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# ANNUAL REPORT

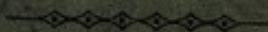
ON THE

## HEALTH

OF THE

### COUNTY BOROUGH OF WIGAN

FOR THE YEAR 1923.



HENRY WHITEHEAD, M.D., D.P.H. (VICT.), M.B., B.S. (LOND.),  
MEDICAL OFFICER OF HEALTH,  
CHIEF TUBERCULOSIS OFFICER,  
SUPERINTENDENT SCHOOL MEDICAL OFFICER,  
MEDICAL SUPERINTENDENT OF CORPORATION  
HOSPITALS, &c.

WIGAN :

THOMAS WALL AND SONS LIMITED, PRINTERS, "OBSERVER" OFFICE.  
1924.







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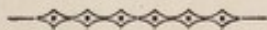
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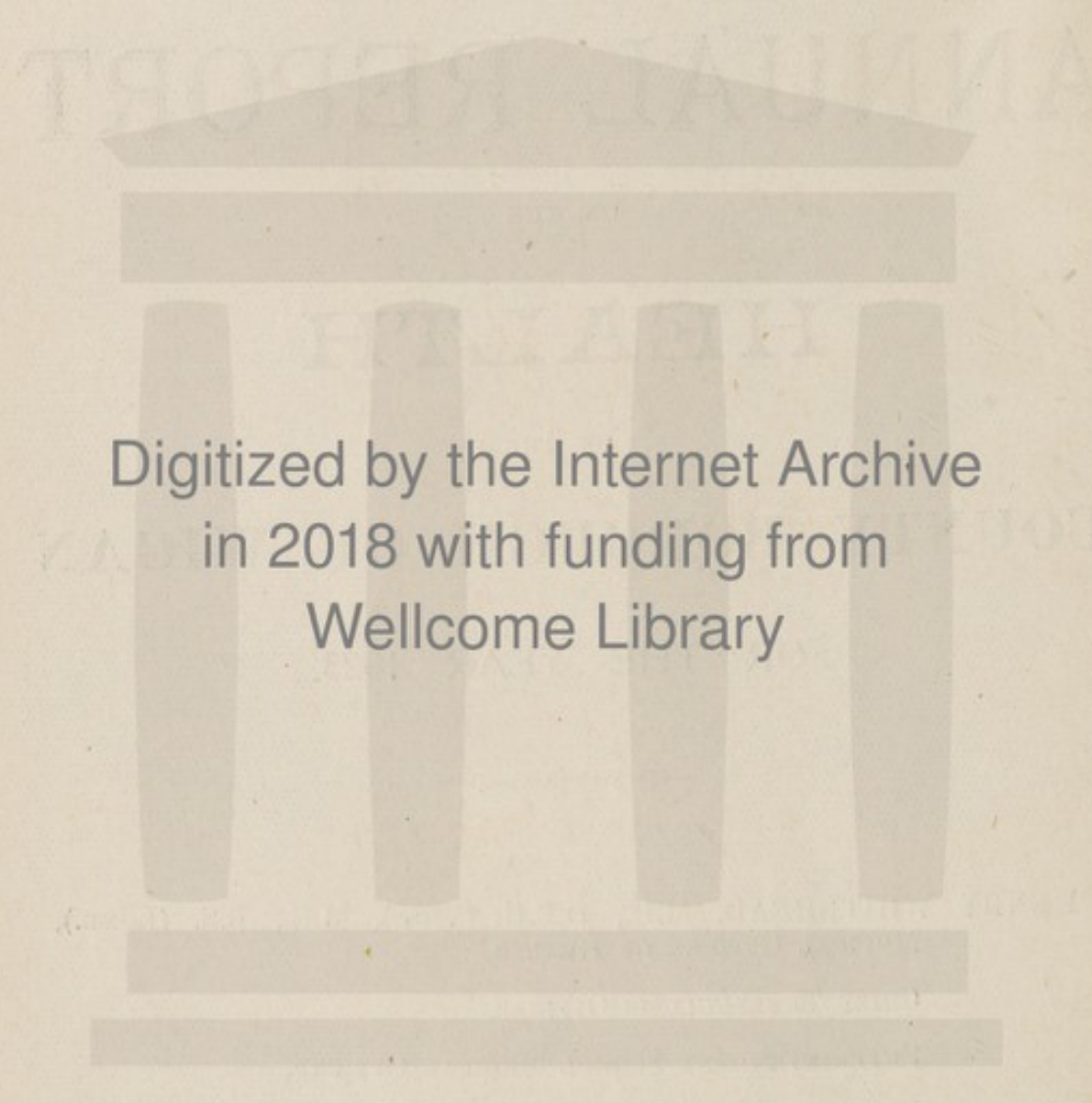


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## ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

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PUBLIC HEALTH OFFICE,

Municipal Buildings,

Library Street, Wigan.

April, 1924.

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

I have the honour to present my ANNUAL REPORT on the Health of the Borough, and on the work of the Health Department for the year 1923.

It is very gratifying to note that the death-rate is the lowest ever recorded in Wigan, namely, 13·4. The previous record was last year's rate of 14·25.

The infant mortality figure is also the lowest ever recorded in the Borough, being 101 per 1,000 births.

The Zymotic death-rate of ·25 is still another record for Wigan. It is extremely low and will compare favourably with any other district in England and Wales.

The birth-rate is comparatively high and differs only slightly from last year.

Very good progress has been made in every branch of the Department, and with conspicuous results.

The two additional Child Welfare Centres opened last year have been effectively organised and are well attended. Attention is now being given to ante-natal work which, when further developed, ought to decrease the maternal mortality and reduce the number of deaths amongst babies in the first few months of life.

Free milk is still being distributed to mothers and babies under the Maternity and Child Welfare scheme.

The great scheme for conversion of privies and pail closets to the water-carriage system is now well in hand, and there is no doubt that this welcome improvement of hygienic conditions will play its part in conserving the health of the people.

The work of dealing with insanitary property, including the paving of backyards, has been continued, and great progress has been made. It is obvious, however, that houses, fit only for demolition, cannot be closed and demolished until accommodation is available for the displaced tenants. When sufficient houses are built infinitely more progress can be made.



The construction of a Public Slaughter-house has received careful consideration, and various sites have been inspected by the Health Committee, but no definite decision has been arrived at.

The time has come when the provision of a new Sanatorium for treatment of Pulmonary Tuberculosis should again be seriously considered.

Excellent work has been done at the Infectious Diseases Hospital, Whelley, and also at the Tuberculosis Hospital, Pemberton.

The reconstruction of the premises of the Health Department is, at time of writing, approaching completion, and very soon the ground floor of the Municipal Offices will be occupied by the Health Offices, the Maternity and Child Welfare Department, and the School Medical Inspection Department.

During the week October 6th to October 13th, 1923, National Health and Baby Week was celebrated in Wigan, and it proved a conspicuous success. Details of the work done are given in the body of the report.

I wish to express my thanks to all the members of the Staff for their good work and loyal support, and to the voluntary helpers at the Child Welfare Centres, also to all who have kindly given their services at various times during the year.

My thanks are due to the Chief Officials for their co-operation.

It gives me great pleasure to put on record my appreciation of the support and continued confidence of the Chairman of the Health Committee (Alderman Benson), and of the Vice-Chairman (Councillor Holland); also to thank the members of the various Committees under whom I serve for their courtesy and consideration.

I have the honour to be,

Your obedient Servant,

HENRY WHITEHEAD



## STATISTICAL SUMMARY FOR 1923.

	1923.	1922.
Population estimated July 1st .. .. .	91,640	91,750
<i>Births</i> —Males .. .. 1050 } Total .. ..	2,057	2,060
Females .. .. 1007 }		
Annual rate of births per 1,000 on Registrar General's estimated population for 1923 .. .. .	22.44	22.45
Ditto for England and Wales .. .. .	19.7	20.6
Illegitimate births 77 or .84 per 1,000 of population, a percentage of .. .. .	3.74	4.17
<i>Deaths</i> —Males .. .. 632 } Total .. ..	1,228	1,308
Females .. .. 595 }		
1 (Sex unknown).		
Corrected Death-rate, on Registrar General's estimated population .. .. .	13.40	14.25
Ditto in England and Wales .. .. .	11.6	12.9
Death-rate in 105 great towns .. .. .	11.6	13.0
Excess of registered births over deaths .. .. .	829	752
Maternal Death-rate .. .. .	2.43	2.91
Total deaths from seven principal Zymotic Diseases .. .. .	23	76
*Total deaths from all Zymotic Diseases .. .. .	70	127
Annual rate of mortality from seven principal Zymotic Diseases .. .. .	.25	.82
Total deaths from Diarrhoea .. .. .	5	17
Infantile-rate (deaths per 1,000 births) .. .. .	101	107
Ditto for England and Wales .. .. .	69	77
Ditto for 105 great towns .. .. .	72	82
Deaths of infants under 1 day old (number) .. .. .	29	32
Ditto 1 year (legitimate) .. .. .	197	213
Ditto 1 year (illegitimate) .. .. .	11	8

\*Including Erysipelas and Influenza.

*Acreage.*—With an acreage of 5,082, and a civil population estimated at 91,640, we have 18.03 persons per acre.

The Birth-rate and Death-rate are calculated on the figures supplied for these purposes by the Registrar-General, namely, 91,640.

*Births.*—The number of births registered during 1923 is 2,057 (males 1,050, females 1,007), the rate per 1,000 of the population being 22.44. The birth-rate compared with 1922 is .01 lower. The illegitimate births number 77 or 3.74 per cent.

*The Mortality-rate.*—The deaths for 1923 number 1,228 (males 632, females 595; and one sex unknown), being an excess of 37 males over females. The recorded rate per 1,000 of the population per annum is 13.40; in 1922 14.25. The decrease in the number of deaths as compared with 1922 was 80—equal to a rate of .84 per 1,000.



## 1.—GENERAL STATISTICS.

Area (acres) .. .. .	5,082
Population (1923) .. .. .	91,640
Number of inhabited houses (1921 Census) .. .. .	17,747
Number of families or separate occupiers (1921 Census) ..	20,368
Rateable value (1923) .. .. .	£411,925
Sum represented by a penny rate. .. .. .	£1,540

## 2.—EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total.	M.	F.	
<i>Births</i> —(Legitimate) ..	1980	1009	971	{ Birth rate per 1,000 population, 22·44.
(Illegitimate) ..	77	41	36	
	2,057	1,050	1,007	

	Total.	M.	F.	
<i>Deaths</i> — .. .. .	1,228	632	595	{ Death-rate per 1,000 population, 13·40.
		1	—	
		Sex unknown.		

Number of women dying in, or in consequence	from sepsis ..	0
of child-birth .. .. .	from other causes ..	5
Maternal Mortality .. .. .		2·43

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

Legitimate	99	Illegitimate	142	Total	101
Deaths from Measles (all ages)	..	..	..	..	1
„ „ Whooping Cough (all ages)	..	..	..	..	11
„ „ Diarrhoea (under two years of age)	..	..	..	..	5

## INQUESTS AND UNCERTIFIED DEATHS.

---

The number of Inquests for 1923 is 99, against 127 for 1922, and 108 for 1921, and the following verdicts have been recorded :—

1.	Natural Causes ...	...	...	...	...	...	...	...	45
2.	Accidents—burnt	...	...	...	...	...	...	...	4
	„ scalded	...	...	...	...	...	...	...	2
	„ colliery	...	...	...	...	...	...	...	10
	„ run over	...	...	...	...	...	...	...	1
	„ falls	...	...	...	...	...	...	...	1
	„ drowned	...	...	...	...	...	...	...	1
	„ railway	...	...	...	...	...	...	...	2
	„ knocked down	...	...	...	...	...	...	...	5
	„ others	...	...	...	...	...	...	...	11
3.	Suicides—hanging	...	...	...	...	...	...	...	2
	„ drowned	...	...	...	...	...	...	...	3
	„ cut throat	...	...	...	...	...	...	...	3
	„ railway	...	...	...	...	...	...	...	1
	„ other	...	...	...	...	...	...	...	1
4.	Others	...	...	...	...	...	...	...	6
5.	Murders	...	...	...	...	...	...	...	1
									99

There was 1 uncertified death in 1923, against 2 in 1922 and 0 in 1921.



