

[Report 1933] / Medical Officer of Health, Warrington County Borough.

Contributors

Warrington (England). County Borough Council.

Publication/Creation

1933

Persistent URL

<https://wellcomecollection.org/works/de88edeg>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

2664880

COUNTY BOROUGH OF WARRINGTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

SANITARY CONDITION OF WARRINGTON DURING THE YEAR 1933.

G. W. N. JOSEPH, M.D., D.P.H.,

Medical Officer of Health, School Medical Officer, Tuberculosis Officer,
and Medical Superintendent of Corporation Hospitals, Sanatorium and
Maternity Home.



WARRINGTON:

MACKIE & CO., LTD., THE GUARDIAN PRESS.

66204



COUNTY BOROUGH OF WARRINGTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

**SANITARY CONDITION OF WARRINGTON
DURING THE YEAR 1933.**

G. W. N. JOSEPH, M.D., D.P.H.,

Medical Officer of Health, School Medical Officer, Tuberculosis Officer,
and Medical Superintendent of Corporation Hospitals, Sanatorium and
Maternity Home.



WARRINGTON:

MACKIE & CO., LTD., THE GUARDIAN PRESS.

COUNTY BOROUGH OF WARRINGTON
ANNUAL REPORT



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

County Borough of Warrington

1933.

HEALTH COMMITTEE.

Mayor :

COUNCILLOR JOHN BURGESS STARKEY, J.P.

Chairman :

ALDERMAN FRANK STRINGER, J.P.

Deputy-Chairman :

ALDERMAN DAVID PLINSTON, J.P.

ALDERMAN TINNION, J.P.	COUNCILLOR MAKIN
„ BROADHURST, J.P.	(Appointed Nov., 1933).
„ ARCHER.	„ POOLE, J.P.
COUNCILLOR CONSTABLE	„ ROBERTS.
(Resigned Nov., 1933).	„ SEABURY.
„ CROWE, J.P.	„ SMITH, J.P.
„ FLANAGHAN	(Resigned Nov., 1933).
(Appointed Nov., 1933).	„ THOMASSON.
„ LOCKER, J.P.	

Maternity and Child Welfare Committee.

All the members of the Health Committee, together with the following Co-opted Members :—

MRS. HAZELDENE.

Miss CLARKE.

Blind Persons Act Sub-Committee.

All the members of the Health Committee, together with the following Co-opted Members :—

MR. S. W. JEFFERY, J.P.
 „ REX FURNESS
 „ J. HAWTHORN.
 „ KILDUFF
 „ R. CARTWRIGHT
 (Appointed Nov., 1933).
 „ O. PERCIVAL
 (Resigned Nov., 1933).
 „ WARBURTON.

Boarding Out Committee :

(Sect. 98 Public Assistance Order, 1930).

All the Members of the Maternity and Child Welfare Committee, together with Mrs. Cunningham, Mrs. Jowett and Mrs. Starkey.

Town Clerk :

A. T. HALLAWAY, Esq.

INDEX.

Ambulance Work.....	27	Maternal Mortality	17
Ante-natal Work	35	Maternity and Child Welfare	
Artificial Pneumothorax	88	Committee	3
Artificial Sunlight Treatment	46	Maternity and Child Welfare	
Area	9	Work	28, 29
Births.....	9	Maternity Home	39
Births, Notification of	30	Measles	78
Bacteriological Examinations	22	Meat Regulations.....	64
Blindness, Prevention of.....	93	Meat Inspection.....	64
Blind Persons Act		Meat & Foodstuffs Condemned	65
Sub-Committee	3	Mental Defectives	19
Blind Persons, Welfare of.....	96	Midwives	30
Blind Persons, Cost of Services	29	Milk Supply	62
Boarded-Out Children	45	Milk for Mothers & Children	44
Boarded-Out Committee.....	3	Mortality Rates	13
Borough General Hospital...24, 118		Non-Pulmonary Tuberculosis ..	90
Borough General Hospital—		Officials, List of	5-6
Maternity Work	119	Ophthalmia Neonatorum	44, 93
Borough Extension	9	Orthopædic Clinic	29, 45, 120
Cancer	81	Padgate Cottage Homes	27
Children's Act, 1908	32	Pathological Examinations	23
Children 1 to 5 years.....	16-33	Pneumonia	78
Clinics	28	Places of Entertainment	53
Consultation Centres.....	37	Population.....	9
Dental Clinic	39, 120	Post-natal Work.....	36
Death Rate	10	Premises and Occupations	
Death Rates, Lancashire Towns	14	controlled by Bye-laws or	
Deaths, Causes of	10, 11	Regulations	50
Diphtheria	78, 81	Puerperal Fever.....	18, 78
Domiciliary Medical Services	19, 103	Radium Treatment	83
Enteric Fever	78	Sanitary Circumstances of the	
Encephalitis Lethargica.....	79	Area	47
Factories and Workshops.....	50, 52	Sanitary Inspector's Work	48
Food Supply, Supervision of....	62	Scarlet Fever	78
Foods and Drugs Act	65-68	Smallpox Hospital	23
Health Committee	3	Smoke Abatement	49
Health Propaganda	94	School Hygiene	54
Health Services, Cost of	29	Still Births	16
Health Services in the Borough	19	Social Conditions.....	8
Health Visitors' Work	30	Tuberculosis.....	83
Hefferston Grange Sanatorium	87	Tuberculosis Regulations	122
Home Nursing.....	21, 44	Uncertified Deaths	14
Housing.....	56	Unmarried Mothers	27
Hospital Accommodation	23	Vaccination	76
Hospital Accommodation for		Veneral Diseases	91, 131
Infants and Children.....	43	Vital Statistics.....	8, 13
Infectious Diseases	75, 115	Water Supply	74
Isolation Hospital, Aikin St.	80	Whooping Cough.....	79
Infant Mortality.....	14, 15	Whitecross Institution, Mental	
Laboratory Facilities	22	Wards	20
Local Government Act, 1929....	19	X-Ray Examination	83, 85
Marriages	10		

PUBLIC HEALTH STAFF.

Office Held	Name.	Qualifications.	Other Offices Held.
(a) <i>Medical.</i> Medical Officer of Health	G. W. N. Joseph	M.D., B.Ch., D.P.H.	School Medical Officer, Tuberculosis Officer, Maternity and Child Welfare Officer, Medical Superintendent of Corporation Hospitals.
Asst. Medical Officer of Health	C. A. Paulusz	L.R.C.P., L.R.C.S. (Edin.), L.R.F.P.&S. (Glas.), L.M.R.C.P.I., D.P.H.	Assistant School Medical Officer.
" " "	Annie Mather	M.B., Ch.B., D.P.H.	Assistant Maternity and Child Welfare Officer.
" " "	J. A. Delmege, O.B.E.	M.R.C.S., L.R.C.P., D.P.H.	Assistant Tuberculosis Officer.
Male Resident Medical Officer (Borough General Hospital)	Max. W. Robinson	M.R.C.S. (Eng.) L.R.C.P. (Lond.)	
Female Resident Medical Officer (Borough General Hospital)	Winifred M. Doran	L.R.C.P. & L.R.C.S. (Edin.), L.R.F.P.&S. (Glasgow)	
Visiting Medical Officer (Borough General Hospital)	Ian Ogilvie	M.B., Ch.B.	Part time.
Veneral Diseases Officer	Ellis Pigott	M.B., Ch.B.	Part time.
School Dental Officer	Edward Crosbie	L.D.S.	
Dental Officer (Borough General Hospital)	J. Ellis	L.D.S.	Part time.
Throat and Nose Surgeon	Geo. Binns	M.B., Ch.B.	Part time.
X-Ray and Eye Surgeon	Ed. Fox	F.R.C.S.	Part time.
Orthopædic Surgeon	Harman Taylor	M.B., Ch.B.	Part time.
Obstetric Surgeon (Cæsarian operations)	C. M. Eynon	M.D., C.M., F.R.C.S.	Part time.
District Medical Officer (1)	D. Meikle	M.B., Ch.B.	Part time.
District Medical Officer (2)	G. A. Sinclair	M.B., Ch.B.	Part time.
Public Vaccinator (1)	Jas. Bennett	M.R.C.S., L.R.C.P., D.P.H.	Part time.
Public Vaccinator (2)	G. A. Sinclair	M.B., Ch.B.	Part time.
Pathologist	H. A. Mitchell	M.D.	Part time.
(b) <i>Others.</i> Veterinary Surgeon (1)	H. H. Ferguson	M.R.C.V.S.	Part time.
Veterinary Surgeon (2)	C. T. Trevers	M.R.C.V.S.	Part time.
Public Analyst	J. G. Sherratt	B.Sc., F.I.C.	Analyst under the Fertilizer and Feeding Stuffs Act.
Sanitary Inspector	W. T. Flood (Chief)	Cert. of R. San. Inst.	Inspector of Food and Drugs. Inspector of Contagious Diseases of Animals. Inspector of Canal Boats. Inspector of Shops Acts. Inspector of Poisons and Pharmacy Acts.
" "	John Stevens	R.S.I. Certificate, Meat Inspector's Cert.	Inspector under Shops Acts. Housing Inspector.
" "	James Snailham	R.S.I. Certificate, Meat Inspector's Cert.	Special Tuberculosis Work.
" "	John C. Cook	R.S.I. Certificate, Meat Inspector's Cert.	Infectious Disease Work. (Died)
" "	Ernest Barton	R.S.I. Certificate, Meat Inspector's Cert.	General District Work.
" "	Wm. H. Molyneaux	R.S.I. Certificate and Meat Certificate.	General District Work.
" "	Douglas E. Watson	R.S.I. Certificate and Meat Certificate.	General District Work (Appointed 26 June, 1933)
" "	Robert L. Winstanley	R.S.I. Certificate	Infectious Diseases Work (Appointed 18 Dec., 1933)

PUBLIC HEALTH STAFF—continued.

Office Held.	Name.	Qualifications.	Other Offices Held.
(b) <i>Others (continued).</i> Vaccination Officer	A. E. Price		Part time.
Matron of Isolation Hospital	Miss D. Sandy	General Trained, Fever Trained, State Registered.	Superintendent of Nurses
Matron of Borough General Hospital	Miss Hannen	General Trained, C.M.B. Certificate, State Registered Nurse, F.B.C.N.	
Matron of Hefferston Grange, Sanatorium, Weaverham	Miss E. F. Yaxley	Tuberculosis and Fever Trained	
Maternity Home	Miss M. Morris	General Trained C.M.B. Cert.	
Steward, Borough General Hospital	Edward J. Marron		
Inspector of Midwives	Miss Knott	C.M.B. Cert., R.S.I. Cert.	Also Health Visitor.
Health Visitor	Mrs. Washington	C.M.B. Cert., R.S.I. Cert.	—
" "	Miss Barlow	C.M.B. Cert., R.S.I. Cert.	—
" "	Miss Cawley	General Training, C.M.B. Cert. and Health Visitor's Cert.	—
" "	Miss Sampson	General Training, C.M.B. Cert.	—
" "	Miss Mawdsley	General Training, C.M.B. Cert. and Health Visitor's Cert.	—
Tuberculosis Nurse	Miss Pettie	R.S.I. Certificate	—
School Nurse	Miss Brown	General Certificate	
" "	Miss Griffith	General Certificate, Hygiene Cert. (Queen's)	
" "	Miss Ritson	General Certificate	(Deceased 16th Jan., 1933)
" "	Miss Wright	General Certificate Fever Trained	
" "	Miss Webb	General Certificate, Children's and Fever Hospitals Certificates	
" "	Miss Gray	General Certificate, C.M.B., and Health Visitor's Certificate.	(Appointed 1st March, 1933).
Clerks	Wm. Lawless		Chief Clerk.
"	Wm. Knowles		Accounts and Stores Clerk.
"	Miss V. Dwerryhouse		Typist.
"	Ernest Tarbuck		Clerk.
"	Bezley Trepasa		"
"	Harold Plinston		" T.B. Dispensary.
"	Albert Duckworth		Junior Clerk, commenced duty 29th January, 1934.

TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.

GENTLEMEN,

I beg to submit to you my Twenty-First Annual Report (and the 57th of the series) on the Health Conditions of the Borough, namely, that for the year 1933.

It contains the information required by the Minister of Health and in accordance with Circular 1346 as to the "Contents and Arrangement of the Annual Reports of Medical Officers of Health" it is an "Ordinary" Report as distinct from the Quinquennial "Survey" Report, which will be again due for the year 1935.

The absorption within the Town of small areas of Lancashire and Cheshire under the Borough Extension Act of 1932 has increased our population slightly.

The **Population** at the mid-year 1933 was assessed by the Registrar-General as 81,710, compared with 79,322 at the Census in 1931. In calculating the Birth and Death Rates, however, we are asked on this occasion to use the figure 81,080 to make allowance for the change in the area. (See page 9).

Our **General Death Rate** for 1933 was 12.4 per 1,000 persons living, compared with 12.2 per 1,000 the previous year.

The **Birth Rate** continues to fall, and was 16.02 per 1,000 compared with 17.3 per 1,000 in 1932.

The **Infantile Mortality** was 73 per 1,000 children born, compared with 87 per 1,000 the year before.

Not only do these Statistics compare favourably with those for England and Wales as a whole (see pages 13 and 14), but in certain respects it was a record year.

So far as infants under 1 year of age are concerned there were fewer deaths (only 95) during 1933 than in any year of which we can trace records, and we have searched back to 1877.

Again the incidence of tuberculosis as based on the notifications received is lower than for any year since notification was instituted, and the Death Rate from this disease is the lowest on record.

Throughout the Report the Statistics show what a very large amount of work was carried out during 1933. In certain branches we have received great assistance from voluntary workers, and I would like once again to express our gratitude to the Ladies' Committee of the Mothers' and Babies' Welfare for their invaluable assistance at the Consultation Centres.

We are also indebted to the members of the Warrington Rotary Club for providing a week's holiday at Prestatyn for a number of necessitous mothers.

I have to record with regret the sudden death of Inspector Cook, one of the Staff of the Health Department, who died whilst engaged in his duties at the office.

For all the valuable work carried out in every department during 1933 I have to thank the whole of the Staff, and I would like to take this opportunity of placing on record my appreciation of the cordial support always afforded me by the members of the Health Committee and the Council.

I am, Ladies and Gentlemen,

Your Obedient Servant,

G. W. N. JOSEPH.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

SOCIAL CONDITIONS.—Warrington is mainly an industrial town, and owing to the variety of manufactures carried on, *e.g.*, wire, iron and steel, chemicals, soap, cotton, glass, brewing tanning, etc., does not suffer from unemployment to the same extent as some of the other Lancashire County Boroughs. The figures for unemployment kindly supplied me by Mr. Fielder, show the position in Warrington for the four years 1930-1933:—

TOTAL UNEMPLOYED.

1930	1931.	1932	1933
27.1.30--5039	26.1.31--6769	25.1.32--6851	23.1.33--6657
22.12.30--6719	21.12.31--5422	19.12.32--6392	18.12.33--4282

Some remarks on the physical features and general character of the town were included in the Report for 1919.

VITAL STATISTICS.

Area	4532	acres		
Population (Census 1931)	79322			
" (R.G. 1933) (Extended Borough).....	81710			
Number of separate dwellings occupied (1931).....	17341			
Number of families or separate occupiers (1931)	18474			
Rateable value (31st March, 1933).....	£349062			
Sum represented by a penny rate.....	£1350			
	Total	M.	F.	
Live Births { Legitimate	1265	643	622	} Birth Rate 16.02
{ Illegitimate	34	17	17	
Still Births.....	70	Rate per 1000 total births.....		51.1
Deaths.....	1007	Death Rate.....		12.4
Percentage of total deaths occurring in Public Institutions.....				45.95 %
Number of women dying in, or in con- | from sepsis				3
sequence of, childbirth..... | from other causes				3
Deaths of Infants under One year of age per 1000 live births.....				73
Legitimate 94; Illegitimate 1	Total.....			95
Deaths from Measles (All ages)				2
" " Whooping Cough (All ages)				6
" " Diarrhoea (under 2 years of age)				9

AREA.—The Area of the Borough was increased by 1,387 acres from the 1st April, 1933, by the operation of the Warrington Extension Act, 1932, which brought the following Areas within the Borough :—

	Population.	Area by acres.	Rateable Value.
Burtonwood (part of)	21	178	£265
Great Sankey	Nil	47	5
Winwick-with-Hulme (part of) (including Orford)	1614	669	7099
Grappenhall (part of)	173	93	1880
Latchford Without (part of)	Nil	9	184
Stockton Heath (part of)	Nil	4	86
Walton Inferior	333	387	2919
	<u>2141</u>	<u>1387</u>	<u>£12,438</u>

The total acreage of the Borough, therefore, was increased from 3,145 to 4,532 acres as from that date.

POPULATION.—The Registrar-General's estimate for the mid-year 1933 was 81,710 (compared with the 1931 Census figures of 79,322), and last year's estimate of 79,670.

The Registrar-General, in furnishing the above estimate, however, says that "The above mid-year population relates to the Area as constituted after the change in boundary, but as the numbers of births and deaths furnished by the Registrar-General for the year include, so far as relates to the portion of the year prior to the change, those occurring in the old Area, adjustment requires to be made in the above-mentioned population (81,710) to make allowance for the change of area, and the following adjusted figure should accordingly be used for the calculation of Birth and Death Rates for the year 1933 :—81,080."

This has been done, and the statistics that follow are based on this adjusted population.

The number of dwellings and persons in the various wards of the town, according to the Census, were given in the 1931 Report. The decennial increases of population, too, from 1831 to 1931, were shown in that Report.

BIRTHS.—There were 1,417 births registered of children born in this borough in 1933; 133 births belonged to parents resident outside Warrington, while 15 children were born outside the borough to parents resident within.

Deducting the 133 births from the total registered, 1,417, and adding the 15 births, we have accredited to Warrington 1,299 births (660 males and 639 females).

The birth-rate for Warrington per 1,000 living of the population was 16.02 in 1933, compared with 17.3 in 1932, and 14.4 for England and Wales as a whole.

The total number of illegitimate births was 34 (17 males, 17 females). This number shows a decrease from the previous year, when 44 such children were born.

MARRIAGES.—There were 738 marriages during the year, the rate per 1,000 of population being 9.0. In 1932 there were 744 marriages, giving a rate of 9.3.

DEATHS.—1,105 deaths were registered as occurring in the Borough during 1933. Of these, however, 151 were non-residents. During the same period 53 deaths have been reported as having occurred outside the district of persons usually resident in Warrington. Adding these and deducting the non-residents we have a total of 1,007 deaths accredited to Warrington for 1933, compared with 974 in 1932, or an increase of 33.

This gives us a death-rate of 12.4 per 1,000 persons living during 1933, compared with 12.2 in 1932, and 13.4 in 1931.

The death-rate for England and Wales was 12.3 for the 118 County Boroughs and great towns 12.2, and for London 12.2.

Our statistics again compare favourably with those of the other Lancashire industrial towns as taken from the Annual Return of the Registrar-General (see page 14). In fact it will be seen that Warrington has on this occasion the lowest general death-rate of them all.

CAUSES OF DEATH.—The causes of death at the different periods of life are given in the table on page 11.

Of the total 1,007 deaths no less than 162 were aged 75 years or over (compared with 158 in 1932 and 103 in 1931).

One-third of the deaths occurred in the age periods 65 onwards.

The following figures show the ages at time of death of persons aged more than 75 years:—

75/80 years	80/85 years	85/90 years	over 90 years
85	52	22	3 = 162

The death-rate amongst males was heavier than amongst females at every age period except from 25 to 35 years of age and from 65 years of age onwards.

CAUSES OF DEATH IN ORDER OF FREQUENCY.

	1933	1932	1931
1. Heart Disease	175 = 17.4%	189 = 19.4%	185 = 17.04%
2. Cancer	126 = 12.5%	111 = 11.4%	111 = 10.3%
3. Tuberculosis	80 = 7.9%	90 = 9.2%	104 = 9.8%
4. Pneumonia	75 = 7.4%	84 = 8.6%	87 = 8.1%
5. Congenital Debility, Premature Birth, Mal- formations, &c.	53 = 5.2%	58 = 5.9%	79 = 7.3%
6. Bronchitis	40 = 3.9%	56 = 5.7%	71 = 6.6%
7. Other Circulatory Diseases (<i>e.g.</i> , Ar- terio Sclerosis).....	39 = 3.8%	37 = 3.8%	40 = 3.7%
8. Cerebral Hæmorrhage	43 = 4.2%	23 = 2.35%	37 = 3.4%
9. Digestive Diseases.....	20 = 1.9%	23 = 2.35%	—
10. Measles	—	20 = 2.05%	—
11. Acute and Chronic Nephritis	22 = 2.17%	20 = 2.05%	—
Total Deaths =	1007 (1933)	974 (1932)	1074 (1931)

Any comparison of the figures for 1933 with previous years may be misleading owing to the increase in population following the extension of the Borough Boundary.

On the whole the statistics are similar, but there is an increase in the number of deaths ascribed to Cancer and Cerebral Hæmorrhage.

For some further remarks on *Cancer* see page 81.

The Table on page 13 compares the vital statistics of Warrington with the average for the County Boroughs and for England and Wales as a whole.

Table comparing the Vital Statistics of Warrington with the average for the County Boroughs and for England and Wales as a whole.
(The mortality rates for England and Wales refer to the whole population but for London and the towns to civilians only.)

	Rate per 1,000 Total Population		Annual Death-rate per 1,000 Population.								Rate per 1,000 Live Births.		Percentage of Total Deaths.					
	Live Births.	Still-births.	All Causes.	Typhoid and Paratyphoid Fevers.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.	Diarrhea and Enteritis (under two years).	Total Deaths under one year.	Certified by Registered Medical Practitioners.	Inquest Cases.	Certified by Coroner after P.M.	No Inquest.	Uncertified Causes of Death.
England and Wales	14.4	0.62	12.3	0.01	0.00	0.05	0.02	0.05	0.07	0.57	0.56	7.0	64	90.9	6.3	1.9	0.9	13
118 County Boroughs and Great Towns, including London	14.4	0.61	12.6	0.00	0.00	0.07	0.02	0.06	0.08	0.55	0.56	9.2	68	91.2	5.8	2.5	0.5	
132 Smaller Towns (Estimated Populations, 25,000—50,000) at census 1931	14.3	0.62	11.7	0.01	0.00	0.04	0.02	0.05	0.05	0.54	0.54	5.5	60	92.4	5.3	1.4	0.9	
London	13.2	0.45	12.5	0.00	0.00	0.02	0.02	0.08	0.08	0.52	0.62	11.7	60	88.5	6.2	5.3	0.0	
Warrington	16.0	0.8	12.4	0.00	0.00	0.02	0.01	0.07	0.08	0.87	0.64	6.9	70	91.4	6.0	0.6	1.8	

The maternal mortality rates for England and Wales are as follows: { per 1,000 Live Births... 1.79
 { " " Total Births ... 1.71
 { per 1,000 Live Births ... 2.30
 { " " Total Births... 2.19

County Borough of Warrington: { per 1,000 Live Births... 2.30
 { " " Total Births... 2.19

Puerperal Sepsis. Others. Total.
 1.79 2.63 4.42
 1.71 2.52 4.23
 2.30 2.30 4.6
 2.19 2.19 4.38

The following table compares our main Statistics with those of other Lancashire Industrial Towns.

	Population.	Birth Rate.	Death Rate.	Infantile Death Rate.
England and Wales ...	...	14·4	12·8	64
Barrow-in-Furness ...	65,030	18·3	12·5	65
Blackburn ...	121,400	12·0	14·4	71
Bolton ...	177,000	12·0	14·1	78
Blackpool ...	104,100	9·8	14·8	69
Bootle ...	77,210	21·4	13·9	89
Burnley ...	95,900	12·1	14·9	75
Bury ...	59,800	12·6	13·9	52
Liverpool ...	859,200	19·7	14·5	98
Manchester ...	758,140	14·7	13·6	75
Oldham ...	136,700	12·2	15·0	72
Preston ...	117,800	14·6	13·4	88
Rochdale ...	95,370	11·4	15·0	89
St Helens ...	107,600	18·0	14·0	116
Salford ...	217,000	15·2	13·9	80
Southport ...	78,980	9·7	15·1	59
Warrington ..	81,710	16·0	12·4	73
Wigan ...	85,150	16·6	14·4	110

UNCERTIFIED DEATHS.

There were, altogether, 20 deaths not certified by a medical practitioner.

Under 1 year	1/5 years	5/15 years	15/25 years	25/65 years	65 and upwards	Total
2	2	2	—	11	3	20

INFANT MORTALITY.

There were only 95 deaths of infants under 1 year of age in the Borough during 1933, compared with 121 the previous year. This number (95) is the lowest ever recorded for Warrington. The infant mortality rate being based on the number of children born during the year, which in 1933 was 1,299, gives us an infant death-rate of 73 per 1,000 children born, compared with 64 per 1,000 for England and Wales, and 68 per 1,000 for the average of the County Boroughs and large towns. No less than 60 of the 95 deaths occurred during the first month of life, and may be ascribed largely to ante-natal factors influencing the health of the child before birth. Forty, or nearly half the deaths, were due to premature birth or congenital malformations. To what extent the use of abortifacients may be to blame it is impossible to say,

but the opinion of our health visitors is that a good deal of this goes on; 46 of the 95 deaths occurred during the first quarter of the year.

No deaths were recorded from measles.

The Health Visitors make careful investigations into infant deaths, and reported:—

Home conditions unsatisfactory	10
Definite over-crowding	1
Concurrent illness in mother or father	2

Out of 1,299 births 626 children attended the Centres, and of those attending 13 died (total infant deaths 95). Among infants attending our Consultation Centres the rate was only 20.7 per 1,000, compared with a death-rate of 121.8 per 1,000 of those who did not attend.

INFANT DEATHS DURING THE YEAR 1933.
(Under 1 year.)

