8	10	6	3
2	2	10	6	2	6	2	2	1	1	4	4	2	1	31
..	2	..	1	..	1	..	1	..	2	1	2	..	1	..
16	12	21	28	18	17	20	38	30	15	16	44	23	24	69
3	3	7	11	3	1	3	10	4	1	2	4	2	1	1
77	50	124	153	104	68	98	137	90	50	73	132	79	68	210

DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
15·92	18·42	17·09	19·17	15·42	16·18	18·45	16·79	15·92	14·28

AVERAGE FOR TEN YEARS, 16·76.

NUMBER OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1921.

Ward.		Census Population.	Death Totals.	Death Rate.
St. George	1	4,746	77	16·22
Lindsay	2	5,151	50	9·70
St. Catherine	3	7,858	124	15·78
St. Patrick	4	9,574	153	15·98
St. Thomas	5	4,552	104	22·84
Poolstock	6	5,275	68	12·89
Victoria	7	5,042	98	19·43
St. Andrew	8	12,473	137	10·98
Swinley	9	7,503	90	11·99
All Saints	10	3,175	50	15·74
West Pemberton	11	4,307	73	16·94
North Pemberton	12	7,390	132	17·86
Central Pemberton	13	6,245	79	12·65
South Pemberton	14	6,156	68	11·04
Totals .. .. .	..	89,447	1,303	14·56

ZYMOTIC DISEASES.

The Mortality from the seven principal Zymotic Diseases, namely: Small-pox, Scarlet Fever, Measles, Whooping Cough, Enteric Fever, Diphtheria, and Diarrhœa, gives us a rate of 1·32 per 1,000 of the population, against 1·79 in 1920.

The deaths numbered 121, as against 163 in 1920.

The Zymotic-rate, 1.32, is made up as follows:—

DEATH-RATES PER 1,000.

	1920	1921
Small-pox ..	..	..
Scarlet Fever ..	·01	·08
Measles ..	1·14	..
Whooping Cough ..	·08	·38
Typhus Fever ..	..	..
Enteric Fever ..	·03	·08
Diphtheria ..	·17	·05
Diarrhoea ..	·34	·71

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

	1920	1921
1st Quarter ..	2·20	1·22
2nd „ ..	3·08	·57
3rd „ ..	1·84	2·19
4th „ ..	1·23	1 31

In 1921 the death-rate was 14·28 the **LOWEST EVER RECORDED IN THE BOROUGH**; whilst that for the 96 great towns was 12·3. Although there is a great deal of striving to be done to reduce Wigan's death-rate to the average of the other great towns, yet the townspeople have reason to be proud of the wonderful work which has been achieved by the Health Committee and the Health Department during the last fifty years.

The results of the work of such a Department cannot be judged by picking out isolated and short periods. It must be comparative and retrospective.

Hence the figures given below represent true progress in the prevention of disease in this town,

In 1874 there were 1,522 deaths in Wigan, the population then being 41,000.

In 1921 there were 1,303 deaths with a population of 91,000. These figures speak for themselves; there being less than half the population in 1874 and yet 219 more deaths.

In 1875 the death-rate in Wigan was 37 per 1,000.

In 1921 it was 14.28.

In 1875 the Zymotic death-rate was 10.1.

In 1921 the Zymotic death-rate was 1.31.

In 1874 the Infantile Mortality was 218.

In 1921 Infantile Mortality was 116.

These are remarkable and somewhat startling figures, and they mean a saving of something like 1,900 lives per annum.

Even at the lowest estimated value per unit of population, this shows an immense annual saving to the Town.

There is no doubt that if certain developments and improvements were carried out, the general death-rate and the infant mortality could be reduced to the level of, or even lower than, the average for the 96 great towns.

The improvements to be urged are the following:—

- 1.—Conversion of privies and pail closets to water carriage system.
- 2.—Provision of more and better receptacles for household refuse and more frequent removal. More up-to-date methods of carting of such rubbish. Precautions in street sweeping (See page 13).
- 3.—Further development of Maternity and Child Welfare work and School Medical Service (See page 36).
- 4.—Paving of yards and passages.
- 5.—Better housing of the people (See report, page 52).
- 6.—More powers required in order to control the preparation, handling, and sale of all foods and drugs for human consumption, including powers to enforce a pure milk supply.

IT IS QUITE TRUE THAT THE HABITS OF THE PEOPLE have a great deal to do with the death-rate especially in diseases such as Infantile Diarrhoea and diseases of children generally, and Tuberculosis. In some districts the people are enemies to themselves and their children in the way they live. Either through ignorance or carelessness they have no idea of cleanliness, and the value of ventilation; of proper feeding, of storing of food, and of regulating their mode of life on hygienic lines.

It is probable that in course of time when such people are given a better environment, with suitable and sufficient housing accommodation, back yards in good sanitary condition, up-to-date methods of sewage disposal and removal of household refuse, and with education and enlightenment, these

bad habits will be dropped gradually; it may however take a generation to accomplish.

STORAGE OF HOUSEHOLD REFUSE.

The accumulation of household refuse in back yards, where no ash-bins are provided, or worn-out ones not replaced, where the tenants of two or more houses have to join at one ash-pit or ash-bin, amounts to a serious nuisance, and a danger to health in many parts of the town.

These rubbish heaps become foul, pollute the atmosphere, breed flies, and so spread disease. They are actually the playgrounds of little children in many instances.

Under such conditions a high infant mortality rate is not surprising.

Each household should have a separate metal receptacle (preferably raised from the ground) for household rubbish. These should be removed at regular and frequent intervals.

Wooden receptacles, of which there are many, are not a success, and should be discarded; they become foul and objectionable.

REMOVAL OF REFUSE.

Up-to-date vehicles ought to be provided for the proper collection and conveying through the streets, of household refuse. In other words, the rubbish should be kept covered to prevent loose material from blowing about or in any way falling on to the street. Such nuisances are constantly occurring in this town.

STREET SWEEPING.

In dry weather street sweeping should be preceded by watering the streets in order to avoid filling the surrounding atmosphere with dust. And the same should apply to the sweeping of footpaths by householders and shopkeepers.

INFANT MORTALITY, 1921. 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 ..	80	16	11	7	114	55	50	37	40	296
Uncertified ..	..	..	..	..	..	..	..	..	..	..
Small-pox ..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	3	3	6	6	18
Diphtheria and Croup ..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis ..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases ..	..	..	..	..	..	..	..	..	..	..
Meningitis (<i>not Tuberculous</i>) ..	..	..	..	..	..	..	..	..	..	..
Convulsions ..	1	1	..	..	2	2	2	2	3	11
Laryngitis ..	..	..	..	..	..	..	..	..	..	1
Bronchitis ..	1	..	..	..	1	2	3	4	4	14
Pneumonia (<i>all forms</i>) ..	..	1	..	..	1	4	6	7	7	25
Diarrhoea ..	..	..	1	1	2	7	8	5	4	26
Enteritis ..	..	..	..	..	..	12	12	6	4	34
Gastritis ..	..	..	..	..	..	..	..	..	..	3
Syphilis ..	..	1	..	..	1	1	1	..	..	3
Rickets ..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying ..	..	..	..	..	..	..	..	..	..	..
Injury at Birth ..	..	..	..	..	..	..	..	..	..	..
Atelectasis ..	1	..	..	..	..	..	..	..	..	1
Congenital Malformations ..	4	..	..	..	4	..	1	..	..	5
Premature Birth ..	58	9	4	3	74	8	1	..	..	83
Atrophy, Debility and Marasmus ..	11	3	3	2	19	14	6	2	3	44
Other Causes ..	4	1	3	1	9	2	7	4	6	28
TOTAL ..	80	16	11	7	114	55	50	37	40	296

Nett Births registered during the calendar year—Legitimate, 2,422; Illegitimate, 109.
Nett Deaths registered during the calendar year—Legitimate Infants, 285; Illegitimate Infants, 11.

3.—NOTIFIABLE DISEASES DURING THE YEAR.

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

1921	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes ..	15.83	14.07	12.19	15.04
Zymoties ..	1.22	.57	2.19	1.31

The Zymotic-rate, 1.32, shows a decrease of .47 for 1921.

The rate for the previous year was 1.79.

DEATH RATES, 1921.

Disease.	No. of Deaths.	Rate.
Enteric Fever	8	.08
Small-pox ... .. .	..	..
Measles .. .. .	..	..
Scarlet Fever.. .. .	8	.08
Whooping Cough	35	.38
Diphtheria and Croup	5	.05
Influenza	18	.19
Erysipelas	3	.03
Phthisis (Pulmonary Tuberculosis)	97	1.03
Tubercular Meningitis	7	.07
Other Tubercular Diseases	9	.09
Cancer, Malignant Disease	56	.61
Rheumatic Fever	6	.06
Meningitis	8	.08
Organic Heart Disease	88	.96
Bronchitis	147	1.61
Pneumonia (all forms)	105	1.15
Other Diseases of Respiratory Organs	8	.08
Diarrhoea and Enteritis (under 2 years)	80	.87
Appendicitis and Typhlitis.. .. .	4	.04
Cirrhosis of Liver	2	.02
Alcoholism	1	.01
Nephritis and Bright's Disease	31	.33
Puerperal Fever	1	.01
Other Accidents and Diseases of Pregnancy and Parturition	10	.10
Congenital Debility and Malformation (including Premature Birth)	133	1.45
Violent Deaths (excluding Suicides)	45	.49
Suicide	11	.12
Other Defined Diseases	322	3.53
Diseases ill-defined or unknown	55	.60
Total	1,303	14.28