**VITAL STATISTICS OF WHOLE DISTRICT DURING 1923 AND PREVIOUS YEARS.**  
**Name of District—Wigan County Borough.**

Year.	Pop'n 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 not registered in the District.	Under 1 year of age.		At all ages.	
			Number.	Rate.					Number	Rate per 1,000 nett births.	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
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	2,518	2,531	27.75	1,249	13.69	93	147	296	116	1,303	14.28
1922..	91,550	2,056	2,060	22.45	1,280	13.95	109	137	221	107	1,308	14.25
1923..	91,640	2,039	2,057	22.44	1,182	12.89	91	137	208	101	1,228	13.40

\* Calculated on Registrar-General's Estimated Population, July 1st, 1923—91,640 ;

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 1923 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 .. ..	1	..	..	..	..	..	..	..	..	1	..	..	..
Small-Pox .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. ..	1	..	1	..	..	..	..	..	..	..	..	..	..
Scarlet Fever .. ..	2	..	..	1	..	1	..	..	..	..	..	..	..
Whooping Cough .. ..	11	4	3	..	1	3	..	..	..	..	..	..	..
Diphtheria and Croup .. ..	3	..	2	..	..	..	1	..	..	..	..	..	..
Influenza .. ..	47	..	1	1	3	2	..	1	..	2	10	12	15
Erysipelas .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (Pul. Tub.) .. ..	73	..	..	..	1	..	..	6	12	19	17	18	..
Tuberculous Meningitis .. ..	4	..	..	2	..	..	..	1	1	..	..	..	..
Other Tubercular Diseases .. ..	10	..	1	..	..	..	1	1	2	..	1	2	2
Cancer (Malignant Disease) .. ..	64	..	..	..	..	..	..	..	..	1	8	30	25
Rheumatic Fever .. ..	9	..	..	..	..	..	..	1	..	2	2	2	2
Meningitis .. ..	9	2	1	2	..	..	..	1	1	2	..	..	..
Organic Heart Disease .. ..	80	..	..	..	..	1	..	..	..	6	6	31	36
Bronchitis .. ..	154	21	10	3	..	..	..	..	..	4	6	50	60
Pneumonia (All Forms) .. ..	154	37	23	10	2	2	3	3	4	14	17	26	13
Other Diseases of Respira- tory Organs .. ..	10	1	..	1	..	..	..	..	1	..	3	3	1
Diarrhoea and Enteritis (under 2 years) .. ..	14	8	6	..	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis .. ..	6	..	..	..	..	..	..	3	2	1	..	..	..
Cirrhosis of Liver .. ..	3	..	..	..	..	..	..	..	..	..	1	2	..
Alcoholism .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis & Bright's Disease .. ..	23	..	..	..	..	..	..	..	..	4	3	11	5
Puerperal Fever .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Accidents & Diseases of Pregnancy & Parturition .. ..	5	..	..	..	..	..	..	..	..	3	2	..	..
Congenital Debility & Malfor- mation, Inc.: Prema'e Birth .. ..	101	101	..	..	..	..	..	..	..	..	..	..	..
Violent Deaths, Excl'g Suicide .. ..	35	1	1	..	1	..	2	1	2	7	4	11	5
Suicides .. ..	7	..	..	..	..	..	..	..	..	1	3	2	1
Other Defined Diseases .. ..	358	31	6	3	1	2	7	5	4	26	23	76	174
Diseases Ill-defined or Un- known .. ..	44	2	2	1	..	..	1	1	1	3	5	19	8
TOTALS .. ..	1228	208	57	24	9	11	15	24	30	97	111	295	347



## 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 Pemberton Ward.	North Pemberton Ward.	Central Pemberton Ward.	South Pemberton Ward.	Total Deaths whether of Residents or Non-Residents in institutions in the district.
..	..	..	..	..	..	..	1	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	1	..	..	..	..	1	..	..	2
1	1	..	2	..	..	..	..	..	..	2	1	4	..	..
..	1	1	..	..	..	..	1	..	..	..	..	..	..	2
1	4	3	5	..	2	1	5	5	3	6	1	8	3	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	3	8	12	7	8	7	10	3	1	2	..	3	4	16
..	1	1	..	..	..	1	..	..	..	..	1	..	..	2
..	1	..	1	..	1	1	..	1	2	..	2	1	..	1
4	2	8	2	6	..	6	5	7	3	9	4	4	4	11
1	..	1	..	..	1	1	..	1	..	..	2	1	1	..
..	1	3	2	..	..	..	1	..	..	..	..	1	1	1
5	9	6	3	3	8	5	16	9	2	1	5	3	5	4
19	3	12	28	11	11	9	11	10	7	6	11	7	9	1
8	16	10	21	11	7	12	12	9	6	8	14	7	13	13
..	1	..	2	..	..	..	1	2	..	..	1	2	1	2
..	..	3	1	2	..	4	..	..	..	1	2	..	1	..
..	1	..	..	..	..	..	1	2	..	..	..	1	1	16
..	..	..	..	..	1	..	..	..	..	1	..	1	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	2	3	..	3	1	6	1	..	2	2	1	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	1	..	..	..	..	1	..	..	1	..	2	4
4	4	11	10	12	7	7	12	1	4	4	10	7	8	1
..	1	3	5	2	1	2	2	2	1	4	3	4	5	26
..	1	..	..	..	..	..	2	1	1	..	..	1	1	2
16	11	32	58	21	13	19	50	35	24	7	31	18	23	68
1	4	4	9	3	1	2	10	3	..	1	2	1	3	2
67	65	108	165	79	64	79	146	93	54	54	94	75	85	179

## DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
17·09	19·17	15·42	16·18	18·45	16·79	15·92	14·28	14·25	13·40

AVERAGE FOR TEN YEARS, 16·09.

## NUMBER OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1923.

Ward.		Census Population.	Death Totals.	Death Rate.
St. George .. .. .	1	4,746	67	14·11
Lindsay .. .. .	2	5,151	65	12·61
St. Catherine .. .. .	3	7,858	108	13·74
St. Patrick .. .. .	4	9,574	165	17·23
St. Thomas .. .. .	5	4,552	79	17·35
Poolstock .. .. .	6	5,275	64	12·13
Victoria .. .. .	7	5,042	79	15·66
St. Andrew .. .. .	8	12,473	146	11·70
Swinley .. .. .	9	7,503	93	12·39
All Saints .. .. .	10	3,175	54	17·00
West Pemberton .. .. .	11	4,307	54	12·53
North Pemberton .. .. .	12	7,390	94	12·71
Central Pemberton .. .. .	13	6,245	75	12·00
South Pemberton .. .. .	14	6,156	85	13·80
Totals .. .. .	..	89,447	1,228	*13·40

\*Death Rate is based on the Registrar General's estimated Population of 91,640.

## ZYMOTIC DISEASES.

The Mortality from the seven principal Zymotic Diseases, namely. Small-pox, Scarlet Fever, Measles, Whooping Cough, Enteric Fever, Diphtheria, and Diarrhoea, gives us a rate of ·25 per 1,000 of the population, against ·82 in 1922.

The deaths numbered 23 as against 76 in 1922. This figure is extremely low and will compare very favourably with that of any place in the whole country.



The Zymotic-rate, .25, is made up as follows:—

								DEATH-RATES PER 1,000.—	
								1922	1923
Small-pox	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	·03	·02
Measles	..	..	..	..	..	..	..	·61	·01
Whooping Cough	..	..	..	..	..	..	..	..	·12
Typhus Fever	..	..	..	..	..	..	..	..	..
Enteric Fever	..	..	..	..	..	..	..	·01	·01
Diphtheria	..	..	..	..	..	..	..	·10	·03
Diarrhoea	..	..	..	..	..	..	..	·06	·05

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

								1922	1923
1st Quarter	..	..	..	..	..	..	..	1·19	·13
2nd „	..	..	..	..	..	..	..	1·51	·26
3rd „	..	..	..	..	..	..	..	·34	·39
4th „	..	..	..	..	..	..	..	·12	·21

The death-rate for 1923 was 13·4, which is easily the lowest ever recorded in Wigan.

The average for the 105 great towns was 11·6.

Taking the figures given in the Registrar-General's return for 1923, it is found that of the 17 great towns in Lancashire, 7 had a higher death-rate, 7 had a lower, and 2 equal. Although the death-rate of the whole country were comparatively low in 1923, the figure for Wigan is, notwithstanding, particularly good.

As in previous years, a comparison is made of the death-rates over a long period. These facts cannot be repeated too often as they show true

progress and improvement in the health of the community and emphasise very clearly the enormous value of Public Health work.

In 1875 the death-rate in Wigan was 37 per 1,000, that is to say one person out of every 26 died.

In 1923 the death-rate was 13·4 : one person in every 75 died.

In 1875 the Zymotic (Infectious Diseases) death-rate was 10·1, or one death in every 100 persons.

In 1923 the Zymotic death-rate was ·25, or one death in every 4,000 persons ; that is *forty* times less than in 1875.

In 1874 the Infantile Mortality was 218 per 1,000 births.

In 1923 Infantile Mortality was 101.

The above figures are very remarkable, and are well worth the careful study and attention of all those interested in the health of the Borough. There is not the slightest doubt that the health of the town is steadily and surely improving.

It must be borne in mind, however, that 1923 was a phenomenal year. the average death-rate of the 105 great towns was extremely low, being 11·6, and the infantile mortality 72. Hence it is well not to be too optimistic a regards the Wigan figures for this particular year.

Some of the developments and improvements recommended last year have been commenced or carried out by the Council :—

1. Conversion of privies and pail-closets to the water-carriage system.

The Corporation scheme is well in hand, and already over 2,000 have been converted.

2. Provision of more and better receptacles for storage of household refuse, and more frequent removal.

An improvement has been made in this direction. Many new bins have been provided by owners of property and the frequency of emptying has been increased. There is, however, still room for further progress.

3. Better methods of carting such rubbish and treatment of it before tipping. (See page 45.)

4. Further development of Maternity and Child Welfare and School Medical service. (See page 37.)

5. Better housing of the people. (See page 60.)



6. Better facilities for controlling food supply. (See page 46.)

7. Education of the people in health matters and the assimilation of the idea of personal responsibility.

It is important to again point out that the personal habits of the people affect the death-rate either directly or indirectly to a very great extent. Scrupulous cleanliness, for instance, is essential in caring for infant life. The spread of Tuberculosis is largely a personal matter. Ignorance, carelessness and excesses of various kinds are responsible for many untimely deaths. There are still many who do not realise the value of good ventilation in their homes : the health-giving qualities of fresh air and sunshine, the necessity of exercise, and last but not least, the extreme importance of moderation in all things. It is difficult, however, for persons to live good wholesome lives in bad surroundings. Hence it is up to every citizen to strive, to keep on striving, and see that suitable homes are provided for those who are either badly housed or lodge in over-crowded houses.

### **STORAGE OF HOUSEHOLD REFUSE.**

Further efforts should be made to hasten the provision of a suitable receptacle for every house. The emptying of these is still not frequent enough, and there are accumulations of rubbish from time to time in back-yards, constituting a serious nuisance and a danger to health.

This is an urgent matter and should be dealt with immediately, as complaints are continually made to this Department, especially during winter.

### **REMOVAL OF REFUSE.**

The high type of open cart is yet in use although it has been pointed out many times that loose material is frequently observed blowing from these vehicles into the streets.

The men raising the receptacles to the necessary height are liable to get strains and rupture as the weight is considerable in many instances.



INFANT MORTALITY, 1923. 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 ..	66	15	12	4	97	27	29	26	29	208
Uncertified ..	..	..	..	..	..	..	..	..	..	..
Small-pox ..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	..	..	..	..	..	..	..	..	..	..
Measles ..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ..	..	..	..	..	..	..	1	1	2	4
Diphtheria and Croup ..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis ..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases ..	..	..	..	..	..	..	..	..	..	..
Meningitis ( <i>not Tuberculous</i> ) ..	..	..	..	..	..	..	..	..	..	..
Convulsions ..	2	3	1	..	6	..	2	2	..	2
Laryngitis ..	..	..	..	..	..	..	..	1	..	10
Bronchitis ..	1	1	1	1	4	8	3	4	2	21
Pneumonia ( <i>all forms</i> ) ..	..	1	..	..	1	3	8	10	15	37
Diarrhoea ..	..	..	..	..	..	..	..	..	..	..
Enteritis ..	..	..	..	..	..	..	4	1	3	8
Gastritis ..	..	..	1	..	1	..	..	1	..	2
Syphilis ..	..	..	1	..	1	..	..	..	..	1
Rickets ..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying ..	..	..	..	..	..	..	..	..	..	..
Injury at Birth ..	..	..	..	..	..	..	..	..	..	..
Atelectasis ..	1	..	..	..	1	..	..	..	..	..
Congenital Malformations ..	2	1	..	..	3	..	..	..	..	1
Premature Birth ..	32	4	4	..	40	5	1	..	..	3
Atrophy, Debility and Marasmus ..	20	3	4	3	30	9	8	2	3	46
Other Causes ..	8	2	..	..	10	2	2	4	3	52
TOTAL ..	66	15	12	4	97	27	29	26	29	208

Nett Births registered during the calendar year—Legitimate, 1,980; Illegitimate, 77.

Nett Deaths registered during the calendar year—Legitimate Infants, 197; Illegitimate Infants, 11.