CAUSES OF DEATH	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
Smallpox.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chickenpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough .....	.....	.....	.....	1	1	.....	.....	1	.....	2
Diphtheria and Croup .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erysipelas .....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Tuberculous Meningitis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Abdominal Tuberculosis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other T.B. Diseases .....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Meningitis (not T.B.) .....	.....	.....	1	.....	1	.....	.....	1	.....	2
Convulsions	1	2	.....	1	4	.....	1	.....	.....	5
Laryngitis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bronchitis .....	.....	.....	.....	.....	.....	2	1	1	2	6
Pneumonia (all forms)	1	.....	.....	.....	1	5	4	2	4	16
Diarrhœa .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Enteritis .....	.....	1	.....	2	3	3	1	.....	.....	7
Gastritis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rickets .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Suffocation (overlying) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Injury at birth .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atelectasis	1	.....	.....	.....	1	.....	.....	.....	.....	1
Congenital Malformation.....	2	2	2	2	8	.....	.....	.....	.....	8
Premature Birth.....	28	2	2	.....	32	.....	.....	.....	.....	32
Atrophy, Debility and Marasmus	2	2	1	1	6	4	1	.....	.....	11
Other Causes .....	.....	1	1	1	3	.....	.....	.....	.....	3
	35	10	7	8	60	14	8	6	7	95

CHILDREN AGED 1 TO 5 YEARS.

The following table shows the number of deaths up to 5 years of age for the past 6 years :—

	No. of Births.	—1	1—2	2—3	3—4	4—5	Total
1933	M.R., 73 1299	95	21	10	5	4	135
1932	M.R., 87 1381	121	28	17	7	8	181
1931	M.R., 100 1484	149	36	8	7	11	211
1930	M.R., 65 1554	101	30	18	8	12	169
1929	M.R., 100 1547	155	53	26	21	12	267
1928	M.R., 64 1557	100	30	14	6	10	160

(M.R., Mortality Rate).

Some particulars with regard to the work of the Health Visitors amongst children aged 1 to 5 years are given on pages 32, 33 and 34.

STILL-BIRTH INVESTIGATIONS.

Altogether 70 still-births occurring in the town during 1933 came to our knowledge, and in the majority of instances visits were paid and investigations were made by the Health Visitors into the cases. These occurred as follows :—

In the practices of doctors	18
„ „ „ of midwives	11
In institutions	41
	<hr/>
	70
	<hr/>

Particulars were obtained of 65 cases.

The probable causes ascribed for the death of the foetus were :

Causes acting before labour :—

Maceration	16
Ante-partum Hæmorrhage	7
Illness of the Mother	6
Albuminuria	10
	<hr/>
	39
	<hr/>

Causes acting during labour :—

Malpresentation	3
Deformity of the Child	18
Difficult labour	5
	<hr/>
	26
	<hr/>

MATERNAL MORTALITY.

There were 6 deaths of mothers due to child-birth, compared with 4 in 1932 and 10 in 1931.

This gives us a Maternal Mortality Rate of 4.38 per 1,000 (live and still) births.

Careful investigations were made in every case in collaboration with the doctor who had attended the case, and full particulars were furnished to the Ministry of Health.

The following points were elicited :—

CAUSES—

Puerperal septicæmia	3
Eclampsia	1
Albuminuria	1
Post-partum hæmorrhage	1
	—
	6
	—

HOME CONDITIONS.—

In good circumstances	=	3
In poor circumstances	=	3

AGE AND PARITY.—

Primiparas (1st confinement)	=	3
Multiparas (not 1st confinement)	=	3
Ages ranged from 22—38 (average 27 years).		

SUPERVISION.—

3 cases attended Ante-Natal Clinic.
2 cases attended own doctor.
1 cases had no ante-natal supervision.

WHERE CONFINEMENT TOOK PLACE.—

Borough General Hospital.—4 cases (2 emergencies).

1 Eclampsia.
1 Post-partum hæmorrhage.
1 Albuminuria.
1 Puerperal sepsis.

Own Home.—1 case.

Septicæmia following abortion.

Maternity Home.—1 case.

1 Puerperal sepsis.

MATERNAL MORTALITY.

Date	No. of Maternal deaths	Infant Mortality rate.	Maternal Mortality rate per 1000 births.		No. who had ante-natal supervision.				No. who had no A.N. supervision.	Total attending A.N.C.	Not attending A.N.C.	No. of Births living and still-born.
			War-rington.	Eng-land & Wales.	A.N. clinic	Own Dr.	Mid-wife.	Total				
1927	10	77	6.4	4.11	2	2	1	5	5	449 (28%)	1107	1556
1928	7	64	4.49	4.43	1	1	3	5	2	477 (30.5%)	1080	1557
1929	6	100	3.7	4.33	-	1	-	1	5	496 (31%)	1104	1600
1930	6	65	3.6	4.40	-	3	-	3	3	684 (44%)	870	1654
1931	19	100	5.9	4.11	2	4	2	8	2	817 (48%)	854	1671
1932	4	87	2.7	4.24	3	1	-	4	-	893 (51%)	658	1475
1933	6	73	4.38	4.23	3	2	-	5	1	870 (58%)	832	1369

PUERPERAL FEVER.

	1933	1932	1931	1930	1929	1928	1927
No. of cases.	3	4	6	4	3	7	8
Deaths	3	1	5	1	2	2	3
Mort. Rate .....	.03	.01	.06	.01	.02	.02	.03
per 1,000 population.							

No. of Births (including Stillbirths) }	1369	1475	1671	1654	1600	1557	1556
Mort. Rate % on No. of Births }	= .2%	= .06%	= .3%	= .06%	= .12%	= .12%	= .19%

SECTION B.

General Provision of Health Services for the Area.

LOCAL GOVERNMENT ACT, 1929.

The Local Authority's Scheme under the above Act and a survey of the transferred Poor Law Hospital, etc., were contained in the Annual Report for 1930, and need not be repeated here.

Particulars of the transferred services for Vaccination, Infant Life Protection, Hospitals, etc., will be found under the appropriate headings.

DISTRICT MEDICAL SERVICES.

The two part-time district Medical Officers who were transferred to the Local Authority carried out their duties carefully during the year. Up to the present, although these officers work in close co-operation with the Health Department, little change has been made in the administration of these services.

	No. 1 District (Dr. Sinclair)	No. 2 District (Dr. Meikle)
Number of sick persons seen during 1933...	730	523
Number of visits to patients' homes	560	187
Number of consultations at Surgery	2000	426

The increase in the amount of work performed by the two doctors, due to various causes, such as re-housing of the population from the poorer quarters of the town, discontinuance of outdoor medical attention on the part of the Infirmary staff, increased unemployment, effect of the National Health Insurance and Contributory Pensions Act, 1932, etc., etc., necessitated a revision of the whole scheme of domiciliary medical service for poor people. The Public Assistance Committee, therefore, at the end of 1933, were considering a preliminary report on the subject from the Medical Officer of Health (copy contained in Appendix, pages 103 *et seq.*). The alternatives presented seemed to be between an increase of staff and added remuneration under the old scheme, or a "free choice of doctor" system.

INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

The Lancashire Mental Hospitals Board is the Local Authority under the Mental Deficiency Act, and all mental defectives other than educable children of school age are notified to this body.

A special block for cases of mental illness is administered by the Public Assistance Committee at the Whitecross Institution. Amongst these there are often a few cases of mentally defective children, who would be much better somewhere else, but the Lancashire Mental Hospitals Board are unable to find other accommodation for them.

MENTAL WARDS OF THE WHITECROSS INSTITUTION.

These are administered by the Public Assistance Committee. The services of Dr. Ogilvie as Visiting Medical Officer and the two Resident Medical Officers of the General Hospital are available for the patients in these wards.

A trained nurse, too, from the Hospital, pays daily visits, and is available for any dressings or special treatments ordered by the Medical Officer as and when required.

The number of staff and the accommodation available were given in last year's Report.

Classification of accommodation for mental cases and the number of beds occupied on the 31st December, 1933: —

Classification of Wards	No. of Wards	BEDS								
		Men		Women		Children		Total		
		Provided	Occupied	Provided	Occupied	Provided	Occupied	Provided	Occupied	
Mental	16									
(a) Lunacy Act, 1890										
(i) Short Stay		12	5	6	3	—	—	18	8	
(ii) Long Stay		63	56	55	55	—	—	118	111	
(b) Mental Treatment Act, 1930										
(i) Voluntary		—		—		—		—		
(ii) Temporary										
Mental Defectives										
Other Cases		12	8	12	10		1	24	19	
		16	87	69	73	68	—	1	160	138

STATISTICS RELATING TO YEAR ENDED
31st DECEMBER, 1933.

	M.	W.	C.	T.
In Mental Ward on 31st December, 1933... =	69	68	1	138
Total number of admissions	94	91	1	186
Total number of deaths	22	20	—	42
Total number of discharges	62	72	1	135
Duration of stay of all cases—				
(a) Four weeks or less	61	45	—	106
(b) Exceeding 4 weeks but under 13 weeks =	16	26	—	42
(c) Exceeding 13 weeks	76	89	2	167
Number of beds occupied—				
(a) Average during the year	64	67	1	132
(b) Highest on 1/12/33	70	73	1	144
(c) Lowest on 25 and 26/3/33	56	62	1	119

MENTAL TREATMENT ACT, 1930.

During the year the Lancashire Mental Hospitals Board entered into an arrangement with Warrington Infirmary to subsidise the Clinic for Early Mental Cases at that Institution. This Early Clinic, under the supervision of a Mental Specialist, was first inaugurated in 1924.

1.—PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

A complete list of the various officers, medical and otherwise, discharging duties whole or part-time for the Local Authority in connection with any of the Health Services, is given at the beginning of the Report. (Pages 5 and 6).

2.—NURSING IN THE HOME.

The arrangements both for (a) general nursing and (b) the nursing of infectious diseases were fully described in the Report for 1930.

The visits during 1933 were as follows:—Cases. Visits.

Ophthalmia	2	62
Whooping Cough	2	45
Puerperal Fever	1	19
Measles	7	136
Others	9	—

3.—MIDWIVES.

Particulars of the number of midwives practising in the area are given on page 30.

There are no arrangements for the employment of or for subsidising Midwives by the L.A. The L.A. pays the Midwives' fee in cases of necessitous mothers who are unable to do so themselves.

4.—LABORATORY FACILITIES.

There has been no change in the arrangements for the examination or analysis of clinical matter (pathological specimens, sputum, swabs, etc.), water, milk, and foodstuffs.

A summary of the work under these headings is given below :

(a) GENERAL BACTERIOLOGICAL WORK (Health Department, Sankey Street, Warrington).—All specimens are examined free of cost to general practitioners.

DIPHTHERIA (swabs from throats).

1. Cases in Aikin Street Hospital	136	
2. Private practitioner's cases	286	
3. Cases from Health Department	69	
4. Cases from Borough General Hospital	48	
5. Cases from Infirmary.....	8	
6. Before discharge from Isolation Hospital	322	
7. Contacts.....	220	
Total	1089	

ENTERIC FEVER (Widal blood test).

For diagnosis of cases in Aikin Street Hospital	9	} 24
„ „ „ Borough General Hospital	9	
„ „ „ of private practitioners	6	

TUBERCULOSIS (specimen of sputum).

For private practitioners	96	} 305
For Dispensary	90	
For Hefferston Sanatorium	52	
For Borough General Hospital	65	
For Infirmary	1	
For Aikin Street Hospital	1	

RINGWORM.

For diagnosis by School Medical Officer.....	33	33
--	----	----

MISCELLANEOUS.

Venereal diseases.....	219	} 220
Other cases	1	
	<u>1,671</u>	

(b) WASSERMAN BLOOD EXAMINATIONS (Professor Maitland, Public Health Laboratory, Manchester).—See under V.D. Scheme, page 91.

(c) PATHOLOGICAL EXAMINATIONS (Dr. H. A. Mitchell, Infirmary Laboratory, Legh Street, Warrington).—Twenty-five examinations were made.

(d) WATER, MILK AND FOODSTUFFS.—Bacteriological examinations, Public Health Laboratory, Manchester, pages 74 and 62.

Chemical Analyses of Water, Milk and Foodstuffs (Mr. J. Graham Sherratt, Legh Street Chambers, Warrington), pages 74 and 66 *et seq.*

5.—LEGISLATION IN FORCE.

A complete list of the Local Acts, Special Orders, General Adoptive Acts and Bye-laws relating to the public health in force within the Borough were given in the Report for 1930, and need not be repeated here.

6.—HOSPITALS.

Details were furnished in the Report for 1930 (pages 30 and 31) of the Hospitals in the area and the approximate number of beds available for various purposes, and a summary will only be given here of any changes made during 1933 and of the work done.

- (i) Warrington Infirmary (113 beds). Average number available during 1933—105).
- (ii) Borough General Hospital (286 beds).
Classification given in table, page
- (iii) Isolation Hospital (131 beds). See page 80.
- (iv) Hefferston Grange Sanatorium (80 beds). See pages 86 and 87.
- (v) Maternity Home (20 beds). See page 39.
- (vi) Smallpox Hospital (22 beds).
- (vii) Specialist Services. (Described in 1932 Report).

(i) WARRINGTON INFIRMARY (provided by Voluntary Agency).

The number of cases dealt with during 1933 is as follows :—

IN-PATIENTS.	1932	1933
Number of in-patients in Hospital at beginning of year	66	75
Number of in-patients admitted during the year	2,247	2,251
Number of in-patients in Hospital at end of year	77	86
Average number of days' treatment	14.05	15.13

OUT-PATIENTS.

General cases	3,091	2,852
Eye cases	489	553
Dental cases	292	329
Pensions cases	3	4
Orthopædic cases	2,136	2,279
	<u>6,011</u>	<u>6,017</u>
Accidents and emergencies	4,766	5,169
Total	<u>10,777</u>	<u>11,186</u>
Total number of attendances :—		
Out-patients	19,061	16,767
Orthopædic cases	43,686	41,711
Total	<u>62,747</u>	<u>58,478</u>

(ii) BOROUGH GENERAL HOSPITAL (appropriated under section 95 P.H.A. (Amendment) Act, 1907).—A special section of the 1930 Report was devoted to a description of the work of this Hospital, which is now administered by the Health Committee with the Medical Officer of Health as Medical Superintendent in charge of administrative arrangements.

The number of in-patients dealt with during the year ending 31st December, 1933, was 2,304.

The following table gives a comparison of the number of patients dealt with during the last 8 years, and shows the large increase in the work since the hospital was appropriated :—

Year	Total Admissions	Maternity Cases.				Surgical Operations
		Total	Live Births	Still Births	Twins	
1926	1726	141	131	11	1 case	176
1927	1715	141	128	18	5 cases	141
1928	1750	147	135	14	2 cases	167
1929	1970	158	144	14	.....	179
1930*	1854	192	172	21	1 case	199
1931†	2080	236	203	39	6 cases	257
1932	2035	247	224	27	4 cases	236
1933	2304	292	268	26	2 cases	280

* Year of transfer to Local Authority.

† Placed under administration of Health Committee.

Among the 280 operations were 52 abdominal sections, and 83 operations on bones and joints.

There is, too, a very large increase in the work of the hospital dentist (Mr. J. Ellis). (See pages 39, 120.)

The next table gives the daily average of beds occupied :—

DAILY AVERAGE OF BEDS OCCUPIED.

Year	Male Hospital (118 beds)		Female Hospital (125 beds)		Annexe (42 beds)		Total (285 beds)	
	No.	%	No.	%	No.	%	No.	%
1930	90.54	77.12%	90.45	72%	37.57	90.48%	218.56	76.84%
1931	88.82	75.42%	92.66	74.4%	34.35	80.95%	215.83	75.79%
1932	91.63	77.97%	88.68	71.2%	36.40	85.71%	216.71	76.14%
1933	95.98	81.36%	94.02	75.2%	38.00	90.48%	228.00	80.00%

In 1933 the highest number of beds occupied was 266 (on 10/2/33), and the lowest 201 (on 12/10/33) of the total 286 beds available. The daily average over the whole year was 228 beds occupied.

**ALTERATIONS AND IMPROVEMENTS AT THE BOROUGH
GENERAL HOSPITAL DURING 1933.**

The following summarises the main improvements effected during the year :—

Erection of a new Recreation Room and Lecture Hall for nurses.

Alterations and extensions of operating theatre.

Provision of new sterilisers in operating theatre.

„ „ shadowless light and new scheme of ventilation in operating theatre.

„ „ new X-Ray apparatus.

**FURTHER IMPROVEMENTS REQUIRED AT THE
BOROUGH GENERAL HOSPITAL.**

Various Reports have been submitted to the Health Committee from time to time, and are at present receiving consideration, with reference to the following additions, etc. :—

Provision of a new nurses' home.

- „ „ receiving wards, waiting rooms, etc., in the hospital.
- „ „ additional accommodation for patients.
- „ „ nurses' dining hall and kitchen for hospital.
- „ „ new operating theatre.
- „ „ X-Ray department.
- „ „ quarters for Senior Medical Officer.
- „ „ lodge and new entrance for hospital.

The General Nursing Council of England and Wales approved the Hospital as one of the Examination Centres of that Body.

An additional temporary porter was appointed owing to the continued diminution in the numbers of able-bodied persons from the Institution side, who have hitherto assisted in the general porter's work of the hospital.

Considerable difficulty has accrued in the past in attempts to obtain the cost of maintenance from patients in the hospital who were entitled to free treatment at Warrington Infirmary under the Contributory Scheme.

In an attempt to obviate this the following tentative scheme was agreed to between the Local Authority and the Infirmary Board of Management :—

ARRANGEMENT FOR THE TREATMENT IN THE BOROUGH GENERAL
HOSPITAL OF PATIENTS WHO COME WITHIN THE SCOPE OF THE
WARRINGTON INFIRMARY CONTRIBUTORY SCHEME.

1. The Corporation will admit into the Borough General Hospital as a patient any person resident in the County Borough who comes within the scope of the Infirmary Contributory Scheme and who has been unable, after due inquiry, to obtain admission to the Warrington Infirmary, provided that the case is a suitable one for treatment under this agreement and also that there is accommodation in the Hospital for such person.
2. The Infirmary will only be responsible for the cost of treatment of patients referred by the Secretary, who will indicate on the usual certificate of admission when the case is one to be dealt with under this agreement.
3. The Infirmary will pay to the Corporation in respect of every patient admitted under this arrangement a sum of 9/- per week and at the end of 4 weeks if it is found necessary for the patient to remain longer in the Hospital a report on the case will be furnished to the Secretary of the Infirmary.
4. This arrangement is to continue in operation from 1st November, 1933, to 31st March, 1935, and may be reviewed or terminated at the end of this period or subsequently by either party giving three month's notice.

LOCAL HOSPITAL POLICY.

There is close co-operation between the Municipal and Voluntary Hospital services in the town.

In accordance with the provisions of section 13 of the Local Government Act, 1929, the members of the Board of Management of the Local Infirmary have been conferred with and further conferences are pending.

7.—MATERNITY AND NURSING HOMES.

The only private Nursing Home at present in the Borough was completed during the year by alterations and additions to the old Nurses' Home at Warrington Infirmary.

This Home will accommodate 25 patients.

8.—INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN.

There is no special institutional accommodation provided by the L. A. for unmarried mothers or illegitimate children, but all such cases are admitted without distinction to any of the Municipal Institutions.

The Cottage Homes, at Padgate, formerly administered by the Board of Guardians, were transferred to the Local Authority by the Local Government Act, 1929, and are now administered by a Special Committee of the Public Assistance Committee. The medical supervision of the children is carried out by a part-time general practitioner (Dr. Sinclair), who reports on medical matters to the Medical Officer of Health.

This institution takes cases from other areas as well as Warrington, and the total children on the 31st December, 1933, was :—

Warrington children	44
Children from other areas	85
	—
Total	129
	—

9.—AMBULANCE FACILITIES.

During the year a new motor ambulance and motor bedding van were purchased for use in connection with the Isolation Hospital to replace the old horse conveyances in use hitherto.

There was no alteration in the arrangements for Ambulance Facilities for non-infectious and accident cases, and maternity cases.

10.—CLINICS AND TREATMENT CENTRES.

No new Clinics or Treatment Centres were opened during the year, but a list of the names and situations, together with hours of attendance, are repeated hereunder :—

MATERNITY AND CHILD WELFARE.

The Corporation has arranged for Clinics to be held at the times and places set out below.

A Medical Officer and Nursing Staff are in attendance, and advice can be obtained by mothers on subjects relating to the health of themselves and babies.

Ante-natal Clinic (i.e., for expectant mothers) :

Health Department, Sankey Street, Tuesdays and Wednesdays at 10 a.m.

Maternity Home, Victoria Park, Fridays, at 2 p.m.
And by appointment.

Consulation Centres for Mothers and Children up to 5 years of age

Thewlis Street Schools, Liverpool Road, Mondays, at 2 p.m.

Adult School, Folly Lane, Bewsey, Tuesdays, at 2 p.m.

St. George's Mission, Brick Street, Wednesdays, at 2 p.m.

Wash Lane School, Latchford, Thursdays, at 2 p.m.

TREATMENT OF TUBERCULOSIS.

The Tuberculosis Dispensary is situated in Garven Place, behind the Health Department, in Sankey Street, and is open daily.

A Medical Officer, who is a specialist in the treatment of Tuberculosis, is in attendance for the examination of persons suffering or suspected to be suffering from this disease.

TREATMENT OF VENEREAL DISEASES.

The Corporation have established a Centre for the treatment of persons suffering from Venereal Diseases (Syphilis and Gonorrhœa) at the Infirmary Kendrick Street. The Clinic is open on :

Tuesdays : Men 4 p.m. Women 5 p.m.

Fridays : Women 5 p.m. Men 6 p.m.

Irrigations are available at any time by arrangement, and a male orderly is in attendance for male patients. A Specialist from Manchester attends on the Clinic days to give advice, and all treatment is carried out under conditions of secrecy. There is also a lady doctor in attendance for female patients. Names and addresses of patients are not divulged.

MEDICAL INSPECTION AND TREATMENT OF SCHOOL CHILDREN.

A Clinic is held every morning during the week at the Health Department for the treatment of school children suffering from minor ailments who require to be excluded from school. In addition, nurses attend daily in our schools to treat those whose condition does not necessitate their absence.

A School Medical Officer is present at the Clinic. Arrangements can be made if required for nose and throat operations, eyesight testing and provision of glasses, and X-ray treatment for ringworm cases.

There is also a special dental clinic.

TREATMENT OF CRIPPLING DEFECTS.

An orthopædic surgeon attends for the examination of children suffering from crippling defects with a view to their receiving treatment as follows:—

Children aged 1 to 5 years :

Orthopædic Clinic, Borough General Hospital, once a month.

Children aged 5—14 years :

Orthopædic Clinic, Borough General Hospital, once a month.

The Clinic is open daily at Whitecross at 9 a.m. for the provision of remedial exercises, massage, electrical and other forms of treatment given by the nurses.

A surgical instrument-maker attends when required to measure cases for any necessary appliances, which are supplied at cost price.

THE COST OF THE HEALTH SERVICES.

Careful consideration has, as usual, been given to the expenditure on our health services.

Actual Expenditure	1933-34 HEALTH SERVICES.	Income.
£		£
6,609	Maternity and Child Welfare	1,570
7,961	Health	312
7,400	Blind Persons Act (1920)	180
893	Treatment of V.D.	200
8,610	Infectious Diseases Hospital	1,160
1,096	Small-pox Hospital	700
12,507	Treatment of Tuberculosis	5,210
28,880	Borough General Hospital	11,200
4,082	Public Conveniences	900
<hr/> 78,038		<hr/> 21,432
	Net Expenditure	£56,606
	Product of rd. Rate	£1,350
		s. d.
	Cost of Health Services	3 5.93

MATERNITY AND CHILD WELFARE WORK.

Full details of the arrangements in Warrington for safeguarding and improving the health of mothers and children have been given in previous Reports, and need not be repeated here.

I must refer to the valuable services of the voluntary workers of the Ladies' Committee of the Mothers' and Babies' Welcomes, who co-operate so heartily with us in the work of the four Consultation Centres. Not only is their work of extreme value to the mothers and children, but they are performing many duties which are essential, free of all cost to the town, and which otherwise would become a charge upon the rates.

Once again, too, through the generosity of the local Rotary Club, a number of necessitous mothers were provided with a week's holiday at Prestatyn, which was very greatly appreciated by those who attended.

The following is a summary of the work done under the various headings :—

1. SUPERVISION OF THE WORK OF THE MIDWIVES PRACTISING IN THE BOROUGH.

Administration of the Midwives Act, 1902 and 1918.

There were, during 1933, 14 midwives registered as practising in the town. All of these hold the certificate of the Central Midwives Board.

All take cases outside the borough as well.

The duties of the Health Visitor, who acts as Inspector of Midwives, have been detailed in previous Reports, and the following is a summary of the work for 1933 :—

Number of visits to midwives and homes	32
Number of visits to homes during lying-in period in order to investigate midwife's work	10
Number of visits to midwives, <i>re</i> disinfection after exposure to cases of infectious disease	29
Number of classes held for instruction of midwives	4
Number of notifications of sending for medical aid received from midwives	336
Number of notifications of artificial feeding	3
Number of notifications of deaths of mother or child before attendance of a doctor	
	mother
	infants
Interviews with midwives at Health Office	90

2. WORK OF THE HEALTH VISITORS.

Particulars of the work amongst infants which is largely based upon information received under the Notification of Births Act has been given in previous Reports.

NOTIFICATION OF BIRTHS ACT, 1907 AND 1912.

The total births registered as belonging to Warrington in 1933, was 1,299, giving a birth-rate of 16.02 (see page 9).

The number of births notified does not however, correspond with those registered, because of the difference in the time allowed for notification and registration respectively.

1933—Number of births notified	1500
Number of births not notified	2
	<hr/>
	1502
	<hr/>

All the cases of non-notification of births are doctor's cases, and usually due to a misunderstanding—the doctor thinking that the nurse or relative has notified and vice-versa.

Notifications received

From Doctors	5
From Midwives	792
From Institutions	703
	<hr/>
	1500
	<hr/>

The births in the Borough were attended by Midwives alone in 27.8% of the cases.