3.—NOTIFIABLE DISEASES DURING THE YEAR.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1921.
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 Age—Years.												St George	Lindsay	St. Cath.	St. Patrick	St Thom's	Poolstock.	Victoria.	St Andrew	Swinley.	All Saints.		W. Pemb.	N. Pemb.	C. Pemb.	S. Pemb.			
		Under 1	1 and 2	2 and 3	3 and 4	4 and 5	5 and 10	10 and 15	15 and 20	20 and 35	35 and 45	45 and 65	65 and over																		
Scarlet Fever..	245	3	3	9	18	23	95	64	20	8	2	2	2	13	22	26	24	6	4	3	26	8	26	9	26	8	21	27	10	175	
Enteric Fever ..	28	-	-	-	-	-	5	6	6	7	-	1	1	2	1	1	1	1	1	1	1	1	1	1	1	4	7	-	3	26	
Diphtheria (including Membranous Group).	47	2	3	5	4	3	15	10	-	4	-	1	1	1	10	4	1	1	1	2	1	1	1	2	1	4	3	2	24		
Pneumonia ..	73	5	4	9	-	4	15	5	6	7	6	9	3	5	5	8	9	1	10	5	8	7	7	2	2	1	2	5	3	-	
Puerperal Fever ..	3	-	-	-	-	-	-	-	-	3	-	-	-	-	1	1	-	1	1	-	-	-	-	-	-	1	1	-	-	-	
Influenzal Pneumonia.	9	-	-	-	-	-	1	2	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	-	-	-	-	-	
Malaria	5	-	-	-	-	-	-	-	-	4	-	-	-	6	6	1	2	1	6	3	3	3	3	2	2	-	-	-	-	-	-
Chicken-pox ..	57	4	7	2	3	6	33	2	-	25	12	23	5	4	6	7	2	3	3	1	5	8	6	8	3	6	11	5	6	5	
Erysipelas ..	73	-	-	1	-	-	2	3	2	25	12	23	5	4	6	7	2	3	3	1	3	1	8	8	3	6	11	5	6	5	
Continued Fever (C)	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cerebro-Spinal Meningitis ..	3	-	-	-	-	-	1	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	2	-	
Ophthalmia Neon.	19	-	-	-	-	-	-	-	-	-	-	-	-	4	-	3	-	1	1	2	1	3	2	2	1	-	-	-	-	-	
Meningitis ..	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Encephalitis Lethargica	4	-	-	-	-	-	-	-	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pul. Tuberculosis ..	183	1	1	-	-	1	8	10	22	75	36	27	2	11	6	12	29	19	16	16	24	10	7	14	13	14	13	11	4	113	
Other Forms of Tuberculosis ..	59	-	1	1	3	1	12	11	8	17	2	3	-	2	2	7	3	2	4	4	4	4	2	13	4	13	4	5	8	27	
TOTALS ..	810	34	20	27	28	38	187	114	68	154	64	65	11	48	60	82	76	44	38	38	97	62	48	80	67	43	67	43	372		

Isolation Hospital or Hospitals, Sanatoria, &c.—Wigan Sanatorium, Pemberton Hospital, Bowdon, Crossley, Stanhope, and D an Head. Sanatoria, Wigan Infirmary and the Barrowmore Hall Training Centre.

Number of Notifications, compared with other years:—]

Disease.	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Small-pox	0	0	0	0	0	0	0	0	0	0
Typhus	0	1	1	0	0	0	0	0	0	0
Scarlet	142	71	222	1608	820	231	174	339	188	245
Enteric	73	97	67	45	89	29	31	21	10	28
Continued	0	0	0	0	0	0	0	3	0	1
Diphtheria	38	34	43	37	37	40	29	46	64	47
Puerperal	4	6	5	4	6	4	5	7	3	3
Cholera	0	0	0	0	0	0	0	0	0	0
Erysipelas	47	56	82	83	60	48	43	66	59	73
Ophthalmia Neonatorum	6	0	0	1	13	23	13	26	29	19
Acute Poliomyelitis	6	0	0	1	0	3	3	1	1	0
Cerebro-Spinal Meningitis	0	0	1	0	0	2	3	2	1	3
Measles	0	0	0	0	285	2907	1055	126	264	0
Pulmonary Tuberculosis	217	207	236	233	178	188	197	139	136	183
Other Forms of Tuberculosis	0	61	124	107	92	134	84	70	37	59
Pneumonia	0	0	0	0	0	0	0	110	135	73
Influenzal Pneumonia	0	0	0	0	0	0	0	60	7	9
Dysentery	0	0	0	0	0	0	0	6	2	0
Malaria	0	0	0	0	0	0	0	48	25	5
Chicken-pox	0	0	0	0	0	0	0	2	3	57
Encephalitis Lethargica	0	0	0	0	0	0	0	2	1	4
Meningitis .. .. .	..	..	..	..	..	..	..	..	..	1
Total	553	549	803	2151	1580	3609	1637	1074	965	810

ANALYSIS OF NOTIFICATIONS, 1921.

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tot.
Scarlet Fever	7	17	13	8	15	4	12	12	20	41	42	54	245
Enteric Fever	3	3	1	0	1	0	0	5	4	4	5	2	28
Diphtheria	5	4	5	4	3	4	3	1	1	2	8	7	47
Puerperal Fever	0	1	0	0	0	0	0	0	0	1	1	0	3
Erysipelas	4	3	4	2	6	2	3	5	11	10	17	6	73
Cerebro-Spinal Meningitis	2	0	0	0	0	0	0	0	0	0	1	0	3
Ophthalmia Neon.	2	1	1	0	0	4	1	3	0	1	6	0	19
Acute Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis	0	0	0	0	0	0	0	1	0	0	0	0	1
Phthisis	20	12	14	17	17	17	13	11	15	17	11	19	183
Other Tubercular Diseases	4	4	7	9	11	1	3	2	3	3	5	1	59
Pneumonia	13	7	6	7	8	8	3	4	2	7	5	3	73
Influenzal Pneumonia	0	0	0	1	4	0	2	0	2	0	0	0	9
Dysentery	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaria	1	0	0	0	0	1	1	1	0	1	0	0	5
Continued Fever	0	0	0	1	0	0	0	0	0	0	0	0	1
Chicken-pox	0	0	0	0	0	0	0	0	4	27	7	19	57
Encephalitis Lethargica	2	2	0	0	0	0	0	0	0	0	0	0	4
Total	63	54	51	49	65	47	41	45	62	114	108	111	810

OPHTHALMIA NEONATORUM.

Notified	Cases.		Vision Unimpair'd	Vision Impaired	Total Blindnes	Deaths
	Treated	At Home In Hospital				
19	19	—	19	—	—	—

Towards the end of 1921, a lecture was given by the Medical Officer of Health to the Midwives of the Borough dealing with the cause, effects, and prophylactic treatment of ophthalmia neonatorum and the following instructions were recommended to be carried out.

There is no doubt whatever that there will be a considerable reduction of the number of cases occurring in 1922 if the instructions are properly followed.

Instructions :—

- 1.—As soon as the head is born, thoroughly cleanse the eyelids and eyelashes with clean swabs, and warm boracic lotion, using separate swabs for each eye.
- 2.—When the baby is born, put one drop of a one per cent. solution of silver nitrate in the hollow between the nose and the eye, open the lids, and tilt the head and see that the fluid runs on to the surface of the eyeball. Repeat the same process with the other eye.
- 3.—Allow a few minutes to elapse and then swab with warm boracic lotion, using separate swabs as before.
- 4.—Don't use the silver nitrate solution again in the same case.

Every case of ophthalmia neonatorum is visited at once by a Health Visitor, a smear taken of discharge if any, to be examined for gonococci or other organisms, and a report made to the Medical Officer of Health.

These cases are visited until cured.

ENTERIC FEVER.

28 cases were notified, 26 of whom were removed to hospital. The type was very severe; there were 8 deaths; the remainder although very bad cases made good recoveries.

We have for 1921 28 notifications against 10 in 1920, and 21 in 1919

Enteric Fever was the cause of 8 deaths during the year, as against 3 in 1920, and 3 in 1919.

INCIDENCE OF ENTERIC FEVER FOR TEN YEARS.

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
Notified Cases	151	73	97	67	45	89	29	31	21	10	28
Deaths	29	12	13	17	10	19	-	8	3	3	8
Death rate per 1,000 ..	.32	.13	.14	.18	.11	.22	-	.09	.03	.03	.08

AGE INCIDENCE—YEARS.

1-4	5-9	10-14	15-19	20-24	25-29	30 and Over
-	5	6	6	4	-	7

Total Cases, 28.

*Revisions of diagnosis.**Case notified as:—*

Typhoid Fever.
 Typhoid Fever.
 Typhoid Fever.
 Typhoid Fever.
 Continued Fever? para-typhoid.

Revised diagnosis.

Br. Pneumonia.
 Sub. Acute Appendicitis.
 Acute Lobar Pneumonia.
 Meningitis.
 Pneumonia.

It was not possible to trace the source of infection of the primary cases and they were scattered about the town. Each case was fully investigated. Several members of the same family in more than one instance contracted the disease from the first case in the house. An interesting fact is that not one of the cases was an ex-soldier; in other words no case had been inoculated against typhoid fever.

SCARLET FEVER.

The type as a whole has been mild. There were 245 cases notified, 175 of which were admitted to Hospital, and eight died.

During 1921 there were only two return cases from a total of 139 cases of Scarlet Fever discharged (1.4%), and those after an interval of 36 days and 24 days respectively. These figures are an index of efficiency in Hospital administration as regards Scarlet Fever. It is interesting to note that in three instances a new case from the same house was admitted only two days before the original case was discharged from Hospital. So if the first cases had been discharged a few days earlier the second three would have been put down as return cases; so second cases are not always true return cases.

Very few were of the old septic type. There is little doubt that the population of the country is getting gradually immunised against Scarlet Fever of a virulent type.

The casual organism, be it streptococcus or not, does not find the same congenial soil or nidus in which to develop its maximum destructive powers, in the people of to-day.

No doubt if the same organisms were let loose amongst a race who were strangers to Scarlet Fever the results would be as disastrous as they were when Measles first infected the Fiji islanders, and killed off a very large proportion. It is now a question whether the stringent measures at present directed to the notification and isolation of Scarlet Fever should not be revised, and whether similar action be taken in other infectious diseases which cause a far greater mortality.

DIPHTHERIA.

The number of cases notified was 47, or 17 less than in 1920, and the number of deaths five. All cases are examined bacteriologically on admission and have two negative swabs before discharge.

Anti-toxin can be obtained free of charge by practitioners at:—

The Pemberton Hospital.
 The Pemberton Police Station.
 The Wigan Police Station.
 Whelley Sanatorium (Telephone 691).
 Public Health Department (Telephone 125).

It cannot be too often urged that anti-toxin should be administered early in the disease. If given in the first twenty-four hours the mortality is nil, and the longer the delay the greater the mortality.

CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS AND ENCEPHALITIS LETHARGICA.

Three cases of Cerebro-spinal Fever and four cases of Encephalitis Lethargica were notified.

ERYSIPELAS.

Number of Cases Notified	..	..	..	..	73
Number of Deaths	..	..	..	..	3
Mortality per 1,000 of Population	..	..	..	..	·03

The number of notifications was greater than in 1920, and there were 3 deaths. One case notified as Erysipelas turned out to be Sub-pectoral Abscess and Endocarditis.

Cases in Houses with Insanitary Surroundings	..	..	..	..	-
„ Defects	..	..	..	..	14
„ No Defects	..	..	..	..	59

PUERPERAL FEVER.

Number of Cases Notified	..	..	..	..	3
Number of Deaths	..	..	..	..	1
Mortality per 1,000 of Population	..	..	..	..	·01

TUBERCULOSIS.

The number of deaths from Phthisis is 97, against 76 in 1920 and 90 in 1919. The number of deaths from other Tubercular affections is 16, against 18 in 1920 and 16 in 1919.

The rates are as follows :—

Phthisis Pulmonalis 1·06 per 1,000 of population.