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

1923	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes ..	13·88	15·93	9·86	13·92
Zymotics ..	·13	0·26	·39	·21

The Zymotic-rate, ·25, shows a decrease of ·57 for 1923.

The rate for the previous year was ·82.

#### DEATH RATES, 1923.

Disease.	No. of Deaths.	Rate.
Enteric Fever .. .. .	1	·01
Small-pox .. .. .	..	..
Measles .. .. .	1	·01
Scarlet Fever.. .. .	2	·02
Whooping Cough .. .. .	11	·12
Diphtheria and Croup .. .. .	3	·03
Influenza .. .. .	47	·51
Erysipelas .. .. .	..	..
Phthisis (Pulmonary Tuberculosis) .. .. .	73	·79
Tubercular Meningitis .. .. .	4	·04
Other Tubercular Diseases .. .. .	10	·10
Cancer, Malignant Disease .. .. .	64	·69
Rheumatic Fever .. .. .	9	·09
Meningitis .. .. .	9	·09
Organic Heart Disease .. .. .	80	·87
Bronchitis .. .. .	154	1·68
Pneumonia (all forms) .. .. .	154	1·68
Other Diseases of Respiratory Organs .. .. .	10	·10
Diarrhoea and Enteritis (under 2 years) .. .. .	14	·15
Appendicitis and Typhlitis.. .. .	6	·06
Cirrhosis of Liver .. .. .	3	·03
Alcoholism .. .. .	..	..
Nephritis and Bright's Disease .. .. .	23	·25
Puerperal Fever .. .. .	..	..
Other Accidents and Diseases of Pregnancy and Parturition .. .. .	5	·05
Congenital Debility and Malformation (including Premature Birth) .. .. .	101	1·10
Violent Deaths (excluding Suicides) .. .. .	35	·38
Suicide .. .. .	7	·07
Other Defined Diseases .. .. .	358	3·90
Diseases ill-defined or unknown .. .. .	44	·48
Total .. .. .	1,228	13·40



### 3.—NOTIFIABLE DISEASES DURING THE YEAR.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1923.

Name of District—Wigan County Borough.

Notifiable Disease.	Number of Cases Notified.													Total Cases notified in each locality (e.g., Parish or Ward) of the district.										Total cases removed to hospital.					
	At all ages	At Ages—Years.												St George	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 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																
Scarlet Fever..	95	3	5	4	6	13	44	14	6	5	3	—	—	7	5	10	9	3	8	9	17	8	6	3	5	3	2	76	
Enteric Fever ..	25	—	—	1	—	1	3	5	7	5	—	—	—	—	8	—	—	—	2	3	2	1	—	1	1	1	1	22	
Diphtheria (including Membranous Croup).	41	1	4	5	4	2	12	3	4	6	—	—	—	2	5	7	1	—	3	1	10	7	—	1	3	—	1	29	
Pneumonia ..	234	24	26	16	15	7	39	17	11	26	21	21	11	10	8	13	29	24	40	32	15	14	7	1	24	5	13	1	
Puerperal Fever ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Influenza Pneumonia.	15	—	—	—	—	—	1	1	2	2	4	5	—	—	—	1	2	1	—	2	—	—	—	—	1	3	—	—	
Malaria ....	3	—	—	—	—	—	—	—	—	2	1	—	—	1	—	—	—	—	—	—	2	—	—	—	—	—	—	—	
Chicken-pox ..	489	31	45	36	44	42	267	13	7	3	1	—	—	67	61	49	44	6	36	34	39	56	17	—	56	21	3	—	
Erysipelas ..	52	—	—	1	1	—	—	—	3	7	9	24	7	—	3	2	2	3	2	4	6	3	3	—	4	7	8	5	1
Continued Fever (C)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cerebro-Spinal Meningitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Ophthalmia Neon.	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	—	—	2	1	—	—	
Meningitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis Lethargica	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	
Pul. Tuberculosis ..	130	—	—	1	1	—	6	12	14	48	14	31	3	9	9	9	13	15	7	15	16	12	3	6	7	3	6	—	
Other Forms of Tuberculosis ..	72	2	1	5	2	1	11	8	14	22	3	3	—	7	7	7	6	1	6	8	6	3	4	3	5	6	3	—	
TOTALS ..	1164	67	81	69	73	66	383	73	68	122	56	85	21	103	106	97	108	53	105	108	114	105	40	26	113	51	35	129	

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



## Number of Notifications, compared with other years:—

Disease.	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Small-pox .. .. .	0	0	0	0	0	0	0	0	0	0
Typhus .. .. .	1	0	0	0	0	0	0	0	0	0
Scarlet .. .. .	222	1608	820	231	174	339	188	245	183	95
Enteric .. .. .	67	45	89	29	31	21	10	28	5	25
Continued Fever .. .. .	0	0	0	0	0	3	0	1	0	0
Diphtheria .. .. .	43	37	37	40	29	46	64	47	73	41
Puerperal .. .. .	5	4	6	4	5	7	3	3	3	1
Cholera .. .. .	0	0	0	0	0	0	0	0	0	0
Erysipelas .. .. .	82	83	60	48	43	66	59	73	81	52
Ophthalmia Neonatorum .. .. .	0	1	13	23	13	26	29	19	7	6
Acute Poliomyelitis .. .. .	0	1	0	3	3	1	1	0	0	0
Cerebro-Spinal Meningitis .. .. .	1	0	0	2	3	2	1	3	0	0
Measles .. .. .	0	0	285	2907	1055	126	264	0	0	0
Pulmonary Tuberculosis .. .. .	236	233	178	188	197	139	136	183	195	130
Other Forms of Tuberculosis .. .. .	124	107	92	134	84	70	37	59	62	72
Pneumonia .. .. .	0	0	0	0	0	110	135	73	186	234
Influenzal Pneumonia .. .. .	0	0	0	0	0	60	7	9	13	15
Dysentery .. .. .	0	0	0	0	0	6	2	0	0	0
Malaria .. .. .	0	0	0	0	0	48	25	5	9	3
Chicken-pox .. .. .	0	0	0	0	0	2	3	57	338	489
Encephalitis Lethargica .. .. .	0	0	0	0	0	2	1	4	0	1
Meningitis .. .. .	..	..	..	..	..	..	..	1	0	0
Total .. .. .	803	2151	1580	3609	1637	1074	965	810	1155	1164

## ANALYSIS OF NOTIFICATIONS, 1923.

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tot.
Scarlet Fever .. .. .	14	8	8	12	10	7	5	6	5	4	9	7	95
Enteric Fever .. .. .	0	1	1	4	2	0	1	3	4	4	4	1	25
Diphtheria .. .. .	4	4	1	2	4	6	7	2	1	5	2	3	41
Puerperal Fever .. .. .	0	0	0	0	1	0	0	0	0	0	0	0	1
Erysipelas .. .. .	4	3	5	4	6	2	6	2	4	3	8	5	52
Cerebro-Spinal Meningitis .. .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Ophthalmia Neon. .. .. .	1	2	0	1	1	0	1	0	0	0	0	0	6
Acute Poliomyelitis .. .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis .. .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Phthisis .. .. .	18	13	12	16	20	7	10	9	6	11	4	4	130
Other Tubercular Diseases .. .. .	3	6	7	8	8	9	8	8	2	3	4	6	72
Pneumonia .. .. .	25	16	32	30	26	13	9	10	9	17	13	34	234
Influenzal Pneumonia .. .. .	0	2	2	3	6	2	0	0	0	0	0	0	15
Dysentery .. .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaria .. .. .	1	0	0	0	0	0	1	1	0	0	0	0	3
Continued Fever .. .. .	0	0	0	0	0	0	0	0	0	0	0	0	0
Chicken-pox .. .. .	47	48	48	36	64	69	49	13	7	15	35	58	489
Encephalitis Lethargica .. .. .	0	0	1	0	0	0	0	0	0	0	0	0	1
Total .. .. .	117	103	117	116	148	115	97	54	38	62	79	118	1164



**OPHTHALMIA NEONATORUM.**

Cases.			Vision Unimpaired	Vision Impaired	Total Blindness	Deaths
Notified	Treated					
	At Home	In Hospital				
1923 .. 6	6	—	6	—	—	—

For a town of over 90,000 population, this small number of Ophthalmia cases is very creditable. The instructions, as set out below, are being carried out by the Midwives, hence the above excellent results.

*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. Silver nitrate solution may be obtained free of charge by Midwives by applying to the Health Offices.
- 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. There was no Bacteriological evidence of gonococcal infection in the above 6 cases.

These cases are visited until cured.

**SMALL POX.**

No cases of this disease occurred during 1923. As a precautionary measure, Chicken Pox was compulsorily notifiable throughout the whole year. Each case was visited immediately by a Medical Officer of the Department, in order to confirm the diagnosis, and was again visited later by a School Nurse (in cases of school age) and a re-admission certificate issued when the child was free from infection.

Four hundred and eighty-nine cases of Chicken Pox were notified. The inspecting and visiting of these cases entails a considerable amount of work, but is a very necessary control as long as Small Pox is prevalent.



# ENTERIC FEVER.

25 cases were notified, 22 cases, three of whom were nurses were removed to hospital. The type was very severe. 1 case died.

25 cases occurred in 1923 against 5 in 1922, and 10 in 1921.

Enteric Fever was the cause of 1 death during the year, as against 1 in 1922, and 8 in 1921.

INCIDENCE OF ENTERIC FEVER FOR TEN YEARS.

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Notified Cases .. ..	97	67	45	89	29	31	21	10	28	5	25
Deaths .. ..	13	17	10	19	—	8	3	3	8	1	1
Death rate per 1,000 ..	.14	.18	.11	.22	—	.09	.03	.03	.08	.01	.01

AGE INCIDENCE—YEARS.

1-4	5-9	10-14	15-19	20-24	25-29	30 and Over
2	3	2	9	2	2	5

Total Cases, 25.

Although this disease is said to be fast dying out in this country owing to better sanitation, improved water supply, and more efficient control, a fair number of cases still occur in Wigan and surrounding districts. In 1923 there were 25 cases, mostly of a severe type, and fortunately only one death.

Every case is enquired into carefully by the Medical Officer of Health, the Chief Sanitary Inspector, and the Inspectorial Staff, with a view to ascertaining the source of infection.

It is interesting to record the details of investigations in two outbreaks where the possible source of infection was traced:—

(1) The Medical Officer of Health was called in consultation by a general practitioner, with reference to the diagnosis of a suspected case of Enteric—a girl of 18. The case was clearly one of acute Enteric Fever. A brother of the girl, aged 8, was in the same bed; and the history was that he was taken ill a month previously, and his condition on the day of the Medical Officer of Health's visit was one of marked emaciation. Another child, aged 11, was dressed and apparently quite well. He also had been ill, and his illness commenced on the same day as that of the other boy. On making further enquiries, it was ascertained that the mother of the girl and of the two boys died a little over a month ago. The symptoms were headache, abdominal pain and diarrhoea. Enteric Fever was not suspected. Her illness commenced about a fortnight before the two boys became ill.



It was reasonable to infer from the evidence that the mother had died from Enteric Fever, and that the three children had contracted the disease from her.

Still further enquiries brought to light the fact that three weeks before the mother took to her bed she had eaten a number of uncooked mussels and cockles. About two dozen were consumed by the members of the family (father, mother, and three children).

It is extremely probable that the mother contracted the disease direct from the mussels; the two boys contracted it from her, and the sister from the boys.

It is interesting to note that the father consumed a pint of beer with the mussels he ate, and this may have prevented infection.

A searching investigation was now made into the source of the mussels, and at last the actual vendor was traced, and it was discovered that the mussels were gathered at a certain spot in the Ribble Estuary which is known to be polluted with sewage.

Full details were supplied to the Ministry of Health and the exact place marked on a map.

Regulations have been issued by the Ministry, and now precautions are taken before the mussels are sold to the public.

A letter was sent to the local papers by the Medical Officer of Health warning people not to eat raw mussels or cockles, but to boil them in order to kill any disease germs which may be present.

(2) A child, aged  $4\frac{1}{2}$ , was removed to hospital with severe Enteric Fever (widal re-action strongly positive). In the course of investigation it was found that a servant employed at this house was previously at another house where the following events happened:—

A schoolboy developed Typhoid Fever a few days after returning to school, having spent his holidays at the above house.

Specimens of blood and of fæces were obtained from the servant, and the blood gave a strong positive re-action and Typhoid bacilli were isolated from the stools. The servant was promptly removed to hospital, and was undoubtedly a carrier.

It appears that she had not been well for some time in the house where the schoolboy lived: had suffered from occasional diarrhœa, headache, and tired feelings. She was probably at that time a case of Ambulatory Typhoid.

She was treated in the hospital, and after a time engaged as a servant there. By this means she can be controlled and care taken that she has no chance of infecting food.