Attended by Doctors (and Midwives in some cases)	379
Attended by Midwives alone	418
Attended in Institutions	703
	<hr/>
	1500
	<hr/>

Number of births with Doctors engaged to attend confinement	124
Number of births with Midwife engaged to attend confinement	669
(In 336 cases a Doctor was called in.)	
Number confined in Maternity Home	403
(Of these 321 were Warrington cases and 82 live out of the Borough.)	
Number confined in Borough General Hospital	299
(Of these 248 were Warrington cases and 51 live out of the Borough.)	
Proportion of Warrington cases confined in Institutions 38%.	
Number confined in Infirmary	1

SUMMARY OF WORK OF THE HEALTH VISITORS.

	1933
First Visits to infants	1259
Total visits to infants	5372
Infant death inquiries	81
Visits to children aged 1—5 years	12581
Inquiries into deaths, 1—5 years	38
Visits to expectant mothers	2316
Still-born and abortion investigations	76
Visits to children out to nurse	38
" " Illegitimate Children	316
" " Boarded out children	65
" " Measles cases	111
" " Whooping Cough cases	81
" " Puerperal Pyrexia cases	6
" " Mumps cases	5
" " Chickenpox cases	69
" " Puerperal Fever cases	—
" " Pneumonia cases	87
" " Ophthalmia Neonatorum	6
" " Orthopædic cases	473
" " Dirty Homes	36
" " Cases under Children's Act	62
" " Consultation Centres	549
" " Ante-Natal Clinic	102
" " Orthopædic Clinic	11
Other Visits	562
Nuisances reported	34
Interviews with parents, at Health Office	790

WORK UNDER PART I CHILDREN ACT, 1908.

Full details of this work, which was transferred to the Local Authority from the Board of Guardians, was given in the 1930 Report.

Cases on Register, 1933—

No. of cases at the beginning of the year	11
No. of cases at the end of the year	11
Children legally adopted	2
„ Returned to their parents	1
„ Died during the year	—
„ Transferred to other Local Authorities	1
Total cases removed	4
Foster Mothers found unsuitable	—
New Foster Mothers found	—
The homes inspected 4 times	15
Number of Visits	62
Number of children attending Welfare Centre	2
Children in School	8

TREATMENT OF DEFECTS IN CHILDREN UNDER 5 YEARS OF AGE.

One of the main functions of the Health Visitor is to supervise carefully the health of the children under her care, and to draw the attention of parents to any departure from the normal, at the same time placing before them the facilities available for treating any defects.

In the first place a note is given to the mother or guardian in every instance stating that the child should be taken to the family doctor.

The Health Visitors do not in any way attempt to diagnose the condition, but simply refer any abnormality to the doctor.

The case is followed up after a short interval, and supervision is not relaxed until satisfactory treatment has been obtained. The good results of thus focussing our attention on the pre-school child are slowly but surely showing themselves by the better physique of the entrants to our schools (*vide* Report on School Hygiene, 1933).

The following table of the defects found in the children during 1933 by the Health Visitors in their visits to the homes is interesting, and should be read in conjunction with the defects found in addition by the Medical Officer amongst the children attending the Consultation Centres (see page 38).

DEFECTS FOUND AMONGST CHILDREN AGED 1—5 YEARS BY THE HEALTH VISITORS OF THE DISTRICT.

Defect	Number	Referred to own Dentist	Referred to own Doctor	Referred to Infant Welfare Centre	Referred to Infirmery	Referred to Orthopaedic Clinic	Receiving treatment when found	Operation	Treatment obtained	No. treatment	Still under treatment	Defect remedied
Teeth	397	90	14	293	—	—	—	—	221	176	—	221
Orthopaedic	98	—	6	5	4	77	6	4	90	8	69	21
Squint	52	—	47	—	5	—	—	—	29	23	29	—
Skin	7	—	7	—	—	—	—	—	7	—	—	7
Tonsils & Adenoids	57	—	13	30	2	—	12	30	34	23	2	32
Rickets	9	—	1	8	—	—	—	—	9	—	6	3
Poliomyelitis	1	—	—	—	—	—	1	—	1	—	1	—
Ears	6	—	2	—	—	—	4	—	6	—	1	5
Tuberculosis	3	—	—	—	—	—	3	—	3	—	3	—
Hernia	13	—	6	4	—	—	3	7	12	1	—	12
Mastoid	1	—	—	—	—	—	1	—	1	—	—	1
Phimosis	20	—	5	6	1	—	8	16	19	1	1	18
Eye	5	—	3	1	—	—	1	—	5	—	1	4
Cleft Palate and Hare Lip	5	—	—	—	—	—	5	3	5	—	3	2
Nævus	4	—	1	—	—	—	3	—	4	—	3	1
Accidents	11	—	—	—	1	—	10	—	11	—	—	11
Total	689	90	105	347	13	77	57	60	457	232	119	338

DEFECTS FOUND AMONGST CHILDREN UNDER 1 YEAR BY THE HEALTH VISITORS OF THE DISTRICT,

	Number	Referred to own Dentist	Referred to own Doctor	Referred to Infant Welfare Centre	Referred to Infirmary	Referred to Orthopaedic Clinic	Receiving treatment when found	Operation	Treatment obtained	No treatment	Still under treatment	Defect remedied
Under 1 Year.												
Hernia	22	—	10	10	—	—	2	15	20	2	1	19
Rickets	1	—	—	—	—	—	1	—	1	—	1	—
Phimosis	33	—	9	7	2	—	15	25	30	3	2	28
Orthopaedic	12	—	—	1	—	9	2	1	11	1	10	1
Mastoid	1	—	—	—	—	—	1	—	1	—	—	1
Cleft Palate	1	—	—	—	—	—	1	1	1	—	—	1
Skin	2	—	2	—	—	—	—	—	2	—	2	—
Eyes	4	—	2	—	1	—	1	—	3	1	—	3
Squint	1	—	—	—	1	—	—	—	—	1	—	—
Tb. Glands	1	—	—	—	—	—	1	—	1	—	1	—
Spina Bifida	2	—	—	—	—	—	2	1	2	—	1	—
Nævus	1	—	—	—	—	—	1	—	1	—	1	—
Extra Toes	1	—	—	—	—	—	1	—	1	—	—	1
Ingrowing Eyelashes	1	—	—	—	—	—	1	—	1	—	1	—
Total	83	—	23	18	4	9	29	43	75	8	20	55

DEFECTS FOUND AMONGST CHILDREN UNDER 1 YEAR BY THE HEALTH VISITORS OF THE DISTRICT

3. ANTE-NATAL WORK.

In 91% of the 1,500 births the mothers received some form of ante-natal care, either from their own doctor or midwife, or at the ante-natal clinics. The number attending the clinics was 870, which is 57.9% of the total births.

Ante-natal clinics are held at the Health Office (twice a week), the Borough General Hospital and the Maternity Home (once a week).

Number of births notified	1500
Number of mothers attending Health Office Clinic	731
Number of mothers attending B.G.H. Clinic	280
Number of mothers attending Mat. Home Clinic	84
(Most patients attending B.G.H. Clinic also attend H.O. Clinic).	
Number of mothers attending Clinics	870
Number of attendances at Health Office Clinic	1628
Number of attendances at B.G.H. Clinic	1028
Number of attendances at Mat. Home Clinic	255
Total number of attendances	2911

Average consultations per patient 3.4.

DEFECTS FOUND AT ANTE-NATAL CLINIC.

CONTRACTED OR DEFORMED PELVIS.—There were nine cases but only one needed a caesarean section for delivery.

MALPRESENTATION.—Eight breech; thirteen occipito-posterior. External version was performed in the majority of these cases resulting in normal delivery.

ALBUMINURIA.—Twenty cases. All these cases recovered, although many of them had premature or still-born babies.

HEART DISEASE.—Five cases. One of these developed influenza and died. The others had normal deliveries.

BRONCHITIS.—Fourteen cases who were all sent to their own general practitioners for treatment.

VARICOSE VEINS.—Fifty-three cases of varying degrees.

ANÆMIA.—Twenty-five cases. Several of these cases were provided with extra nourishment.

HYDRAMNIOS.—Two cases.

HÆMORRHAGE.—Two cases. Both had premature babies.

VENEREAL DISEASE.—Five cases—sent to the Infirmary.

VARIOUS.—Twenty-two cases, mostly referred to their own doctors for treatment.

DENTAL CARIES.—Eighty-three cases, who were referred either to their own dentists or to the dental clinic at the Borough General Hospital.

Twenty-one cases attended the clinic who were found to be not pregnant.

ANTE-NATAL CLINIC AT BOROUGH GENERAL HOSPITAL.

This Clinic is held at the Hospital once a week, for patients who intend being confined there. All these cases are, however, seen in the first instance by the M. & C. W. Medical Officer at the Health Department.

No. of Expectant Mothers who attended in 1933.....	280
No. of Attendances	1028

In addition to the work of the Centres, expectant mothers are visited in their own homes by the Health Visitors :—

	PRIMIPS.		MULTIPS.			
	Married.	Unmarried.	Married.	Unmarried.		
No. of 1st visits paid by nurses	369	9	651	4	=	1033
No. of revisits paid by nurses	326	13	934	10	=	1283
Total visits	695	22	1585	14	=	2316
No. of Expectant Mothers visited in their own homes only, and who did not attend Centre or Clinic	21	—	166	—	=	187
No. of 1st visits paid....	21	—	166	—	=	187
No. of revisits paid....	9	—	226	—	=	235
Total Visits	30	—	392	—	=	422

MIDWIVES AND ANTE-NATAL WORK.

Early in the year the midwives received special instruction in the great importance of ante-natal supervision. A memorandum on "Suggestions for complete ante-natal examination" was drawn up and a copy furnished to each midwife. This has certainly had a good effect on their work and they are now all very particular about the ante-natal care their patients receive. Two of the midwives hold a clinic each week in their own homes, where they examine their patients regularly. Others send their patients to the clinic at the Health Office, and are kept informed of the progress of the pregnancy. Some accompany their patients to the clinic and are present at the medical examination.

4. POST-NATAL WORK. CLINIC.

In March, 1932, a post-natal clinic was started. This is held at the Health Office once a week (Wednesday, 11-30 a.m.), and is for the examination of women about two months after their confinement. The object of this examination is to ensure that every thing is normal again, and any defects resulting from a recent labour can be rectified.

It is hoped that when the value of this clinic is better appreciated more mothers will attend.

During 1933, 38 women attended the clinic. Of these 16 were normal: 20 had slight defects which were remedied: 2 had gross defects needing operative treatment.

5. WORK OF THE CONSULTATION CENTRES.

(For days and hours of opening of the four Centres see page 28).

These deservedly popular institutions carried on their good work during the year.

There is no doubt that an additional centre in the Latchford area will have to be established shortly. Various premises have been inspected with this end in view, but up to the present nothing suitable has been found.

The attendances of mothers and children during the year have been as follows :—

Attendances	Mothers	Ex. M.	Infants	Children 1 to 5 years	Total
Brick Street—					
Total	6626	503	3479	3969	14577
Av. weekly	138	11	72	83	304
Latchford—					
Total	4298	263	2365	2703	9629
Av. weekly	91	6	50	58	205
Thewlis Street—					
Total	2254	99	1188	1320	4861
Av. weekly	49	2	26	29	106
Bewsey—					
Total	2104	116	1128	1429	4777
Av. weekly	47	3	25	31	106

The total attendances at all Centres were :—

Mothers	15282
Expectant Mothers	981
Infants	8160
Children 1—5	9421

Number of consultations held by the Medical Officer in 1933 :

(i.) At the Centres.

	Thewlis Street	Brick Street	Latch- ford	Bewsey	Total	Total
No. of Sessions	46	48	47	45		
Infants { 1st examination	89	216	137	75	= 517	} = 1703
{ Re-examination	174	463	313	236	= 1186	
Children { 1st examination	26	64	48	13	= 151	} = 1323
{ Re-examination	209	440	251	272	= 1172	
Expectant { 1st examination	7	22	19	8	= 56	} = 102
{ Re-examination	17	9	9	11	= 46	
Nursing { 1st examination	46	88	59	30	= 223	} = 505
{ Re-examination	48	96	78	60	= 282	
Others	45	66	46	44	= 201	= 201
Total	661	1464	960	749	3834	= 3834

(ii.) At the Health Office.

Infants	224
Children	193
Expectant Mothers	129
Nursing Mothers	41
Others.....	204
Midwives	12
	<hr/>
	803
	<hr/>

(iii.) At Maternity Home.

Expectant Mothers	255
	<hr/>
	255
	<hr/>

(iv.) At the Health Office.

Ante-natal Clinic :	
Expectant Mothers	1628
	<hr/>
	1628
	<hr/>

Total number of consultations held by M.O. in 1933=6,520.

The following table shows a list of the defects discovered in the children by the Medical Officer at the Consultation Centres :—

DEFECTS FOUND AT CONSULTATION CENTRES.

Defect.	No. of Cases.	Sent to own Doctor.	Sent to own Dentist.	Sent to Ailing Babies' Ward Aikin Street.	Sent to B.G.H.	Results			
						No. Improv.	Improved.	Cured.	Still under treatment.
Dental Cases	127	—	11	—	116	5	—	122	—
Rickets	25	—	—	3	22	2	1	4	18
Orthopaedic	3	—	—	—	3	1	—	—	2
Tonsils and Adenoids.....	16	—	—	—	16	—	—	16	—
Hare Lip.....	1	1	—	—	—	—	—	1	—
Enteritis	1	—	—	1	—	1	—	—	—
Phimosis	31	29	—	—	2	9	—	22	—
Bronchitis	5	4	—	1	—	—	2	3	—
Malnutrition.....	18	1	—	12	5	2	7	4	5
Strabismus	5	5	—	—	—	—	—	—	5
Hernia	6	6	—	—	—	—	2	4	—
Nævus	1	1	—	—	—	1	—	—	—
Other.....	16	12	—	3	1	—	7	7	2
Total	255	59	11	20	165	21	19	183	32

6. DENTAL CLINIC for expectant Mothers and Children under 5 years of age.

In 1932 a dental clinic was established at the Borough General Hospital in connection with the Maternity and Child Welfare Scheme. This clinic is held once a fortnight and is for expectant and nursing mothers and children up to school age. Much valuable work has been done by Mr. Ellis, the Dental Officer, in connection with this work.

No. of cases treated at the clinic during 1933 :—

Children (under 5 years)	187 cases.
Expectant mothers	42 cases.
Nursing mothers	23 cases.
	<hr/>
	252
	<hr/>

7. MATERNITY HOME.

This Institution, which was opened in July, 1918, continued its useful work during the year.

There are now 20 beds (including 2 labour beds and 2 isolation beds).

During 1933, 403 children were born in the Institution in 398 confinements. 5 sets of twins. Particulars follow :—

(1) No. of patients in Home 1st January, 1933	14
" " admitted during year	405
" " in Home, 31st December, 1933.....	16
(2) Average duration of stay	12 days
(3) No. delivered by doctors	21
(4) " " " midwives.....	377
	<hr/>
Total	398
	<hr/>

(5) No. of Cases in which Medical Assistance was required, and reasons.

(a) Ante-Natal	9
Albuminuria	6
General Debility	1
Mitral Stenosis	1
Threatened abortion.....	1
	<hr/>
	9
	<hr/>

During 1933, the amount received from patients was £1,432
(during 1932 receipts were £1,434).

MATERNITY WORK AT THE BOROUGH GENERAL HOSPITAL.

There are now 20 beds (including 2 labour beds and 4 isolation beds which are in another ward.)

During 1933, 294 children were born in the Institution in 292 confinements (2 sets of twins). Particulars follow :—

- (1) No. of patients in Hospital, 1st January, 1933, 12 maternity cases.
 „ „ „ admitted during year, 292 maternity cases.
 „ „ „ in Hospital 31st December, 1933, 11 maternity cases

(2) Average duration of stay, 17.39 days.

(3) No. delivered by doctor	23
(4) „ „ „ „ midwives	269
Total	<u>292</u>

(5) No. of cases in which Medical Assistance was required and reasons :—

(a) *Ante-Natal* 86.

Ante-partum Hæmorrhage.....	15
Anæmia and Debility	12
Delayed Labour.....	2
Abnormal Presentation	2
Vaginal Discharge.....	1
Venereal Diseases	1
Pyelitis	1
Chorea	2
Hæmorrhoids	1
Attempted Abortion	1
Constipation	4
Hæmaturia	1
Retention of Urine	1
Œdema Feet and Legs.....	3
Premature Labour	1
Youth of Mother	1
Chronic Nephritis.....	1
Albuminuria	21
Cardiac Disease	2
Enteritis	1
Tuberculosis	1
Pneumonia	1
Influenza	2
Bronchitis	2
Threatened Abortion	1
Eclampsia	2
Epilepsy	3
	<u>86</u>

(b) During Labour 39.

In Hospital all 3 stages.

Ante-partum	
Hæmorrhage	5
Rectal Hæmorrhage.....	1
Eclampsia	1
Uterine Inertia.....	12
Retained Placenta	2
Prolapsed Cord	1
Retained Membranes	6
Breech.....	1
	<hr/>
	29
	<hr/>

*Admitted after partial
delivery at home.*

Eclampsia	1
Uterine Inertia.....	1
Abnormal Presentation	2
Retained Placenta	6
	<hr/>
	10
	<hr/>

(c) After Labour 78.

In Hospital all 3 stages.

Ruptured Perineum	19
Retained Placenta	4
Pyrexia	2
Œdema Feet and Legs..	1
	<hr/>
	26
	<hr/>

*Admitted after partial
deliveuy at home.*

Pneumonia	2
Puerperal Sept.	2
Puerperal Pyrexia.....	4
Septic Abortion	2
Collapse	2
Mammary Abscess.....	4
Mastitis	1
White Leg	1
Gangrene	1
Retained Placenta	25
Eclampsia	1
Parametritis	1
P.P.H.	3
Femoral Thrombosis.....	2
Erysipelas	1
	<hr/>
	52
	<hr/>

(d) For Infants 55

Born in Hospital.

Premature Birth	16
Spina Bifida	2
Phimosis	1
Asphyxia	12
Illness of Mother	1
Discharging Eyes	1
Talipes	3
	<hr/>
	36
	<hr/>

Not born in Hospital.

Premature Birth	2
Spina Bifida	1
Phimosis	3
Illness of Mother	3
Icterus Neon	2
Acute Bronchitis	1
Injury (forceps)	1
Aphthæ Mesth.....	3
Septic Cord	1
Discharging Eyes	2
	<hr/>
	19
	<hr/>

		Delivered		
		In Hospital.	At Home.	
(6)	No. of cases notified as Puerperal Sepsis	—	—	
(7)	„ „ „ with temp. over 100.4 for 24 hours	3	4	
(8)	„ „ „ with Ophthalmia neonatorum.....	1	1	
(9)	„ „ „ with Inflammation of Eyes	—	—	
(10)	No. of babies not entirely breast fed	31	(a) Supplementary	20
			(b) Supplementary, later complete artificial	3
			(c) Complete artificial from birth	8
(11)	No. of Maternal deaths	2	2	
(12)	„ Infant deaths.....	14 within 10 days of birth		
	13 of these from premature birth and 1 Marasmus premature congenital.			
(13)	No. of Still Births	26	Anencephalic	1
			Hydrocephalus.....	3
			Albuminuria	5
			Eclampsia	2
			Spina Bifida	1
			Post Mature	3
			Ante-Partum	
			Hæmorrhage	5
			Prolapsed cords, etc.	3
Abnormal Presentations	2			
Placenta Prævia....	1			

8. INSTITUTIONAL TREATMENT OF PUERPERAL FEVER, ETC., AT AIKIN STREET HOSPITAL.

One case of Puerperal Fever was dealt with at Aikin Street.

9. HOSPITAL ACCOMMODATION FOR INFANTS AND CHILDREN.

(a) MEASLES OR WHOOPING COUGH.

Cases of Measles or Whooping Cough were dealt with at Aikin Street Hospital.

(b) MARASMUS, DEBILITY AND DIETETIC AILMENTS.

Ten cots are allocated for these cases at Aikin Street Hospital.

BABY WARD, 1933.

(1) No. of cases admitted, 1933	45
" " " still in Hospital, 31st December, 1933	7
(2) Average duration of stay, 46.5 days.	
(3) Reasons for Admission.	
Marasmus and Malnutrition	10
Chronic Gastro Enteritis	2
Broncho pneumonia	2
Bronchitis	4
Rickets	8
Debility.....	7
Illness of mother	12
(4) No. of Cases Discharged.	
In good health	27
Improved	11
Died	2
No improvement	5
	45
(5) No. of Cases of Infectious Diseases occurring among the Patients admitted.....	Nil

	Cause of Death.	Age.	Date.	Residence in Hospital.
1.	Acute gastro enteritis	2 months	26/9/33	17 days
2.	Broncho pneumonia	2 weeks	8/12/33	1 day

(c) OPHTHALMIA NEONATORUM. (See also page 93.)

By arrangements with the local Infirmary, cases of this disease are admitted—if need be, with the mother also. Out of 3 cases occurring in 1933, 2 recovered without any damage to vision.

Ophthalmia Neonatorum cases, 1933—Three cases.

No.	Date of Notificat'n	Date of Onset	Age when Treated	Where Treated	Length of Treatment	Mother attended at confinement.	Result
1	1/2/33	30/1/33	6 days	At home	22 days	Midwife	Cured
2	28/6/33	27/6/33	8 days	B.G.H.	16 days	Midwife	Cured
3	31/7/33	29/7/33	8 days	B.G.H.	19 days	B.G.H.	Died

10. HOME NURSING (see page 21).

11. SUPPLY OF MILK FOR EXPECTANT AND NURSING MOTHERS AND FOR CHILDREN UNDER FIVE YEARS OF AGE.

Details of our scheme under this heading were given in the Report for 1919.

The following table shows the amount of milk provided during 1933 :—

FRESH MILK.

	Necessitous Nursing Mothers	Expectant Mothers	Ailing Babies
No. of cases	186	79	121
No. of quarts	5965	2109½	4148½
Total cost, 12,223 quarts, £278 10s. 6d.			

In addition 258 lbs. of dried milk were distributed free of cost.

1,400 lbs. of dried milk were sold at the Consultation Centres at a reduced price.

12. SUPERVISION OF BOARDED OUT CHILDREN.

This work, formerly carried out by the Board of Guardians, was taken over by the Maternity and Child Welfare Committee on 1st October, 1931, on behalf of the Public Assistance Committee. In accordance with Part VI of the Public Assistance Order, 1930, the Committee co-opted three lady members, Mrs. Cunningham, Mrs. Jowett and Mrs. Starkey, who had been visiting the cases on behalf of the Board of Guardians.

These voluntary workers, in addition to the Health Visitors, supervise all cases, and we are indebted to them for their valuable services.

Number of children 17.

The usual allowance in each case is 11/6 per week per child, plus 20s. quarterly clothing allowance.

All cases are visited at least twice a quarter for the purposes of the Order, and full reports are given at each quarterly meeting of the Boarding-Out Committee.

13. SUPERVISION OF ILLEGITIMATE CHILDREN

Special care is exercised in following up children coming within this category.

316 special visits were paid to 132 illegitimate children.

65 special visits were paid to 16 boarded-out children.

14. ORTHOPÆDIC WORK AMONG CHILDREN OF PRE-SCHOOL AGE.

The Orthopædic work by Mr. Harman Taylor at the Clinic at the Borough General Hospital has been carried on very successfully during the year.

The following table gives the ages of the children dealt with :

	Under 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	No. still under treatment	No. treatment required	No. of operations	No. on Massage	No. discharged cured	No. receiving Sun-light t'tment	Transferred to Sch. Med. service
Males ..	—	3	1	1	2	17	22	9	7	42	4	7	2	13	39	3
Females	—	1	—	1	1	14	20	13	8	39	5	3	3	13	36	1

13 out of 62 males, and 13 out of 58 females were discharged as cured during the year.

The defects treated at the Clinic were :—

BOYS

Spina Bifida	1
Paralysis	2
Wry Neck	1
Synovitis	2
Flat Feet	4
Rickets	37
Cong. Mal. of Hand	1
Club Feet (Talipes).....	7
Tuberculosis	3
Fractures	1
Perthes Disease	1
Accidents	1
Supernumerary Digits	1

Total 62

GIRLS

Rickets	50
Wry Neck.....	1
Deformed Ears	1
Talipes	1
Paralysis	1
Flat Feet	1
Inversion of Feet	1
Cyst in Hand	1
Muscle Weakness	1

Total 58

ARTIFICIAL SUNLIGHT TREATMENT.

Ultra-Violet Ray treatment is carried out at the Orthopædic Clinic. Cases are referred when necessary from the Consultation Centres, and the ones that appear to benefit chiefly are cases of rickets.

During 1933 the number of children under 5 years receiving this form of treatment were :—Boys 39, Girls 36.

SECTION C.

Sanitary Circumstances of the Area.

For descriptions of the Water Supply, Rivers and Streams, Drainage and Sewerage, Scavenging, etc., reference must be made to former reports.

RIVER POLLUTION.—The Mersey, when it arrives at Warrington is a most polluted stream, and in the hot weather becomes a most objectionable nuisance. Correspondence was entered into with the Mersey and Irwell Joint Board on the subject during the year to see if any improvement could be made.

SEWERAGE.—The whole problem of re-sewering the borough, treatment of sewage and conversion of pail closets has been referred to a Consulting Engineer for Report.

CLOSET ACCOMMODATION, including Added Area, Borough Extension.—The proportion of w.c.'s to pail is now increasing, chiefly owing to the building of new property, and partly to the gradual conversion of some of the worst of the pails :

According to the latest return there are now :—

(1) WATER CLOSETS

in dwelling-houses	5659
„ schools	291
„ factories and workshops...	1319
„ offices and shops	252
„ picture palaces	34
„ theatres	8
„ public institutions	178
„ railway stations	31
„ public conveniences	48
	<hr/>
	7820
	<hr/>

(2) PAIL CLOSETS.—13,720.

(The proportions in 1932 were w.c.'s 6,996, pails 13,680.)

The increase in the number of pail closets compared with last year is due to the incorporation of part of the Rural areas within the borough.

SANITARY INSPECTIONS OF THE DISTRICT.