Other Tuberculous Diseases. ·17 ,, ,,

If taken together as Tuberculous affections, we have 113 deaths, or a rate of 1·23 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	6	2	8
No. 2—Lindsay	4	1	5
No. 3—St. Catharine	7	2	9
No. 4—St. Patrick	11	1	12
No. 5—St. Thomas	9	3	12
No. 6—Poolstock	1	—	1
No. 7—Victoria	8	1	9
No. 8—St. Andrew	13	—	13
No. 9—Swinley	2	—	2
No. 10—All Saints	1	1	2
No. 11—West Pemberton	6	1	7
No. 12—North Pemberton	3	1	4
No. 13—Central Pemberton	7	—	7
No. 14—South Pemberton	3	1	4
Transferable Deaths	16	2	18
Totals	97	16	113

The following table shows the Comparative figures for 1917, 1918, 1919, 1920, and 1921, as regards Pulmonary cases :—

	1917	1918	1919	1920	1921
Number of Notifications	188	197	139	136	183
Deaths	122	99	90	76	97
Fatality-rate per cent.	64·89	50·51	64·74	55·88	53·00
Death-rate per 1,000	1·46	1·23	1·07	·83	1·06

				Total Cases Notified	Total Deaths
Pulmonary :—	Males	..	..	110	55
	Females	..	..	73	42
	Total	..	..	183	97
Non-Pulmonary :—	Males	..	..	25	8
	Females	..	..	34	8
	Total	..	..	59	16

Fatal Cases of Tuberculosis :—

Notified Cases	..	..	..	..	79
Non-notified	..	..	..	..	34
Total deaths	..	..	..	..	113

The ratio of non-notified deaths from Tuberculosis to notified is as 34 is to 113, or 30% of the total.

This ratio is unfortunately very high, and in addition to this a great number of cases are notified only a short time before death occurs. In such cases enquiries are made and explanations asked for from practitioners notifying, and the reasons are placed before the Tuberculosis Sub-Committee.

COUNTY BOROUGH OF WIGAN.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1911 & 1912.

SUMMARY OF NOTIFICATION DURING 1921.

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)	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-	Tot.			un- der 5	5 to 10				10 to 15	Tot
Pul. Males ..	1	1	2	4	8	13	26	18	7	2	108	110	1	1	2	9	79		
" Females ..	..	1	3	3	12	13	24	8	2	..	68	70	..	2	3	5	1	40
Non-pul. Males ..	..	2	4	3	6	3	4	2	1	..	25	25	..	..	..	..	..	11
" Females ..	..	4	7	6	2	7	4	1	..	..	31	34	..	1	2	3	..	10

CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1921.

Wards.	Population, Census 1921	Pulmonary Tuberculosis	Other forms of Tuber'losis.	Totals
No. 1—St. George	4746	11	2	13
No. 2—Lindsay	5151	6	2	8
No. 3—St. Catharine	7858	12	7	19
No. 4—St. Patrick	9574	29	3	32
No. 5—St. Thomas	4652	19	2	21
No. 6—Poolstock	5275	7	3	10
No. 7—Victoria	5042	16	4	20
No. 8—St. Andrew	12473	24	4	28
No. 9—Swinley	7503	10	2	12
No. 10—All Saints	3175	7	..	7
No. 11—West Pemberton..	4307	14	13	27
No. 12—North	7390	13	4	17
No. 13—Central	6245	11	5	16
No. 14—South	6156	4	8	12
Totals	89,447	183	59	242

NUMBER OF CASES DEALT WITH DURING THE YEAR 1921.... 666

Number of Deaths	109 + 4 notified at Death.
Left the District	9
Number of cases still under supervision at end of year ..	548
Notified Pulmonary	307
Notified Non-Pulmonary	118
Observation Cases	123

Sputum results:—

Positive	153
Negative	350
No Sputum	163

Treatment Received:—

Sanatorium	110
Infirmary (in-patient)	27
Manchester and Salford (in-patient)	1
(out-patients)	4
Extra Nourishment	28
Dispensary Supervision	666

Result of Treatment at end of year:—

Improved	303
Not Improved	131
Stationary	114
Fit for Work	313
Not fit for Work	235

Number of Ex-service men in whose case tuberculosis has been accepted as aggravated by or attributable to service in the Great War :—

Number 41 (included in total.)

The above particulars show the number of cases dealt with during the year, the treatment provided, and the results.

Below is a statement of the actual work done during 1921 :—

YEAR ENDING 1921.

Number of Notifications :	Pulmonary	183
" "	Non-Pulmonary	59
Number of Deaths		113
Number of Examinations at Dispensary :	New Cases	285
" "	Old Cases	1,064
Number of Contacts examined		67
Number of Tuberculosis Officer's visits to patients		139
Number of Nurses' visits to patients Homes		2,095
Number of Cases Treated by Dentist		93
Number of Sputum examinations :	Positive	101
" "	Negative	261
Number of Disinfections		139

NUMBER OF RECOMMENDATIONS.

Dispensary Supervision only	1,085
Dispensary Supervision with Extra Nourishment	28
Pemberton Hospital	93
Other Hospitals	30
Wigan Infirmary	27

HOSPITAL ADMISSIONS AND DISCHARGES.

Number of Patients admitted to Pemberton	82
" " discharged from Pemberton	76
Number of Patients admitted to other Hospitals	23
" " discharged from other Hospitals	21
Number of Patients in Pemberton Hospital, Male	14
" " " Female	8
Number of Patients in other Hospitals, Male	9
" " " Female	2

NOTIFIED CASES ON REGISTER AT END OF YEAR 1921.

WARD	Pulmonary					Non-Pulmonary					Grand Total
	Adults		Children under 16.		Total	Adults		Children under 16.		Total	
	M.	F.	M.	F.		M.	F.	M.	F.		
St. George's ..	10	2	-	1	13	2	2	2	1	7	20
Lindsay ..	14	6	-	-	20	-	-	4	2	6	26
St. Catherine ..	12	14	1	2	29	4	3	1	2	10	39
St. Patrick ..	23	11	1	2	37	-	5	4	2	11	48
St. Thomas ..	25	7	3	2	37	1	2	2	2	7	44
Poolstock ..	9	7	2	-	18	5	-	-	2	7	25
Victoria ..	23	11	3	-	37	1	2	6	3	12	49
St. Andrew ..	20	12	1	-	33	3	3	4	4	14	47
Swinley ..	12	2	-	1	15	1	1	1	-	3	18
All Saints ..	9	4	1	-	14	1	-	2	1	4	18
Pemberton W. ..	5	2	1	1	9	7	4	1	1	13	22
Pemberton N. ..	9	7	1	-	17	1	-	2	2	5	22
Pemberton C. ..	10	3	2	-	15	-	4	2	2	8	23
Pemberton S. ..	11	1	-	1	13	1	6	2	2	11	24
Totals ..	192	89	16	10	307	27	32	33	26	118	425

The control of all cases of tuberculosis, whether insured or non-insured rests, since 1st May, 1921, with the Local Authority, represented by the Tuberculosis Committee.

Schemes were made some time ago for the provision of a new Sanatorium adjoining Whelley Hospital for pulmonary tuberculosis of all stages. The Ministry of Health, however, refused to allow the scheme to go on for financial reasons. Additional and better accommodation for all forms of tuberculosis is badly needed in Wigan. and to withhold such improvements is false economy.

NON-PULMONARY TUBERCULOSIS.

A limited number of cases are treated at the Wigan Infirmary. This is by no means an ideal method of dealing with them. There is no control by the Tuberculosis Officer or other expert on tuberculosis.

There is only one way of effectively preventing the spread of tuberculosis, and that is by (1) removing infectious cases from the rest of the community, (2) eliminating other sources of infection, such as tuberculous milk. The first remedy is obviously beset with enormous difficulties. If the disease were as disfiguring as leprosy which in many ways resembles tuberculosis, it would have been similarly controlled long ago. Unfortunately, the disintegration of tissues, most commonly occurring in the lungs, is usually hidden from view, hence the danger of infection is not apparent to the man in the street. The result is, disaster to many. Complete permanent segregation

of families, one, or more, of whom are tuberculous, in colonies would be ideal if properly controlled. The practical difficulties and expense would be enormous. Separation of the children from homes of tuberculous persons as carried out in Paris and known as the Grancher System, would no doubt save the majority of children from tuberculosis. This method again has serious drawbacks. The present method of dealing with the problem of tuberculosis, *i.e.*, notification, observation, supervision, sanatorium treatment, and after-care, no doubt does a great deal of good. A few cases are cured completely, many cases are patched up for a time, whilst other cases go from bad to worse in spite of treatment.

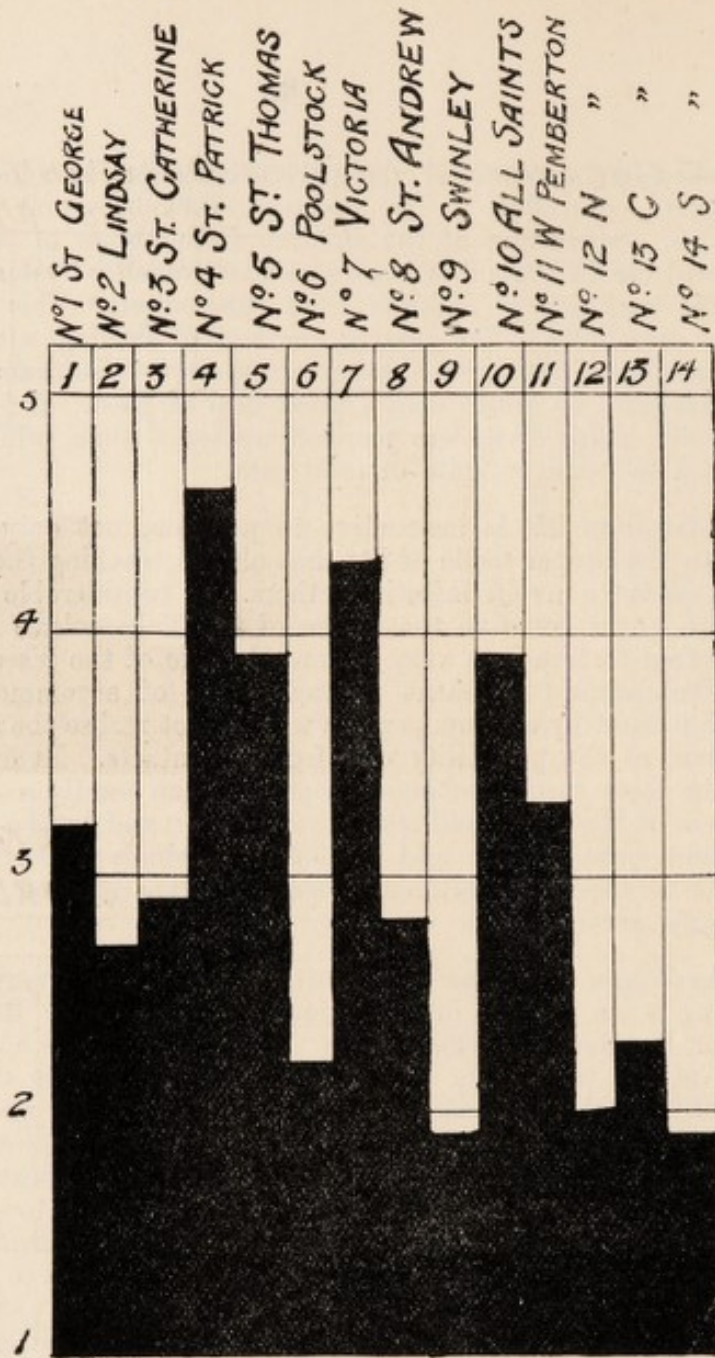
Sanatorium life is instructive to patients, not only in guiding themselves to the proper mode of life, but also in teaching them the precautions to be taken to avoid infecting others. A considerable number of cases, however, never come to the notice of the Tuberculosis Officer, and many are referred to him in a very advanced stage of the disease. Many cannot have sanatorium treatment through lack of accommodation. Infection is spread about by all such persons who do not realise the seriousness of their condition, or the possibility of infecting contacts. In overcrowded houses even the most careful tuberculous persons can hardly avoid infecting other members of the household sooner or later; and in the present scheme of treatment cases are in and out of sanatoriums from time to time, they go back to their overcrowded houses infection goes on and new cases are constantly arising.