These two investigations show that outbreaks of Enteric can arise, and do arise, from infection by missed cases of the disease, and from mild cases which do not seek medical advice, or from genuine carriers.



No definite source of infection could be found in the other cases, and they had no connection with each other that could be traced.

It is possible in a mining district such as this that Enteric is contracted in some instances by direct contamination by the urine or fæces of a mild case or a carrier.

It is well known that, although conveniences are provided at certain points in the mines, not much attempt is made to use them, and so the workings get to a certain extent fouled with urine and excreta. It is easy to understand how a man may get infected from such deposits if there should be a carrier or a mild case about.

### REVISIONS OF DIAGNOSES.

Notified as	Revised to
Cerebral-Spinal Fever.	Cerebral Abscess.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo ?
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo ?
Chicken Pox.	Impetigo ?
Chicken Pox.	Impetigo.
Chicken Pox.	Impetigo.
Diphtheria.	Tonsilitis.
Enteric Fever.	Enteritis.
Enteric Fever.	Bronchitis.
Enteric Fever.	Acute Ulcerative Endocarditis followed by Acute Cerebral Meningitis.
Scarlatina.	Tonsilitis.
Scarlet Fever.	Burns.
Scarlet Fever.	Broncho Pneumonia.
Scarlet Fever.	Tonsilitis.
Scarlet Fever.	Tonsilitis.

### SCARLET FEVER.

The type as a whole has been mild. There were 95 cases notified, 76 of which were admitted to hospital, and 2 died.

During 1923 there were no return cases. This is a good index of efficiency of hospital isolation, especially with regard to condition on discharge.

### DIPHTHERIA.

The number of cases notified was 41, or 32 less than in 1922, and the number of deaths 3. All cases are examined bacteriologically and have

two negative swabs before discharge from hospital. 29 cases were removed to hospital, 2 of whom died.

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

The Pemberton Hospital (Tel. Pemberton 14).

The Pemberton Police Station.

The Wigan Police Station.

Whelley Sanatorium (Telephone 691).

Public Health Department (Telephone 125).

#### TREATMENT OF LARYNGEAL DIPHTHERIA.

Tracheotomy was performed in 4 cases. 3 made a good recovery; one died, a baby of 13 months who was moribund on admission, and there was a septic discharge from nose and sores on mouth and chin.

#### CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS.

No cases of the above diseases were notified.

#### ENCEPHALITIS LETHARGICA.

One case was notified during the year.

#### ERYSIPELAS.

Number of Cases Notified	..	..	..	..	52
Number of Deaths	..	..	..	..	—
Mortality per 1,000 of Population	..	..	..	..	—

The number of notifications was smaller than in 1923, and there were no deaths.

#### PUERPERAL FEVER.

Number of Cases Notified	..	..	..	..	1
Number of Deaths	..	..	..	..	—
Mortality per 1,000 of Population	..	..	..	..	—

#### TUBERCULOSIS.

The number of deaths from Phthisis is 73, against 89 in 1922 and 97 in 1921. The number of deaths from other Tubercular affections is 14, against 25 in 1922 and 16 in 1921.

The rates are as follows :—

Phthisis Pulmonalis .. .. .79 per 1,000 of population.

Other Tuberculous Diseases. .14                   "                   "

If taken together as Tuberculous affections, we have 87 deaths, or a rate of .93 per 1,000 of population.

It is interesting to note that the incidence rate of tuberculosis is on the decline, as is also the mortality rate.

The present system of dealing with this obstinate disease is having its effect.



## PULMONARY PHTHISIS AND TUBERCULOUS DISEASES

The deaths occurred in the following Wards :—

Wards.	Phthisis.	Other Tubercular. Diseases.	Total.—
No. 1—St. George .. .. .	4	—	4
No. 2—Lindsay .. .. .	3	2	5
No. 3—St. Catharine .. .. .	8	1	9
No. 4—St. Patrick .. .. .	10	—	10
No. 5—St. Thomas .. .. .	7	—	7
No. 6—Poolstock .. .. .	5	1	6
No. 7—Victoria .. .. .	4	2	6
No. 8—St. Andrew .. .. .	9	—	9
No. 9—Swinley .. .. .	3	1	4
No. 10—All Saints .. .. .	1	1	2
No. 11—West Pemberton .. .. .	2	—	2
No. 12—North Pemberton .. .. .	—	2	2
No. 13—Central Pemberton .. .. .	3	1	4
No. 14—South Pemberton .. .. .	3	—	3
Transferable Deaths .. .. .	11	3	14
Totals .. .. .	73	14	87

The following table shows the Comparative figures for 1919, 1920, 1921, 1922, and 1923, as regards Pulmonary cases :—

	1919	1920	1921	1922	1923
Number of Notifications .. .. .	139	136	183	195	133
Deaths .. .. .	90	76	97	89	73
Fatality-rate per cent. .. .. .	64·74	55·88	53·00	45·64	56·15
Death-rate per 1,000 .. .. .	1·07	·83	1·06	·97	·79

			Total Cases Notified	Total Deaths
Pulmonary :—Males .. .. .	..	..	61	40
Females .. .. .	..	..	47	33
Total .. .. .	..	..	108	73
Non-Pulmonary :—Males .. .. .	..	..	29	5
Females .. .. .	..	..	23	9
Total .. .. .	..	..	52	14

## Fatal Cases of Tuberculosis :—

Notified Cases	..	..	..	..	76
Non-notified ..	..	..	..	..	11
Total deaths	..	..	..	..	<u>87</u>

The ratio of non-notified deaths from Tuberculosis to notified is as 11 is to 76, or 12.64% of the total.



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

SUMMARY OF NOTIFICATIONS DURING 1923.

Age Periods.	Number of Notifications on Form A.											Number of Notifications 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 Insti- tutions.	Sana- toria.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65& up- wds.		Tot. wds.	un- der 5	5 to 10				10 to 15
Pul. Males ..	..	1	2	4	6	3	15	7	13	7	3	6	66	..	..	..	1	3	32
„ Females ..	..	1	..	5	8	9	11	4	6	3	..	47	53	..	3	1	4	2	4
Non-pul. Males ..	1	7	3	1	5	6	3	0	3	..	..	29	30	..	4	1	5	2	10
„ Females..	..	1	2	4	7	5	3	1	..	..	..	23	30	..	1	1	2	..	6

## CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1923.

Wards.	Population, Census 1921	Pulmonary Tuberculosis	Other forms of Tuber'losis.	Totals
No. 1—St. George .. ..	4746	9	7	16
No. 2—Lindsay .. ..	5151	9	7	16
No. 3—St. Catharine .. ..	7858	9	7	16
No. 4—St. Patrick .. ..	9574	13	6	19
No. 5—St. Thomas .. ..	4552	15	1	16
No. 6—Poolstock .. ..	5275	7	6	13
No. 7—Victoria .. ..	5042	15	8	23
No. 8—St. Andrew .. ..	12473	16	6	22
No. 9—Swinley .. ..	7503	12	3	15
No. 10—All Saints .. ..	3175	3	4	7
No. 11—West Pemberton..	4307	6	3	9
No. 12—North .. ..	7390	7	5	12
No. 13—Central .. ..	6245	3	6	9
No. 14—South .. ..	6156	6	3	9
Totals .. ..	89,447	130	72	202

## NUMBER OF CASES DEALT WITH DURING THE YEAR 1923.

Number of Deaths .. ..	87
Left the District .. ..	30
Found not suffering from Tuberculosis .. ..	112
Number of cases still under supervision at end of year ..	559
Notified Pulmonary .. ..	327
Notified Non-Pulmonary .. ..	144
Observation Cases .. ..	88

*Sputum results:—*

Positive .. ..	186
Negative .. ..	365
No Sputum .. ..	227

*Treatment Received:—*

Sanatorium .. ..	140
Infirmery (in-patient) .. ..	18
Extra Nourishment .. ..	79
Dispensary Supervision .. ..	774

*Result of Treatment at end of year:—*

Improved .. ..	222
Not Improved .. ..	105
Stationary .. ..	232
Fit for Work .. ..	297
Not fit for Work .. ..	262



## ACTUAL WORK DONE DURING 1923.

Number of Notifications :	Pulmonary	..	..	..	131
"                    "	Non-Pulmonary	..	..	..	72
Number of Deaths	..	..	..	..	87
Number of Examinations at Dispensary :	New Cases	..	..	..	321
"                    "	Old Cases	..	..	..	1,303
Number of Contacts examined	..	..	..	..	246
Number of Tuberculosis Officer's visits to patients	..	..	..	..	015
Number of Nurses' visits to patients Homes	..	..	..	..	2,239
Number of Sputum examinations :	Positive..	..	..	..	102
"                    "	Negative	..	..	..	354
Number of Disinfections..	..	..	..	..	142

## NUMBER OF RECOMMENDATIONS FOR TREATMENT.

Dispensary Supervision only	..	..	..	..	668
Dispensary Supervision with Extra Nourishment	..	..	..	..	228
Pemberton Hospital	..	..	..	..	119
Wigan Infirmary	..	..	..	..	22
Other Hospitals	..	..	..	..	48
Number of Patients admitted to Pemberton	..	..	..	..	88
"                    " discharged from Pemberton	..	..	..	..	88
Number of Patients admitted to other Hospitals..	..	..	..	..	52
"                    " discharged from other Hospitals	..	..	..	..	51
Number of Patients in Pemberton Hospital, Male	..	..	..	..	12
"                    "                    " Female	..	..	..	..	11
Number of Patients in other Hospitals, Male	..	..	..	..	12
"                    "                    " Female	..	..	..	..	2
Number of Cases Treated by Dentist	..	..	..	..	145
"                    " Examined by Dentist	..	..	..	..	239

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

Number .. .. . 55 (included in total.)



## NOTIFIED CASES ON REGISTER AT END OF YEAR 1923.

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 ..	7	4	1	2	17	3	4	4	2	13	30
Lindsay ..	7	4	—	2	13	3	2	3	1	9	22
St. Catherine ..	15	3	—	3	21	3	3	6	2	14	35
St. Patrick ..	21	13	2	4	40	5	6	3	1	15	55
St. Thomas ..	18	8	3	3	32	2	1	1	2	6	38
Poolstock ..	10	5	2	3	20	4	1	2	2	9	29
Victoria ..	21	14	3	3	41	3	2	3	2	10	51
St. Andrew ..	23	14	4	3	44	2	4	7	3	16	60
Swinley ..	10	6	—	1	17	1	2	2	1	6	23
All Saints ..	8	4	—	—	12	1	—	4	1	6	18
Pemberton W.	5	4	2	1	12	2	—	2	3	7	19
Pemberton N.	14	5	2	3	24	4	2	2	3	11	35
Pemberton C.	8	4	1	3	16	1	5	3	4	13	29
Pemberton S.	5	10	2	1	18	2	2	4	1	9	27
Totals ..	172	101	22	32	327	36	34	46	28	144	471

The time has arrived when the scheme for the provision of a new Sanatorium at Whelley should be again considered. Here pulmonary cases of all stages could be treated.

The number of beds available is very limited and there is always a long waiting list of persons requiring treatment. When a case is admitted into Pemberton Hospital the vacancy is either made by a death or by discharging a patient who may require more prolonged treatment.

All persons suffering from Tuberculosis require treatment, and a large percentage, sanatorium treatment for a considerable time. With such shortage of accommodation as we have in Wigan it means that the length of stay in hospital is too short. Cases are sent home to the old unsuitable surroundings, get worse again, promptly infect others, and so the process goes on.

All advanced cases should be kept out of the home as long as possible. Hence ample hospital or sanatorium accommodation is very necessary indeed.

## NON-PULMONARY TUBERCULOSIS.

A limited number of adult cases are sent to the Wigan Infirmary for treatment.

As regards the treatment of children, it is highly satisfactory to report that at the time of writing the Council have approved of an agreement with



Leasowe Hospital whereby four beds are reserved for this Borough. The arrangement has been sanctioned by the Ministry of Health.

Leasowe is an ideal hospital for this work, both in construction and situation.

Some types of cases are sent to the Manchester Children's Hospital, Pendlebury.

### WIGAN AFTER-CARE COMMITTEE

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 providing extra clothing needed by patients when they go to a sanatorium; also to provide clothing for necessitous tuberculous cases at home.
- (3). To loan bedsteads, bedding, etc., where, in the opinion of the Officers of the Committee this is desirable, either for the greater comforts of the patients or for better isolation.
- (4). In exceptional cases to assist dependants.
- (5). To help in securing suitable work for those sufficiently recovered to undertake it.
- (6). Visiting and friendly advice.
- (7). Any other help required by tuberculous persons.
- (8). To assist in educating public opinion in matters of health, especially in regard to tuberculosis.