Systematic inspection of all areas of the town has been carried out during the year, and a large amount of valuable work has been carried out by the staff under our Chief Inspector (Mr. W. T. Flood).

Altogether 7,641 visits have been paid by the inspectors, which, added to those paid to cases of infectious disease and tuberculosis, make up a total of 12,841 during the year as follows:—

VISITS PAID BY INSPECTORS.

Visits to deal with property, nuisances, etc	7,641
" " cases of infectious disease (p. 79)	3,266
" " cases of tuberculosis (p. 86)	1,934
Total	<u>12,841</u>

The following table shows the number of **nuisances** found and dealt with during 1933:—

A SUMMARY OF NUISANCES DEALT WITH DURING THE YEAR.

Insufficiently ventilated rooms.....	92
Dirty dwellings	11
Defective floors	90
Defective walls and ceilings (plaster)	153
Dirty walls, ceilings and floors	3
Defective roofs	173
Defective spouting	263
Defective slopstones and pipes	35
Blocked drains	340
Defective drains	24
Defective pavements in yards and passages	21
Defective chimneys and ranges	105
Damp walls of dwellings	31
Defective window frames.....	72
Defective pail closets and ash-places	182
Defective or absent ashplace doors.....	70
Defective or absent closet doors	33
Defective water closets	12
Accumulation of manure	34
Accumulation of refuse	20
Defective and dangerous yard and closet walls	54
Dirty walls, passages, yards and closets	4
Defective dwelling house doors	97
Animals kept so as to be a nuisance	4
Defective dwelling house walls	97
Dirty and choked w.c.'s	4
Pail closet conversions	74
Defective hot water service	2
Defective or absent yard gates	61
Defective washing boilers	42
Defective staircases	14
Miscellaneous	16
Total Nuisances	<u>2233</u>

Preliminary Notices sent calling attention to

Nuisances	422 covering 1084 Nuis.
Legal Notices served to abate nuisances	245 covering 749 Nuis.

Out of the total number of nuisances found, 1,936, or 88.9%, were abated during the year under review, the remainder being carried forward into 1934 for suitable measures to be adopted. 240 nuisances remained unabated at the end of the year 1933.

SMOKE ABATEMENT.

During the last year 96 observations were made of chimneys with a view to the detection of the emission of black smoke. In no instance was black smoke emitted for a period in excess of the bye-law.

There can be no doubt that greater efforts should be made to obtain a purer atmosphere in our industrial towns, and such an object can be obtained without in any way penalising or hampering industry.

The Health Committee decided to inaugurate a Course of Lectures and Demonstrations on "Fuel Economy and Smoke Abatement" for boiler firemen and others interested in the subject.

A meeting of employers was held in the Town Hall, in October, and the scheme propounded to them.

The suggestion met with a very favourable reception, and the employers decided to pay the fee of 7s. 6d. for any member of their staff who wished to take the lectures.

Altogether 19 employees enrolled themselves for the course, which was held in the Technical Institute, on Wednesday evenings throughout the winter months. The Lecturer was Mr. S. N. Duguid, B.Sc. Tech., and the main features dealt with were:—

Coal, its composition and origin. Combustion boilers of various types. Furnaces, hand-firing, mechanical stokers, draught, chimneys, fuels, economisers, smoke and its evil effects. Feed water, scale, water softeners. Causes of inefficiency. Boiler-house instruments.

The Course was of an essentially practical nature, and illustrated by lantern slides and various apparatus. An examination was to be held at the end of the Session by the Manchester and District Regional Smoke Abatement Committee, and certificates granted to successful candidates. The Local Authority received a grant from the Regional Smoke Abatement Committee of £20 towards the cost of the course, and I would like to record our thanks for this assistance.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE-LAWS OR REGULATIONS.

In addition to the inspection of the district for nuisances, etc., there is the supervision of PREMISES AND OCCUPATIONS controlled by bye-laws or regulations. The following is a summary of the work in this respect:—

	No. of Premises	No. of Inspections
Workshops	137	491
Factories (Sanitary Accommodation).....	—	145
Canal Boats	30	30
Common Lodging Houses.....	25	677
Houses Let-in-Lodgings	11	39
Smoke Observations	92	96
Bakehouses	57	245
Milkshops and Shops where Bottled Milk is sold.....	320	603
Cowsheds	9	64
Ice-cream (premises where manufactured)	45	60
Slaughter Houses	11	1540
Premises where Potted Meat, Sausages, etc. are prepared	72	492
Fried-fish Shops	95	122
Tripe-boilers' Premises	3	67
Gut Scrapers.....	1	21
Artificial Manure Works	1	45
Refuse Tips.....	5	25
Stables and Middensteads.....	149	286
Pig-Styes	42	45
Places of Entertainment	15	60
Schools	24	27
Public Conveniences	24	55
Number of Premises Disinfected after Cases of Infectious Disease	682	
Number of Articles Disinfected by Steam Disinfector	4694	

The defects found at the inspections given in the preceding table were :—

FACTORIES AND WORKSHOPS.

	Factories and Workshop			Total.
	Work-shops.	Bake-houses.	Factory Bake-houses.	
Defective roof, spouting, floors and chimneys	—	2	1	3
Want of Cleanliness—Walls and Ceilings	10	9	15	34
Defective and choked drains and w.c.'s	1	—	2	3
Sanitary Accommodation :—				
Insufficient	1	—	—	1
Defective	4	—	5	9
Want of cleanliness	2	—	—	2
Approach obstructed	1	—	—	1
Absence of intervening ventilated space	1	—	—	1
Insufficiently screened	1	—	—	1
Miscellaneous	2	—	—	2
Conversions to water carriage system ..	—	1	—	1
Accumulation of Refuse	3	—	—	3
Want of Cleanliness—yards and passages	—	—	1	1
	26	12	24	62

MILKSHOPS.

Blocked and defective drains	2
Want of Cleanliness—Walls and Ceilings	13
Defective Spouting, Plaster and Doors	6
Defective Sanitary Accommodation	1
	<hr/>
	22

SLAUGHTER HOUSES.

Want of Cleanliness—Walls and Ceilings	4
Defective water supply	1
	<hr/>
	5

HOUSES LET IN LODGINGS.

Dirty rooms and passages	1
Absence of washing accommodation	1
Defective House Roofs	2
Defective Walls and Ceilings	3
Defective Window Frames	3
Defective House Floors and Staircases	2
Defective House Door	1
Defective Fire Range	1
	<hr/>
	14

COWSHEDS.

Want of Cleanliness—Walls and Ceilings	4
--	---

COOK-HOUSES.

Want of Cleanliness—Walls and Ceilings	3
--	---

PIGSTIES.

Accumulation of Manure	2
------------------------------	---

STABLES.

Accumulations of Manure	29
-------------------------------	----

COMMON LODGING HOUSES.

Defective W.C.'s and Pail Closets	4
Blocked and Defective Drains	1
Accumulation of Refuse	1
Want of Cleanliness—Walls and Ceilings	8
Want of Cleanliness—Floors, Windows, W.C.'s and Pail Closets	4
Defective Roofs and Spouting	3
Defective Staircase, Hand Rails, Fire Ranges, Windows, Doors and Wall and Ceiling Plaster	7
	<hr/>
	28

ENTERTAINMENT HOUSES.

Want of Cleanliness—W.C.	1
-------------------------------	---

ICE CREAM PREMISES.

Want of Cleanliness—Walls and Ceilings	1
--	---

The next table shows the annual return asked for by the Secretary of State :—

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

Premises.	Including Inspection made by Sanitary Inspectors or Inspectors of Nuisances.		
	Inspections.	Number of Written Notices.	Occupiers prosecuted.
(1)	(2)	(3)	(4)
Factories.....	286	—	—
(including Factory Laundries)			
Workshops	588	—	—
(Including Workshop Laundries)			
Workplaces	1877	—	—
(Other than Outworker's premises)			
Total	2751	—	—

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	Number of Defects			Number of offences in respect to which Prosecutions were instituted.
	Found.	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
Nuisances under the Public Health Acts :—				
Want of Cleanliness	35	35	—	—
Want of Ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances.....	11	11	—	—
Sanitary accommodation :				
Insufficient	1	1	—	—
Unsuitable or defective	15	15	—	—
Not separate for sexes	—	—	—	—
Offences under the Factory and Workshops Acts :—				
Illegal occupation of underground bakehouse (s. 101).....	—	—	—	—
Other offences	—	—	—	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921).				
Total	62	62	—	—

THE HOME WORKERS ORDER OF 1905.

The occupiers of one factory, also of three workshops, complied with the requirements of Section 107 of the Act, and furnished lists of homeworkers employed by them. These lists have to be forwarded to the Local Authority on or before the first day of February and the first day of August each year. The lists contained the names of 17 homeworkers, 4 resident in Warrington, and 13 in adjacent urban or rural districts. The names and addresses of the workers resident outside the Borough were forwarded to the Local Authority concerned. Of the Warrington homeworkers 3 were engaged in making wearing apparel and 1 as file and tool maker, and of those resident outside the borough, 13 were engaged in file or tool making.

No cases of infectious disease were notified in the homes of Warrington homeworkers, and it was not found necessary to report in any case adverse circumstances in their homes or surroundings.

CANAL BOATS.

30 canal boats visited at Warrington were berthed on the River Mersey, either at Bank Quay, Bishop's Wharf, or Howley Quay. They were found in a satisfactory condition. These boats travel between Manchester and Liverpool, and are subject to inspection not only by the Inspectors at the towns mentioned, but also they are visited by the Manchester Port Sanitary Inspector, who is on duty on the Ship Canal between Eastham and Manchester.

PLACES OF ENTERTAINMENT.

There are nine Picture Houses and one other place of entertainment open each evening for the benefit of the public. In addition we have one skating rink and four halls which are used fairly regularly either for concerts or public meetings. All these premises are visited with a view to ascertaining that the means provided for ventilation during performances are made use of, and also to see that during the daytime the doors and windows are thrown open to admit both fresh air and sunlight. The cleansing of the premises and the removal of refuse have been fairly well carried out, while the drains and sanitary conveniences have been kept clean and in good order.

Some points with regard to our supervision of these places of entertainment will be found in the Reports for 1919, 1920 and 1929.

REFERENCES TO OTHER DEPARTMENTS.

1. To Borough Surveyor (Blocked drains, defective pavements in streets and back passages, etc.)	96
2. To Water Engineer (Defective fittings resulting in waste of water, etc.)....	13
3. To Cleansing Superintendent (Absence of ashbins and pails, defective ashbins or leaking pails, non-removal of house refuse, etc.).....	88

SCHOOLS.

A Special Report on the health of the School Children of the Borough has already been issued.

The Medical Officer and his staff deal with the sanitary condition of the Schools, and with all cases of infectious disease arising in them.

Apart from the routine medical inspection of the scholars for various defects and ailments, a large amount of work is done each year in endeavouring to prevent the spread of infection among them.

The total number of Elementary School children on the registers was 12,830. The number of cases of notifiable infectious disease occurring among school children in 1933 is shown as follows :—

Scarlet Fever	138
Diphtheria	74
Pulmonary Tuberculosis	1
Other Tubercular Diseases	14
	<hr/>
	227
	<hr/>

and similarly the number of cases of non-notifiable infectious disease :—

Measles	130
Whooping Cough	116
Chicken Pox	513
Mumps	154
Sore Throat	234
German Measles	21
	<hr/>
	1168
	<hr/>

In order to minimise as far as possible the risk of the conveyance of infection, school children are referred to the Medical Officer of Health, who sees certain cases each morning.

These consist of:—

- Convalescents from infectious disease.
- “ Contacts ” with cases of infectious disease.
- Children who are suspected to be suffering from infectious disease.
- Children who are suffering from sore throats.

The numbers dealt with in 1933 are shown in the next table:—

Scarlet fever convalescents (examined prior to return to school)	243
Diphtheria convalescents (examined prior to return to school)	96
“Contacts” with cases of diphtheria	148
Sore throats	42
Rash	13
	542

Further particulars of 3,266 visits paid by the Inspectors in case of infectious disease in the homes of the children will be found on page 79.

SECTION D.

Housing.

A description of the general Housing Conditions of the Borough was given in the 1930 Report.

The number of houses in the Borough at the end of 1933 was approximately 19,267, and nearly all of them were occupied. This figure includes 633 in the added area.

HOUSING REQUIREMENTS.

There is certainly not as much over-crowding as there was a few years ago. The Housing Committee was gradually overtaking the shortage of houses for ordinary growth of population, but the cessation of building under the 1924 Act will very soon place us in arrears again.

HOUSING APPLICANTS.

The total number of applications received since commencement of registration in 1920 to the end of 1933 is 6840

The number of tenancies granted by the Committee, 1920, to end of 1932	2265	}	2406
Number of tenancies granted during the year 1933	141		

NOTE.—48 tenants of houses gave up their tenancy during the year.

The number of applicants who have been allowed to become lodgers in Corporation houses	663
--	-----

Number who have removed or obtained accommodation elsewhere	2594
---	------

At present we have remaining on the Register :

Applicants living in overcrowded houses..	313	
„ not „ „ „ „	679	
„ not „ within the Borough ...	185	
	—	1177
		— 6840

Number of interviews with applicants at Health Office in 1933	= 3681
---	--------

Number of visits to houses of applicants	= 813
--	-------

In addition 619 exchanges have been permitted by the Committee to tenants of Corporation houses with tenants of privately owned houses, and 607 tenants of Corporation houses have been permitted to take lodgers.

SITES AND TYPES OF MUNICIPAL HOUSES.

A complete list of the sites and types of Corporation houses was given in the 1930 Report.

NUMBER OF NEW HOUSES BUILT IN 1933.

Eighty new houses were built by private enterprise in the town during the year, and 178 under the L.A.'s scheme, making a total of 19,267 (including 633 in the added area). The new houses were erected on the Reynolds Street and Manchester Road (Kingsway) sites and were all A3 Type houses.

The total number of houses built during the period 1911 to 1933, by private enterprise and the L.A. was 4,352 (2,354 by the L.A.), or an average of 189 per year.

The number of persons who have taken advantage of the Small Dwellings Acquisition Act and purchased their own houses is 1,593.

The total amount of money advanced by the Corporation for this purpose up to the end of the financial year ending March 31st, 1934 was £450,555.

HOUSING ACT, 1930.

A circular letter (No. 1331) from the Minister of Health, dated 6th April, 1933, invited all Housing Authorities to prepare and submit to him programmes for the demolition of all houses in their area unfit for human habitation, and for the provision of the necessary re-housing accommodation.

The following programme of local requirements and of the action intended to be taken under the Housing Act, 1930, in the years 1933-38 was submitted to the Minister :—

- (1) Areas to be declared Clearance Areas :—
 - Dolmans Lane Area (54 houses to be demolished, 252 inhabitants).
 - Turner Street Area (113 houses to be demolished, 506 inhabitants).
 - Stanley Street Area (24 houses to be demolished, 151 inhabitants).
- (2) Area in which improvement by way of re-conditioning or otherwise is necessary :—
 - Dial Street Area (39 houses to be demolished, 178 inhabitants to be displaced).

- (3) Individual houses to be dealt with under Section 19, 326 (as on list submitted), with 1,309 inhabitants.
- (4) Provisional time-table :—
- James Street Area, 1933.
 - Dolmans Lane Area, 1934.
 - Turner Street Area, 1935-6.
 - Stanley Street Area, 1937.
 - Dial Street Improvement Area, 1934-5.
 - Individual Unfit Houses, 1933 to 1938.

PROGRESS IN DEMOLITION OF INSANITARY PROPERTY AND IN RE-HOUSING UNDER THE HOUSING ACT, 1930.

JAMES STREET CLEARANCE AREA.

On the 2nd May, 1933, the Council, in pursuance of their powers under Section 2 of Part I. of the Housing Act, 1930, made a "Clearance Order" for the demolition of all the buildings in what is known as the James Street Area.

A public inquiry was held by an Inspector of the Ministry of Health, on July 25th, at the Town Hall.

On the 6th December, 1933, the Minister issued an Order confirming the Order, with slight modifications.

This area comprises some 125 buildings, of which 123 were dwelling-houses.

INDIVIDUAL UNFIT HOUSES.

Considerable progress had already been made with the demolition of insanitary houses in the two preceding years, and the following property was dealt with during 1933 :—

Back Greenall Street, 1, 2 and 3.	King Street, 31—41.
Buckley's Yard, 1, 2 and 3.	Litherland's Yard, 1, 3, 5, 7.
Brown's Yard, 1, 2.	Orchard Street, 4.
Banner's Yard, 1, 2.	Ryland's Court, 1, 2, 3, 4.
Brick Street, 17A.	Six Houses, 1, 2, 3, 4, and 5.
Brick Street, 35.	Smith's Court, 1, 2, 3.
Cloth Hall Yard, 3.	Stout's Yard, 1, 2.
Dial Street, 9A.	Tanners Lane, 60.
Gough's Yard, 3, 4, 5 and 6.	Turner Street, 17.
Jolley's Court, 2, 3 and 4.	

The foregoing, together with the property dealt with since the coming into operation of the 1930 Housing Act, totals :—

Houses Demolition Orders served	128
„ Demolished	81
Persons Re-housed	474

DE-INFESTATION OF FURNITURE, ETC., FROM VERMIN.

In September, 1933, arrangements were made for the de-infestation of all the household effects of persons before transfer from insanitary property to new municipal houses.

A special van is used for the purpose, and all furniture, etc., is exposed to Cyanide gas, the work being carried out on our behalf by the expert staff of a Liverpool firm.

Bedding, clothing, etc., is submitted to high pressure steam in a Washington Lyon Disinfector.

Up to the end of the year 36 households were dealt with.

CARAVANS.

As in many other areas the problem of dealing with caravans and sheds as human habitations is a difficult one.

These caravans fall into two main groups :—

- (i) Caravans on wheels, in good condition and capable of being moved from place to place. These are usually inhabited by travelling showmen or others of a nomadic type. These caravans are usually in good state of repair and may be quite fit for habitation, but may become a nuisance to the neighbourhood in which they stop owing to the absence of sanitary conveniences and proper methods of disposal of refuse. For these facilities and for adequate water supply they are mainly dependent on neighbouring householders.

There is no site in the town definitely allocated for caravans, and even if one was provided for the purpose, properly paved, drained and with adequate sanitary accommodation, etc., we have in Warrington no power to insist on persons using such a site.

The solution to this part of the problem is to seek powers in the next Private Bill to provide an adequate camping ground for use by a certain maximum number of caravans, and to compel owners of travelling caravans to use this site and this only.

In Oldham, Walsall and certain other towns such powers have already been obtained, and are on the following lines :—

WALSALL CORPORATION ACT, 1930.

SECTION 106 (1).

(a) No tent, van, shed or similar structure used or intended to be used for human habitation shall be placed or kept on any land situate within the borough without the previous approval of the Corporation.

(b) It shall not be lawful for any person, without the previous consent of the Corporation, to let or permit to be used any land for

occupation by any tent, van, shed or similar structure used or intended to be used for human habitation unless and until such land is provided with sufficient roads and sewers, and furnished with a separate supply of water to the satisfaction of the Corporation.

(ii) But there is also another class of structure which, though sometimes termed a caravan, is often merely a shed, or a van without wheels.

Many of them are in a very bad condition and quite unfit for habitation.

The occupiers are in the main local people who have drifted into these surroundings partly owing to lack of housing accommodation, or to bad economic conditions or, in a few instances, from choice.

Some of these people may be able to pay an economic rent, whilst some may have only the barest means of existence.

The best solution for this part of the problem is to deal with these dwellings by demolition and providing the necessary re-housing accommodation under the 1930 Housing Act.

The following are the statistics *re* housing asked for by the Ministry of Health in Circular 1346 (2/10/33), and includes particulars of the work of inspection of insanitary dwellings and of action taken under various Statutory Powers during 1933 :—

(a) **Statistics.**

Number of new houses erected during the year :—

(a) Total (including numbers given separately under	
(b)	258
(b) With State assistance under the Housing Acts	
(i) By the Local Authority	178
(ii) By other bodies or persons	Nil
(c) Without State assistance	80

1. INSPECTION OF DWELLING HOUSES DURING THE YEAR.

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1,899
(b) Number of inspections made for the purpose	6,059
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected recorded under the Housing Consolidated Regulations, 1925	491
(b) Number of inspections made for the purpose	1,524

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	86
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	1,328
2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.	
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	853
3. ACTION UNDER STATUTORY POWERS DURING THE YEAR.	
A.—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930 :—	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	Nil
(b) By Local Authority in default of owners...	Nil
B.—Proceedings under Public Health Act.	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,328
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By owners	1,208
(b) By Local Authority in default of owners...	Nil
C.—Proceedings under sections 19 and 21 of the Housing Act, 1930 :—	
(1) Number of dwelling-houses in respect of which Demolition Orders were made	48
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	27
D.—Proceedings under section 20 of the Housing Act, 1930 :—	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	Nil
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Nil

SECTION E.

The Inspection and Supervision of Food.

(a) MILK SUPPLY.

At the end of the year 1933 there were nine cowsheds within the town, six of these being first included at the time of the Borough Extension. They have been regularly visited, and the cattle kept therein examined by the Veterinary Inspector.

There are 76 premises registered for the sale of milk, and in addition 244 shopkeepers sell milk in closed bottles (chiefly sterilized).

The following table gives the numbers of samples submitted for bacteriological and chemical examination, and the results :—

Samples submitted for bacteriological examination	120
Number found to contain tubercle bacilli	11
Number of cows giving milk containing tubercle bacilli, which were found and dealt with	3
Samples of milk submitted to the Public Analyst	82
Number found adulterated (3 supplied from one farm)	9
Samples of fresh cream submitted to the Public Analyst	9

The cattle found to be giving milk containing tubercle bacilli were slaughtered and dealt with under the Tuberculosis Order, 1925.

As far as possible the samples taken for bacteriological examination are obtained from the producers' cans as soon as they arrive at the retailers' premises within the Borough. The greater portion of our milk supply comes from farms situated in Cheshire.

Since the year 1915 it has been our practice to submit for examination from 80 to 100 samples of milk per annum to ascertain its freedom from tubercle bacilli. These samples were obtained from the milk supplied for consumption within the town by producers resident both within and outside the Borough. Through the information obtained from these samples during the past 19 years (1915 to 1933), it has been possible to trace 151 cows giving milk containing tubercle bacilli. These animals were at once removed from the milking herds and slaughtered.

Fifty-seven samples were submitted for the detection of dirt or injurious bacteria. In 12 cases the result was unsatisfactory. When the result of the examination is unsatisfactory, enquiries are first made at the dairy, and afterwards at the producer's premises. When the producers' premises are situated outside the Borough, a

copy of the Bacteriological Certificate is forwarded to the Medical Officer for the district with an intimation that further samples will be taken, and if the sample of milk is still unsatisfactory the matter will be considered as to the necessity of instituting proceedings. Further samples have been taken, and in every instance considerable improvement has been found.

Nine out of the 82 samples of milk submitted to the Public Analyst were found to be unsatisfactory.

For action taken in these and other cases of adulteration of food see pages 66 and 67.

There has only been one licence issued in the Borough under the Milk (Special Designation) Order, 1923, and that for pasteurised milk.

Several persons resident outside retail " Graded Milk " by motor vehicle in the Borough.

The Local Authority are endeavouring to encourage the production of the better grade of milk by stipulating that the milk supply for the Borough General Hospital, the Isolation Hospital and Maternity Home should be "Grade A" (Tuberculin tested).

A scheme to encourage the consumption of more milk among school children is mentioned in the Annual Report on School Hygiene for 1931.

The general public are still far from realising the great importance, especially to children, of consuming pure milk, but the milk must be pure.

It is estimated that in this country about 6 per cent. of all deaths from tuberculosis are caused by tubercular milk ; that about 2,000 deaths, mostly in children, occur annually from this cause ; that at least 4,000 fresh cases of tubercular infection due to milk develop each year ; and that an immense amount of suffering, invalidity and often permanent deformity is caused by impure milk.

This being so, is it not worth while paying the penny a pint extra, in the case of children at any rate, for a milk which can be guaranteed free from the infection of tubercle?

If anyone in Warrington finds difficulty in obtaining Grade A. (Tuberculin tested) milk they have only to apply at our Health Department, and information will readily be available regarding sources of supply.

Efforts are being made by the Milk Marketing Board to increase the consumption of milk, but whilst recognising the extreme value of this food as an article of diet, before one can wholeheartedly support the campaign there must be a definite assurance that steps are being taken to promote a milk supply free from tubercle bacilli.

(b) MEAT AND OTHER FOOD.

(i) The Public Health (Meat) Regulations, 1924.

The Regulations have been of considerable benefit in the transport and handling of meat.

The practice of retailing meat on handcarts, horse-drawn or motor vehicles still continues, and although some of the motor vehicles now in use for this purpose are in first-class condition, we do not approve of the principle.

There is no public abattoir in this Borough. We have nine private slaughter-houses (2 registered, 7 licensed). One of the slaughter-houses is only used at irregular intervals, and at another pigs only are slaughtered.

The slaughter-houses are regularly visited by the inspectors, chiefly during the time slaughtering is taking place. Not only do the inspectors examine the meat and view the premises as to the conditions of cleanliness, but also see that no cruelty takes place.

The total number of carcasses, etc., condemned at the slaughter-houses during the year was as follows :—

Nineteen beasts, 2 sheep, 6 pig and 1 calf carcasses with their offals, and in addition 1,783lbs. of offal. The chief cause for condemnation in both beasts and pigs was tuberculosis.

(ii) The Necessity for Improved Slaughter-house Accommodation in the Borough.

The provision of a public abattoir in Warrington has been considered by the Local Authority on many occasions, and in March, 1931, the matter was deferred to see what the effect (if any) was locally of the erection of a new and extensive abattoir at Liverpool.

Since then matters have become worse. Many of the old slaughter-houses have become more and more dilapidated, and are entirely unsuitable for their purpose.

In one case the slaughter-house is situated in close proximity to a new public elementary school which has just been opened.

Every endeavour has been made during the year to find another site for this slaughter-house, and it is hoped that before long something will be done to remedy the position. A suitable site is required on which to erect the necessary buildings, and of such a size as to accommodate most of those butchers at present killing animals in the town. It would be possible then for the Health Authority to close the majority of the licensed slaughter-houses forthwith.