The Wigan After-Care Committee continue to do very good work. The following is an extract of the Annual Report of the Honorary Secretary, Miss L. K. Dawson, which gives the objects of the Committee. Briefly these are, (1) to provide extra nourishment mainly in the form of milk; (2) to help in the purchase of clothing which patients need when they go to a sanatorium, also necessitous cases at home; (3) to provide (on loan) bedsteads, bedding, etc., when patients are unable to obtain a separate bed; (4) in exceptional cases to assist dependants; (5) to help in securing suitable work for those who are sufficiently recovered to undertake it; (6) visiting and friendly advice; (7) enlightenment of the public as to the laws of health. During the year 72 cases have been provided with milk as extra nourishment. Five Benger's food, Seven have been given clothing, eighteen have been loaned air cushions, Three have been loaned bed-pans, One has been loaned a water bed. From time to time parcels of clothing have been sent to the Pemberton Hospital for use of the patients there.

The following four diagrams are intended to show the incidence of tuberculosis in each Ward of the Borough for a period of ten years, and its relation to overcrowding, congestion of buildings, and insanitary houses:—

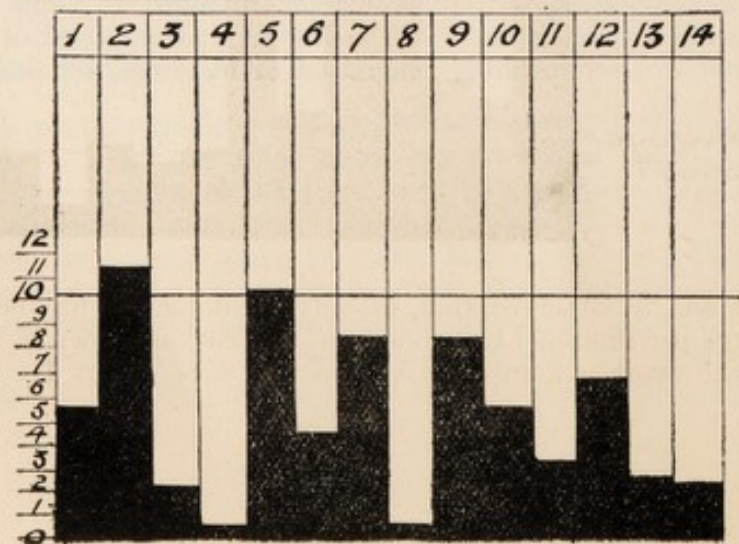
NUMBER OF NOTIFICATIONS OF TUBERCULOSIS.—Average per thousand of population per year in Wards for the 10 years 1912–1921.

A

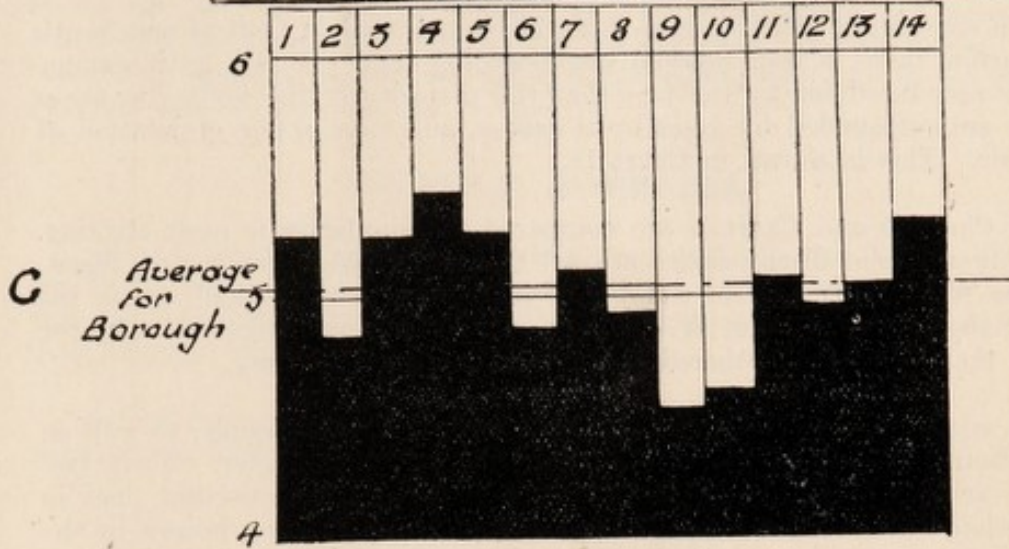


— PERCENTAGE OF INSANITARY —
— HOUSES IN EACH WARD —

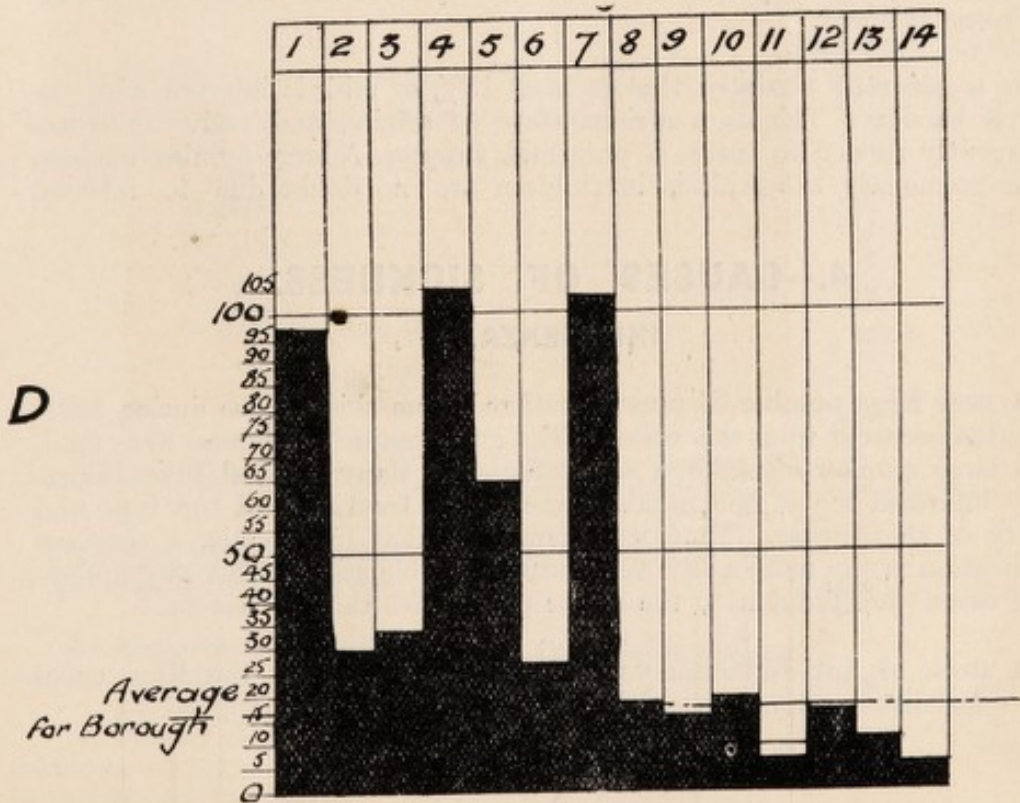
B



— AVERAGE NUMBER OF OCCUPANTS PER HOUSE —
— IN EACH WARD CENSUS 1921 —



— AVERAGE NUMBER OF PERSONS —
— PER ACRE IN EACH WARD —



It will be observed that, broadly speaking, the number of notifications (average per thousand of population per year) as shown in Chart A increases with the average number of persons per acre (Chart D).

The presence of insanitary houses does not appear to affect to any appreciable degree the number of cases of tuberculosis (Chart B).

On comparing Charts A and C it will be seen that in Central and South Pemberton there is well marked overcrowding and yet few notifications. This is accounted for by the fact that the majority of the houses in these Wards are surrounded by great open spaces, and have a free circulation of fresh air. This is shown in Chart D.

If Chart D and Chart A are compared the similarity is most striking. The only apparent discrepancies are All Saints and West Pemberton Ward. In these Wards, although the number of persons per acre is small, yet in the former there is congestion of buildings, chiefly business premises. In the latter, the houses are gathered together in a congested area.

It is clear then, that where there is overcrowding of people, as well as congestion of buildings, the incidence of tuberculosis is higher. These two factors according to the Wigan figures seem to be the important ones in connection with this disease. Hence the wisdom of building houses in the rural parts or outskirts of a town, and above all, avoiding congestion.

Another factor must be considered in trying to account for the variations in the numbers of cases of tuberculosis occurring in different districts. The type and habits of the people have undoubtedly some bearing on the number of persons infected.

It is generally accepted that at least 15% of milk is infected with the tubercle bacillus. This is a serious state of affairs, and active measures are urgently needed to ensure a pure milk supply. A large number of cases of non-pulmonary tuberculosis in children are no doubt due to infected Milk.

4.--CAUSES OF SICKNESS.

INFLUENZA.

A very large number of persons suffered from this disease during 1921. 18 deaths occurred from this cause. The great majority of cases were mild, and a large number of children were affected. Many Medical Practitioners kindly informed me of the numbers they were treating and the type and severity of the disease. They were reminded that pneumonia, a common complication in the more acute cases, was notifiable and in this way a number of cases were brought to the notice of the Health Department.

A stock of Anti-Influenza vaccine was procured from the Ministry of Health for distribution, but only in one instance was it applied for.

MEASLES.

During 1921 there was not a single death from this Disease. In 1920 Measles accounted for 104 deaths. The number of cases reported from the schools was 36.

WHOOPING COUGH.

In the early part of the year this Disease was rife in the town and accounted for 35 deaths. Advice as to preventative measures and treatment was given from time to time in the press and in public. 332 cases were reported by the schools of which eight were closed for periods varying from 21 to 30 days.

INFANTILE DIARRHOEA.

All notified cases were visited at once by the Health Visitors and all deaths inquired into. Posters warning the public of the danger of flies and giving instructions on the proper protection of food were displayed in prominent places all over the town.