During the year the average number of persons in receipt of milk per day was 68. 134 persons received extra nourishment, as against 108 last year. This increase is due mainly to the greater poverty now existing, also to the fact that a number of pre-tubercular children have been granted extra nourishment in the hope of preventing the development of the disease.

27 persons have been assisted with clothing. Of the Committee's beds 14 are on loan to patients. Bedding was provided in 12 cases, and 12 air cushions and 1 water bed loaned. During the year parcels of clothing were sent to the Pemberton Hospital for the use of patients there.

The young patient suffering from surgical tuberculosis, whom the Committee sent to the Royal Southern Hospital, Liverpool, for special treatment not available in Wigan, is very much improved and shortly to be discharged.

## 4.--CAUSES OF SICKNESS.

### MEASLES.

During 1923 there was 1 death from Measles. The number of cases reported from the schools was 8.

### WHOOPIING COUGH.

11 deaths occurred from this Disease in 1923, and 141 cases were reported from the schools.

### INFANTILE DIARRHOEA.

No cases of this Disease were notified. 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.

There were 5 deaths. Enquiries were made in each of these cases.

### 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 1923 :—

							<i>Borough.</i>	<i>County.</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 :—									
Syphilis	..	..	..	..	..	..	55	.. 44	
Soft Chancre	..	..	..	..	..	..	—	.. —	
Gonorrhœa	..	..	..	..	..	..	48	.. 14	
Conditions other than Venereal	..	..	..	..	..	..	1	.. 1	
							<hr/>	<hr/>	
Total	..	..	..	..	..	..	104	.. 59	
<hr/>									
(b) Total number of attendances at the Out-Patient Clinic of all patients residing in each area									
..	..	..	..	..	..	..	1488	.. 821	
(c) Aggregate number of " In-patient days " of all patients residing in each area									
..	..	..	..	..	..	..	296	.. 118	
(d) Number of doses of									
arsenobenzol compounds	}	(1) Out-patient Clinic						.. 519	.. 253
given to patients residing in		(2) In-patient Department						.. 13	.. 9
each area in the :—									



(e) Give the names of arsenobenzol compounds 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.  
 Sulpharsenol, Nos. 1, 2, 3, 4, 5, 6, 7, 8.  
 Stabilarsenol, 15, .3, .45, .6, .75.  
 Silversalvarsan, .15, .2, .25.

(f) State the amount and kind of treatment usually administered to a case of syphilis of each of the types usually dealt with at the treatment centre.

*Primary and Secondary Cases.*—Eight intravenous injections, arsenobenzol cpsi, eight injections (intravenous) of mercuric cyanide Sols at weekly intervals, followed by three weeks of mercury unctions, then three weeks rest ; then take Wasserman test.

*2nd Course.*—With injections at longer intervals and nightly unctions of mercury ointment, bismuth, etc., or non-metallic solutions can be usefully substituted.

*3rd Course.*—A modified 2nd Course alleviated with iodine in some form.

(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 examinations.

Dr. Prosser White the Medical Officer of the Centre makes the following remarks :—

During the year under review there has been one change in personnel. Dr. Burke left owing to pressure of other work. and the vacancy was not filled until early in 1924, the work being carried out by myself, with the assistance of the House Surgeon. Dr. Burke was distinguished in this particular branch of work and he was chiefly responsible for the evening clinics. So sensitive are these patients to alterations in the staff that the presence of a different Medical Officer causes, for a time, some to stay away.

The statistics for the year show a slight increase in new cases, whereas the actual attendance has been a little smaller.

The incidence of these diseases throughout the country is slowly decreasing. Much however requires to be done if we are to be freed from the incubus of these unnecessary evils. There is no doubt that if every person who suffers from syphilis would at its very earliest commencement receive expert control and treatment, this disease would be stamped out in the course of a few years. It would then become as rare and unusual in this country as hydrophobia.

With gonorrhœa the necessity for prompt attention is just as imperative. Unfortunately, in certain phases, its complete eradication and the certainty of having destroyed its infectivity is ever a difficulty even for the



expert. Present methods of cure require to be more definitely specific. Again in the acute stages rest is most advisable. This is often impossible to obtain because abstention from work means loss of wages. Pecuniary aid to tide over this period would cut short many cases of this disease and diminish the number of troublesome and often unsatisfactory chronic cases. Surely it is time that the Ministry of Health should institute an intensive and continuous research upon this subject. What are wanted are more specific scientific and reliable remedies and applications than those in general use. By such means this troublesome plague might be abolished.

Reports throughout the country confirm our experience that the afflicted seek aid much too late and stop treatment before cure is complete. This is both wrong and disheartening. For these reasons many of the Scotch Authorities strongly favour some form of notification. The general feeling is still rather to increase opportunities and facilities for the public than adopt more harsh methods. Market days are selected because they are convenient for the country people. Tradesmen's holidays cater for the urban population, and the evenings are perhaps suitable for the majority. The hardened transgressor is not particularly the care of the State or the Corporation. He is, however, a potential danger to the public. He gets, therefore, every attention and the highest skill like the rest. Women, children, the accidentally infected and the first offender particularly require privacy and consideration. Because of these reasons we believe, generally speaking, that the pock or purely venereal disease hospital should be superseded by the special department in a general hospital. Here expert advice could be obtained. Such departments should be linked up with the dermatological section. Throughout the civilized world syphilis has always been included and studied with other skin diseases. Privacy can thus be amply secured for any innocent victims without the slightest risk to other patients.

## **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 1923 the Wigan Nursing Association and the Pemberton Nursing Association each employed one nurse.

Pemberton Colliery Co. Ltd., also employ 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 40 midwives practising in the district on 1st January, 1923.

**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 Tuesday and Thursday afternoons. School for mothers Wednesday 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 Monday afternoons. School for mothers on Friday afternoons.  |
| 3.     Maternity and Child Welfare Centre, Platt Lane Mission Room.         | Mainly consultative ; treatment to a very limited extent. Open Friday afternoons. School for mothers held on Friday afternoons.   |
| 4.     Maternity and Child Welfare Centre, Wesleyan Chapel, Worsley Mesnes. | Mainly consultative ; treatment to a very limited extent. Open Wednesday afternoons. School for mothers also held on Friday afternoons.   |
| 5.     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.  |
| 6.     Tuberculosis Clinic, 14, Rodney Street, Wigan.                       | Also used by County Council. Open Tuesday, Wednesday and Friday mornings and Tuesday evenings, as required, for Borough cases. A dentist is in attendance on Wednesday mornings for the inspection and treatment of tuberculous persons. Six rooms. |
| 7.     Venereal Disease Clinic, Royal Albert Edward Infirmary, Wigan.       | Open Mondays 4 to 7 p.m. } Males<br>Wesnesdays 5 to 7 p.m. } and<br>Friday 9 to 12 noon. } females.<br>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. Sankey Small Pox Hospital<br>Near Warrington. | For treatment of smallpox. Payment of £275 per annum.                          |
| 2. Bowden Sanatorium,<br>Frodsham.               | Two beds reserved for treatment of tuberculosis. £2 10s. 0d. per bed per week. |
| 3. Crossley Sanatorium,<br>Kingswood.            | Two beds reserved for treatment of tuberculosis. £2 10s. 0d. per bed per week. |

**Other Hospitals Available for the District:—**

- |  |   |
|--|---|
| Royal Albert Edward Infirmary,<br>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, Goose Green,<br>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<br>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 1923.

Matron.

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

The Medical Officer of Health personally attends the patients.

	Notifications	Removed to Hospital		Died in Hospital	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Scarlet Fever .. .. .	95	76	10	2	..
Enteric Fever .. .. .	25	22	7	1	1
Diphtheria and Memb. Croup ..	41	29	6	2	..
Pneumonia .. .. .	234	1	..	1	..
Influenzal Pneumonia .. .. .	15	..	..	..	..
Malaria .. .. .	3	..	..	..	..
Chicken-pox .. .. .	489	..	..	..	..
Erysipelas .. .. .	52	1	1	..	..
Cerebro-Spinal Meningitis ..	..	1	..	1	..
Ophthalmia Neonatorum .. ..	6	..	..	..	..
Pulmonary Tuberculosis .. ..	130	..	..	..	..
Other forms of Tuberculosis ..	72	..	..	..	..
Encephalitis Lethargica .. ..	1	..	..	..	..
Puerperal Fever .. .. .	1	..	..	..	..
Others .. .. .	..	18	1	1	..
Totals .. .. .	1164	148	25	8	1

Whelley Hospital.	Diphtheria.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1923 ..	9	23	1	1	34
Admitted in 1923 .. ..	35	86	29	23	173
Discharged .. .. .	39	98	27	20	184
Died .. .. .	2	2	2	3	9
In-patients, Jan. 1, 1924 ..	3	9	1	1	14

## MATERNITY AND CHILD WELFARE.

Very great progress has been made in this important branch of the Department. Two new Centres have been established and are supplying the needs of certain districts. They are held at Platt Lane Mission Rooms, and at the Wesleyan Chapel, Worsley Mesnes. The Centres and times of attendance are given on page 38.



There are now four Schools for Mothers, one at each Centre ; these are well attended, and should do a great deal of good.

At time of writing the Central Clinic is about to be transferred to suitable premises on the ground floor of the Municipal Buildings.

It is very satisfactory to note that the infant mortality for 1923 is by far the lowest ever recorded in Wigan, namely, 101 deaths per 1,000 births. This figure, however, is the second highest of the 105 large towns, and so more and more efforts must be made for its further reduction.

The most striking facts to be observed from the statistics on page 15 are (1) there were 66 deaths occurring in the *first week* of life out of a total of 208, or practically *one third* ; (2) 91 deaths occurred in the *first month* of life, or practically *one half*.

A similar proportion was recorded in previous years. Apart from this Neo-natal period (*i.e.*, very early age) there has been a progressive steady decline in the infant mortality.

This means that more attention must be paid to the care of expectant mothers ; better conditions must be provided for confinement ; and more supervision must be made possible for babies in the first few months of life.

All through the country, and indeed all over the world, the Neo-natal mortality is comparatively high, and moreover shows very little signs of being reduced.

If the above suggestions are carried out some reduction ought to take place.

A maternity home is necessary in Wigan, where confinements often take place under wretched conditions. More Health Visitors are essential if more supervision is to be provided for very young babies.

More attention is already being given to expectant mothers, and it is to be hoped that midwives will co-operate with the Department in this matter and send expectant mothers to the Clinics.

It must not be forgotten, however, that the care of babies at this very tender age is very largely an individual and personal matter, and many lives are lost by ignorance or carelessness of mothers. Many more mothers and expectant mothers should attend the School for Mothers, where they will be taught the right way. Mothercraft should be a compulsory subject for the older girls in every school. This is the time when teaching and propaganda are the most useful ; this is the age when the mind is receptive and the memory retentive.

In Wigan National Health Week and Baby Week were worked together. A great amount of propaganda work was done the details of which are given on page 44.

Child Welfare Exhibitions were held at each Centre, and a large number of talks were given to the older school girls by the Assistant Medical Officer, and the Health Visitors. Prizes were given for the best essays describing the exhibits and lectures, and it was clear that a great deal of useful knowledge had been absorbed by the children.



A great gathering of mothers and babies was held in the Drill Hall, which was opened by the Mayor, Councillor Ainscough, J.P. Tea and entertainment were provided, and various certificates and prizes distributed by the Mayoress. (See page 45.)

During the months of February and March Dr. Aileen Williams gave a series of lectures at various Schools in the town on "Child Welfare in Relation to Public Health." Handbills announcing the lectures were delivered at houses in the districts, and the lectures were announced in the Churches and in the press. The total number of people who attended the lectures was 322. One lecture was not given owing to the poor attendance.

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.

SUMMARY OF VISITS PAID BY THE HEALTH VISITORS DURING THE  
YEAR 1923.

No. of primary visits to births	..	..	..	..	1995
„ visits to infants under one year	..	..	..	..	2406
„ „ infants over one year and under two years	..	..	..	..	2228
„ „ infants over two and under three years	..	..	..	..	1988
„ „ infants over three and under four years	..	..	..	..	1760
„ „ infants over four and under five years	..	..	..	..	1428
„ „ expectant mothers	..	..	..	..	74
„ „ cases of Ophthalmia Neonatorum	..	..	..	..	13
„ „ cases of Pneumonia	..	..	..	..	7
„ „ cases of Diarrhoea	..	..	..	..	18
„ „ <i>re</i> deaths under one year	..	..	..	..	118
„ „ still births	..	..	..	..	75
„ „ to midwives	..	..	..	..	200
„ other visits	..	..	..	..	702

The infantile mortality for 1923 is by far the lowest recorded in Wigan, being 101. It is certain that this figure could be reduced still further when the Maternity and Child Welfare Scheme is fully developed and certain improvements in general sanitation, etc., are carried out.