(iii) Unsound Food.

The following table is a summary of the amount of unsound or diseased food which has been destroyed by the Health Department during the year :—

Beast Carcases	80	cwts.
Beast Offal	14	„
Sheep Carcases and Offal.....	1	„
Pig Carcases and Offal	9½	„
Tinned Meat	36	lbs.
Fish	19	cwts.
Rabbits (frozen)	62	carcases.
Oranges	3	boxes.
Grape Fruit	20	„

11 bags of sheep and beast feet, which were found to be unsound while in transit on the railways, were destroyed.

(c) ADULTERATION, ETC., OF FOODS.

Action taken under various Acts to prevent adulteration of milk and other foods.

Artificial Cream.

Nine samples of cream were submitted to the Public Analyst and found to be genuine. One informal sample marked "Fruit Tart with Fresh Cream" was examined. The cream was an entirely artificial product. Before further proceedings could be taken the description "fresh cream" was altered by the vendor.

The use of artificial cream for the filling of cream cakes has become very prevalent.

Condensed Milk and Dried Milk Regulations.

There are no factories in this borough where either Condensed or Dried Milk are prepared. The material sold is of the well-known brands and labelled in accordance with the requirements of the Regulations.

Public Health (Preservatives, etc., in Food) Regulations.

All samples in which preservatives might reasonably be expected to be present were tested for preservatives. Only in one case was any preservative found.

Twelve samples of bacon were specially obtained for the purpose of ascertaining whether preservatives had been used. In one case, an informal sample, boron preservative equivalent to 15 grains per pound was present. An official sample, taken two days later from the same premises, was found free from preservative.

Summary of the action taken on the Reports of the Borough Analyst on Adulterated Samples.

ADULTERATED SAMPLES			
Sample	No.	Adulteration, etc.	Action taken
Milk	174 175	Solids-not-fat below Ministry Standard (8.5%) (174) 8.39. (175) 8.48.	Further samples taken found to be up to standard.
Milk	185	Deficient in solids-not-fat 8.26%	Two samples taken 10 days later gave a result as follows : Fat 2.76. Solids-not-fat 8.76. Fat 3.45. Solids-not-fat 8.55. Appeal to the cow sample Fat 3.42, Solids-not-fat 8.58 The farmer was summoned before the Health Committee and cautioned. Samples obtained since have been found satisfactory.
Milk	188	Slightly deficient in fat and solids-not-fat. Fat 2.77. Solids-not-fat 8.41.	Further samples obtained with the following results:— Fat 2.8. Solids-not-fat 8.5. " 2.6. " 8.5. " 2.57. " 8.61 " 3.2. " 8.42. The appeal to the cow sample was Fat 3.2. Solids-not-fat 8.42 The farmer was summoned to appear before the Health Committee and after hearing his statement, the Committee requested him to make an improvement in his method of feeding the cattle. This man has now ceased to send milk into Warrington.
Milk	211 212	Fat 3.25, Solids-not-fat 6.9. (18.8% extraneous water). Fat 2.84, solids-not-fat 6.12 (28% extraneous water).	As this milk was being con- veyed by a Haulage Contractor from the farmer to its destina- tion in Warrington, and as milk from several other farms were on the wagon, it was decided to take samples next day at the farm before the contractor received the milk. Result. 216 contained 11.7% ex. water 216a " 42.3% " 216b " 10.5% " 217a " 23.5% " The farmer was summoned before the Magistrates and fined 20/- on each of the two samples, plus £1/1/- costs.

Sample	No.	Adulteration, etc.	Action taken
Milk	214	Fat 2.86. Solids-not-fat 8.07. (50% extraneous water).	This sample was taken on the same date as samples No. 211 and 212 and was on the same Motor Lorry. The Driver, three days afterwards, informed me that he had placed a small tank of milk from No. 211 farm into 214 tankard to make more room on his motor lorry. This probably accounted for the deficiency. Other samples obtained since from this farm have been up to standard.
Milk	232	5% deficient in fat.	Deficiency probably attributable to unduly long interval between consecutive milking. Farmer interviewed and he promised to arrange more equal period between the times of milking. Samples taken since have been satisfactory.
Milk	236	3% deficient in fat (Fat 2.96).	Two samples obtained since from this farm contained:— Fat 4.2. Fat 3.7.
		Milk Original Samples	9 adulterated.
		Checking Samples	10 „

1 Sample Cream	Container marked Thick Rich Cream. Contained 24.6% of milk fat. The Public Analyst states that Thick Rich Cream should contain not less than 50% of milk fat. There is no legal standard for cream.
Sample E. Ground Almonds	Decomposed due to storage—for the most part valueless. Formal sample obtained—certified genuine.
Sample N. Shredded Suet	Contained 28% of rice flour. The Public Analyst states—“Any quantity in excess of 15% must be considered adulterated.” Unable to obtain a sample of same brand. Further sample of shredded suet on sale at the same shop was certified genuine.
Sample 225 E. Bacon	Contained boron preservatives equivalent to 15 grains per pound. Formal Sample obtained two days after Sample 225E was obtained. Found free from preservative.
Sample	100% of Cream Substitute containing no cream.

I am indebted to Mr. Graham Sherratt, the Public Analyst, for the following report upon the samples analysed under the Food and Drugs Act and related Acts during the year ended 31st December, 1933.

NUMBER OF EACH VARIETY OF FOOD ANALYSED DURING 1933.

Description of sample	Number analysed			Number Adulterated
	Formal	Informal	Total	
Milk	58	24	82	19
Butter	0	12	12	0
Cream	0	9	9	1
Cheese	0	1	1	0
Margarine	0	1	1	0
Ground Almonds	1	8	9	1
Shredded Suet	1	7	8	1
Bacon	2	10	12	1
Malt Vinegar	0	3	3	0
Self-raising Flour	0	1	1	0
Sugar	0	1	1	0
Bread	0	1	1	0
Pea Flour	0	1	1	0
Boiled Sweets	0	5	5	0
Honey	0	1	1	0
Jam	0	1	1	0
Fruit Tart with Fresh Cream	0	1	1	1
Totals	62	87	149	24

The total number of samples of food submitted for analysis during 1933 was 149, and in the following table this number is compared with the figures relating to previous years :—

TABLE No. 1.

NUMBER OF SAMPLES ANALYSED.

	1933	1932	Average 1926-31
Formal samples	62	59	51
Informal samples	87	102	115
Total	149	161	166

Later in this Report, samples are frequently referred to as "Formal" or "Informal" and it is perhaps desirable to mention, therefore, that the description relates to the method of sampling, and has no other significance with regard to the subsequent treatment of the sample by the analyst. In taking formal samples, the article must be divided into three portions, each of which must be separately sealed and labelled. Of these, one is left with the vendor, one is sent for analysis, and the third portion is reserved. This procedure, whilst necessary if a prosecution is contemplated, is tedious and may occasion considerable inconvenience to a retailer in a busy shop. To avoid this, it is customary to take "informal" samples of many articles, such samples being purchased as an ordinary transaction by the Sampling Officer or his agent, and being sent for analysis without any knowledge of the matter on the part of the vendor. Samples so taken are dealt with on their merits, and are followed up by the taking of a formal sample only as required.

The method has disadvantages, in that it is not always possible to obtain a second (formal) sample of an article that has proved to be adulterated, but on the whole the practice is a good one, and saves considerable time and inconvenience both to the Sampling Officer and the retailer who supplies him.

Table No. 2 gives the number and percentage of samples reported as adulterated or not up to standard; details of individual samples so reported are given later in this Report.

TABLE, No. 2.

Number of Samples adulterated.

Year.	Number analysed.	Number adulterated.	Percentage adulterated.
1933	149	24	16.1
1932	161	12	7.5
1931	169	8	4.7
1930	141	7	4.9
1929	160	24	15.0

The above table illustrates the very considerable fluctuation in the number and percentage of adulterated samples that occurs from year to year, but it has been mentioned in previous Reports that the figures are not a reliable index by which to judge the condition of the food supply of the borough, since they are necessarily governed by the number of samples taken from any one unsatisfactory source. Possibly a more reliable indication might be obtained by comparing annually the number of vendors by whom unsatisfactory articles are sold, but as samples are always distinguished only by a serial number, and the analyst is usually unaware of their source, such a comparison would be difficult to make, and it has not been thought desirable to attempt it.

The samples analysed during 1933 included seventeen varieties of food, and a table is given at the end of this Report, showing the number of each variety analysed. For convenience of consideration, the samples may be divided into the following classes, viz. :—

1. Dairy Products, i.e., Milk, Butter, etc.
2. General "Groceries."
3. Confectionery.

No samples of drugs, or of wines or spirits were submitted.

DAIRY PRODUCTS.

(a) Milk.

Milk is by far the most frequently sampled article, not only in Warrington, but throughout the country, but, in spite of this, the percentage of unsatisfactory samples remains regrettably high in comparison with other articles.

During 1933, eighty-two samples of milk were analysed, and 19 of these were reported against as failing to conform to the requirements of the Sale of Milk Regulations, 1901. These unsatisfactory samples represented milk from seven different producers. By no means all the samples were deficient as a result of deliberate adulteration, but the fact cannot be overlooked that there may well be as much extra profit to be made by inadequate feeding of cows as by the actual abstraction of fat or the addition of water. It is a matter of experience that cows producing milk of poor quality may nearly always be made to yield a satisfactory supply by regular milking and adequate feeding, and it follows that there is little ground for the frequently made contention that a milk producer who finds himself in trouble with the Sampling Authority

is often unjustly persecuted. It has been the practice for a number of years in Warrington, to inquire closely into every case of inferior quality milk, however trivial the deficiency may appear, and I can recall no case in the past five years where this policy has not ultimately resulted in an improvement of the supply.

Details regarding those samples that were considered to be of unsatisfactory quality may be summarised as follows :—

SAMPLE No. 174 and RELATED SAMPLES.

The solids-not-fat in sample No. 174 were found to be slightly below the minimum required by the Sale of Milk Regulations, 1901, and a detailed analysis suggested that the deficiency was probably due to the presence of one or two per cent. of extraneous water. This small quantity of water might, of course, be the result of purely accidental and unsuspected contamination, and it was advised that further samples should be taken from the producer concerned. Accordingly, in one week's time, the supply was again sampled and analysed, and on this occasion was found to be of satisfactory quality. No further action has been taken in the matter.

SAMPLE No. 185 and RELATED SAMPLES.

This was a series of nine samples taken from one producer over a period of a few weeks, and three samples in the series were found to be deficient in fat or in solids-not-fat or in both. In this case, it was advised that "appeal to the cow" samples should be taken. (It may be mentioned that "appeal to the cow" samples are samples taken from the bulk supply of a herd immediately after a Sampling Officer has supervised the milking, and they are taken to ascertain what quality of milk the cows are actually giving.) The appeal to the cow samples were satisfactory and of normal quality, and it must be presumed, therefore, that the deficiencies of the original samples were not unavoidable. The Members of your Committee, on being acquainted with the above facts, decided to interview the producer concerned, and it would appear that the warning then issued proved effective, since subsequent samples from the same source have proved to be of good quality.

SAMPLE No. 188 and RELATED SAMPLES.

The facts in relation to this series of samples of milk were somewhat similar to the above recorded case. Sample No. 188 was slightly deficient in both fat and solids-not-fat, and three subsequent samples from the same source, taken one week later, were of similar unsatisfactory quality. The case differed from the preceding one, however, in that the "appeal to the cow" sample also failed to satisfy the requirements of the Sale of Milk Regulations. The Members of your Committee interviewed this producer also, but in spite of this, further samples taken a few weeks later showed only a slight improvement. At the suggestion of your Inspector, therefore, the producer was invited to discuss the matter with the Inspector and myself, and certain recommendations were made with regard to the food given to the cows. It is presumed that the suggestions were effectively carried out, since no further unsatisfactory samples have been received from this source.

SAMPLES Nos. 211, 212, 216 (a, b, c and d) and RELATED SAMPLES.

This was a case in which all the samples mentioned above were heavily adulterated with added water. As the facts were fully explained to your Committee at the time, and as the final result of the investigation was the prosecution and conviction of a producer, it is perhaps unnecessary to make any comment here.

SAMPLE No. 214 and RELATED SAMPLES.

The facts in connection with this supply illustrate the risk that attends the sale of milk by a retailer who is not also the producer if he fails to protect himself by obtaining a warranty from the individual from whom he buys the milk.

The vendor in this case collected his supply from a farm and brought it by lorry into Warrington. Here it was sampled by the Sampling Officer, and, on analysis, was found to be adulterated with not less than five per cent. of added water. The retailer had no warranty from the producer, and, in consequence, was liable to prosecution for the sale of adulterated milk, although the circumstances in connection with the delivery of the supply rendered it unlikely that he was, in fact, the actual offender. Section 29 of the Food and Drugs (Adulteration) Act contains details as to a warranty defence, which was specifically intended to protect the innocent vendor of an adulterated article, and it is very regrettable that so many milk retailers entirely fail to take advantage of its provisions. Further samples of this milk supply were taken from both the retailer and the producer, but these samples were all of satisfactory quality, and no action was taken in respect of the original sample.

SAMPLE No. 232 and RELATED SAMPLES.

Sample No. 232 was deficient in fat to the extent of five per cent. The sample was taken on a Sunday morning, and the deficiency was probably attributable to an unduly long interval between consecutive milkings, caused by the difficulty experienced by some farmers in obtaining labour at the weekend. Further samples taken later in the year were of satisfactory quality.

SAMPLE No. 236.

The remarks made in connection with sample No. 232 above are equally applicable to sample No. 236, which was taken on the same day, and was deficient in fat to the extent of 1.3 per cent. No definite action has been taken in this case, but further sampling is advised.

SAMPLES OF MILK REPORTED TO BE GENUINE.

Apart from the 19 samples included in the above summary of unsatisfactory cases, the supply of milk in Warrington as represented by the samples has been of normal quality. The following table shows the average composition of the milk solids of all the genuine samples taken in the four quarters of the year, and comparison is made with similar data from previous years:—

TABLE No. 3.
AVERAGE COMPOSITION OF "GENUINE" SAMPLES OF MILK.

Milk Solids		1933	1932	1931	1930
Jan-March	Fat	3.54	3.75	3.66	3.70
	Solids-not-fat	8.74	8.70	8.76	8.90
April-June	Fat	3.53	3.93	3.41	3.80
	Solids-not-fat	8.70	8.89	8.70	8.70
July-Sept.	Fat	3.60	4.15	3.91	3.80
	Solids-not-fat	8.60	8.68	8.62	8.70
Oct.-Dec.	Fat	4.02	3.85	3.95	3.80
	Solids-not-fat	8.81	8.74	8.81	8.80

EXTRANEIOUS DIRT IN MILK.

Only one sample in which the extraneous sediment exceeded 5 parts per 100,000 has been encountered during the year, and in this case the nature of the sediment suggested that it was probably due to a gust of wind blowing wheaten chaff into the milk. The amount of sediment was estimated to be 7 parts per 100,000, but there was no evidence of excretal contamination, and the sample was passed as genuine.

DAIRY PRODUCTS.

(b) Butter, Cream, Cheese.

BUTTER.

The twelve samples of Butter analysed during 1933 were all genuine articles, free from foreign fat and/or preservatives. In no case did the amount of water in a sample exceed the maximum of 16 per cent. permitted by Section 11 of the Food and Drugs (Adulteration) Act.

CREAM.

Nine samples of Cream were analysed during 1933, and one was reported to be unsatisfactory. The objection to this sample was not against its composition, but against the labelling adopted for the container in which it was sold. The article was described as "Rich Thick Cream," but genuine rich cream should contain at least 50 per cent. of fat; the sample contained only 24.6 per cent. of fat, and such a label is entirely unwarranted and misleading. Whilst no strictly legal standard exists in this country for cream, there is no doubt that the machinery of the Food and Drugs (Adulteration) Act is sufficient, and could be applied, to prevent this type of misdescription, and it is rather unfortunate that no action was taken in the matter. It is my considered opinion that the public to-day stands in real need of protection from mislabelling and from unwarranted and extravagant claims in the advertisement of food, and if those responsible for the administration of the Act are to acquiesce in some present manufacturing tendencies, the position will, no doubt, become rapidly worse. The longer misbranding of any particular article is allowed to continue, the greater becomes the likelihood of the establishment of a "Trade Custom," a term that all too frequently in the past has been utilised to maintain a successful legal defence of the sale of an inferior article. Whatever may be the merits of "Trade Custom" as a legal argument, there can be no doubt that it is nearly always invoked against the interests of the consumer, and it follows that instances of alleged mislabelling should not be permitted to go unchallenged if new "Customs" are not to become firmly established.

Apart from the above-mentioned case of mislabelling, all the samples of cream analysed were genuine articles. The average percentage of fat in the samples of fresh cream was 51 per cent., and in the samples of tinned and sterilised cream was 24 per cent. No case of the introduction of a preservative was detected.

CHEESE.

Only one sample of Cheese was received for analysis during the year. The sample was made wholly from unskimmed milk, and was of good quality.

GENERAL "GROCERIES."

GROUND ALMONDS.

During 1933, nine samples of Ground Almonds were analysed, and one was reported to be of unsatisfactory quality, the remainder being passed as genuine.

The complaint in regard to the unsatisfactory sample (Serial Number "E") was that it had become decomposed to such an extent as entirely to have lost the recognised character of ground almonds. It is probable that the explanation of this quite remarkable decomposition was to be found in the conditions under which the almonds had been stored, but as a subsequent formal sample from the same source proved to be genuine, this theory could not be confirmed and no action could be taken in the matter.

SHREDDED SUET.

Eight samples of shredded suet were analysed during the year, and, of these, seven were of satisfactory quality and one was returned as adulterated. This sample (Serial Number "N") was an informal one, and contained 28 per cent. of rice flour and only 69.9 per cent. of fat. It was regarded as containing a large and unnecessary excess of rice flour and as seriously deficient in fat. Rice or similar farina is introduced into shredded suet for the purpose of preventing the adhesion of grains of fat, but any quantity in excess of 15 per cent. must be regarded as adulteration. Up to the time of writing this Report, no formal sample corresponding to the adulterated article has been received, and no action has been taken.

BACON.

The number of samples of Bacon analysed in 1933 was ten, and one of these was found to be adulterated, the remainder being of satisfactory quality. The adulterated sample (Serial Number 225E) was an informal one, and contained boron preservative equivalent to 0.22 per cent., or 15 grains per pound. The use of boron in any form is entirely prohibited by the Public Health (Preservatives in Food) Regulations.

Bacon is an article of food that is somewhat difficult to deal with by the process of informal sampling. In a busy shop or store, any one piece of bacon is cut up and sold quite rapidly, and, in consequence, it is usually impossible to obtain a second (formal) sample from the same piece as the informal sample. This difficulty arose in the present instance. A formal sample from the same source, and representing the same brand of bacon (but not, of course, the same piece) was taken two days after the informal one, but the second sample was entirely free from preservative, and no further action could be taken.

The remaining samples of "groceries," consisting of Malt Vinegar (3), Self-Raising Flour (1), Sugar (1), Pea Flour (1), and Margarine (1) were all of good commercial quality and do not call for individual comment.

CONFECTIONERY AND PRESERVES.

The articles in this section include samples of Boiled Sweets (5), Prepared Honey (1), Jam (1), Bread (1), and Fruit Tart with Fresh Cream (1). All the above were informal samples.

The samples of Sweets, Honey, Jam and Bread were genuine articles and do not call for special comment, but the sample of Fruit Tart with Fresh Cream was reported to be adulterated. The "filler" in this sample was an entirely artificial product of vegetable fat, sugar and flavouring materials, and there was complete absence of cream, fresh or otherwise. No action against the vendor of this sample has so far been taken, as there is some difficulty in obtaining a formal sample, but it is hoped to investigate the matter further at a later date.

PRESERVATIVES IN FOOD.

One hundred and twenty-eight of the samples received during 1933 were specially tested for the presence of preservatives. This number included all samples in which preservative might reasonably be expected to be present, or in which it could serve any useful purpose. With the exception of the case of bacon mentioned above, no case of contravention of Public Health (Preservatives in Food) Regulations was detected.

METALLIC CONTAMINATION.

All samples that were artificially coloured or that during manufacture were likely to have been exposed to metallic contact have been specially tested for the presence of poisonous metals. It is satisfactory to be able to record that in no instance was there found any significant quantity of metallic contamination.

I am, Gentlemen,

Your Obedient Servant,

J. GRAHAM SHERRATT,

Public Analyst.

PURITY OF WATER SUPPLY.

(a) RESULTS ON CHEMICAL ANALYSIS:—

Date 1933	Sample No.	Free Ammonia.	Albuminoid Ammonia.	Oxygen absorbed in 3 hours.	Nitrogen as Nitrates.	Chlorine.	Solids Total.	Solids Fixed.
March 9	A	0.0030	0.004	0.22	faint trace.	0.8	4.16	2.80
" 20	B	Nil.	0.004	0.20	"	0.8	3.52	2.56
May 30	C	Nil.	0.003	0.044	0.46	2.2	22.9	20.7
July 7	D	Nil.	0.0010	0.010	0.55	2.6	37.2	29.7
August 22	E	0.0005	0.0020	0.010	0.50	2.5	34.0	30.0
Sept. 26	F	Nil.	0.0010	0.014	0.45	2.4	34.0	28.6
Oct. 25	G	0.0010	0.0010	0.018	0.48	2.55	37.5	31.4
Dec. 20	H	0.0005	0.0005	0.005	0.52	2.5	39.8	32.1

(b) Results of Bacteriological examination during the year 1933 of samples submitted to Prof. Maitland, Public Health Laboratory, Manchester.

Twelve samples submitted—bac. coli. was not found in 100 c.c.'s in 9 samples, but was present in 100 c.c.'s of 3 samples though not present in 100 c.c.'s.

SECTION F.

Prevalence of and Control over Infectious and other Diseases.

NOTIFIABLE DISEASES.

Statistics in the Special Table requested by the Ministry of Health are given on pages 114 to 116.

The number of notifications received, the incidence rate and number of deaths are given in the following tables:—

(a) Notifications.

The number of cases of notifiable infectious disease and the deaths therefrom, together with the numbers treated at Aikin Street Hospital, are given in the Appendix (page 114).

During 1933 there was a decrease compared with the previous year in the incidence of most of the infectious diseases:—

Scarlet Fever	208	Compared with 403 in 1932
Puerperal Fever.....	2	" 3 "
Enteric Fever.....	—	" 4 "
Pneumonia	374	" 265 "
Erysipelas.....	47	" 46 "
Diphtheria	124	" 74 "
Tuberculosis:—		
Pulmonary	79	" 90 "
Non-Pulmonary	33	" 42 "
Encephalitis Lethargica ..	—	" 4 "
Smallpox	—	" — "
Measles.....	128	" 1094 "
Puerperal Pyrexia	7	" 12 "
Cerebro Spinal Fever	1	
Poliomyelitis	2	
Ophthalmia	3	

The incidence of infectious disease, except for the epidemic of scarlet fever, compares favourably with the country as a whole per 1,000 of the population:—

	Incidence Rates of Warrington	England & Wales.
Smallpox	0.00	0.02
Scarlet Fever	2.44	2.21
Diphtheria	1.52	1.18
Enteric Fever.....	—	0.04
Puerperal Fever.....	0.02	0.05
Puerperal Pyrexia.....	0.08	0.14
Erysipelas	0.58	0.45

The case rates for Puerperal Fever and Puerperal Pyrexia are better expressed in relation to the births registered than to the population. When calculated on this basis the rates are Puerperal Fever 1.4, and Puerperal Pyrexia 5.6 per 1,000 total births (*i.e.*, live registered births) registered during the year in Warrington, compared with Puerperal Fever 3.5 and Puerperal Pyrexia 9.6 per 1,000 for England and Wales as a whole.

The number of deaths due to the notifiable infectious diseases during the year were :—

Diphtheria	7
Scarlet Fever	1
Puerperal Fever.....	3
Cerebro Spinal Fever	1
Encephalitis Lethargica	1

SMALL-POX.

There were no cases of Small-pox in Warrington.

No vaccinations were performed by the Medical Officer of Health under the Public Health (Small-pox Regulations) 1917.

VACCINATION.

Particulars of this transferred service were given in the Report for 1930.

No alterations were made in the districts or in administration, and the Vaccination Officer works in close co-operation with the Health Visitors.

The following table gives a summary of the work for the year, and a further table contrasts the number of vaccinations for the past 22 years :—

VACCINATION OFFICER'S RETURNS.

For the year ending December 31st, 1933.

	District.	
	No. 1.	No. 2.
Number of children registered during 1933, and residing in No 1 and No. 2 Districts.....	532	671
Number of cases submitted on Form H to the Public Vaccinators	310	444
Cases Vaccinated in No. 1 and No. 2 Districts.....	272	388
Number refused Vaccination.....	18	9
Cases postponed	13	39
Cases removed or Vaccinated by other Doctors after Form H has been sent.....	7	8
Number of Q Notices sent during 1933.....	265	300

The following is the return of the Vaccination Officer for the year 1933,
compared with previous years :—

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Births	2111	2166	2238	1900	1774	1540	1625	1640	2272	2034	1808	1784	1642	1741	1645	1634	1651	1567	1593	1581	1475	1400
Successfully vaccinated	1313	1287	1421	1151	970	1183	876	1050	1433	1295	1244	1216	1192	1158	1119	1161	1146	888	893	873	888	817
In susceptible of vaccination	3	.....	2	2	2	1	3	1	4	2	1	5	2	1	8	.....	4	2	7	7	5	1
Died unvaccinated	115	156	168	133	108	78	107	116	121	120	87	75	98	87	96	87	76	100	71	116	82	83
Exemptions	251	347	407	382	331	334	285	332	574	484	400	325	278	325	313	286	365	408	458	441	435	407
Removed : Address unknown	35	50	5	20	46	1	12	19	18	46	52	20	35	31	30	41	39	43	31	25	23	26
Had Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Children born in other districts but vaccinated here	9	11	.....	5	2	8	10	24	17	14	14	17	12	13	13	12	12	12	5	9	3	3

SCARLET FEVER.