A few cases were removed to the infectious diseases hospital for treatment, when facilities for home nursing were poor. There were 65 deaths.

VENEREAL DISEASES.

The treatment of Venereal Diseases is still being carried out at the R. A. E. Infirmary under this Authority's scheme. The following figures are in respect of the year 1921 :—

	<i>Borough.</i>	<i>County.</i>								
<i>(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 :—</i>										
Syphilis	77	49								
Soft Chancre	4	1								
Gonorrhœa	43	19								
Conditions other than Venereal	25	9								
Total	149	78								
<hr/>										
<i>(b) Total number of attendances at the Out-Patient Clinic of all patients residing in each area</i>	3540	1734								
<i>(c) Aggregate number of " In-patient days " of all patients residing in each area</i>	385	138								
<i>(d) Number of doses of Salvarsan substitutes given to patients residing in each area in the :—</i>	<table style="border: none;"> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td style="vertical-align: middle;">(1) Out-patient Clinic</td> <td style="text-align: right; vertical-align: middle;">970</td> <td style="text-align: right; vertical-align: middle;">465</td> </tr> <tr> <td style="font-size: 3em; vertical-align: middle;">}</td> <td style="vertical-align: middle;">(2) In-patient Department</td> <td style="text-align: right; vertical-align: middle;">29</td> <td style="text-align: right; vertical-align: middle;">—</td> </tr> </table>		}	(1) Out-patient Clinic	970	465	}	(2) In-patient Department	29	—
}	(1) Out-patient Clinic	970	465							
}	(2) In-patient Department	29	—							

(e) Give the names of Salvarsan substitutes used in the treatment of syphilis and the usual initial and final doses .. Neokharsivan, .15 .45, .6, and .75 gms.
Novarsenobillon, .3, .45, .6, .75.
Galyl, 20cgs, 30cgs, 40cgs.

(f) State the amount and kind of treatment usually 8 doses Neok., 4 Intra-administered to a case of Syphilis of each of the types; us ally musc. Hg. dealt with at the treatment centre Pot. Iod. in tertiary cases.

(g) State the nature of tests applied in deciding as to discharge of patients Syphilis. Four negative Wasserman tests one year after the treatment is finished.
Gonorrhœa: No threads in urine, and negative bacteriological examination.

It will be seen from the above figures that the total number of new cases dealt with during the year show a decrease, being 227 against 357 in 1920. This is either an indication that the incidence of venereal diseases is diminishing, or that many persons suffering do not seek treatment.

Dr. Prosser White, the Medical Officer to the Centre, informs me that persons who present themselves for treatment are realising in larger numbers the value of treatment and continue their attendances more consistently. There were 5,274 attendances against 3,590 in 1920.

The numbers of those who ceased their visits before the completion of the first course has fallen considerably. This is a distinct improvement. Absenteeism is one of the most difficult problems of such Centres. Without the completion of a first course infective lesions cannot be with certainty removed; and without subsequent treatment, in the majority of cases, can the danger of recurrences be checked or controlled.

In common with similar experiences elsewhere, the brilliant results obtained by the thorough and continuous treatment of the syphilitic mother from the earliest stage of pregnancy cannot be over emphasised. A few such cases have presented themselves for treatment, and the results have been most satisfactory.

5.—SUMMARY OF NURSING ARRANGEMENTS ; HOSPITALS AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home.—There are two Voluntary Nursing Organisations in the district, namely, the Wigan Nursing Association and the Pemberton Nursing Association. These are supported by local charities and donations. During 1921 the Wigan Nursing Association employed two nurses, and the Pemberton Nursing Association employed one nurse.

Pemberton Colliery also employs a nurse.

Midwives.—No midwives are employed by the Corporation. Midwives' fees are paid by the Corporation in necessitous cases only, and where Maternity Benefit under the National Health Insurance Acts is not payable. Strict enquiries are made into each case.

There were 39 midwives practising in the district on 1st January, 1921.

Clinics and Treatment Centres.—The following Clinics and Treatment Centres are provided by the Corporation :—

- | | |
|---|--|
| 1. Maternity and Child Welfare Centre, 22, Rodney Street, Wigan. | Mainly consultative; treatment to a very limited extent. Open Monday and Thursday afternoons. Four rooms and a small cleansing room. |
| 2. Maternity and Child Welfare Centre, Billinge Road, Pemberton. | Mainly consultative; treatment to a very limited extent. Open Tuesday and Friday afternoons. |
| 3. School Clinic, 22, Rodney Street, Wigan. (See No. 1.) | For minor ailments. A dentist is in attendance three mornings each week for inspection and treatment of school children. |
| 4. Tuberculosis Clinic, 14, Rodney Street, Wigan. | Also used by County Council. Open Tuesday, Wednesday and Friday mornings for Borough cases. A dentist is in attendance on Wednesday mornings for the inspection and treatment of tuberculous persons. Six rooms. |
| 5. Venereal Disease Clinic, Royal Albert Edward Infirmary, Wigan. | Open Mondays 4 to 7 p.m.
Wednesdays 5 to 7 p.m.
Friday 9 to 12 noon. } Males
and females.
Irrigations as arranged. "In patient" treatment is also available. |

Hospitals Provided or Subsidised by the Local Authority.—The following hospitals are provided by the Local Authority within the district :—

- | | |
|---------------------|---|
| Pemberton Hospital. | For treatment of pulmonary tuberculosis. 26 beds, four of which are reserved for the Lancashire County Council. |
| Whelley Sanatorium. | For Infectious Diseases (other than Small-pox and Venereal Diseases). 76 beds. |

The following hospitals and institutions are subsidised by the Local Authority, either by way of (a) an annual grant, or (b) payment for beds reserved for cases sent by this Authority.

- | | |
|--|--|
| 1. Bury Joint Hospital Board. | For treatment of smallpox. Payment of £200 per annum for beds when required. |
| 2. Bowden Sanatorium,
Frodsham. | Two beds reserved for treatment of tuberculosis. £2 10s. 0d. per bed per week. |
| 3. Crossley Sanatorium,
Kingswood. | Two beds reserved for treatment of tuberculosis. £2 10s. 0d. per bed per week. |
| 4. Stanhope Sanatorium,
Stanhope, Durham. | One bed reserved for treatment of tuberculosis. £2 2s. 0d. per week. |

Other Hospitals Available for the District :—

- | | |
|--|---|
| Royal Albert Edward Infirmary,
Wigan. | General Hospital. 152 beds. Replete with massage, electrical, orthopaedic and X ray Departments. A certain number of cases of non-pulmonary tuberculosis are treated there, for which payment is made by this Authority. |
| Billinge Infirmary, Billinge. | For medical, surgical, male phthisis, maternity and mental cases. 360 beds. There is no resident medical officer. Under the control of the Poor Law Authorities. |
| Wigan Union. | A number of beds are available chiefly for infirm people. There is also a ward for infectious diseases, such as venereal diseases, scabies, etc. There is no resident medical officer. Under the control of the Poor Law Authorities. |

Institutional Provision for Unmarried Mothers :—

- | | |
|--|--|
| St. Margaret's Home, Lamberhead
Green, Wigan. | Supported by charities and donations. Grant made by Ministry of Health and Local Authority. Accommodation for eight babies and 12 girls. |
|--|--|

Ambulance Facilities:—

- (1). For Infectious Cases. One motor ambulance is owned by the Health Department.
- (2). For Non-infectious Cases and Accidents. Two motor ambulances owned by Local Authority. One ambulance owned by Royal Albert Edward Infirmary. Two ambulances owned by Poor Law Authorities.

HOSPITAL FOR ACUTE INFECTIOUS CASES, WHELLEY.

76 Beds.

RESIDENT STAFF IN 1921.

Matron.

1 Sister.	1 Cook.
2 Nurses.	2 Ward-maids.
11 Probationers.	1 Kitchen-maid.
1 Laundress.	1 Gardener.
1 House-maid	1 Assistant Gardener.
1 Waitress.	1 Boilerman.

	Notifications	Removed to Hospital		Died in Hospital	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Scarlet Fever	245	175	8	9	..
Enteric Fever	28	26	5	7	1
Diphtheria and Memb. Croup ..	47	25	4	2	1
Pneumonia	73	..	..	..	..
Influenzal Pneumonia	9	..	..	..	..
Dysentery ... .. .	..	..	..	..	..
Malaria	5	..	..	..	..
Chicken-pox	57	..	..	..	..
Poliomyelitis .. .. .	..	..	..	..	..
Erysipelas	73	5	..	..	..
Continued Fever	2	..	..	..	..
Cerebro-Spinal Meningitis	2	2	1	2	..
Ophthalmia Neonatorum	19	..	..	..	..
Pulmonary Tuberculosis	183	..	..	..	..
Other forms of Tuberculosis	59	..	..	..	..
Meningitis	1	..	..	..	..
Encephalitis Lethargica	4	3	..	1	..
Puerperal Fever	3	..	..	..	..
Others .. .. .	..	10	..	6	..
Totals	810	145	18	27	2
		263			

Whelley Hospital.	Small-pox.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1921	7	1	1	9
Admitted in 1921	183	31	49	263
Discharged	139	19	29	187
Died	9	8	12	29
In-patients, Jan. 1, 1922	43	5	8	56

MATERNITY AND CHILD WELFARE.

There are, as in 1920, two Centres, one in Rodney Street and one at Billinge Road, Pemberton. The latter centre has recently been structurally improved, in addition to the provision of a hot and cold water lavatory basin and a W.C. in the large Clinic, and a lavatory basin in the Consulting Room.

A waiting room is provided on the ground floor and a glass shelter for prams will be erected in front of the building.

A school for mothers has been commenced in a room of the Health Department by one of the Health Visitors. It is open every Thursday evening and is well attended. Demonstrations and Lectures are given on various subjects, which are much appreciated by the mothers.

A monthly summary of work done by this branch of the Health Department is submitted at each meeting of the Maternity and Child Welfare Committee.

Although the infantile mortality was in 1921 comparatively low for Wigan, being 116, the second lowest figure recorded, it is certain that it could be reduced still further if the Maternity and Child Welfare Scheme were extended and certain improvements in general sanitation, etc., as outlined elsewhere, carried out.

There is an urgent necessity for the establishment of more centres, distributed in suitable places in the town, to facilitate the attendance of mothers and babies.

Each Health Visitor should have her own centre in her own district, where health talks, demonstrations in feeding and clothing, etc., could be given.

The fact that the mortality rate from Infantile Diarrhœa during the summer months of 1921 was the highest in the country, shows the great need for more instruction and supervision of the mothers and babies of Wigan.

More Centres would mean more Medical Staff. Provided that there were two School Medical Officers, however, school work and Infant welfare work could be conveniently carried out by these Officers.

It will be noticed from the statistics of Infant mortality on page 14 that 80 babies died under one week, and 114 under four weeks old. 83 were certified as dying from Premature birth, 26 from Diarrhœa, and 45 from marasmus or wasting, making a total of 154 deaths. A fair percentage of deaths from these causes ought to be preventable.