Dr. Aileen Williams now spends two-thirds of her time in Maternity and Child Welfare Work.

The scheme of hours of attendance is given below.

Dr. Williams now personally supervises the Midwives.

The following Centres are open from 2-30 p.m. to 4-30 p.m. on the days mentioned in the table below:—

<i>Centre.</i>	<i>Time open.</i>
Wigan Central Clinic, Rodney Street ..	Tuesday and Thursday of each week. School for Mothers on Wednesday.
Pemberton Clinic, 15, Billinge Road ..	Monday of each week. School for Mothers on Friday.
Platt Lane Mission Room .. ..	Friday of each week. School for Mothers on Friday.



Wesleyan Chapel, Worsley Mesnes . . . Wednesday each week, and also  
School for Mothers on that  
day.

It will be noticed from the statistics of Infant mortality on page 14 that 66 babies died under one week, and 97 under four weeks old. 48 were certified as dying from Premature birth, 5 from Diarrhoea, and 45 from marasmus or wasting. A fair percentage of deaths from these causes ought to be preventable. 10 deaths were due to Congenital Malformation.

It is well known that the practice of taking drugs &c., with the object of producing abortion or miscarriage is prevalent in this town and throughout the country.

If abortion is not brought about in this way, premature births may occur, often resulting in the death of the child. The danger of death or permanent injury of the mother is very considerable.

The sale of any drugs, &c., likely to cause the above results should be controlled.

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; in fact it is a necessity. 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.

55 deaths occurred among children attending Clinics. Of these 13 attended regularly. The 55 deaths are made up as follows: 27 deaths under 12 months, 4 from Diarrhoea and 23 from other causes. 28 over 12 months: 2 from Diarrhoea, and 26 other causes. Among children receiving free milk there were 3 deaths from Diarrhoea and 16 from other causes.

6 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:—

	<i>Doctors.</i>	<i>Midwives.</i>		<i>Total.</i>
		<i>Qualified.</i>	<i>Un-qualified.</i>	
No. of Births attended .. ..	211	1,612	292	2,115
Percentage .. .. .	9.97	76.21	13.80	—
No. of Medical Aid Forms received	—	351	56	407
No. of Still-births notified.. ..	17	50	19	86

Of the 40 Midwives, 5 reside outside the Borough.

8 cases of Artificial Feeding were notified by Midwives.



## MEDICAL AID.

The reasons for sending for Medical Aid, as far as can be ascertained, were as follows:—

## (1) COMPLICATIONS OF PREGNANCY.

Epileptic fits	..	..	..	..	..	1
Albuminuria	..	..	..	..	..	1
Abortion	..	..	..	..	..	20
Miscarriage	..	..	..	..	..	14
Prematurity	..	..	..	..	..	42
Swollen	..	..	..	..	..	1
Ante natal poor condition	..	..	..	..	..	1
Total	..	..	..	..	..	80

## (2) ABNORMAL PRESENTATIONS .. .. 18

## (3) COMPLICATIONS OF LABOUR.

Retained Membranes	..	..	..	..	..	3
Delayed labour	..	..	..	..	..	110
Contracted pelvis	..	..	..	..	..	5
Uterine inertia	..	..	..	..	..	4
Ante-partum hæmorrhage	..	..	..	..	..	4
Post-partum hæmorrhage	..	..	..	..	..	9
Adherent placenta	..	..	..	..	..	13
Ruptured perineum	..	..	..	..	..	56
Prolapsed cord	..	..	..	..	..	1
Placenta prævia	..	..	..	..	..	1
Retained placenta	..	..	..	..	..	1
Eclampsia	..	..	..	..	..	1
Hydramnios	..	..	..	..	..	1
Total	..	..	..	..	..	209

## (4) COMPLICATIONS OF PUERPERIUM AND OTHER ILLNESSES OF PATIENT.

Rise of Temperature and Rapid Pulse	..	..	..	..	10
Patient ill (undefined)	..	..	..	..	12
Exhaustion	..	..	..	..	3
Foul discharge	..	..	..	..	2
Bad leg and white leg	..	..	..	..	3
Rigor	..	..	..	..	2
Weakness	..	..	..	..	1
Heart trouble	..	..	..	..	1
Total	..	..	..	..	34

## (5) ILLNESS AND ABNORMALITIES OF CHILD.

Malformation .. .. .	3
Baby ill (undefined) .. .. .	7
Icterus Neonatorum .. .. .	2
Dangerous feebleness .. .. .	22
Loose stools .. .. .	1
Convulsions .. .. .	3
Pemphigus .. .. .	3
Skin rash .. .. .	1
Growth on leg .. .. .	1
Broken arm .. .. .	1
Umbilical hæmorrhage .. .. .	1
Discharging eyes .. .. .	15
Asphyxia .. .. .	1
Gathering finger .. .. .	1
Abnormal baby .. .. .	1
Ruptured navel .. .. .	1
Double hare lip .. .. .	1
Cyst on eyes .. .. .	1
Total .. .. .	66

**PUERPERAL FEVER.**

There has been 1 case and 0 deaths from Puerperal Fever, as compared with 3 cases and 1 death in 1923.

**CLINICS.**

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

**ATTENDANCE AT CHILD WELFARE CENTRES.**

Total attendances of Babies .. .. .	5,301
Primary attendances of Babies .. .. .	1,073

2,917 cases were seen by the Medical Officer during 1923. 57 deaths among children attending Clinics. Of these 16 attended regularly. 20 deaths among children receiving free milk.



### MIDWIVES ACT, 1902.

Forty 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 208, or 101 per 1,000 births, and of children over one year and under five years 101, or 1·10 per 1,000 of the population.

These figures compare with 221 deaths under one year, a rate of 101 per 1,000 in 1922.

An analysis of these 208 deaths show that they may be grouped under the following headings:—

Premature Birth, Congenital Debility, Malnutrition, and Congenital Malformations .. .. .	101
Diarrhoea and Enteritis .. .. .	8
Bronchitis.. .. .	21
Pneumonia .. .. .	27
Whooping Cough .. .. .	1
Convulsions .. .. .	10
Meningitis.. .. .	2
Gastritis .. .. .	2
Other causes .. .. .	23

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

The instructions issued in Circular 185, of May, 1921, by the Ministry of Health, are still being carried out with this modification, that free milk is limited to children under 12 months old. Special cases over this age up to 5, are granted free milk at discretion of Medical Officer of Health.

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.  
(These are being dealt with at the present time).

2. Unsatisfactory system of storing and removal and tipping 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, at present being developed and greatly improved.

4. The unsatisfactory conditions under which milk is produced and distributed, and lack of proper care and storage in the homes.

5.—Insanitary and overcrowded houses.  
(This will be discussed under housing.)

6. Ignorance and carelessness of parents.

TABLE SHOWING METHOD OF FEEDING OF 215 INFANTS UNDER ONE YEAR WHO DIED DURING 1923.

SAID TO BE—

81 Entirely Breast-fed.
5 Partly Breast-fed.
7 Condensed Milk.
31 Cow's Milk.
13 Dried Preparations.
11 Miscellaneous.
42 No feeding (lived 1-2 days only).

## 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 1923 :—

		Positive.	Negative.	Doubtful.	Not Examined.
Swabs for Diphtheria	..	22	.. 121	.. —	.. —
Widal tests for Enteric	..	27	.. 27	.. —	.. —
Cerebro-spinal fluid	..	—	.. 1	.. 1	.. —
Wasserman	.. ..	53	.. 95	.. 6	.. 5
Gonococci	.. ..	—	.. 19	.. —	.. —
Fæces, B. Typhosus	..	1	.. 3	.. —	.. —
Water : Samples Bacterio- logically Examined	..	—	.. —	.. —	.. 9
Water : Samples Chemical Examination	.. ..	—	.. —	.. —	.. 16

## MILK.

It is generally recognised that cow's milk, as it is delivered to consumers at the present time, is far from pure. A great deal has been written and a



lot of work has been done in some quarters in the endeavour to produce milk under hygienic conditions. Enthusiasts in this direction have taught and are teaching at the present time how to avoid contamination of milk. Long lists of instructions are to be carefully followed as to sanitary conditions of cowsheds, precautions to be taken by milkers both regarding the cleanliness of the cows and of themselves; sterilisation of all appliances, etc.

All this is excellent teaching, and is open to no controversy. The difficulty is to get people to carry out these instructions, and no staff of Inspectors would be great enough to do it. The time has come when the general public should be told that no matter what precautions are taken it is an impossibility to supply them with a safe milk unless it is previously treated by some adequate method. In this Borough a fair amount of propaganda work has been carried out on behalf of the Health Committee by the Chairman and the Medical Officer of Health. Pasteurisation, cooling and bottling of all milk, has been recommended, because it renders the milk comparatively safe and yet does not materially alter its food value.

As a result of such teaching it is very satisfactory to report that at the time of writing an up-to-date pasteurising plant had been erected in Wigan, thus a local supply is now available. If such treatment of milk were universal it is certain that the cases of surgical tuberculosis would be enormously reduced, and that other diseases which are transmitted by milk would not occur.

The risks incurred in drinking untreated cows' milk are so serious that it is high time that pasteurisation of all milk was made compulsory by law. At the same time producers and distributors of milk should be enforced to do their work on strictly hygienic lines. It is a fact that something like 20 per cent. of milk sold to-day contains tubercle bacilli, and it is estimated that 30 per cent. of milk cows are tubercular. Nothing more needs to be said to justify drastic action being taken to protect the people of this country.

### **HEALTH AND BABY WEEK.**

During the week 7th-13th October, 1923, a Health and Baby Week was held, particulars of which are given below.

**MONDAY, 8TH OCTOBER.**—A lecture on "Clean Milk," was given by Dr. M. Benson, the Chairman of the Health Committee, at St. George's Institute, and a lantern lecture on "Child Welfare" was given by Dr. Aileen Williams, at St. Patrick's School, Rupert Street.

Educational films were shown at the Carlton Cinema, Pemberton.

A Child Welfare Exhibition was held at the Pemberton Maternity and Child Welfare Centre, Billinge Road.

**TUESDAY, 9TH OCTOBER.**—A Child Welfare Exhibition was held at the Maternity and Child Welfare Centre, Poolstock Lane, Pemberton, and the films mentioned above, were shown at the Pavilion Picture Theatre.

In the evening a Dance and Whist Drive was held at the Empress Hall; about 300 persons attended.



WEDNESDAY, 10TH OCTOBER.—A reception was held at the Drill Hall, and 350 mothers and 450 babies who attended at the Welfare Centres were entertained to tea.

THURSDAY, 11TH OCTOBER.—A lecture on "Infectious Diseases" was given by Dr. Whitehead, at Carnegie Library, Pemberton, and one on "The health of School Children" was given by Dr. Georgina Murdoch, Assistant School Medical Officer, at St. Thomas's School, Clayton Street.

A Child Welfare Exhibition was held at the Rodney Street Centre.

FRIDAY, 12TH OCTOBER.—A Child Welfare Exhibition was held at St. Catherine's Mission Room, Platt Lane.

Arrangements were made with the Director of Education for the visitation by school children of the Child Welfare Exhibitions, and a prize was offered to them in connection with each exhibition for the best essay. A large number of essays were received, the standard of which was very high, and it was apparent from these that much had been learned from the visits to the exhibitions.

Altogether 412 children and 441 adults visited the exhibitions, 1,954 persons attended the Carlton Cinema, and the Pavilion Picture Theatre, and 370 persons attended the Lectures. 1,000 mothers and babies, etc., were entertained to tea at the Drill Hall.

The money raised by the Dance and Whist Drive, together with donations received, paid for the tea for mothers and various other items which could not be charged to the Maternity and Child Welfare Account, and a small balance remains in hand.

A considerable amount of propaganda work was carried out in the press.

### TIPPING OF REFUSE.

In Wigan crude refuse from ashtubs, bins and privies is frequently tipped in various places direct from the collecting carts. Refuse should either be treated before tipping by passage through a destructor or precautions should be taken after tipping as suggested by the Ministry of Health, which involve depositing in layers of a certain thickness, and covering each layer with a certain depth of earth, steps being taken to prevent light material such as paper, etc., from blowing about.

Crude refuse contains all kinds of organic material which is liable to putrefaction; paper and all kinds of foul substances get blown about and become a serious nuisance. Moreover, such collections of rubbish form an admirable breeding ground for flies which invade the neighbouring houses and carry the filth and disease with them.

Several examples of invasion of houses by flies have come to the notice of this Department, and have been traced to tips.

Knowledge of the causes of disease is absolutely no use unless it is practically applied.