During 1933 there were 208 cases with 1 death (mortality rate .01 per 1,000, compared with .05 per 1,000 the previous year).

29 cases were notified from the Borough General Hospital, Infirmary and Peninsula Barracks.

Out of the 208 cases, 196 (or 94 per cent.) were removed to Aikin Street Hospital.

MEASLES.

This disease in Warrington is only notifiable in the case of children under five years of age.

There were 128 cases notified, with 2 deaths, a mortality rate of .02 per 1,000.

8 cases were treated in hospital during 1933. The District Nurse attended in the patients' own homes, in accordance with our arrangements, 7 cases, paying altogether 136 visits (see page 21).

111 visits were paid by the Health Visitors in supervising home treatment.

16 visits were paid by the Inspectors to the homes of children affected.

GERMAN MEASLES.

Only 22 cases came to our notice during 1933.

DIPHTHERIA AND MEMBRANEOUS CROUP.

In 1933 there were 124 cases notified, with 7 deaths (a death-rate of .08 per 1,000).

Immunization against diphtheria has not yet been practised in a wholesale manner in this area, but a certain amount is done at the Isolation Hospital.

All these cases were treated in hospital, and in certain laryngeal cases tracheotomy was performed (page 81).

ENTERIC FEVER.

There were no cases notified during 1933.

PUERPERAL FEVER.

There were 3 deaths, a mortality rate of 0.03 per 1,000 compared with 0.01 per 1,000 in 1932.

Some further particulars *re* this disease are given on page 18.

ERYSIPELAS.

47 cases of this disease were notified during 1933.

ACUTE PRIMARY AND INFLUENZAL PNEUMONIA.

The total number of notifications received was 374, and out of these cases death resulted in 75 instances.

In the Annual Return of Deaths, 71 deaths from influenzal pneumonia are included under influenza, the primary cause, and not under pneumonia.

ENCEPHALITIS LETHARGICA ("Sleepy Sickness").

1 case of a death from this disease was recorded on the death return, but no previous notification had been received.

NON-NOTIFIABLE ACUTE INFECTIOUS DISEASES.

The following cases of non-notifiable infectious diseases came to our notice and were dealt with during the year :—

Measles (in children over 5 years of age)	130
German Measles	22
Whooping Cough	140
Chicken-pox	535
Mumps	154
	981

These do not represent the total of these diseases that have occurred in the Borough, but only those of which we have become aware.

As regards MEASLES, the cases given here are in addition to those notified to us as occurring in children under 5 years of age (see previous page).

WHOOPING COUGH,

like measles, is a very fatal disease in young children. 140 cases came to our notice during 1933. There were 6 deaths from the disease.

WORK OF THE INSPECTORS DEALING WITH INFECTIOUS DISEASES.

The following is a statement of the visits paid by the Inspectors during the year :—

Visits to premises where cases of Scarlet Fever or Diphtheria, occurred	332
Revisits to premises where cases of Scarlet Fever, Diphtheria, or Enteric Fever had occurred to ascertain as to contacts, &c.	226
Revisits to premises where cases of Scarlet Fever or Diphtheria have been treated at home	58
Visits to premises where cases of Measles and German Measles have occurred	151
Revisits to premises while the cases of Measles and German Measles were being treated	67
Visits to homes of children reported by Education Department as being absent from School owing to either Whooping Cough, Chickenpox, or Mumps	783
Revisits to homes of children suffering from either Whooping Cough, Chickenpox, or Mumps	1000
Visits to homes when children are absent from school with a Sore Throat or suspicious Rash	234
Visits to homes where cases of Influenza or Pneumonia have occurred	374
Visits to premises <i>re</i> cleansing and disinfection after cases of infectious disease	41
Total	3266

DISINFECTION.

Month.	Houses.	Articles.
1933.—January	57	421
February	44	386
March	55	438
April	48	343
May	59	401
June	68	301
July	48	117
August	49	312
September	72	616
October	72	585
November	70	551
December	40	323
Total	682	4694

3 notices were served for the stripping and cleansing of premises where certain cases of Infectious Diseases had occurred.

In addition stripping and cleansing was carried out in 15 other premises without notices having to be served.

AIKIN STREET ISOLATION HOSPITAL.

The main diseases at present treated at this Isolation Hospital are Scarlet Fever, Diphtheria, Enteric Fever, Measles and Puerperal Fever. No charge whatever has been made for many years to patients residing within the Borough. When circumstances permit cases from Runcorn Rural, Warrington Rural, and Lymm Urban Districts are admitted.

Summary of number of Patients and Diseases for 1933 :—

	From the Borough	From Warrington Rural District	From Lymm Urban District	From Other Districts	Total
Remaining in Hospital at the end of 1932	51	—	1	—	52
Admitted during 1933 :—					
Scarlet Fever	194	14	2	—	210
Diphtheria	126	8	3	—	137
Enteric Fever.....	—	—	—	—	—
Cerebro-Spinal Meningitis	4	—	—	—	4
Encephalitis Lethargica	—	1	—	—	1
Measles.....	8	—	—	—	8
Whooping Cough	6	—	—	—	6
Pneumonia	2	—	—	—	2
Erysipelas.....	5	2	1	—	8
Chicken Pox.....	5	—	—	—	5
Other Causes	3	—	—	—	3
Under treatment during 1933.....	*404	25	7	—	436

* This figure does not include the cases of ailing babies referred to on pages 43 and 44.

Deaths during 1933 :—

	From the Borough	From Warrington Rural District	From Lymn U.D.C.	From Other Districts	Total
Scarlet Fever	1	—	—	—	1
Diphtheria	7	1	1	—	9
Measles.....	—	—	—	—	—
Puerperal Fever.....	1	—	—	—	1
Other Causes	3	1	—	—	4
Totals	12	2	1	—	15

In hospital at end of 1933 :—

Scarlet Fever	9	1	—	—	10
Diphtheria	12	—	1	—	13
Measles.....	3	—	—	—	3
Totals	24	1	1	—	26

Out of 6 cases admitted as Laryngeal Diphtheria the operation of tracheotomy was performed in 4 cases (3 died).

The following table shows the number of operations performed during the past 8 years.

RETURN OF CASES OF TRACHEOTOMY DURING 1926—1933.

	No. of operations performed	No. of recoveries.	No. of deaths.
1926	9	6 (66.6%)	3 (33.3%)
1927	7	7 (100%)	Nil.
1928	8	6 (75%)	2 (25%)
1929	6	5 (83.3%)	1 (16.6%)
1930	7	4 (57.1%)	3 (42.8%)
1931	3	1 (33.3%)	2 (66.6%)
1932	2	—(00.0) %	2(100.0%)
1933	4	1 (25%)	3 (75.0%)
Total	46	30 (65.2%)	16 (34.8%)

During the year all uncomplicated cases of patients who had suffered from Scarlet Fever were discharged at the end of 5 weeks.

Children convalescing from Scarlet Fever are immunized against Diphtheria if the parents desire it, and it is found necessary after Schick testing.

CANCER.

The number of deaths from Cancer was 126, an increase of 15 over the previous year, where there were 111 deaths.

The male deaths numbered 63, being a decrease of 7, and the female deaths were also 63, an increase of 22 over the previous year.

The ages at death were :—

Ages	0-	1-	2-	5 -	15-	25-	35-	45-	55-	65-	75-
FEMALES	—	—	—	—	1	3	3	14	15	21	6
MALES	1	—	—	1	—	—	4	11	18	21	7

These 126 deaths give a death-rate of 1.55 per 1,000 persons living.

The increase in the number of deaths ascribed to Cancer each year is shown in the next table :—

The following table gives the number of deaths from Cancer during the past 28 years :—

	Number of deaths.	Death-rate per 1000 living.	Average death-rate, 5 year periods.
1906	60	0.85	} 0.68
07	44	0.61	
08	42	0.57	
09	46	0.62	
10	58	0.78	
1911	48	0.66	} 0.80
12	59	0.81	
13	69	0.93	
14	59	0.79	
15	58	0.81	
1916	62	0.88	} 0.96
17	69	1.0	
18	68	0.98	
19	71	0.94	
20	81	1.03	
1921	89	1.14	} 1.03
22	75	0.94	
23	80	1.01	
24	84	1.07	
25	79	1.01	
1926	83	1.06	} 1.15
27	88	1.11	
28	87	1.09	
29	103	1.29	
30	98	1.23	
1931	111	1.39	} 1.44 past 3 years.
32	111	1.39	
33	126	1.55	

Inquiries are made into all Cancer deaths occurring in the Area, and the results are recorded on special cards. Investigations into the histories of all patients suffering from Cancer are made at the Borough General Hospital on the lines indicated in Circular 1136 of the Ministry of Health.

It is very difficult to obtain accurate information with regard to other members of a family who may have been affected with the same disease, as most patients are elderly people whose parents have been dead for many years, and the cause of death is not known or has been forgotten. However, the following table shows what has been elicited in this connection for the past six years :—

FAMILY HISTORY.

Year	No. of Deaths from Cancer	No. whose relatives, etc. had died from Cancer		Relatives who had previously died of Cancer			
				Parent ents	Wife or hus-band	Bro-ther or Sis-ter	Other Rela-tives
1928	87	3	3.4%	2	—	1	—
1929	103	14	13%	6	3	3	2
1930	98	10	10%	5	—	3	2
1931	111	13	11.7%	8	1	3	1
1932	111	7	6.3%	5	1	1	—
1933	126	14	11.1%	6	4	—	4

ARRANGEMENTS FOR RADIUM TREATMENT.

Arrangements have been made through the agency of the Warrington and District Committee of the British Empire Cancer Campaign for free radium treatment for residents of this district at the Liverpool Radium Institute.

21 Recommends were given to applicants during 1933.

X-RAYS FOR DIAGNOSIS.

There are adequate facilities for X-Ray examination both at Warrington Infirmary and the Borough General Hospital.

TUBERCULOSIS.

NO. OF CASES IN THE TOWN.

To our knowledge the number of persons suffering from Tuberculosis resident in Warrington at the end of 1933 was 593, divided as follows :—

	Males.	Females.	Total.
Pulmonary	202	113	315
Non-Pulmonary	136	142	278
	<u>338</u>	<u>255</u>	<u>593</u>

and living in close contact with these 593 cases were 2,458 persons.

This number (593) shows a considerable reduction from the previous year, when we had 661 cases on the register.

Our register is revised at the end of each year and cases are struck off which have left the town or apparently been well for several years (5 years for pulmonary, and 3 years for non-pulmonary cases).

NOTIFICATIONS.

The number of new cases notified during 1933 was 112, compared with 132 for 1932.

A summary of all new cases under the different ages and sexes is given in the table in the Appendix, page 124.

Eighty-eight or 78.5 per cent. of the notifications were new cases coming to the Tuberculosis Officer before notification for his opinion as to diagnosis :—

- 57 were sent by Private Practitioners.
- 24 were seen at the Borough General Hospital.
- 1 was seen at the Warrington Infirmary.
- 6 were contacts.

In addition to the 112 notifications, 17 cases (11 pulmonary and 6 non-pulmonary) came to our knowledge from other sources (*e.g.*, 9 transferred from other districts, 4 deaths found on death-returns, 4 posthumous notifications).

DEATHS.

The number of persons certified as having died from Tuberculosis during 1933 was 80 (62 pulmonary and 18 other forms). This gives us a death-rate of 0.98 per 1,000.

DEATHS DURING 1933 DIVIDED INTO AGE PERIODS :—

	Pulmonary	Non-Pulmonary	All forms
1933	0.76	0.22	0.98

Extracts from the special tables that have to be prepared annually for the Ministry of Health are given on pages

Age Periods Years	Pulmonary		Non-Pulmonary	
	Male	Female	Male	Female
0	—	—	—	—
1	—	—	—	1
5	—	—	2	—
10	1	1	4	4
15	2	1	1	1
20	2	4	—	2
25	5	5	1	—
35	6	7	1	—
45	7	2	—	1
55	6	1	—	—
65 and upwards	8	4	—	—
Totals	37	25	9	9

NON-NOTIFIED DEATHS.

There were 8 non-notified deaths during 1933—4 pulmonary and 4 non-pulmonary. Four of these died at home, 3 in Borough General Hospital, and 1 at Manchester Royal Infirmary.

The percentage of such deaths has fallen very considerably since 1920, when it was 21.5%.

The following table shows percentage in 5 year periods since 1921 :—

	Non-notified Deaths	Total Deaths	Percentage of non-notified Deaths
1921—1925 (5 years)	52	575	9.04
1926—1930 (5 years)	33	534	6.10
1931 (1 year)	7	104	6.73
1932 (1 year)	4	90	4.44
1933 (1 year)	8	80	9.9

SUPERVISION.

No change has been made in the staff or in the method of supervision of the cases at the Dispensary, as was described in some detail in the 1930 Report.

DISPENSARY.

Numbers of attendances in 1933 :—

	Adults	Children	Total
New cases	256	169	425
Old cases	227	114	341
Attendances for examination	956	439	1395

In addition to these attendances there were also 1,860 for interviews, etc., making a total of 3,255.

X-RAY EXAMINATIONS.

Number of cases X-rayed in 1933 was 524, compared with 463 in 1932.

CONTACTS.

During 1933 134 contacts with cases of the disease were specially examined by the Tuberculosis Officer, and of these 6 were found to be suffering from Tuberculosis, and 7 were sufficiently suspicious to be kept under observation.

CO-OPERATION WITH GENERAL PRACTITIONERS.

The relations of the Tuberculosis Department with the local doctors are excellent, and 149 patients were sent up for special examination during 1933 by their private practitioners.

WORK IN THE HOMES.

Visits paid during 1933 by the Tuberculosis Inspector and Nurse :—

	Pulmonary	Non-Pulmonary
Visits paid to homes of notified cases, for the purpose of making enquiries and giving advice	83	37
Visits paid to homes of notified cases, to ascertain progress of patient, if instructions are being carried out, etc., etc.	1123	598
Visits to arrange for disinfection and cleansing of homes after death or removals to institutions or another address	38	3
Miscellaneous visits to doubtful cases, etc. ...	34	18
	1278	656
	1934	

AFTER CARE.

Details of the work under this head were given in 1930. We must again place on record our indebtedness to the Local Secretaries of the British Red Cross, Council of Social Service and United Services Fund for much help and financial assistance of patients in this branch of our work.

OTHER WORK.

Disinfection, 121 houses.
 Bacteriological Examination of Sputum, 307.
 Certificates for Ministry of Pensions, 116.
 Certificates for United Services Fund, 49.
 Applications to Red Cross Fund for Assistance, 28.
 Applications to Council of Social Service for Assistance, 20.

TREATMENT OF TUBERCULOSIS.**HOME NURSING AND EXTRA NOURISHMENT.**

Reference may be made to the 1930 Report for details with regard to this.

During 1933, 30 patients received extra nourishment.

DENTAL TREATMENT.

Arrangements have now been made to enable necessitous Tuberculosis patients requiring Dental Treatment to obtain it at our Borough General Hospital. One case was sent for treatment during the year.

SANATORIUM.

All types of the disease are admitted to Hefferston Grange Sanatorium, the early with a view to cure, and the late with a view to prevention of spread of the disease to others.

We also deal with a certain number of outside cases as well as our own, viz., from Cheshire and Lancashire Counties and from Wigan.

The following are the details of the 1933 cases treated:—

	Pulmonary Cases			Observation	Non-Pul.	Total
	Early	Medium	Advanced			
Warrington—						
Adults	7	53	44	11	3	118
School children	1	2	3	10	8	24
Cheshire C.C.	1	27	29	—	—	57
Lancashire C.C.	—	18	14	—	—	32
	—	—	—	—	—	—
Total	9	100	90	21	11	231
	—	—	—	—	—	—

OBSERVATION CASES.

19 of these completed the period of observation, and 1 was found to be suffering from Tuberculosis and retained for treatment. Urgent cases admitted almost immediately. Average period of waiting 5 days.

RESULTS OF SANATORIUM TREATMENT.

During 1933, 166 cases left Hefferston Grange Sanatorium, Weaverham, 98 were Warrington cases, and 89 were cases treated for the Lancashire and Cheshire County Councils.

Warrington cases:—

	Early	Medium	Advanced	Observation	Non-Pul.	Total
Quiescent	5	22	7	—	5	39
Improved	1	5	7	—	—	13
No material improvement	—	2	6	—	1	9
Died in Sanatorium...	—	5	13	—	—	18
Observation cases—						
Tuberculosis	—	—	—	1	—	1
Not tuberculous	—	—	—	18	—	18
	—	—	—	—	—	—
Total Warrington Cases	6	34	33	19	6	98
	—	—	—	—	—	—

Cases discharged from Hefferston who were treated for the Lancashire and Cheshire County Councils.

	Early	Medium	Advanced	Observation	Total
Quiescent	—	12	7	—	19
Improved	—	5	4	—	9
No material improvement ...	—	7	7	—	14
Died in Sanatorium	1	7	18	—	26
	—	—	—	—	—
Total	1	31	36	—	68
	—	—	—	—	—

The average duration of treatment for all cases was 19 weeks. The longest period was 120 weeks for one of the cases.

Cases undergoing treatment at Hefferston on December 31st, 1933 :—

	Early	Medium	Ad- vanced	Observation	Non- Pul.	Total
Warrington cases	2	21	14	2	5	44
Cheshire C.C.	—	9	6	—	—	15
Lancashire C.C.	—	5	1	—	—	6
	—	—	—	—	—	—
Total	2	35	21	2	5	65
	—	—	—	—	—	—

ARTIFICIAL PNEUMOTHORAX.

This form of treatment has been used on much the same scale as last year.

Number of cases attempted but not found possible	16
" " " carried on with benefit to patient	19
" " " still under treatment at the Sanatorium ...	9
" " " " " " at Dispensary	3

Gold-therapy has been continued, as the results were encouraging, especially in connection with an Artificial Pneumothorax. Solganol B given intramuscularly is the preparation at present used, and 12 patients are at present having this treatment. The equipment of a small operating room was completed in the autumn, and division of the phrenic nerve is now carried out in suitable cases by Mr. Graham Bryce, of Manchester, the visiting surgeon. Two such operations were done last year.

RECREATION.

Recreational facilities at the Sanatorium are ample, and particulars of them were given in the 1931 Report.

We have to record with regret the death of the Rev. J. H. Downes, Vicar of Crowton, and Chaplain to the Sanatorium, who conducted regular weekly services for the patients. The Vicar of Weaverham kindly undertook the duties until the vacancy could be filled.

Our best thanks are due to the various concert parties from Warrington, who have provided entertainment at different times.

BOROUGH GENERAL HOSPITAL.

In addition to treatment at the Sanatorium, cases of Tuberculosis are admitted to the Borough General Hospital where the Ministry of Health has approved 8 beds for pulmonary, and 24 beds for non-pulmonary tuberculosis.

PULMONARY CASES.

Types of cases admitted to the Borough General Hospital.

	Early	Medium	Ad- vanced	Obser- vation	Total
Adults	4	25	21	3	53
School Children.....	—	—	2	—	2
Under School Age.....	—	—	—	—	—
Totals	4	25	23	3	55

Condition on discharge of the 49 cases who left the Borough General Hospital.

	Early	Medium	Ad- vanced	Obser- vation	Total
Improved	3	7	4	—	14
No Material Improvement.....	1	3	1	—	5
Died	—	5	12	—	17
Observation Cases—					
Found Tuberculous	—	—	—	—	—
Found not Tuberculous	—	—	—	2	2
Transferred to Hefferston Sanatorium for further treatment	—	6	4	1	11
Totals	4	21	21	3	49

The following cases were still undergoing treatment on December 31st, 1933:—

	Early	Medium	Ad- vanced	Obser- vation
Adults	—	4	1	—
Children	—	—	1	—
Total	—	4	2	—

In addition to the above Warrington cases 8 cases have been treated for Lancashire County Area and other Authorities.

Dr. Delmege visits the hospital on Wednesday each week. Cases suitable for Sanatorium treatment are transferred to Hefferston Grange.

After discharge from the Sanatorium and Borough General Hospital, the cases are kept under observation by the Tuberculosis Visitor, and are asked to attend the Tuberculosis Department from time to time for medical examination.

NON-PULMONARY TUBERCULOSIS.

The following are details of the cases treated during the year 1933 at various hospitals, in addition to 11 cases dealt with in our Sanatorium.

Parts Affected.	In-patients.		Out-Patients.	
	Adults	Children under 15 years	Adults	Children under 15 years
Tuberculosis of the Spine	1	4	2	—
” ” Hip	1	6	3	8
” ” Elbow	1	—	1	—
” ” Ribs	2	—	1	—
” ” Knee	—	1	—	2
” ” Ankle	3	1	—	—
” ” Abdomen	1	9	—	—
” ” Gland	8	7	7	16
” ” Skin	2	—	23	8
” ” Other forms	2	5	—	2
” ” Observation	—	1	—	—
Totals	21	34	37	36

The cases were treated as follows at the Institutions mentioned below :—

	In-patients.		Out-patients.	
	Adults.	Children.	Adults.	Children.
Borough General Hospital	10	26	10	23
Warrington Infirmary	6	7	23	13
Shropshire Orthopædic Hospital, Oswestry	4	—	—	—
Manchester Skin Disease Hospital....	1	—	4	—
Royal Children's Hospital, Liverpool	—	1	—	—
Totals	21	34	37	36

RESULTS OF TREATMENT.

IN-PATIENTS.

Forty-nine of the 55 cases that received treatment in Residential Institutions were discharged.

The following table shows their condition on discharge :—

Hospital	Quiescent	Im-proved	No im-prove-ment	Observation found not tuberculous	Died	Total
Borough General Hospital	16	3	1	1	10	31
Warrington Infirmary	5	7	—	—	—	12
Shropshire Orthopædic Hospital	3	1	—	—	—	4
Manchester Skin Hospital	—	1	—	—	—	1
Royal Children's Hospital, Liverpool	—	—	1	—	—	1
Totals	24	12	2	1	10	49

Six cases were still undergoing treatment on December 31st, 5 at Borough General Hospital and 1 at Warrington Infirmary.

OUT-PATIENTS.

MANCHESTER SKIN DISEASES HOSPITAL.

No cases were discharged during the year.

Four cases are still attending. The cases have made a total of 33 attendances.

WARRINGTON INFIRMARY.

Fifteen cases attending for Artificial Sunlight treatment and dressings for skin diseases were discharged, 6 as recovered, 4 much improved, 2 ceased attending for various reasons, 3 were transferred to other forms of treatment.

Twenty-one cases were still attending for treatment on December 31st.

A total of 820 attendances have been made, 676 were for artificial sunlight treatment, and 144 for treatment at the Skin Disease Clinic.

BOROUGH GENERAL HOSPITAL.

Twenty cases were discharged, 16 much improved, and 1 was transferred for in-patient treatment. Two ceased attending for various reasons, and one was transferred to another Local Authority.

Thirteen were still attending on December 31st.

A total of 897 attendances were made for Artificial Sunlight treatment, etc.

The Cases attending the various hospitals for out-patient treatment have made a total of 1,750 attendances, 1,573 were for Artificial Sunlight, 177 for Skin Treatment.

One patient was supplied with a Surgical Appliance and one appliance has been repaired.

Section 62 of the Public Health Act, 1925, and the Public Health (Prevention of Tuberculosis) Regulations, 1925.

It has not been found necessary at any time in Warrington to put the foregoing powers into operation.

VENEREAL DISEASES.

Much valuable work was done in our Scheme under this heading during the year 1933 by Dr. Ellis Pigott, at Warrington Infirmary, assisted by Dr. Annie Mather.

1. PATHOLOGICAL EXAMINATIONS.

WASSERMAN BLOOD TESTS.

	Results		
	Pos.	Neg.	
For General Practitioners	4	13	17
For V.D. Clinic	58	124	182
For Health Department and Maternity Home	—	27	27
	62	164	226

OTHER EXAMINATIONS.

See page 22 (Bacteriological examinations).

2. FREE TREATMENT AT THE INFIRMARY CLINIC.

The number of attendances, 8,745, was slightly below the attendances for the year 1932.

For hours of consultation, etc., see page 28.

The number of attendances for the past eight years are compared in the following table :—

	1926	1927	1928	1929	1930	1931	1932	1933
Warrington	3090	3907	5384	5569	5905	5831	5984	5821
Lancashire	676	782	1258	1925	1481	1981	1878	1856
Cheshire	427	436	867	1255	1465	1170	1092	1068
Other	—	—	2	—	—	—	—	—
	4193	5125	7511	8749	8851	8981	8954	8745
<i>Clinic Days</i>	1926	1927	1928	1929	1930	1931	1932	1933
New Cases	161	163	190	180	180	196	181	208
Old cases	261	83	82	125	136	122	138	132

The forms of disease dealt with in 1933 were :—

	Syphilis		Soft Chancre		Gonorrhœa		Non-Venereal		Total
	Old Cases	New Cases	Old Cases	New Cases	Old Cases	New Cases	Old Cases	New Cases	
Males	43	23	—	—	24	81	—	14	185
Females.....	33	29	—	—	32	40	—	21	155

ATTENDANCES ON NON-CLINIC DAYS (Males and Females),
for irrigation, douching, etc.

1927	1928	1929	1930	1931	1932	1933
3206	4940	5923	5934	6055	5802	5464

CASES DISCHARGED AS CURED :—

	1928	1929	1930	1931	1932	1933
Syphilis	19	15	22	30	41	41
Gonorrhœa	46	88	94	90	86	100
Soft Chancre	—	—	—	—	—	—
Non-Venereal	40	—	—	28	26	35
	105	103	116	148	153	176

3. PROVISION OF SALVARSAN SUBSTITUTES.

The number of doses of arsenobenzene supplied during 1933 is as follows :—

To Private Practitioners	41 doses.
To Treatment Centre	603 doses.

A total of 644 doses as compared with 605 doses in 1932.

Further particulars are given in the Special Return which has to be submitted annually to the Ministry of Health (see copy pages 131—132).

PREVENTION OF BLINDNESS.

Considerable stress has been placed upon the necessity for prevention of blindness, and at the end of 1933 the Medical Officer of Health submitted a special report on the subject to the Local Authority.