Ante natal work, and Infant welfare generally, should be developed to the utmost extent. No cutting down of expenses in this direction is economy.

A Maternity Home is very badly needed in Wigan. Many homes are unsuitable because of overcrowding or insanitary conditions for women to be confined there. The babies must be looked after at all costs.

35 deaths among children attending Clinics ; of these 6 attended regularly. 28 deaths under 12 months : 8 Diarrhœa and 20 other causes. 7 over 12 months : 3 Diarrhœa and 4 other causes. Among children receiving free milk over 12 months there were 3 deaths from Diarrhœa and 15 from other causes.

Nineteen 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, which were notified by Doctors and Midwives.

	By MIDWIVES.			
	By Doctors.	Qualified.	Unqualified.	Total.
No. of Births attended by..	265	1684	500	2449
Percentage	10.82	68.76	20.23	—
No. of Medical Aid Forms received	—	391	63	454
No. of Still-births notified..	19	85	19	123

Of the 39 Midwives 7 reside outside the Borough.

Artificial Feeding, 7 ; Infectious Disease, 1.

MEDICAL AID.

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

(1) Complications of pregnancy, namely : Albuminaria, 1 ; Abortion, 9 ; Miscarriage, 1 ; Prematurity, 40. Total, 51.

(2) Abnormal Presentations, 23.

(3) Complications of Labour, namely : Delayed Labour, 138 ; Contracted Pelvis, 11 ; Uterine Inertia, 4 ; Ante-partum Hæmorrhage, 12 ; Adherent Placenta, 13 ; Post-partum Hæmorrhage, 4 ; Ruptured Perineum, 38 ; Retained Membrane, 1 ; Prolapsed Cord, 3 ; Placenta Previa, 2 ; Retained Placenta, 1 ; Eclampsia, 1 ; Total, 228.

(4) Complications of Puerperium and other Illnesses of Patient, namely : Rise of Temperature and Rapid Pulse, 13 ; Patient Ill (undefined), 15 ; Exhaustion, 2 ; Collapse, 2 ; Patients' request, 4 ; Excessive Sickness, 2 ; Pain in Leg, 1 ; Diarrhœa and Sickness, 1 ; Total, 50.

(5) Illness and Abnormalities of Child, namely : Malformation, 4 ; Baby Ill (undefined), 4 ; Itcerus Neonatorum, 2 ; Dangerous Feebleness, 26 ; Baby's Eyes, 34 ; Circumcision, 1 ; Convulsions, 5 ; Pemphigus, 4 ; Hare-lip and Cleft Palate, 2 ; Retention of Urine, 1 ; Snuffles, 1 ; Abscess, 1 ; Asphyxia, 4 ; Syphilitic Sore, 1 ; Macerated Fœtus, 2 ; Ophthalmia, 3 ; Total, 95.

PUERPERAL FEVER.

There have been 3 cases and 1 death from Puerperal Fever, as compared with 3 cases and no deaths in 1920.

CLINICS.

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

ATTENDANCE AT CHILD WELFARE CENTRES.

Total attendances of Babies	.. .. .	5,101
Primary attendances of Babies	.. .. .	956

592 cases seen by the Medical Officer during 1921. 35 deaths among children attending Clinics. Of these 6 attended regularly. 18 deaths among children receiving free milk.

MIDWIVES ACT, 1902.

Thirty-nine 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.

Infantile Mortality.—The number of deaths of children under one year is 296, or 116 per 1,000 births, and of children over one year and under five years 119, or 1.30 per 1,000 of the population.

These figures compare with 316 deaths under one year, a rate of 124 per 1,000 in 1920.

An analysis of these 296 deaths show that they may be grouped under the following headings :—

Premature Birth, Congenital Debility, Malnutrition, and Congenital Malformations	.. .. .	133
Diarrhoea and Enteritis	.. .. .	60
Bronchitis	.. .. .	14
Pneumonia	.. .. .	25
Whooping Cough	.. .. .	18
Laryngitis	.. .. .	1
Eclampsia Convulsions	.. .. .	11
Gastritis	.. .. .	3
Syphilis	.. .. .	3
Other causes	.. .. .	28

—
296
—

SUPPLY OF MILK TO NURSING AND EXPECTANT MOTHERS AND INFANTS UNDER THREE YEARS OF AGE.

In May, 1921, a Scheme was prepared according to instructions issued in Circular 185 by the Ministry of Health. An elaborate system was devised based on the Ministry's suggestions by which all persons satisfying the conditions laid down and whose income was below a scale approved by the Ministry, were supplied with free milk.

Information was gathered from all possible sources in order to check the income given by persons making applications.

All families applying were visited by a Health Visitor. A Sub-Committee consisting of the Chairman and Vice-Chairman and three other members of the M. and C. W. Committee was formed and met once a week to examine the applications and investigations and grant or otherwise free milk. The Medical Officer of Health, the Chief Sanitary Inspector, an official from the Treasurer's Department, a clerk from the Town Clerk's Office were in attendance at each meeting. During the coal crisis of three months, the number of persons receiving free milk rose to over 3,000. The work of dealing with such numbers was enormous, and for a time the whole of the staff had to give a hand.

Later the Health Visitors with a clerk were able to cope with this extra work, but at the expense of some of their proper work. In fact, one third of their time was taken up in income investigations and clerical work. The greatest care and scrutiny have been exercised both by the members of the Sub-Committee and by the Health Visitors and other members of the Health Department in order that the granting of free milk should be made only to those entitled to it.

There is no doubt that the distribution of free milk to necessitous cases has been the means of reducing the infant mortality.

No "Baby Week" celebrations were held this year owing to the fact that the Health Visitors were fully occupied with their usual duties and the additional work in connection with free milk distribution.

The causes of high infant mortality in this town are in my opinion as follows:—

1. The existence of large numbers of privies, pail closets, and enormous accumulations of human excreta at Miry Lane Depot.

2. Unsatisfactory system of storing and removal of household refuse.

The above conditions are undoubtedly causes of infantile diarrhoea and other infectious diseases, and mean death to large numbers of babies.

3. The limited scheme of Maternity and Child Welfare work.

- 4.—Insanitary and overcrowded houses.

(This will be discussed under housing.)

5. Ignorance and carelessness of parents.

TABLE SHOWING METHOD OF FEEDING OF 292 INFANTS UNDER ONE YEAR WHO DIED DURING 1921.

SAID TO BE—

110	Entirely breast-fed.
13	Partly breast-fed.
36	Condensed Milk.
31	Cow's Milk.
10	Dried Preparations.
36	Miscellaneous.
56	No feeding (lived 1-2 days only).

292

6.—LABORATORY WORK.

Specimens in connection with Venereal Diseases, other special examinations, and examinations of water, food, etc., are examined at the Manchester University.

Blood examinations for enteric, and swabs for Diphtheria, are carried out at the City Laboratories, Liverpool.

Examinations of sputum for presence of tubercle bacilli are made at the Tuberculosis Clinic, Rodney Street, Wigan.

The following examinations have been made during the year 1921 :—

	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Swabs for Diphtheria	13	61	74
Widal tests for Enteric	17	32	49
Cerebro-spinal fluid	0	3	3
Wasserman	85	163	248
Spirochaetae	1	2	3
S. Pallida	—	1	1
Sputum for tubercle bacilli ..	153	350	503

LIST OF ADOPTIVE ACTS, BYE-LAWS, & LOCAL REGULATIONS,

relating to the Public Health, in force in Wigan, with date of adoption.

Small Dwellings Acquisition Act, 1899.

The Infectious Disease (Prevention) Act, 1890.

The Public Health Acts Amendment Act, 1890 (Part 3).

The Housing of the Working Classes Act, 1890.

The Public Health Acts Amendment Act, 1907.

(Section 27, 33,51, and Part 6).

The Notification of Births Act, 1907.

Local Government Board Provision Orders Confirmation No. 7 Act 1888.

Wigan Improvement Act, 1874 and 1880.

Wigan Corporation Acts, 1889, 1893, 1898, 1902, 1905, and 1921.

Bye-laws with respect to Water Closets and Waste Water Closets, 27th day of November, 1905.

Regulations with respect to Dairies, Cowsheds, and Milkshops, adopted 1st August, 1900.

Bye-laws with respect to Slaughter-houses, 2nd September, 1891.

Bye-laws with respect to Houses Let-in-Lodgings, 7th December, 1887.

Bye-laws with respect to Common Lodging-houses, 1st July, 1891.

Bye-laws with respect to New Streets and Buildings, 21st September, 1903.

Bye-laws with respect to New Streets and Buildings, 6th January, 1892.

Bye-laws with respect to Alteration of Buildings, 6th January, 1892.

Bye-laws with respect to Nuisances, 7th December, 1887.

Bye-laws regulating the Employment of Children, 8th March, 1921.

Bye-laws with respect to Tents, Vans, Sheds, and Similar Structures, used for Human Habitation, 11th November, 1913.

Bye-laws as to Sanitary Conveniences, 1st June, 1892.

Bye-laws relating to Offensive Trades, 2nd September, 1914.

Bye-laws with reference to Spitting, 20th October, 1915.

7.—SANITARY ADMINISTRATION.

Mr. Martlew, Chief Sanitary Inspector, submits the following remarks, with a summary of work done by the Sanitary Inspectors :—

I beg to submit the Annual Report of the work done by the Inspectorial Staff of the Health Department for the year 1921.

For a period of three months during the Coal Crisis the routine work of the Department could not be carried out, as the whole staff were principally engaged on the work of distributing free milk under the Maternity and Child Welfare Scheme, and only urgent matters received attention.

I desire to take the opportunity of recording my appreciation of the courteous manner in which Dr. Whitehead, the Medical Officer of Health, has directed the work of the Department, to the Inspectors, Clerical Staff, and other assistants for the efficient and willing way they have carried out much strenuous work throughout the year, as they have frequently had to be on duty before and after the usual office hours.

Number of water closets in the Borough ..	7966
Number of pail closets.. .. .	7132
Number of privy middens	1575

* Eighteen closets and privy middens were converted into water closets during the year 1921.

NUISANCES.	1920	1921.
Houses and premises inspected and visited <i>re</i> nuisances and complaints	2769	2385
Nuisances discovered	3267	5320
Nuisances abated	2742	4514
Notices issued (preliminary)	1220	1265
" " (formal)	899	1343
Re-visits to nuisances	6265	8129
Other visits made	1085	1199
Visits to premises (testing of drainage)	109	95
Letters issued <i>re</i> nuisances	457	565

DESCRIPTION OF NUISANCES DEALT WITH.