### **INSPECTION OF MEAT.**

In order that this important branch of public health work may be carried out thoroughly, it is essential to centralise slaughtering in a public abattoir. This question has been before the Health Committee for a considerable time. Various sites have been inspected, but no decision has been arrived at. There is ample work in this specialised branch of the service to justify the appointment of a whole-time veterinary surgeon to take charge under the direction of the Medical Officer of Health, of meat inspection and the supervision of cowsheds and dairies ; and he could also carry out the Corporation's general veterinary work.

The Chief Sanitary Inspector and the assistants have such multitudinous duties to perform that they could well give their time to other important matters.

### **PREPARATION OF FOOD.**

At the present time we have no compulsory powers to enforce the registration of all places where food for human consumption is prepared for sale.

It is no uncommon occurrence for the officers of Health Departments to find that food for sale is being prepared in insanitary and unclean premises, and on occasions by unclean persons. Further, it has been found that the contents of certain foods have contained ingredients which are dangerous to health. Adequate protection and control is quite impossible unless all premises where food is prepared for sale are enforced by law to be registered.

As pointed out previously, the Wigan statistics show clearly that the mortality from respiratory diseases bear a close relation to congestion of buildings and to a lesser extent over-crowding.

The better the housing conditions the less will be the mortality from respiratory diseases, including Pulmonary Tuberculosis.

### **WIGAN WATER SUPPLY.**

A complete inspection was made in 1922 by the Health Department of the three gathering grounds, namely : Worthington, Pemberton (Edgwood), and Bispham respectfully.

A great amount of pollution is occurring on each of these gathering grounds where sewage is finding its way either directly or indirectly into the main streams.

The Medical Officer of Health made certain recommendations to the Water Committee in order to prevent such pollution and at the time of writing the three supplies from the above gathering grounds are being chlorinated, whilst the other suggestions are still being considered.

### **COMPENSATION CLAIMS AND MEDICAL EXAMINATIONS.**

Medical Examinations of Corporation Employees under Workmen's Compensation Acts, 66.



Examinations of other persons claiming compensation from the Corporation, 4.

# **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 1923.

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.

### CONVERSION OF PAIL CLOSETS AND PRIVY MIDDENS.

The scheme for the conversion of the whole of the pail closets and privy middens within the Borough was commenced early in the year.

2,513 pail and privy closets were reported to the Insanitary Houses and Conversions Committee, notices were issued for the conversion of 2,269 closets. Notices for 680 conversions were served between November 15th and December 31st, 1923. By December 31st, 1923, 565 pail closets and 450 privy closets had been converted; in addition the work of converting approximately 500 pail and privy closets was in hand. 76 additional water closets were provided for premises at which the closet accommodation was insufficient. To carry out this work no less than 9,643 visits were paid. I am of opinion that the progress made is quite satisfactory as the first notices were only served on March 8th, 1923, and the scheme could not be considered to be in full running order until the latter part of the year. At the time of writing the pace at which conversions are being carried out has considerably increased, and there is no doubt that a far greater number of closets will be converted during the year 1924.

NUISANCES.						1923.	1922.
Houses and premises inspected and visited <i>re</i> nuisances							
and complaints	..	..	..	..	..	1610	1784
Nuisances discovered	..	..	..	..	..	3011	3980
Nuisances abated	..	..	..	..	..	2534	3154
Notices issued (preliminary)	..	..	..	..	..	886	1206
„ „ (formal)	..	..	..	..	..	605	884
Re-visits to nuisances	..	..	..	..	..	5021	7743
Other visits made	..	..	..	..	..	1167	1149
Visits to premises (testing of drainage)	..	..	..	..	..	93	73
Letters issued <i>re</i> nuisances	..	..	..	..	..	416	579



## DESCRIPTION OF NUISANCES DEALT WITH.

Defective drainage .. .. .	34	21
Choked drainage .. .. .	181	173
Defective and foul gullies .. .. .	20	25
Gullies requiring grids .. .. .	8	9
Want of slopstones and pipes .. .. .	3	—
Slopstones and slopstone pipes defective .. .. .	59	66
Soil pipes or connections defective .. .. .	11	16
Defective or choked water closets .. .. .	32	31
Defective water supply to closet .. .. .	2	16
Defective sink waste pipes (connected to drains) .. .. .	1	—
Defective condition of closets (roof, walls, door, seat, or floor) .. .. .	69	129
Want of doors to closets .. .. .	5	23
„ „ ash-house .. .. .	8	33
Defective condition of ash-houses (roof, walls, door or floor) .. .. .	2	24
Defective or choked waste water closets .. .. .	24	23
Houses with defective floors .. .. .	91	206
Want of receptacles for house refuse .. .. .	—	1
Workshops require limewashing .. .. .	1	—
Defective water closet cisterns .. .. .	16	30
Insufficient and Want of closet accommodation to houses or Workshops .. .. .	4	25
Defective spouts (eaves or down) .. .. .	395	381
Want of spouting to premises .. .. .	17	46
Defective roofs .. .. .	320	336
Defective window frames, want of cords, &c. .. .. .	217	413
Defective ceilings .. .. .	53	68
Unclean walls and ceilings .. .. .	737	930
Defective flagging or paving (yards and passages) .. .. .	38	67
Houses overcrowded or keeping of lodgers .. .. .	2	3
Houses and premises filthy .. .. .	3	4
Houses with filthy closets .. .. .	3	—
„ filthy yards and entries .. .. .	3	3
„ damp and defective walls .. .. .	453	687
Defective middenstead .. .. .	6	36
Want of middensteads .. .. .	6	—
Accumulations of manure .. .. .	13	8
„ rubbish .. .. .	10	1
Keeping of animals .. .. .	24	15
Miscellaneous .. .. .	140	129

## SMOKE NUISANCES.

During the year 43 smoke observations have been taken. In seven instances the time limit was exceeded, 4 warning letters were sent to the persons responsible for the nuisances. Seven visits were made to premises and instructions given to the stokers in charge of the steam-raising apparatus.



**CANAL BOATS ACT, 1877 AND 1884.**

No of Boats that have been registered at Wigan..	..	310
„ 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 .. ..	.. ..	25
„ registered but not legally required ..	.. ..	6
„ Applications for registration and re-registration during the year ..	.. ..	4
„ Applications granted .. ..	.. ..	4
„ Boats re-registered .. ..	.. ..	4
„ Inspections .. ..	.. ..	61
„ Notices issued .. ..	.. ..	2
„ Notices complied with .. ..	.. ..	2
„ Contravention of regulations .. ..	.. ..	2
„ Letters sent out .. ..	.. ..	4

**FACTORY AND WORKSHOP ACT.**

No. of workshops on register .. ..	.. ..	276
„ bakehouses on register .. ..	.. ..	132
„ domestic workshops on register .. ..	.. ..	67
„ visits to outworkers' premises .. ..	.. ..	38
„ „ factories .. ..	.. ..	40
„ „ workshops.. ..	.. ..	549
„ defects dealt with .. ..	.. ..	114
„ defects remedied .. ..	.. ..	103
„ notices received from H.M. Inspector ..	.. ..	14
„ Section 5, sanitary defects .. ..	.. ..	17
„ complied with .. ..	.. ..	11
„ letters sent out .. ..	.. ..	39
„ underground bakehouses being used ..	.. ..	5

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

No. of shops on register .. ..	.. ..	2254
„ visits to shops (day) .. ..	.. ..	109
„ „ re Closing Orders, 1920 (day) .. ..	.. ..	207
„ „ re Closing Orders, 1920 (night) .. ..	.. ..	241
„ letters sent out re infringements .. ..	.. ..	38
„ observations (day) .. ..	.. ..	510
„ „ (night) .. ..	.. ..	823
„ visits, Meat Closing Order.. ..	.. ..	94
„ observations, Meat Closing Order .. ..	.. ..	682

**REPORT OF OFFENCES, 1921.**

Not exhibiting closing notice .. ..	.. ..	35
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Not exhibiting form (assistants' half-holiday) ..	11
"    abstract .. .. .	10
re assistants' half-holiday .. .. .	14
"    "    intervals for meals .. .. .	4
Letters for serving customers during prohibited hours .. .. .	38
Employing young persons after working under F. and W. A. .. .. .	1

### 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.

#### COMMON LODGING HOUSES.

No. of common lodging-houses in the Borough .. ..	11
"    lodgers allowed nightly .. .. .	481
"    visits .. .. .	671
"    lodgers reported as being received (per returns)	117,896
"    letters sent out .. .. .	7
"    houses on register end of 1922 .. .. .	11
"    houses remaining on register end of 1923 ..	11

#### HOUSES-LET-IN-LODGINGS.

No. of houses on register .. .. .	15
"    visits .. .. .	106

### PLACES OF ENTERTAINMENT.

All these have been inspected and reports made before the renewal of licences.

### 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 .. .. .	368
"    rooms disinfected .. .. .	665
"    beds disinfected .. .. .	401
"    mattresses disinfected .. .. .	183
"    sheets and quilts disinfected .. .. .	898
"    other articles disinfected .. .. .	1,783
"    premises cleansed and limewashed after infectious disease .. .. .	107
"    visits to houses re limewashing and cleaning, &c. ..	153
"    "    "    infectious disease .. .. .	294
"    letters sent out re infectious disease .. .. .	63
"    "    "    limewashing .. .. .	11
"    library books disinfected .. .. .	42
"    schools disinfected .. .. .	3



### **RATS AND MICE (DESTRUCTION) ACT, 1919.**

Mr. E. Richardson who devotes a portion of his time as Administrative Officer under the above Act, reports as follows:—

No. of premises under observation on 1st January, 1923 .. .. .	86
No. of premises found to be infested during 1923 .. .. .	43
No. of premises reported to be free from rats or mice during 1923 .. .. .	79
No. of premises under observation on 31st December, 1923 .. .. .	50
Total number of visits made during 1923 ..	276

The occupiers of premises still infested are carrying out the requirements of the Act. During Rat Week, held in November, 1923, a special effort was made to exterminate rats and mice. 2,544 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.**

204 samples were taken under the above Statutes. All were submitted to the Public Analyst. Eight samples proved to be below the standard required. Five samples of milk were found to be as follows:—1. Deficient in milk fats to the extent of 15%. 2. Deficient in milk fats to the extent of 5%. 3, 4 and 5. Added water to the extent of 7%, 11·2% and 15·2% respectively.

Legal proceedings were instituted respecting No. 1, and the defendant was ordered to pay costs. A letter of warning was written in the case of No. 2. Sample No. 3 was a formal sample; and samples Nos. 4 and 5 were informal samples taken in consequence of sample No. 3, and it was found that the vendor was receiving milk containing added water from farmers outside this district. A warning letter was forwarded to the vendor, and the Authorities in the districts concerned were notified of these facts.

Three samples of cream were found to contain preservatives. In two cases letters of warning were written, and the third was an informal sample. The samples contained ·18, ·124 and ·124% of Boron preservatives respectively.

<i>Article.</i>	<i>Samples.</i>	<i>Genuine.</i>	<i>Adul- terated.</i>	<i>Not Formal.</i>	<i>Appeal to Cow Samples not Formal.</i>
New Milk .. ..	139	134	5	21	3
Butter .. ..	9	9	—	1	—
Margarine .. ..	4	4	—	—	—
Dripping .. ..	2	2	—	2	—
Jam .. ..	3	3	—	3	—
Preserved Cream ..	2	2	—	2	—
Cream .. ..	3	—	3	1	—
Tea .. ..	3	3	—	—	—
Coffee .. ..	4	4	—	—	—
Baking Powders ..	15	15	—	15	—
Liquid Eggs .. ..	5	5	—	5	—
Egg Powder .. ..	1	1	—	1	—
Sponge Cakes .. ..	6	6	—	6	—
Flour .. ..	4	4	—	4	—
Whiskey .. ..	2	2	—	2	—
Rum .. ..	2	2	—	2	—
Totals .. ..	204	196	8	65	3

### BOARD OF AGRICULTURE.

Report for the year ended 31st December, 1923.

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

	(a.)  <i>Number of Samples examined for the presence of a Preservative.</i>	<i>Number in which preservative was reported to be present, and percentage of Preserva- tive found in each Sample.</i>
Milk .. ..	139	Nil.
Cream .. ..	5	5

#### 2. Cream sold as preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

(i.) Correct statements made	..	..	..	2
(ii.) Statements incorrect	..	..	..	Nil.

Total	..	..	..	2
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NOTE.—The samples were labelled: "Contains not more than .4 % boric acid," and were found on analysis to contain 0.31, and 0.21 % respectively.

### MARGARINE AND MARGARINE CHEESE.

13 firms have registered as wholesale dealers of Margarine for 15 premises.

### MILK AND DAIRIES (AMENDMENT) ACT, 1922.

The following is the number of premises registered under the above Act:—

Retail Purveyors of Milk	..	..	..	..	149
Wholesale Traders in Milk	..	..	..	..	27
Producers of Milk	..	..	..	..	27

The above premises have been regularly visited during the year, and, with few exceptions, are kept in a satisfactory condition.