Amongst other points it was recommended that application should be made to the Minister of Health under Section 66 of the Public Health Act, 1925, for approval of the following resolution :

“That subject to the approval of the Minister of Health, the Medical Officer of Health be empowered to make arrangements for the provision of treatment, either at hospitals or otherwise, for persons who are not blind, but may become blind if efficient or prompt treatment is not undertaken, and who are otherwise unable to obtain such treatment.”

One of the greatest causes of blindness throughout the country in the past was Ophthalmia Neonatorum—a serious form of inflammation of the eyes of the new born. Great progress has been made in the prompt treatment of this condition so that it does not now rank so highly as a cause. The position in Warrington for the past 10 years is shown as follows :—

OPHTHALMIA NEONATORUM.

Maternity and Child Welfare Authority.

Year	CASES			Vision unimpaired	Vision impaired	Total Blindness	Deaths	Total
	Notified	Treated						
		At home	In hospital					
1924	8	3	5	7	—	1 (one eye)	—	8
1925	12	5	7	10	1	—	1	12
1926	4	2	2	4	—	—	—	4
1927	7	4	3	6	1	—	—	7
1928	3	2	1	2	—	—	1	3
1929	12	7	5	10	—	—	2	12
1930	4	1	3	4	—	—	—	4
1931	3	—	3	3	—	—	—	3
1932	6	3	3	6	—	—	—	6
1933	3	1	2	2	—	—	1	3

HEALTH EDUCATION.

Educational work of one sort or another is proceeding regularly week by week each year through the efforts of the staff of all the various branches of our department.

The Magazine, "*Better Health*," with local supplement, has been distributed monthly, free of cost, from the Health Department, and is much appreciated by the public receiving it.

The Local Authority availed itself of the offer of negotiating for the *display frames of the Empire Marketing Board*. We are indebted to two of the firms in the town, Messrs. Greenall, Whitley & Co., and Messrs. Joseph Crosfield & Sons, for having given us possession of these frames for health propaganda purposes, and the latter firm have very kindly permitted us to use the frame "in situ." Arrangements have now been made with the Health Education Council for the periodical supply of posters for these frames.

A *Health Week and Exhibition* were held in the town from the 3rd to the 17th December, 1933.

The Exhibition was opened in the Parr Hall, on December 6th, by Sir Bruce Bruce-Porter.

As on previous occasions we engaged Mr. Bowen Partington to conduct the lectures.

Various meetings, all of them well attended, were held during the period in various quarters throughout the town.

The following is a list of the main items:—

(a) WORKS MEETINGS.

Wednesday, Dec. 6th.—British Aluminium Co.

Thursday, Dec. 7th.—Longford Wire Co., Ltd.

Friday, Dec. 8th.—Rylands Bros., Ltd.

Monday, Dec. 11th.—Whitecross Co., Ltd.

Tuesday, Dec. 12th.—Monks, Hall & Co., Ltd.

Wednesday, Dec. 13th.—Fletcher, Russell & Co., Ltd.

Thursday, Dec. 14th.—Armitage & Rigby, Ltd.

Friday, December 15th.—Richmond Gas Stove Co.

(b) TALKS IN SCHOOL.

These were blackboard talks of just under one hour each. The various Head Teachers expressed themselves as satisfied with the subjects taken and the interest of the scholars. The subjects covered a wide range:—

Discoveries in medical science which have benefited mankind generally, correlated with the social history of this country in particular.

Hygiene and the body.

Health and the community.

Prevention of infectious diseases.

Milk.

Fresh air, sleep, wholesome food and eating habits.

Ventilation in the home, necessary sleep, evils of smoking.

Sleep and the importance of rest.

Visits to the lavatory.

Fresh air and sunlight, etc., etc.

(c) OTHER MEETINGS.

Sunday, Dec. 3rd.—3 p.m., Bewsey Adult School.

6.30 p.m., Bewsey Adult School.

8.15 p.m., Warrington Y.M.C.A.

Monday, Dec. 4th.—1.0 p.m., Rotary Club of Warrington.

3.15 p.m., Christ Church Women's Meeting.

7.30 p.m., Bewsey Adult School.

Tuesday, Dec. 5th.—7.30 p.m., Warrington Co-operative Men's Guild.

Wednesday, Dec. 6th.—Opening of Health Exhibition.

Special Women's Meeting abandoned through fog.

Sunday, Dec. 10th.—3 p.m., Warrington Post-War Brotherhood.

Monday, Dec. 11th.—4 p.m., Lecture to Unemployed Young Men.

8 p.m., Warrington Co-operative Society's Comrades' Circle.

Tuesday, Dec. 12th.—3.30 p.m., Inner Wheel Club of Warrington.

7.30 p.m., Lecture to Girl Guides.

Wednesday, Dec. 13th.—4 p.m., Lecture to Unemployed Young Men.

7 p.m., Warrington Co-operative Women's Guild.

Thursday, Dec. 14th.—4 p.m., Y.W.C.A. Meeting for Women.

7.30 p.m., Meeting for Women at Warrington Labour Club.

Sunday, Dec. 17th.—8.15 p.m., Y.M.C.A.

WELFARE OF THE BLIND.

A great deal of time is devoted by members of the Local Authority to the welfare of the blind in the area.

The Blind Persons' Sub-Committee for the administration of the Act of 1920 is a sub-committee composed of the Health Committee, and composed of all the members of that committee, together with 2 representatives of the Warrington, Widnes and District Society for the Blind, 2 representatives of the Warrington Branch of the National League of the Blind and 1 unattached blind person. One of the representatives also represents the Education Committee.

The Voluntary Agency, the Warrington, Widnes and District Society for the Blind, which carries out, on behalf of the Local Authority, much of the welfare work for the blind, continued its useful work during the year.

Certain amendments were made in the conditions of employment in the workshop. The sickness allowance of 12/6 per week to males and females was increased to £1 a week, and it was declared that during the first week of sickness, when three days have to be counted before National Health Insurance benefits are receivable, the scheme shall admit of benefits being increased (a) in the case of males to ensure an income of 35/- per week and (b) in the case of females to ensure an income of 30/- per week (such allowances to be paid only upon satisfactory medical evidence being forthcoming).

It was also decided to debit the unemployable grant account with the cost of arrears of stamps in cases where unemployable blind persons are in arrears with their National Health Insurance contributions.

WORKSHOP ACCOMMODATION.

A problem which is receiving the earnest consideration of the Voluntary Agency and the Local Authority is the provision of additional workshop accommodation, especially for the women, who are working under unsatisfactory and overcrowded conditions. There is little or no room for storage of materials or finished goods. There are now 33 workers, whilst 4 blind persons are in training; one is about to enter training, and eight children are being educated at blind schools. Apparently then, workshop accommodation for about 60 blind persons is urgently required.

Small workshops run independently by individual Local Authorities are bound to be expensive items, and a better method would be the establishment of large workshops regionally by several adjoining authorities, so that overhead charges could be very much reduced.

The whole question of employment of the blind in workshops appears to require careful consideration nationally by some competent body. One is driven to the conclusion at times that the whole system is out-of-date. It may have been quite all right in days gone by, when workshops were run as small philanthropic institutions, but in these days of mass production and rationalisation, where there is apparently far too little work to keep every one employed, it is a different matter.

We are inclined to talk glibly about the therapeutic value of work and of work for work's sake, but is there really a great deal of truth in this?

The majority of people work not for work's sake or for any therapeutic value attaching to it, but for the sake of the pounds, shillings and pence they can earn.

This is borne out in the recent report of the Industrial Health Research Board on "Incentives in Repetitive Work," in which one of the conclusions was that "only three workers out of ten showed any tendency to be satisfied by the work for its own sake."

Whilst asserting that work in workshops is not essential for the welfare of anyone so long as means of subsistence are assured to that person, one must admit that occupation as distinct from work is essential for all.

So that it may be suggested that workshops for the blind, instead of being run as they are at present in competition with similar industries employing sighted labour, would be better used as occupational centres at which any blind person might attend who desired to do so.

In our present schemes until more or less recently, the unemployable blind seem to have been neglected, and much less is done for them than for the employable, who, after all, only constitute about 6% of the total.

In these days of so much unemployment the question of the competition of blind workshops with ordinary industry is a serious one.

We all know instances where industries such as basket-making, brush-making, etc., employing sighted workers, have found it difficult to carry on, and have had to discharge numbers of their employees owing to the competition of a blind workshop in the district which may be subsidised through the rates even to the extent of a 5d. rate.

With so many able-bodied persons unemployed nowadays it is a moot point as to whether the blind are not entitled to become one of the leisured classes.

At any rate, a thorough examination of this question would be useful, even if it were found to be part of a much larger problem, which need not be dwelt upon here.

I am indebted to Mr. J. Hawthorn, the Superintendent and Secretary, for the following report on the work of the Warrington and District Society for the Blind.

WARRINGTON AND DISTRICT SOCIETY FOR THE BLIND.

(Registered under the Blind Persons Act, 1920).

I have much pleasure in furnishing you with a brief survey of our work during the past twelve months, together with the usual statistical information with regard to Registration, etc.

During the year, 13 new cases were registered, there were 16 deaths, 14 de-certified cases (owing to improved vision or for other causes) and 2 blind persons removed outside the County Borough Area. The number on the register, therefore, at the 31st December, 1933, was 183 (103 males, 80 females).

GRANTS TO UNEMPLOYABLE BLIND PERSONS.

105 blind persons are in receipt of the Old-Age Pension, and 89 persons (some of whom receive the Old-Age Pension) are in receipt of grants from the Society under the County Borough Scheme. The amount granted under this heading during the past twelve months was £3,107 16s. 9d. The grants are distributed weekly by the Home Teachers in the course of their duties, either directly at the homes of the blind persons, or at a weekly pay centre at Museum Street here.

ANALYSIS ON THE REGISTER

(31st December, 1933).

	Males.	Females.	Total.
Persons on the Register	103	80	183
New Cases	6	7	13
Number of Visits made	—	—	5756
Books, Magazines and Periodicals received	317 Books plus 100 periodicals.		
Books, Magazines and Periodicals exchanged	411 Books plus 700 periodicals.		
Number of Braille and Moon Readers	—	—	49
Number of Pupils receiving lessons in Braille, Moon and Handicraft	—	—	22
Number of lessons given during year in Braille, Moon and Handicraft	—	—	632
Trainees	4	—	4
Number of persons awaiting training	1	—	1
Number of persons trained but unemployed	—	3	3
Persons employed	25	10	35
Unemployables	65	63	128
School Age Period	4	3	7
Not at School	4	1	5
Number of Persons receiving Council Grants	—	—	89
Number of persons receiving Blind Pension	—	—	105
Deaths	12	4	16
Removals out of district	2	—	2
Decertified Persons	9	5	14
Persons sent to M.O.H. for preliminary examination	—	—	45
Persons assisted with fares to Manchester for examination and treatment	—	—	150
Persons examined by the Eye Specialist at the Health Office Clinic	—	—	107

DEFECTIVE CASES.

	Males.	Females.	Total.
(a) Mental	7	4	11
(b) Physical	10	7	17
(c) Deaf	3	9	12
(d) Combination of (a), (b) and (c)	3	5	8
Total	23	25	48

TABLE SHOWING AGE PERIOD—Present Ages.

	0-5	5-16	16-21	21-30	30-40	40-50	50-60	60-70	70-80	over 80	Total
Males	2	8	2	11	12	5	11	23	23	6	103
Females.....	—	4	2	6	7	5	14	11	25	6	80

AGE PERIOD OF OCCURRENCE OF BLINDNESS.

	0-1	1-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	over 70	Total
Males	7	3	4	11	14	4	6	18	22	14	103
Females.....	2	1	4	7	4	3	11	8	22	18	80

DETAILS OF "CAUSES OF BLINDNESS."

As a result of careful and detailed examination of cases on our registers, I am able to give you definite information as to the "Causes of Blindness" in 94 cases at present certified. Particulars are as follows :—

Causes of Eye Defects in the Persons on the Blind Register who have been examined by the Ophthalmic Surgeon :—

Congenital, hereditary and development defects	22
Myopic Error	8
Glaucoma, primary	6
Cataract, primary	19
Ophthalmia Neonatorum	6
Syphilis (a) Congenital	2
(b) Acquired	1
Local infection of coats of eye	1
Specific Fevers—Diphtheria	1
Eczematous kerato-conjunctivitis	1
Septicæmia	7
Other infectious and bacterial diseases	2
Trauma—(a) industrial	1
(b) non-industrial	3
Vascular diseases (including cerebral vascular lesions)	8
Diseases of the central nervous system	1
Other general diseases	1
No information obtainable	4

Total 94

Next year I hope to be in a position to give you accurate information with regard to the whole of our registered cases,

CERTIFICATION.

The new form approved by the Ministry of Health has been used for the Certification of every new case during the past twelve months, and headway has been made with the re-certification of those who have been on the registers for the past several years—also with the use of the new form. The new form is undoubtedly of great assistance at the examination of cases, and for the later use of extraction of important matter for statistical purposes and prevention work.

The adoption of the new form by all Registration Agencies is to be encouraged, and my Committee feel it will lead to general uniformity for all Blind Welfare purposes where evidence of certification is required.

WORKSHOPS.

Developments in the Workshops are severely handicapped by lack of adequate accommodation. Nevertheless, progress has been made from the point of view of sales and production. Little unemployment was experienced during the year, and sales by the end of March showed some increase on those of previous years, and the net loss on Workshops subsequently reduced proportionately.

The question of alternative trades and new industries must soon be considered in conjunction with the question of new Workshops.

PREVENTIVE WORK.

My Committee has for some years past been keenly interested in this side of Blind Welfare, and as you know personally, we have endeavoured to do all we can in this direction. During the year a close look-out was kept for cases whose eyesight bordered on blindness, and several excellent operative results were our reward for recommending treatment in such cases.

Apart from the good work done locally, more than 150 visits were paid by cases attending the Manchester Eye Hospital, at my Society's expense.

The question of hereditary blindness has also been considered, and the report of the Special Committee in London dealing with this important matter has been received, and is also receiving careful consideration by my Committee.

SOCIAL ACTIVITIES.

The usual social amenities for the blind were continued during the past twelve months, a particular feature being the extension of the provision of annual holidays for the blind, to include 110 blind persons from the Society's Area being sent away for a whole week's holiday, and the remaining number of Unemployable Blind on our registers a gift of 10/- each. My Committee are looking forward with optimism, and hope to send away the whole of the Unemployable Blind in 1934.

The Ladies' Visiting Committee functioned well during the year. Socials were organised regularly, and wireless sets maintained, white sticks provided for those who desired them, and picnics arranged for the whole of the blind, including the school children, whilst other points such as extra benefits during convalescence, bedding, provision of spectacles, etc., were well attended to during the year.

CONCLUSION.

I have to extend my Committee's thanks to the Corporation for the part they play in "Blind Welfare" in Warrington, and to the several departments of the Corporation for their co-operation during the past twelve months.

I am,

Yours faithfully,

J. HAWTHORN,
Superintendent and Secretary.

Appendix I.

Report on the Provision of Domiciliary Medical Services for Poor People in Warrington.

GENTLEMEN,—

The part-time services of two general practitioners who act as District Medical Officers were transferred to the Local Authority from the Board of Guardians under the Local Government Act, 1929, and up to the present no change has been made in the method of administration of this "outdoor medical relief" to necessitous poor persons in Warrington.

The present arrangements, the procedure followed by patients requiring medical attention under the poor-law, the duties and remuneration of the District Medical Officers, statistics of work done, etc., are given in an Appendix to the Report (see pages 9 *et seq.*) The work has increased, however, and continues to increase to such an extent that a reconsideration of the whole scheme is advisable.

SOME REASONS FOR RECONSIDERATION OF PRESENT SYSTEM:

1. INCREASED WORK.

Several factors have combined to add to the work beyond that which was anticipated when the original arrangements were made by the Board of Guardians as follows:—

- (a) actual increase due to growth of population;
- (b) increased area in Lancashire has been allocated to the Medical Officers;
- (c) the new housing estates in Latchford and Bewsey make the work of visiting cases more onerous;
- (d) decision of Infirmary Board of Management to abolish the appointment of a Visiting Medical Officer attached to the Staff of that Institution. This medical officer in the past paid many visits to poor people in their homes. For this he was paid £150 per annum, and had no dispensing of medicines to do;
- (e) alteration in policy of the out-patients departments of all voluntary hospitals whereby the numbers attending are greatly reduced owing to more stringent internal and external scrutiny of the cases allowed to attend;

(f) owing to unemployment a considerable number of unemployed insured persons have ceased to be entitled to medical benefit, and more still will do so at the end of the present year owing to the coming into operation of the Insurance and Contributory Pensions Act, 1932.

2. UNSATISFACTORY CONDITIONS OF SERVICE FROM POINT OF VIEW OF THE DISTRICT MEDICAL OFFICERS.

Both District Medical Officers complain of the increased work, poor remuneration and crowding of their surgeries by poor law cases to the prejudice of their private practice (see Dr. Sinclair's letter appended, page 113).

In Dr. Sinclair's case, for a salary of £95 per annum, he had to be responsible for the treatment in 1932 of 459 persons. This works out at the rate of 4/1 per person per year, and each person may have had to be visited at home on many occasions, and, in addition, may have received treatment at the doctor's surgery.

Furthermore (included in the salary of £95), Dr. Sinclair had to supply in 1932, 2,380 bottles of medicine to these patients. This alone at a cost of 1/- per bottle for drugs and dispensing would have cost more than the doctor's salary.

It is interesting to compare a doctor's remuneration under the National Health Insurance Act with the foregoing. Under the panel system a doctor receives 9s. per head per annum of all persons on his panel whether he attends them or not, and he has no medicine to dispense, or only occasionally, in emergencies. In the poor law case the sum of 4/1 per head was only paid per case attended.

The discrepancy between remuneration and work done in the case of Dr. Meikle is perhaps not so great. Per person attended the remuneration works out at something under 7/- per person per annum. There is no record of the number of bottles of medicine supplied. The number of persons seen per annum by the doctor has, however, almost doubled from 1929 to 1932.

3. UNSATISFACTORY CONDITION FROM POINT OF VIEW OF POOR PERSONS.

Under the present scheme a poor person has no choice of doctor, and is sent to the District Medical Officer allotted to his part of the town.

The surgeries of both doctors are situated in the Lovely Lane and Froghall Lane district, and entail considerable journeys to and fro by some of the poor people. This has become more marked since the re-housing of many on the Latchford Housing Estate.

4. The Committee will remember that the Local Government Act, 1929, required that local authorities should, as soon as circumstances permit, secure that any assistance which can lawfully be provided otherwise than by way of poor relief should be provided exclusively by virtue of other Acts.

In the general circular on the above Act issued by the Ministry of Health, too, appears the following paragraph :—

“A clear direction is thereby given that the process known for the last twenty years as the break-up of the Poor Law shall be put in hand in a practical manner and carried so far as the existing law and the prevailing circumstances allow.”

Now the recommendations made in this report do not remove this service entirely from the Poor Law, but the last of them would constitute a definite step in that direction, and is in true conformity with the Act of 1929.

ALTERNATIVE SUGGESTIONS FOR REVIEW OF SYSTEM.

1. The first suggestion is :—

The institution of a central clinic at the Borough General Hospital would considerably assist the District Medical Officers. If the cases attended at one clinic each doctor could see all the cases on alternate days, and if arrangements for dispensing the medicines required were made at the hospital there would be much less delay both for doctors and patients than at present. Cases would then only attend at the doctor's surgery in case of emergency.

Such a system would make it possible for patients to receive more treatment for minor conditions than they do now, because nurses would be present, and the various apparatus and appliances of a hospital available.

On the other hand this system would have the disadvantage of still further differentiating between the poor person who required medical advice from a general practitioner and other members of the community.

Also at present there is no accommodation at the Borough General Hospital for such a clinic, though the provision of a special receiving block, with waiting-rooms and consultation rooms for other purposes, is now an urgent necessity, and is receiving the consideration of the Health Committee.

2. Another suggestion is that:—

The salaries of the District Medical Officers should be increased, and they should be relieved of the duty of dispensing medicine for these cases.

It would be possible to arrange for a panel system of chemists in the town who would dispense medicines from the prescriptions of the District Medical Officers, and these would be paid for by the committee on the same terms as medicine under the Insurance Act.

From the Return (see page 112) kindly furnished by Mr. Tilling (Clerk to the Insurance Committee), it is seen that the average cost per bottle of medicine in 1932 was 7.58d. The estimated number of bottles supplied by the District Medical Officers was 3,557, which, if dispensed by the Chemists on the same terms as under the National Health Insurance Act, would have cost £112 6s. 10d.

The salaries should be increased in the case of each doctor by £50 per annum.

The cost of the service would then be approximately:—

Medical Officers' Salaries:—	£	£	s.	d.
Dr. Sinclair	145	} 280	0	0
Dr. Meikle	135			
Payment to Chemists for Medicine		112	6	10
In addition, special Medicines and Surgical Appliances—average for past 3 years		66	0	3
Total	£458	7	1	

3. The third alternative and the best of all would be the institution of a system analogous to that under the National Health Insurance Act, whereby every patient has free choice of doctor.

Every doctor in the town would be invited to join a panel for this purpose. The remuneration of the doctors would be on a capitation basis similar to the Insurance Act. The amount of the capitation fee would be a matter for settlement. Under the National Health Insurance Act the fee is 9s. per person on the doctor's panel, but many of these never require his services. (It is estimated that only 25% seek medical advice each year). Under a panel system for necessitous persons only persons who actually required medical services would be included, which would necessitate a higher rate of remuneration per person than under the National Health Insurance Act.

Although the general practitioners in the town have not been approached officially with regard to such a scheme I do not foresee any difficulty in getting their consent, as it is in accordance with the avowed policy of the British Medical Association. In fact, I think the general practitioners would welcome such a scheme.

We have got out the figures for the past four years from the Poor Persons Sickness Returns, and they are as follows:—

STATISTICS OF NUMBER OF NECESSITOUS PERSONS SEEN BY THE DISTRICT MEDICAL OFFICERS ANNUALLY FOR PAST 4 YEARS.

No. 2 District :	1929.	1930.	1931.	1932.
Dr. Meikle	122	188	199	227
No. 1 District :				
Dr. Sinclair and				
Dr. Peacock	446	490	426	459
	<u>568</u>	<u>678</u>	<u>625</u>	<u>686</u>

The number of persons seen during the year 1932 was therefore 686, and this, at, say, 12/6 per head = £478 15s.

The cost of medicines would be the same as under suggestion 2, viz., approximately £112 6s. 10d., plus cost of special medicines and appliances £66 os. 3d., making a total of £657 2s. 1d.

EFFECT OF THE NATIONAL HEALTH INSURANCE AND CONTRIBUTORY PENSIONS ACT, 1932.

The foregoing particulars and estimates are based, as stated, on the work of the district medical services for the past 4 years. Under the above Act a number of persons hitherto entitled to medical services under the Insurance Act will come out of benefit.

An estimate of the number affected at 31st December, 1933, is given as approximately 600 by the Clerk to the Insurance Committee (Mr. A. Tilling).

A year ago the estimate was as high as 2,000, so that it is gratifying to note that a considerable improvement in trade has occurred in Warrington.

Efforts have been made by Insurance Committees throughout the country to obtain special treatment for this class of case from Public Assistance Committees, but there is hardly a real justification for this. After all, many of those who have been receiving treatment from the District Medical Officers in the past are cases who were once State insured, and have come out of benefit for one reason or another.

Again, both those coming out of benefit under the aforementioned Act and those who are at present receiving medical treatment from the Public Assistance Committee would again become entitled to medical benefit under the National Health Insurance Acts if they obtained employment and had paid up their arrears of contributions. It would not appear, therefore, to be fair to formulate any scheme of free choice of doctor for this group alone.

The experience of the National Health Insurance Act is that approximately 25% of those on the panel require treatment during the year, so that of the 600 some 150 additional cases would have to be added to the previous estimate of the work under the proposed free choice of doctor scheme.

A further point, however, is that possibly not all those who come out of benefit owing to the National Health Insurance and Contributory Pensions Act, 1932, would be necessitous cases. Additional cases also may come out of benefit in addition to the above in June and December, 1934.

It has to be borne in mind that the above are estimates based on present statistics, and that the number of persons availing themselves of this new system might increase considerably owing to its greater popularity, and the more ready accessibility of the general practitioner.

Undoubtedly the system of free choice of doctor, even if somewhat more expensive, would prove the most satisfactory to all concerned.

It is clear that some reorganisation of the domiciliary medical services for poor persons is required, and I would be glad if the Committee would therefore consider the foregoing suggestions.

Once the system is decided upon a further report on the details necessary to bring it into operation will be furnished.

It must be remembered that these services are the responsibility of the Public Assistance Committee, who may, however, delegate them to the Health Committee to be administered by the latter on behalf of the Public Assistance Committee.

Before writing this Report I have had the advantage of conferring with Mr. Bottomley (Public Assistance Officer), who has been most helpful to me, and who agrees that some reorganisation is necessary.

In many ways it is desirable that all medical services in the Area should be under the one Committee.

Whatever arrangement, however, is agreed upon, it would still be necessary for all persons seeking to become entitled to treatment under this scheme to apply through the Relieving Officers in the first place.

Furthermore, any scheme which entailed any departure from the Public Assistance Order, 1930, would require the prior approval of the Minister of Health.

G. W. N. JOSEPH, M.D., D.P.H.,

Health Department,
Warrington,
January, 1934.

Medical Officer of Health.

APPENDIX TO REPORT.

The District Medical Services for Poor People in Warrington.

1. PRESENT ARRANGEMENTS.

DISTRICTS AND MEDICAL OFFICERS.

The Domiciliary Medical Services at present provided for necessitous persons in Warrington is administered by the Public Assistance Committee. The town is divided into two Districts, in each of which there is a District Medical Officer who is in general practice and gives part-time service to this work. The Districts and Medical Officers are as follows:—

No. 1 DISTRICT.—Comprises Orford, St. John's, Fairfield and Howley Wards; also that portion of Town Hall Ward on the east side of Horsemarket Street.