Defective drainage	62	44
Choked drainage	259	281
Defective and foul gullies	16	19
Gullies requiring grids	4	5
Want of slopstones and pipes	18	8
Slopstones and slopstone pipes defective	97	95
Soil pipes or connections defective	3	15
Defective or choked water closets	48	49
Defective water supply to closet	—	8
Defective sink waste pipes (connected to drains)	3	6
Defective condition of closets (roof, walls, door, seat, or floor)	143	226
Want of doors to closets	12	51
" " ash-house	53	117
Defective condition of ash-houses (roof, walls, door or floor)	36	53
Defective or choked waste water closets.. .. .	33	33
Houses with defective floors	114	362
Defective water supply to houses	1	10
Want of receptacles for house refuse	1	16
Workshops require limewashing	3	3
Defective water closet cisterns	34	33
Insufficient and Want of closet accommodation to houses or Workshops	20	9
Defective spouts (eaves or down)	524	508
Want of spouting to premises	14	44
Defective roofs	681	593
Defective window frames, want of cords, &c.	—	495
Defective ceilings	—	101
Unclean walls and ceilings.. .. .	—	613
Defective flagging or paving (yards and passages)	52	81
Houses overcrowded or keeping of lodgers	10	3

Houses and premises filthy	12	5
Houses with filthy closets	6	5
" filthy yards and entries	9	4
" damp and defective walls	240	848
Defective middenstead	18	72
Want of middensteads	6	9
Accumulations of manure	21	26
" rubbish	14	10
Keeping of animals	26	24
Miscellaneous	674	436

SMOKE NUISANCES.

During the year 8 smoke observations have been taken. In four instances the time limit was exceeded. Warning letters were sent to the persons responsible for the nuisances.

CANAL BOATS ACT, 1877 AND 1884.

There has been a decrease in the number of canal boats inspected on account of the Leeds and Liverpool Canal Company ceasing to carry goods and coal boats lying idle during the Coal Crisis.

No. of Boats that have been registered at Wigan.. ..	303
" still in use or available.. .. .	47
" not in use	23
" broken up	111
" that cannot be traced, sold, or dispensed with	83
" re-registered with other Authorities	15
" re-registered at Wigan	18
" registered but not legally required	6
" Applications for registration and re-registration during the year	8
" Applications granted	8
" Boats re-registered	8
" Inspections	41
" Notices issued	1
" Notices complied with	1
" Contravention of regulations	1
" Letters sent out	12

FACTORY AND WORKSHOP ACT.

No. of workshops on register	297
" bakehouses on register	121
" domestic workshops on register	29
" visits to outworkers' premises	33
" " factories	74
" " workshops.. .. .	635
" defects dealt with	118
" defects remedied	113
" notices received from H.M. Inspector	7
" Section 5, sanitary defects	30
" complied with	29
" letters sent out	19
" underground bakehouses being used	5

SHOPS ACTS, 1912 AND 1913; SHOPS (EARLY CLOSING), 1920.

No. of shops on register	2336
„ visits to shops (day)	417
„ „ (night)	154
„ „ <i>re</i> Closing Orders, 1920	
(day)	78
„ „ <i>re</i> Closing Orders, 1920	
(night)	154
„ letters sent out <i>re</i> infringements	95
„ observations (day)	65
„ „ (night)	450

REPORT OF OFFENCES, 1921.

Not exhibiting closing notice	151
„ form (assistants' half-holiday)..	25
„ abstract	7
<i>re</i> assistants' half-holiday	6
„ „ intervals for meals	4
Letters for serving customers during prohibited	
hours	95

COMMON LODGING HOUSES AND HOUSES LET-IN-LODGINGS.

The common lodging houses and houses let-in-lodgings have been regularly visited, and are kept in a satisfactory condition with one exception. The occupier of this common lodging house was requested to appear before the Committee, and was warned that unless his lodging house was kept according to the Bye-laws legal proceedings would be instituted and his licence would not be renewed.

COMMON LODGING HOUSES.

No. of common lodging-houses in the Borough	13
„ lodgers allowed nightly	496
„ visits	828
„ lodgers reported as being received (per returns) ..	139,325
„ letters sent out	3
„ houses on register end of 1920	13
„ houses remaining on register end of 1921	13

HOUSES-LET-IN-LODGINGS.

No. of houses on register	16
„ visits	114

INFECTIOUS DISEASES (PREVENTION) ACTS, etc.

A high-pressure disinfectant is used for the purpose of the disinfection and disinfection of clothing, bedding, and other articles.

No. of houses disinfected	480
„ rooms disinfected	696
„ beds disinfected	694
„ mattresses disinfected	496
„ sheets and quilts disinfected	1285
„ other articles disinfected	2565
„ premises cleansed and limewashed after infectious disease	169
„ visits to houses <i>re</i> limewashing and cleaning, &c.	257
„ „ „ infectious disease	520
„ letters sent out <i>re</i> infectious disease	1
„ „ „ limewashing	22
„ library books disinfected	30

RATS AND MICE (DESTRUCTION) ACT, 1919.

Mr. E. Richardson was appointed, in January, 1921, to devote a portion of his time as Administrative Officer under the above Act.

He reports as follows :—

No. of premises under observation on 1st January, 1921	104
No. of premises found to be infested during 1921	134
No. of premises reported to be free from rats or mice during 1921	111
No. of premises under observation on 31st December, 1921	127
Total number of visits made	325

The occupiers of premises still infested are carrying out the requirements of the Act. During Rat Week, held in November, 1921, a special effort was made to exterminate rats and mice. 2,100 baits were prepared and distributed free of charge to persons in occupation of premises infested. Satisfactory results were reported.

SALE OF FOOD AND DRUGS ACTS; MARGARINE ACTS; PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912-17.

All the samples were submitted to the Public Analyst.

Of the 141 samples taken under the above Statutes only three proved to be below the standard required. One sample of milk was deficient in fat to the extent of 5½%. Satisfactory evidence was produced to show that the vendor had not tampered with the milk, and a letter of warning was sent in this case.

Two samples of mercury ointment were found to be deficient in mercury according to the B.P. standard to the extent of 63% and 66% respectively. The first was an informal sample; the second was a formal sample from the same vendor. A letter of warning was sent in this case.

<i>Article.</i>	<i>Samples.</i>	<i>Genuine.</i>	<i>Adulterated.</i>	<i>Not Formal.</i>
New Milk	109	108	1	10
Butter	4	4	—	1
Lard	1	1	—	1
Dripping	3	3	—	3
Jam	4	4	—	4
Preserved Cream ..	3	3	—	3
" Glaxo "	1	1	—	1
Mercury Ointment ..	4	2	2	3
Camphorated Oil ..	3	3	—	3
Epsom Salts	3	3	—	3
Sweet Nitre	3	3	—	3
Tripe	3	3	—	3
Totals	141	138	3	38

*New
Milk. Cream*

1.—MILK AND CREAM NOT SOLD AS PRESERVED CREAM

No. of samples examined for the presence of a preservative	109	..	3
No. in which a preservative was reported to be present	—	..	*2

*In each case they were in conformity with the above Regulations.

SLAUGHTER-HOUSES, OFFENSIVE TRADES, AND MARKETS.

The Ministry of Health have recently issued a memorandum, suggesting certain methods of meat inspection, which include the careful examination of every carcass killed in a slaughter-house. It is quite impossible to carry out this system with the present staff of Inspectors as there are no less than 25 slaughter-houses in the Borough, and these are spread over a very large area. Further, at five slaughter-houses an average of over 700 animals are slaughtered each week. To carry out the Ministry's suggestions two additional Inspectors would be required to devote the whole of their time to the inspection of meat and other foods.

By request, several occupiers of slaughter-houses have ceased to deposit manure in middensteads and load same direct into special carts left for this purpose, which are removed almost daily. It has been observed that at these slaughter-houses there has been a great decrease in the number of flies.

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	.. .. .	1405
No. of visits to offensive trade premises	.. .. .	115
" markets	.. .. .	404
" butchers and other food shops	.. .. .	331
" letters sent out	.. .. .	3
" certificates issued (condemned food)	.. .. .	344

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

	Passed, but offal condemned	Condemned.	Part passed and part condemned.
Beasts ..	336	25	11
Sheep	4	2	—
Pigs	1	9	—

MARGARINE AND MARGARINE CHEESE.

Under the above, 13 persons are registered as wholesale dealers for 14 premises.

FERTILISERS AND FEEDING STUFFS ACT, 1906.

During the year nine informal samples were obtained :—

SAMPLES.

Cotton meal	.. .. .	3
Bean flour	.. .. .	1
Indian meal	.. .. .	2
Thirids	.. .. .	2
Fattening meal	.. .. .	1

The Borough Analyst reported that eight were satisfactory and one unsatisfactory. A warning letter was sent in this case.

FOOD CONDEMNED, 1921.

No. of Beasts condemned	.. .. .	25
" Beasts of which a portion was condemned	.. .. .	11
" Sheep condemned	.. .. .	2
" Sheep of which a portion was condemned	.. .. .	2
" Pigs condemned	.. .. .	9
Beef	.. .. .	764lb.
Imported	.. .. .	32lb.
Frozen Meat	.. .. .	273lb.
Lamb	.. .. .	5lb.
Corned Beef	.. .. .	117lb.
Bacon	.. .. .	140lb.

Boiled Ham	.. .. .	8lb.
Cheese	.. .. .	112lb.
Butter	.. .. .	49lb.
Eggs	.. .. .	2,645
Milk (Condensed)	.. .. .	12 tins.
Wet Fish	: 90 boxes, 14 barrels, and 3 tins.	
Dry Fish	.. .. .	515 boxes
Fowls	.. .. .	42
Rabbits	: 2,644 and 1 tin.	
Hares	.. .. .	22
Fruit	: 245 boxes, 97 bags, 2 baskets, 17 barrels, and 37 tins.	
Vegetables	.. .. .	5½cwts.

REPORT OF THE PUBLIC ANALYST FOR THE YEAR 1921.

The Borough Analyst (Mr. S. E. Melling) submits the following report:

I have much pleasure in placing before you a brief summary of the work carried out under the various Acts, during the year 1921.

SALE OF FOOD AND DRUGS ACT.—During the year I have analysed 140 samples of foods and drugs as enumerated in the following table:—

<i>Articles.</i>	<i>Number Analysed.</i>	<i>Number Adulterated.</i>
Milk	109	1
Butter	4	—
Mercury Ointment	4	2
Tripe	3	—
Sweet Spirit of Nitre	3	—
Camphorated oil	3	—
Epsom Salts	3	—
Preserved Cream	2	—
Dripping	3	—
Jam	3	—
Cream	1	—
Glaxo	1	—
Marmalade	1	—
Lard	1	—
	141	3

Of the 109 milks examined one was reported against on account of fat deficiency to the extent of 5 per cent. The remaining samples were examined for preservatives with wholly negative results. The following table illustrates the quality of the milk supply, judging by the fat content:—

Milks containing under 3·0 per cent. of fat.....	1	or	0·9 %.
„ „ 3·0 % fat not over 3·5 %	43	„	39·4 %.
„ „ 3·6 % fat not over 4·0 %	39	„	35·7 %.
„ „ Over 4·0 % of fat	26	„	23·8 %.