### SLAUGHTER-HOUSES, OFFENSIVE TRADES, AND MARKETS.

There are within the Borough 18 slaughter-houses, 16 of which are registered and 2 licensed. Structural alterations have been carried out at one slaughter-house and improvements at another during the past year.

The work entailed in the supervision of the slaughter-houses and inspection of meat accounts for a large proportion of the time of the Inspectors. No fewer than 1,854 visits were made to these premises. A large wholesale business in fish and other foodstuffs is carried on in and around the Markets, and these premises are visited daily.

No. of slaughter-houses in the Borough registered	..	16
"                    "                    " licensed	..	2
" offensive trade premises in the Borough	..	7
" knackers' yards in the Borough (licensed)	..	2
" visits to slaughter-houses	..	1,854
No. of visits to offensive trade premises	..	162
"                    markets	..	334
"                    butchers and other food shops	..	538
" letters sent out	..	14
" certificates issued (condemned food)	..	265

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

	Passed, but offal condemned	Condemned.	Part passed and part condemned.
Beasts ..	577	20	18
Sheep ..	—	9	—
Pigs ..	1	29	1

## FERTILISERS AND FEEDING STUFFS ACT, 1906.

During the year eight informal samples were obtained :—

### SAMPLES.

Bran .. .. .	2
Indian Meal .. .. .	1
Feeding Meal .. .. .	1
Bibby Cake .. .. .	1
Chicken Food .. .. .	2
Fertilisers .. .. .	1

The Borough Analyst reported 8 samples as satisfactory and 1 as unsatisfactory. A letter was written to the vendor firm asking for an explanation, and the reply was considered satisfactory.

## FOOD CONDEMNED, 1923.

No. of oxen condemned .. .. .	20
„ „ of which a portion was condemned..	18
„ sheep condemned .. .. .	9
„ pigs condemned .. .. .	29
„ „ of which a portion was condemned ..	1
„ calves condemned .. .. .	2
Meat condemned .. .. .	579 lbs.
Imported meat condemned .. .. .	713 lbs.
Cooked and prepared meat condemned ..	85 lbs.
Canned meat condemned .. .. .	52 tins.
Offal condemned .. .. .	360 lbs.
Rabbits condemned .. .. .	2,890
Hare condemned .. .. .	1
Turkey condemned .. .. .	1
Fowl condemned .. .. .	1
Wet fish condemned..	160 boxes, 2 bags, 1 kit, and 22 lbs.
Dried fish condemned .. .. .	130 boxes.
Canned fish condemned .. .. .	11 tins.
Fruit condemned .. .. .	177 boxes, 125 baskets, 9 bags, and 5 barrels.
Canned Fruit condemned .. .. .	5 tins.
Condensed milk condemned .. .. .	143 tins.
Total meat and offal destroyed at the Miry Lane Depot,	
	30 tons 2 cwts.
Total fish destroyed .. .. .	3 tons 0 cwt. 1 qr.
Total fish refuse destroyed .. .. .	42 tons 18 cwts.

## REPORT OF THE PUBLIC ANALYST FOR THE YEAR 1923.

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



SALE OF FOOD AND DRUGS ACT.—Return of Samples submitted under the Act :—

<i>Article.</i>	<i>No. analysed.</i>	<i>No, adulterated.</i>	<i>Percentage of adulteration.</i>
Milk .. ..	139	5	3·6
Butter .. ..	9	nil.	—
Sponge Cake .. ..	6	nil.	—
Liquid Eggs .. ..	5	nil.	—
Coffee .. ..	4	nil.	—
Flour .. ..	4	nil.	—
Margarine .. ..	4	nil.	—
Cream .. ..	3	3	100
Tea .. ..	3	nil.	—
Jam .. ..	3	nil.	—
Preserved Cream .. ..	2	nil.	—
Rum .. ..	2	nil.	—
Whisky .. ..	2	nil.	—
Miscellaneous .. ..	18	nil.	—
Total .. ..	204	8	3·9

In respect of milk it will be observed that the sophisticated samples fall below 4% and, having regard to the general quality throughout it may fairly be said that the supply is satisfactory and, at least, not inferior to that of similar manufacturing towns in the North of England. The samples reported against included two which were deficient in fat and three which contained 7·0, 11·2 and 15·2% of added water, respectively. Complete freedom from colouring matter and preservatives is a meritorious feature which the public, one is sure, will appreciate. All cream and preserved cream samples were submitted under the Public Health (Milk and Cream) Regulations, 1912-17. All of the former were boracised. Freedom from boron compound was determined in all samples of cake and liquid eggs, and all the grocery samples were of sound commercial quality and free from foreign additions.

FERTILISERS AND FEEDING STUFFS ACT.—Nine informal samples were analysed and only one (bran) found to be of unsatisfactory quality.

WATER SUPPLY.—The usual monthly survey has applied, and with regard to the water, generally speaking, a perfectly satisfactory organic condition has obtained. In the early part of the year, however, special attention was given to the filtered water at Edgewood (Pemberton) which showed the presence of an excessive amount of fermentable organic matter and precautionary measures were adopted to eliminate all possibility of objectionable contamination.

The Public Analyst begs to tender his appreciation of and his warm thanks for the helpful co-operation of his colleagues, and particularly to the Chief Inspector (Mr. Fred Martlew).



## REPORT ON THE INSPECTION OF DAIRIES AND COWSHEDS FOR 1923.

Mr. Woods, Veterinary Surgeon, submits the following report :—

GENTLEMEN,

I have to report that during the year three cases of udders suspicious of tubercle have been met with amongst the dairy cattle of the County Borough : one proved negative to microscopic examination, and in the other two cases the animals were got rid of. The Milk and Dairies Amendment Act of 1922, under which licenses are issued to milk dealers reaching various standards of cleanliness has passed without any action being taken by any of the milk producers in Wigan. It is quite true that certified and Grade A (tuberculin tested) milk are difficult to produce in towns where new cattle are continually being purchased to replace fat ones, but with intelligent care Grade A milk can easily be produced—and with very little extra expense. It does not appear that any applications by milk sellers will be made to sell such milk until there is a public demand for it, and up to the present the public are either not acquainted with the subject or too careless to take an interest in the cleanliness of their milk. Wigan is not exceptional, the report of the Veterinary Inspector for the City of Manchester states that the farmers cannot be congratulated on any improvement in the cleanliness of the milk supply, and practically the same remark has been made by other Inspectors. With few exceptions the old methods still obtain in the production and distribution of milk, and, I have not noticed any general improvement in the protection of milk by the public after its delivery.

I wish to draw attention to the lectures and demonstrations which will be given by the Reading Clean Milk Society at all the principal agricultural shows this year and to express the hope that not only farmers and milk dealers but the public generally will take advantage of these demonstrations which show that the cost of production need not be much increased to improve very much the cleanliness of the milk, and, with its cleanliness, its keeping qualities. I have lately been given the privilege of inspecting a cowshed and dairy at Didsbury in Manchester, where the owner was able to supply "certified" milk for which he was easily obtaining fourteen pence a quart against seven pence for ordinary milk. He told me that to produce certified milk in Manchester was a highly paying proposition, and the following were the rules he observed :—

1. His cows were all tuberculin tested and healthy.
2. His shed was clean, well ventilated and lighted, and the surroundings were also kept clean.
3. Any operation likely to produce dust just before or during milking was avoided.
4. The cows were kept clean, but not groomed just before milking.
5. The udder and teats were washed with soap and water before milking, and then wiped with a clean damp cloth.



6. Milker's hand and clothes (overalls) were clean and also the milking stool.

7. The milk pails were partially covered, *i.e.*, not open buckets.

8. The first stream of milk from each teat was delivered into a separate vessel, and rejected so far as certified milk was concerned, but was used for the pigs.

9. Wet handed milking absolutely abolished.

10. After "stripping" the end of the teat was dried with a clean cloth.

11. The milk was removed from the cowshed immediately after milking and cooled by refrigerator to the lowest temperature obtainable (about 50°).

12. Milk utensils, including the cooler, rinsed with cold water immediately after use.

13. After rinsing the utensils are thoroughly washed and scrubbed with hot water to which soda is added.

14. Utensils sterilised with steam, which is better than boiling water.

15. Utensils kept wrong side up till required for next milk

16. Straining cloths and udder cloths washed and boiled.

17. Milk delivered in sealed bottles.

A short printed instruction was delivered to each consumer asking for the milk to be kept covered and cool until required for use.

Most of these precautions are simple and not expensive provided they are done methodically.

I am extremely gratified to learn that a considerable pasteurising plant is being established in Wigan, because pasteurisation almost eliminates the danger of tubercle infection of children, and even the most careful clinical examination cannot in all cases guarantee the complete absence of tubercle bacilli in milk.

## 8.—PUBLIC HEALTH STAFF, 1923.

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.

Deputy Medical Officer of Health,

Clinical Tuberculosis Officer :

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

Assistant Medical Officer—Maternity and Child Welfare :

(Miss) M. A. WILLIAMS, M.R.C.S., L.R.C.P.

Veterinary Surgeon (part time) :

WILLIAM WOODS, F.R.C.V.S.

Public Analyst (part time) :

S. ERNEST MELLING, F.I.C.

Chief Sanitary Inspector :

\* FREDERICK MARTLEW (a) (b).

Sanitary Inspectors :

J. ASHTON (a) (b), W. J. LOE (a) (b), G. YATES (a) (b).

Sanitary Inspector and Administrative Officer under

Rats and Mice (Destruction) Act, 1919 :

E. RICHARDSON (a).

Factory, Workshops, and Shops Inspector :

F. G. BISHOP.

Matron of Sanatoria :

\* Miss M. MOSS.

Lady Health Visitors :

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

\* M. GOLD (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.

The housing conditions in Wigan are still very acute. According to the 1921 census, there are 2,620 more families than houses.

Since that time the natural increase in the population is 2,200, which means the necessity for 488 more houses, taking 4·5 persons per house as a fair average. Further, there are approximately 500 houses only fit for demolition. This brings the total up to 3,600 houses. Certain deductions can be made from this, including 300 houses which have been built since 1921, and about 800 of the 2,620 families above not at the present requiring a separate house. Thus the maximum figure of 2,500 houses required in Wigan is arrived at. Congestion of buildings, overcrowding of houses, and insanitary conditions of houses are three very powerful factors in the production of disease and premature death. Five hundred families are living in houses which are in such a bad state that they ought to be demolished. All these could be dealt with immediately if houses were available. It is useless putting Closing Orders on insanitary dwellings if displaced tenants cannot be housed.

Insanitary areas and insanitary buildings cannot be dealt with adequately unless many more houses are built, and the process of patching up and delay is inevitable in the circumstances. Speeding up in housing is absolutely necessary in Wigan.

Number of new Houses erected during the year:—

(a) Total .. .. .	23
(b) As part of a Municipal Housing Scheme ..	

### 1.—*Unfit Dwelling-Houses:*

Inspection (1) Total number of dwelling houses inspected for housing defects under Public Health or Housing Acts .. .. .	2031
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulation, 1910..	1740
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. ..	313
(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 ..	972

### 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.. .. .	656
--	-----

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 .. .. . | 353 |
| (2) Number of dwelling houses in which defects were remedied :—  |     |
| (a) by Owners .. .. .  | 299 |
| (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 .. ..   | 3    |
| (2) Number of dwelling-houses in respect of which Closing Orders were made .. ..   | 11   |
| (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. |

*Note.*—Five dwelling-houses were demolished voluntarily by owner on account of their dangerous condition.



<i>No.</i>	<i>Date.</i>	<i>Nature of Case.</i>	<i>Result.</i>
1923.			
1.	Mar. 15	Exposure for sale of unsound meat ..	Fined £10 and costs.
2.	„ 15	Exposure for sale of unsound meat ..	Fined £10 and costs.
3.	„ 19	Selling to the prejudice of the purchaser milk deficient in fat to the extent of 15% .. .. .	Order to pay costs.
4.	Apr. 19	Non-compliance with notice to abate nuisance .. .. .	Order made to abate nuisance within 28 days.
5.	May 14	Allowing carcase of diseased cow to be deposited on premises .. ..	Fined £5.
6.	„ 14	Ditto .. ..	Fined £10 and £5/5/- costs.
7.	„ 18	For aiding and abetting case No. 5 ..	Fined £10 and costs.
8.	July 23	Selling after prescribed closing time (Shops Act) .. .. .	Fined £10.
9.	„ 23	Ditto .. ..	Fined £1.
10.	„ 23	Ditto .. ..	Dismissed.
11.	„ 30	Ditto .. ..	Fined 10/-.
12.	„ 30	Ditto .. ..	Dismissed.
13.	Sep. 30	Non-compliance with Magistrate's Order to abate nuisance .. ..	Fined £1.