District Medical Officer.—Dr. Sinclair.

Surgery situated 6, Froghall Lane, Warrington.

No. 2 DISTRICT.—Comprises Whitecross, Bewsey, St. Austin's and Latchford Wards; also that portion of Town Hall Ward on the west side of Horsemarket Street.

District Medical Officer.—Dr. Meikle.

Surgery situated 117, Lovely Lane, Warrington.

N.B.—The boundaries of the district do not coincide with Ward boundaries, and thus render difficult any comparison of population or other vital statistics.

In each case the Medical Officer also has to deal with cases in the Rural District surrounding Warrington, which was formerly part of the area of the Warrington Board of Guardians. This

portion of the district is administered by Lancashire County Council, and they repay to the Warrington Town Council a part of the District Medical Officer's salary for work in connection with it.

2. MODE OF PROCEDURE FOLLOWED BY PATIENTS REQUIRING MEDICAL ATTENTION UNDER THE POOR LAW.

As a rule patients requiring public medical service attend before the Relieving Officer and apply to him for medical treatment on the grounds that they are themselves destitute of the means to obtain such treatment.

The Relieving Officer gives to the patient a note addressed to the appropriate District Medical Officer requesting him to give attention to the patient, stating the form of treatment required. This may be one of several kinds. The patient may be certified as requiring hospital treatment. He may require domiciliary treatment, in which case the district medical officer gives advice and, if necessary, medicine. The patient may require extra nourishment, and if this is the case the District Medical Officer may order him to be supplied with such nourishment. The District Medical Officer may find that the patient is on the panel of a National Insurance doctor, and in such case he refers the patient to the panel doctor. The patient, nevertheless, must go to the District Medical Officer in addition to the panel doctor wherever a renewal of his certificate for relief purposes is necessary.

3. DUTIES OF DISTRICT MEDICAL OFFICERS AND REMUNERATION.

Each Medical Officer has to render all the ordinary forms of medical advice and treatment to the patients referred to him, either at his surgery or, if necessary, in the patient's own home. He has, moreover, to provide them with medicine, which is dispensed in his surgery.

For these duties each officer receives a fixed annual salary. In addition he may receive extra payment for specially expensive medicines and for certain appliances that may be supplied to patients, generally for these latter the cost price is refunded. Formerly fees for attending midwifery cases were also paid, but now these are generally paid by the Health Committee in the same way as to other general practitioners under the Midwives Act, 1918.

The salaries paid are :—

To Dr. Sinclair in No. 1 District.—£130 per annum.

To Dr. Meikle in No. 2 District.—£120 per annum.

Of these sums Lancashire County Council repay £35 per annum in each case for duties outside Warrington, leaving the net salaries payable by the Town Council at £95 and £85 per annum—£180 per annum.

4. STATISTICS OF WORK OF DISTRICT MEDICAL OFFICERS FOR PAST 4 YEARS.

		No. of individuals attended by District Medical Officers.			
		1929.	1930.	1931.	1932.
No. 2 District :					
Dr. Meikle		122	188	199	227
No. 1 District :					
Dr. Peacock and					
Dr. Sinclair		446	490	426	459
		<u>568</u>	<u>678</u>	<u>625</u>	<u>686</u>

		No. of Bottles of Medicine Supplied :			
		1929.	1930.	1931.	1932.
		Aug-Dec.			
By Dr. Sinclair in District No. 1		519	1,642	2,079	2,380
Estimate of Medicine Supplied by Dr. Meikle in District No. 2		142	629	971	1,177
Annual Estimated No. of Bottles of Medicine		<u>661</u>	<u>2,271</u>	<u>3,050</u>	<u>3,557</u>

	1929	1930	1931	1932
Cost of medicine at the average cost of prescriptions under N.H.I. Panel Scheme	£20/17/6	£71/14/6	£96/6/7	£112/6/10

The following is taken from the Borough Treasurer's abstract of accounts for the years ending 31st March, 1931, 1932 and 1933. (Outdoor Relief (Medical)).

	1931.			1932.			1933.		
	£	s.	d.	£	s.	d.	£	s.	d.
Salaries, Dispensing and Nursing	252	6	3	247	3	6	244	7	0
Special Drugs, Medical & Surgical Appliances	102	16	3	40	4	0	55	0	6
*Totals ...	<u>£355</u>	<u>2</u>	<u>6</u>	<u>£287</u>	<u>7</u>	<u>6</u>	<u>£299</u>	<u>7</u>	<u>6</u>

*Average for 3 years £66 os. 3d.

WARRINGTON INSURANCE COMMITTEE

Summary of Statistical Data relating to prescriptions dispensed in the Borough during the year 1932, and comparisons with previous years.

Year	Total No. of Prescriptions	Average Cost per Prescription.			Average cost per insured person	Prescription frequency per insured
		Ingredients	Dispensing Fees	Total Cost		
		Pence	Pence	Pence	Pence	
1932	148,818	3.34	4.24	7.58	34.46	4.55
1931	150,397	3.10	4.28	7.38	34.36	4.66
1930	148,102	3.18	4.22	7.40	34.49	4.66
1929	157,377	3.72	4.33	8.05	39.96	4.96
1928	145,790	3.81	4.32	8.13	38.24	4.70
1927	147,302	3.70	4.36	8.06	38.89	4.83
1926	136,676	3.78	4.36	8.14	37.08	4.55
1925	122,993	3.65	4.38	8.03	33.96	4.23
1924	108,491	3.60	4.41	8.01	30.59	3.82
1923	92,328	3.43	4.44	7.87	25.67	3.26
1922	88,805	3.31	4.78	8.09	25.90	3.20
1921	81,232	3.62	5.35	8.97	26.58	2.96
1920	83,172	4.83	4.77	9.60	29.92	3.12
1919	83,986	4.26	3.62	7.88	27.54	3.49
1918	81,566	3.82	3.21	7.03	25.52	3.63
1917	63,893	3.22	2.73	5.95	17.78	2.99
1916	62,562	2.71	2.52	5.24	13.92	2.66

Averages for the whole of the area of South West Lancs. and Cheshire :—

Year	Pence	Pence	Pence	Pence	
Year 1932	3.57	4.36	7.93	37.37	4.71
Year 1931	3.49	4.29	7.88	36.88	4.69
Year 1930	3.65	4.33	7.98	36.19	4.53
Year 1929	4.04	4.40	8.44	40.15	4.76
Year 1928	4.16	4.39	8.55	37.64	4.40

Total value of Warrington Prescriptions	1932	£4699	3	7
do.	1931	£4624	4	5
do.	1930	£4564	11	4
do.	1929	£5278	7	2
do.	1928	£4941	2	2
do.	1927	£4951	10	11
do.	1926	£4640	4	5
do.	1925	£4112	12	10
do.	1924	£3621	14	3
do.	1923	£3055	7	2
do.	1922	£3022	8	2
do.	1921	£3064	10	8
do.	1920	£3327	7	9
do.	1919	£2758	13	6
do.	1918	£2388	15	0
do.	1917	£1584	2	1
do.	1916	£1557	10	1

(Signed) A. TILLING,
Clerk to the Committee.

Ivy Lodge,
Warrington,
23rd November, 1933.

Dear Dr. Joseph,—

I am writing you with a view to your placing my present position of District Medical Officer for No. 1 District before your Committee.

The work is becoming so heavy and so much more varied in its scope than was formerly intended under the Poor Law Scheme that I feel I cannot carry on much longer under present conditions. As I now have no surgery hour in which I am not required to do work under the present Public Assistance service my private practice is being seriously affected. The amount of dispensing I now require to do for these cases is proving a heavy toll on my time.

I append figures for work done this year.

Quite apart from the question of remuneration for these services I feel that the increasing amount of this work will make it beyond my power to cope with unless arrangements are made for dealing with these cases at a definite time each day and at some place other than my surgery, where the dispensing would be dealt with in some other way.

I am,

Yours faithfully,

(Signed) G. A. SINCLAIR.

1933.

	June 7 to Oct.	1st Nov. to 23rd.
No. of cases sent by R.O.'s	590	80
Visits made	464	43
No. of Bottles of Medicine supplied	1,842	153

In addition there are dressings and new bottles supplied where none have been brought. Also many cases seen where application was made purely for the purpose of having school notes or pension books signed

Appendix II.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1933.

Particulars of the incidence of notifiable diseases in the County Borough of Warrington during the year.

Disease.	Total Cases Notified	Cases Admitted to Hospital	Total Deaths
Smallpox	—	—	—
Scarlet Fever	208	196	1
Diphtheria	124	124	7
Puerperal Fever	2	1	3
Puerperal Pyrexia	7	7	3
Pneumonia	374	2	75
Erysipelas	47	6	—
Polio-Encephalitis	—	—	—
Encephalitis Lethargica	—	—	1
Measles (notifiable under 5 years)	128	10	2
Ophthalmia	3	2	—
Cerebro Spinal Meningitis	1	—	1
Poliomyelitis	2	1	—

NOTIFIABLE DISEASES, 1933.

Disease.	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 & over	Total	Cases Admitted to Hospital.
Small Pox	1	8	11	8	23	95	43	10	7	2	...	...	208	196
Scarlet Fever	2	3	6	7	13	50	27	5	8	3	...	...	124	124
Diphtheria .....	...	...	...	...	...	...	...	...	2	...	...	...	2	1
Enteric Fever .....	...	...	...	...	...	...	...	...	6	1	...	...	*7	7
Puerperal Fever .....	...	...	...	...	...	...	...	...	62	40	58	25	374	2
Puerperal Pyrexia	14	18	17	20	15	58	21	26	1	...	...	...	2	1
Pneumonia .....	...	...	...	...	1	...	1	...	1	...	...	...	1	...
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	3	2
Cerebro-Spinal Fever.....	3	...	...	...	...	...	...	...	8	7	13	11	47	6
Ophthalmia	1	1	...	...	...	1	4	1	...	...	...	...	128	10
Erysipelas	13	22	34	29	30	...	...	...	...	...	...	...	...	...
Measles .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Total notified 8, 1 withdrawn.

Particulars extracted from Page 1, Form Hosp. 6 (Ministry of Health), year ending 31st December, 1933.

NAME OF HOSPITAL.—Borough General Hospital, Warrington.

AREA AND POPULATION SERVED BY THE HOSPITAL.—Total Population=127,572 (County Borough of Warrington, Urban District Councils of Haydock and Newton-in-Makerfield, and Parishes of Burtonwood, Cuerdley, Great Sankey, Houghton, Myddleton and Arbury, Penketh, Poulton-in-Fearnhead, Rixton-with-Glazebrook, Southworth-in-Croft, Winwick-with-Hulme, and Woolston-with-Martinscroft).

DESCRIPTION.—A General Hospital, maintained under the Local Government Acts and Public Health Acts.

STAFFING. MEDICAL.

Medical Superintendent—Medical Officer of Health.

Visiting Medical Officer.

Resident Medical Officers—2.

Visiting Staff—1 Orthopædic Surgeon.

1 Tuberculosis Officer.

1 Dentist.

Specialists as required.

NURSING.	No. of trained nurses	10
	No. of probationer nurses	46

ACCOMMODATION. Total number of beds provided in the Hospital for sick and maternity cases at 31st December, 1933 :—

(a) for men	100
(b) for women ...	105
(c) for children ...	80 (excluding cots in maternity ward)
(under 16 years of age)	—
Total ...	285
	—

BOROUGH GENERAL HOSPITAL.
 TABLE SHOWING THE CLASSIFICATION OF THE ACCOMMODATION FOR SICK & MATERNITY
 CASES AND THE NUMBER OF BEDS OCCUPIED ON THE 31st DECEMBER, 1933.

Classification of Wards. (1)	Number of Wards. (2)	BEDS.								Total.
		MEN		WOMEN		CHILDREN (under 16 years of age).		Pro- vided (9)	Occu- pied (10)	
		Pro- vided (3)	Occu- pied (4)	Pro- vided (5)	Occu- pied (6)	Pro- vided (7)	Occu- pied (8)			
1. Medical	22	40	37	29	28	39 Cots 27 Beds	27	227 Beds and Cots	84	
2. Surgical		26	26	22	16		24		24	68
3. Chronic sick	4	20	20	24	16	.....	.....	.....	37
4. Children .....		.....	.....	.....	.....	.....	.....	.....	.....
5. Venereal	3	.....	.....	.....	.....	.....	.....	.....	.....
6. Tuberculosis		10	8	10	.....	12	4	.....	12
7. Isolation	3	4	2	7	3	{ 1 cot } { 1 bed }	.....	13	6
8. Maternity	3	.....	.....	13	10	.....	.....	13	11
9. Mental— (a) Lunacy Act, 1890, (i) Short Stay
(ii) Long Stay .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(b) Mental Treatment Act, 1930, (i) Voluntary .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ii) Temporary .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10. Mental defectives .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11. Other .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	32	100	93	105	73	80	55	285	218	

BOROUGH GENERAL HOSPITAL (continued).

Statistics relating to the year ended 31st December, 1933.

(A) IN-PATIENTS.

1.	Total number of admissions (including infants born in hospital)	2304
2.	Number of women confined in hospital	292
3.	Number of live births	268
4.	Number of still births	26
5.	Number of deaths among the newly-born (<i>i.e.</i> , under four weeks of age)*	18
6.	Total number of deaths among children under one year (including those given under 5)	38
7.	Number of Maternal deaths among women confined in hospital	4
8.	Total number of deaths	390
9.	Total number of discharges (including infants born in hospital)	1918
10.	Duration of stay of patients included in 8 and 9 above. Give number of cases whose total stay was for the following periods:—	
	(a) Four weeks, or less, 1699.	
	(b) Exceeding four weeks but under thirteen weeks, 486.	
	(c) Exceeding thirteen weeks, 123.	
11.	Number of beds occupied (a) average during the year, 228. (b) highest 266 on 10/2/33; (c) lowest 201 on 12/10/33.	
12.	Number of surgical operations under general anæsthetic (excluding dental operations)	280
13.	Number of abdominal sections	52

*This figure should relate only to children born in hospital.

(B) OUT-PATIENTS.

1. State the nature and scope of the out-patient provision (if any) for continuation of treatment, emergency treatment, consultations, or otherwise.

ORTHOPÆDIC CLINIC.—OUT-PATIENT
DEPARTMENT (B.G.H.).

	Attendances.
Children (Education)	2417
Children (Maternity and Child Welfare)	1400
Adults and Children (other than above-mentioned).....	2858
Adults and Children (Tuberculosis scheme)	898
Total	= 7573
2. Total number of persons seen in the out-patient department	426
3. Number of these persons who were subsequently admitted for in-patient treatment in the Institution...	53
4. Number of these persons who had received in-patient treatment in the Institution	63
5. Total number of attendances in the out-patient department	7573
6. If there is an ante-natal clinic, give the number of women seen and the total number of attendances :— 280 Women. 1028 Attendances.	
7. If there is a Venereal Disease clinic, give the number of patients seen and the total number of attendances ...	None

DENTAL OUT-PATIENTS' DEPARTMENT
(Commenced 24th June, 1932).

Patients attended included :—

Ante-natal cases, Nursing Mothers, Children under 5 years, and cases from T.B. Dispensary—

M. & C.W.	29 Patients.
Ante-Natal Cases	20 ,,
Nursing Mothers	26 ,,
Children under 5 years	169 ,,
Whitecross Institution Inmates	21 ,,
Total	265

BOROUGH GENERAL HOSPITAL (continued).

(C) CLASSIFICATION OF IN-PATIENTS WHO WERE DISCHARGED FROM OR WHO DIED IN THE INSTITUTION DURING THE YEAR ENDED 31st DECEMBER, 1933.

DISEASE GROUPS	Children (under 16 years of age).		Men and Women.	
	Dis- charged	Died	Dis- charged	Died
A. Acute infectious disease.....	9	2	15	2
B. Influenza	5	1	54	11
C. Tuberculosis—				
Pulmonary	1	—	32	16
Non-Pulmonary	16	9	7	4
D. Malignant disease	—	—	25	32
E. Rheumatism—				
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheuma- tism and chorea.....	4	—	17	1
(2) Non-articular manifestations of so- called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica).....	—	—	25	1
(3) Chronic arthritis.....	—	—	12	4
F. Venereal disease.....	2	—	3	—
G. Puerperal pyrexia.....	—	—	13	—
H. Puerperal fever—				
(a) Women confined in the hospital.....	—	—	—	1
(b) Admitted from outside	—	—	1	—
I. Other diseases and accidents connected with pregnancy and childbirth.....	—	—	90	3
J. Mental diseases—(a) Senile Dementia	—	—	—	—
—(b) Other	—	—	—	—
K. Senile decay	—	—	31	24
L. Accidental injury and Violence.....	18	—	56	11
<i>In respect of cases not included above :</i>				
M. Disease of the Nervous System and Sense Organs	27	2	59	14
N. " " Respiratory System	106	18	163	77
O. " " Circulatory System	5	1	89	74
P. " " Digestive System	18	4	82	13
Q. " " Genito-urinary System..	7	3	58	27
R. " " Skin	50	2	68	1
S. Other diseases	69	4	76	5
T. Mothers and infants discharged from Maternity Wards and not included in above figures—				
Mothers	—	—	300	—
Infants	264	23	—	—
U. Any person not falling under any of the above headings.....	39	—	2	—
Totals	640	69	1278	321

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

Part I.—Summary of Notifications during the period from the 1st January, 1933, to the 31st December, 1933, in the area of the County Borough of Warrington. (to which this Return relates).

Age periods.....	Formal Notifications												Total notifications
	No. of Primary Notifications of new cases of Tuberculosis.											Total (all ages)	
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-		
Pulmonary Males	-	-	1	1	5	9	5	9	11	8	-	49	57
„ Females	-	-	1	1	3	6	8	5	2	2	2	30	41
Non-pulmonary Males	-	6	3	4	1	1	-	-	-	1	-	16	19
„ Females	2	1	5	3	3	3	-	-	-	-	-	17	25

SUPPLEMENTAL RETURN

Part II.—New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age Periods.....	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	Total
Pulmonary Males	-	-	1	1	-	2	-	2	1	1	1	9
„ Females.....	-	-	-	-	-	1	-	1	-	-	-	2
Non-pulmonary Males	-	-	2	1	-	-	-	-	-	-	-	3
„ Females	-	-	2	-	1	-	-	-	-	-	-	3

TUBERCULOSIS (continued).

The source or sources from which information as to the above-mentioned cases was obtained should be stated below :—

Source of Information	No. of Cases	
	Pulmonary	Non-Pulmonary
Death Returns { from local Registrars.....	1	2
{ transferable deaths from Registrar General.....	—	1
Posthumous notifications	3	1
“Transfers” from other areas (other than transferable deaths)	7	2
Other Sources if any (specify).....	—	—

Part III. NOTIFICATION REGISTER.

Number of cases of Tuberculosis remaining at the 31st Dec., 1933, on the Registers of Notifications kept by :— <i>District Medical Officers of Health in the County, the Medical Officer of Health of the County Borough, or Metropolitan Borough</i>	Pulmonary			Non-pulmonary			Total Cases
	Males	Females	Total	Males	Females	Total	
	202	113	315	136	142	278	593
Number of cases removed from the Register(s) during the year by reason <i>inter alia</i> of :—							
1. Withdrawal of notification	1	2	3	—	1	1	4
2. Recovery from the disease	28	13	41	19	17	36	77
3. Death	37	29	66	6	7	13	79

TUBERCULOSIS (continued)

RETURN FOR THE YEAR 1933.
(A) Return showing the work of the Dispensary (or Dispensaries).

Diagnosis	Pulmonary						Non-Pulmonary						Total						Grand Total	
	Adults			Children			Adults			Children			Adults			Children				
	M	F		M	F		M	F		M	F		M	F		M	F			
A.—New Cases examined during the year (excluding contacts) :																				
(a) Definitely tuberculous	42	26	—	—	1	3	5	15	11	—	—	—	—	—	—	45	31	15	12	103
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	2	—	2	9
(c) Non-tuberculous	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	77	69	19	14	179
B.—Contacts examined during the year :—																				
(a) Definitely tuberculous	3	—	2	1	—	—	—	—	—	—	—	—	—	—	—	3	—	2	1	6
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	3	7
(c) Non-tuberculous	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	20	43	54	121
C.—Cases written off the Dispensary Register as :—																				
(a) Recovered	25	6	—	—	—	2	—	8	7	—	—	—	—	—	—	27	6	8	7	48
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous).....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	86	92	72	78	328
D.—Number of Cases on Dispensary Register on December 31st																				
(a) Definitely tuberculous	173	86	15	14	—	55	67	55	53	—	—	—	—	—	228	153	70	67	518	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	3	5	11	24	

TUBERCULOSIS (continued)

1. Number of cases on Dispensary Register on January 1st	576	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years.....	9
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	17	4. Cases written off during the year as Dead (all causes).....	75
5. Number of attendances at the Dispensary (including Contacts)	1230	6. Number of Insured Persons under Domiciliary Treatment on the 31st December	134
7. Number of consultations with medical practitioners :— (a) Personal	165	8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	42
(b) Other	145	10. Number of :— (a) Specimens of sputum, etc., examined (b) X-ray examinations made..... in connexion with Dispensary work	161 332
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	1683	12. Number of "T.B. plus" cases on Dispensary Register on December 31st.....	102
11. Number of "Recovered" cases restored to Dispensary Register, and including in (A) a and A (b) above.....	5		

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the { Council } One.
 { Joint Committee..... }
Provided by Voluntary Bodies None.

TUBERCULOSIS (continued)

*(C) Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

Name of Institution	For Pulmonary Cases		For Non-Pulmonary Cases		Total
	Adults	Children under 15	Adults	Children under 15	
	Hefferston Sanatorium, Weaverham.....	72	8	—		—	80
Borough General Hospital, Warrington.....	8	—	12	12	32

*All institutions belonging to the Authority which are being used for the treatment of tuberculosis are to be included. Any of them which have not been appropriated for Public Health purposes and are being administered by a Public Assistance Committee are to be shown separately under the title of "Poor Law Institutions."

"Number of beds available," means the total number of beds in the Institution used for the purpose, whether they are all occupied or not, and whether they are occupied by patients from the area of the Authority, or are leased to or used by other Authorities.

TUBERCULOSIS (continued)

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

	In Institu- tions on Jan. 1st (1)	Admitted during the year (2)	Discharged during the year (3)	Died in the Institu- tions (4)	In Institu- tions on Dec. 31st (5)	
Number of doubtfully tuberculous cases admitted for observation	Adult males	3	8	10	1	
	Adult females	—	3	2	1	
	Children	5	6	11	—	
	Total	8	17	23	—	2
Number of definitely tuberculous patients admitted for treatment	Adult males	27	100	70	21	36
	Adult females	3	45	29	12	7
	Children	16	36	29	12	11
	Total	46	181	128	45	54
Grand Total	54	198	151	45	56	

TUBERCULOSIS (continued)

(F) Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation	For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						†Totals			
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks						
	M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch	
Tuberculous	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Non-tuberculous	3	1	—	6	1	8	—	—	—	—	—	—	—	—	9	
Doubtful	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Totals	4	1	1	6	1	8	—	—	1	—	—	—	—	10	2	11

† The total of each of these columns should agree with the sum of (3) and (4) in the first section of Part D.

TUBERCULOSIS (continued)

Classification on admission to the Institution	Condition at time of discharge	Duration of Residential Treatment in the Institution														Grand Totals		
		Under 3 months			3-6 months			6-12 months			More than 12 months			*Totals				
		M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch	M	F		Ch	
Class T.B. minus	Quiescent	5	—	1	9	2	—	3	—	1	—	—	—	—	17	2	2	21
	Not quiescent.....	10	6	—	4	1	—	2	—	—	1	—	—	—	17	7	—	24
	Died in Institution.....	6	3	1	1	—	2	—	—	1	—	—	—	—	7	3	4	14
Class T.B. plus Group I	Quiescent	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1
	Not quiescent.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. plus Group II	Quiescent	—	—	—	5	1	—	2	2	—	1	—	—	8	3	—	11	
	Not quiescent.....	4	2	—	1	—	—	1	1	—	1	—	—	7	3	—	10	
	Died in Institution.....	1	1	—	1	—	—	1	1	—	—	—	—	3	2	—	5	
Class T.B. plus Group III	Quiescent	—	—	—	2	1	—	1	—	—	—	—	—	3	1	—	4	
	Not quiescent.....	4	3	—	1	2	—	3	—	—	—	—	—	8	5	—	13	
	Died in Institution.....	8	2	—	1	3	—	1	—	—	—	1	—	10	6	—	16	

PULMONARY TUBERCULOSIS

VENEREAL DISEASES (continued)

	Arsenobenzene Compounds	Mercury	Bismuth		
	14. Chief preparations used in treatment of Syphilis :—	Stabilarsan Novarsenobillon Sulphostab.	—	Hypoloid Bi.	
(a) Names of preparations					
(b) Total number of injections given (out-patients and in-patients)	603	—	791		
(c) Number of injections included in (b) given to patients who on first attendance at this Centre were suffering from primary and secondary syphilis	324	—	398		
15. Are the tests recommended in Memo. V21 as amended by Memo V21a followed in deciding as to the discharge of the patient after treatment and observation for syphilis and gonorrhœa?	Yes.				
	- Microscopical		Serum Tests		
	for spirochetes	for gonococci	Wassermann	Others for Syphilis	for Gonorrhœa
16. Pathological Work :—					
(a) Number of specimens examined at and by the medical officer of the treatment centre					
(b) Number of specimens from patients attending at the centre sent for examination to an approved laboratory		221	179		19

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) to be inserted in these headings.	Warrington	Lancs.	Cheshire	Total
A. Number of cases in Item 3 from each area found to be suffering from :—				
Syphilis	35	8	9	52
Soft Chancre				
Gonorrhœa	83	23	15	121
Conditions other than venereal	30	1	4	35
<i>Total</i>	148	32	28	208
B. Total number of attendances of all patients residing in each area	5821	1856	1068	8745
C. Aggregate number of "In-patient days" of all patients residing in each area	1			1
D. Number of doses of arsenobenzene compounds given in the Out-patient Clinic and In-Patient Department to patients residing in each area	396	64	143	603