Two samples of Mercury Ointment were found to be deficient in mercury—the medicinally active constituent—to the extent of 63 and 66 per cent. respectively. The British Pharmacœpia directs that the ointment shall be so compounded as to contain 30 per cent. of mercury.

The remaining drugs conformed to the requirements of the Pharmacœpia.

All remaining samples were of sound commercial quality.

FERTILISERS AND FEEDING STUFFS ACT.—Under this Act nine samples were analysed. Five of these carried no invoice, but judged by their general composition were satisfactory. Three of the remaining samples conformed closely to the guarantee in respect of oil and albuminoids, whilst the remaining sample was slightly deficient in oil after making due allowance, as prescribed by the Act.

WATER SUPPLY.—Monthly analysis have been carried out of the Corporation Water, for the most part of the Wigan supply and occasionally that from the Pemberton district. Fluctuations in respect of organic matter present have been noted, but there has never been evidence that such contamination is due to other than traces of vegetable material. Whenever necessary I have followed up any doubtful analysis, i.e., an analysis in which the albuminoid ammonia is sensibly higher than usual, by subsequent examination of the water from the same service-tap. Limiting myself to an expression of opinion from the standpoint of chemical analysis, there is no doubt that the public supply is of satisfactory all-round quality.

I have again to express my appreciation of the hearty co-operation of the Medical Officer and his staff in this branch of public health administration, and especially to thank the Chief Inspector, Mr. Fred Martlew, for his good offices.

REPORT ON THE INSPECTION OF DAIRIES AND COWSHEDS.

Mr. Woods submits the following report:—

I beg to report that for the second year in succession I have not found any cases of udder tuberculosis among the milch cows in the County Borough. Generally speaking the cows are of good quality. One owner has received an intimation that his cowshed must be closed or considerable alterations made. This cowshed was condemned and closed before the war, but owing to special circumstances was allowed to be used during the War.

The outbreak of foot and mouth disease over an extensive area has unfortunately not quite missed the County Borough, which has suffered two outbreaks in both of which the Ministry of Agriculture decided to slaughter the whole of the stock and pay compensation to the owners.

Perhaps a few words on this policy may not be considered amiss in this report, as there is considerable cloudiness in the minds of farmers and others as to the *raison d'être* of the advisability of slaughtering both the diseased and healthy stock in almost every outbreak.

It is quite true that it is a mild contagious disease; that not one per cent. would die if properly treated, and that in from three weeks to a month the probabilities are that a perfect recovery would occur in almost every case.

The reason for the present drastic methods are as follows:— It has been computed that although a mild disease, what with loss of flesh during the couple of weeks when the mouth is too sore to eat, and the animal has to be gruelled; and the loss of milk, not only during the actual period of affection, but owing to the cow not coming back to her full note, and to the cost of treatment and nursing, each milch cow loses about one third of her value.

I think it would be fair to estimate the average value of milch cows at £30 each. There are in the country $2\frac{1}{2}$ millions of milch cows, and if the disease were allowed to go uncontrolled, it is so extraordinarily contagious that a low estimate of the number of animals that would become affected is at least one million. Now a loss of £10 each on one million cows comes to ten millions, and the question is whether it is cheaper to slaughter out this mild contagious disease at a cost of one million, or to allow it to run its course at a cost of ten millions? This, in a few words, is the Government's justification for the policy of slaughter. The full statistics of the number of milch cows slaughtered under the Foot and Mouth Disease Order and found on post mortem to be affected with Tuberculosis are not yet published, but I gather that the percentage affected will show a marked diminution.

There is a movement commencing amongst various bodies interested in public health for the renewal of the Tuberculosis Order which was suspended at the outbreak of the war in 1914, and which permitted the seizure of milch cows with tuberculosis of the udder, or with what was christened open tuberculosis, with compensation to the owners, and I think that with certain amendments a new order satisfactory both to the producers and the general public should be pressed for in the interests of clean and healthy milk.

The experiments of Professor Calmette with the view to immunisation and which I related at some length last year, will necessarily take several years, but that they are attracting some attention in this country is evident from the question asked in the House of Commons within the last few weeks as to whether the Government were aware of what was being attempted: the answer, of course, being that they were.

The grading of milk according to its purity (i.e., its bacterial content) is becoming more and more discussed, but what seems to me of almost more importance is to educate the consumer to take all necessary precautions after receiving the milk to protect it from contamination by either dust or flies. The importance of this is very imperfectly realised by the majority of consumers.

The Medical Officer of Health, at my request, has accompanied me on a round of visits to the cow sheds in the Borough, and I think he agrees with the late Medical Officer that Wigan does not compare unfavourably with other towns, either in its cow sheds or cattle.

8.—PUBLIC HEALTH STAFF, 1921.

Medical Officer of Health.

Medical Superintendent of Sanatoria.

Superintendent School Medical Officer,

Administrative Tuberculosis Officer :

* HENRY WHITEHEAD, M.D., D.P.H., Vict., M.B., B.S. Lond.

Assistant Medical Officer of Health,

Clinical Tuberculosis Officer :

* A. D. MACMAHON, M.B., D.P.H.

Chief Sanitary Inspector :

* FREDERICK MARTLEW (a) (b).

Sanitary Inspectors :

J. ASHTON (a), W. J. LOE (a) (b), H. MORGANS (a) (b).

Assistant Sanitary Inspector and Administrative Officer under

Rats and Mice (Destruction) Act, 1919 :

E. RICHARDSON.

Factory, Workshops, and Shops Inspector :

F. G. BISHOP.

Matron of Sanatoria :

* Miss M. MOSS.

Lady Health Visitors :

* B. CROMPTON (c) (d), * E. RICHARDSON (a), * L. LEE (a),

* A. F. BRASSINGTON (c) (d), * M. GOULD (a) (c).

Tuberculosis Nurse :

* L. WEST (a).

School Dentist and Tuberculosis Dentist (part time) :

* J. R. TOWNHEND.

Clerks :

A. BYERS, * T. MCKNIGHT, J. ROUGHAN, * M. M. WHITTLE,

* A. FAIRHURST.

Steam Disinfector Attendant :

J. RISLEY.

Disinfectors :

G. CROSTON,

J. ARROWSMITH,

A. MACKENZIE.

Motor Driver :

L. HILTON.

(a) Sanitary Inspector's Certificate.

(b) Meat Inspector's Certificate.

(c) Certificate, Central Midwives' Board.

(d) Health Visitor and School Nurse's Certificate, Royal S.I.

*Salary contribution made under Public Health Acts or by Exchequer grants.

9.—HOUSING.

Environment is one of the most powerful forces in nature affecting the evolution of the human race for good or evil. If people are placed in favourable environment by giving them suitable and a sufficient number of houses to live in, they will work out their own salvation. It may not be apparent immediately, but it is, to my mind, impossible for people to continue their insanitary and unhygienic mode of living in decent and clean surroundings. Hence this question of housing should be most carefully considered. There are instances of old cottage property in Wigan situated amongst better class houses where the people live decent and cleanly lives, and it is very noticeable that in such property the occupants have learned to live similar lives, and to keep themselves and their houses sanitary and clean. There is absolutely no doubt that habits are moulded to a great extent by environment. During December, 1919, a survey of the Borough of Wigan was made, and it was found that there were 572 houses in scheduled insanitary areas; 87 insanitary houses in other parts of the town were in such a state as to require demolition; there were 207 back-to-back houses which require making into through houses, meaning a reduction of 103 dwellings; 319 other houses were without proper ventilation or below the standard required. 1,461 houses were overcrowded, and of these 247 dangerously overcrowded. To replace houses demolished and to provide suitable housing accommodation in these cases of overcrowding, at the very least 2,000 houses are required. To meet the natural increase in the population (*i.e.* births over deaths), which number 2,563 for the two years 1920 and 1921 (on the basis of five persons per house), 500 more houses are necessary. That is to say, a minimum of 2,500 houses are required for Wigan. Since 1st January 1920, only 100 houses have been built which are at present ready for occupation. The Borough's building scheme is to provide 135 houses on the Beech Hill site, and 50 on the Ridyard Street site, making a total of 185 houses. This is, of course, a start in the right direction, but this number will have only a very slight effect in alleviating the deplorable housing conditions in this town.

Number of new Houses erected during the year :—

(a) Total	30
(b) As part of a Municipal Housing Scheme ..	28

1.—Unfit Dwelling-Houses :

Inspection (1) Total number of dwelling houses inspected for housing defects under Public Health or Housing Acts	2432
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulation, 1910..	1328
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	5
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ..	929

2.—*Remedy of Defects without Service of Formal Notices :*

Number of defective dwelling-houses rendered fit in consequence of informal action by Local Authority or their Officers.. .. .	301
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3.—*Action under Statutory Powers :*

(a) Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919.

(1) Number of dwelling houses in respect of which notices were served requiring repairs	Nil.
(2) Number of dwelling-houses which were rendered fit :—	
(a) by Owners	Nil.
(b) by Local Authority in default of Owners	Nil.
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declaration by owners of intention to close	Nil.

(b).—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	2215
(2) Number of dwelling houses in which defects were remedied :—	
(a) by Owners	1506
(b) by Local Authorities in default of Owners	—

(c).—Proceedings under section 17 and 18 of the Housing, Town Planning, &c., Act, 1909 :—

(1) Number of representations made with a view to the making of Closing Orders	4
(2) Number of dwelling-houses in respect of which Closing Orders were made	1
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-house having been rendered fit ..	Nil.
(4) Number of dwelling-houses in respect of which Demolition Orders were made ..	Nil.
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil.

LEGAL PROCEEDINGS.

<i>Date.</i>	<i>Case.</i>	<i>Nature of Case.</i>	<i>Result.</i>
1921. March 3..	Case 1	Non-compliance with notices to abate nuisances.	The case was adjourned for three months in order that the work could be carried out. The work was done.
March 21..	Case 2	Non-compliance with notices to abate nuisances.	As the work required to abate the nuisances had been completed before the summons was heard the case was withdrawn on payment of costs.
March 21..	Case 3	Non-compliance with notices to abate nuisances.	As the work required to abate the nuisances had been completed before the summons was heard the case was withdrawn on payment of costs.
April 4..	Case 4	Non-compliance with notices to abate nuisances.	Order made for the work to be carried out within seven days.
April 14..	Cases 5 and 6	Selling goods under Market Verandah after prescribed closing time.	Each fined 10/- and costs.
May 25..	Case 7	Obtaining free milk by false pretences.	Dismissed.
May 25..	Case 8	„ „	Fined £5.
June 20..	Case 7	Obtaining milk by false pretences under the milk distribution scheme.	Fined 20/- and costs.
July 11..	Cases 8, 9, 10, 11	Selling goods after prescribed closing time.	Each fined 6/-, and the advocate's fee to be divided between the four.
Sept. 12..	Case 12	Non-compliance with notices to abate nuisances.	Summonses withdrawn on payment of costs—the necessary work having been carried out.
Decr. 22..	Case 13	Non-compliance of notices to abate nuisances.	Order made to abate nuisances within 4 days.