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COUNTY BOROUGH OF WARRINGTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

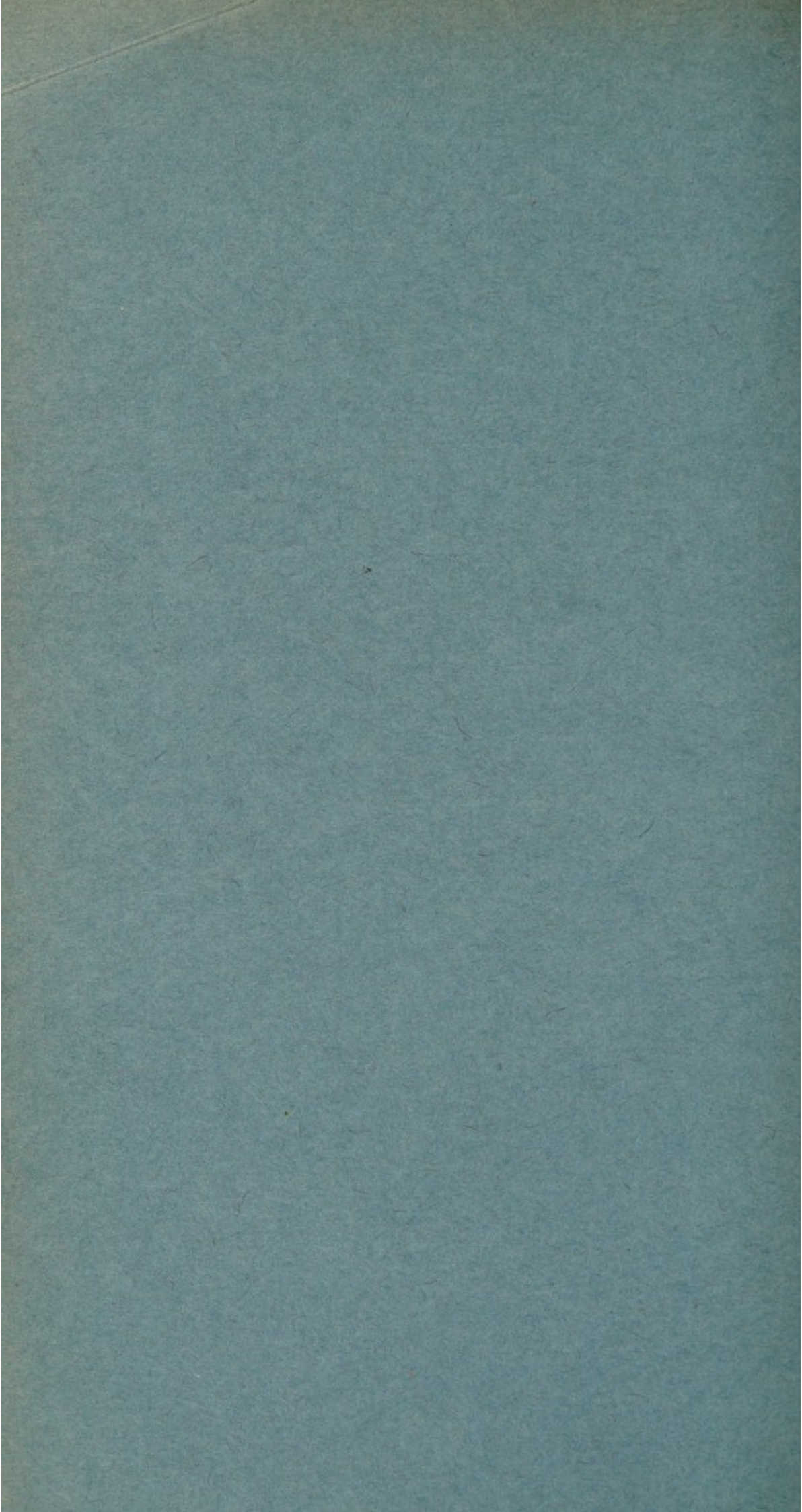
SANITARY CONDITION OF WARRINGTON DURING THE YEAR 1938.

STUART F. ALLISON,
M.B., Ch.B., D.P.H.

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



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County Borough of Warrington

1938.

HEALTH COMMITTEE.

Mayor :

ALDERMAN HARRY SINCLAIR.

Chairman :

ALDERMAN DAVID PLINSTON, J.P.

Deputy-Chairman :

ALDERMAN FRANK STRINGER, J.P.

ALDERMAN TINNION, J.P.

(Deceased 27th October, 1938)

„ BROADHURST, J.P.

„ POOLE, J.P.

„ ROBERTS.

COUNCILLOR CHALLINOR.

„ DONE.

„ GRAY.

„ HARDMAN.

„ SMITH.

„ STARKEY, J.P.

„ TAYLOR.

„ WIGGINTON

Maternity and Child Welfare Committee.

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

MRS. HAZELDINE.

MISS CLARKE.

MRS. UNSWORTH

Blind Persons Act Sub-Committee.

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

MR. REX FURNESS

„ J. HAWTHORN.

„ F. DAVIES.

ALDERMAN MARSHALL

MR. WARBURTON.

„ J. MYTTON.

Boarding Out Committee :

(Sect. 98 Public Assistance Order, 1930).

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

Town Clerk :

A. T. HALLAWAY, Esq.

INDEX.

Ambulance Facilities	25	Maternity and Child Welfare Committee	3
Ante-natal Work	29, 34	Maternity and Child Welfare Work	28
Artificial Pneumothorax	98	Maternity Home	47
Artificial Sunlight Treatment	45	Maternal Mortality	18
Area	10	Measles	83
Births	11	Meat Inspection	72
Births, Notification of	31	Meat & Foodstuffs Condemned	73
Bacteriological Examinations	21, 71, 79	Medical Inspection, 3 year olds	40
Blindness, Prevention of	103	Mental Defectives	20
Blind Persons Act Sub-Committee	3	Midwives	29
Blind Persons, Welfare of	104	Milk Supply	71
Blood Transfusion Service	24	Milk for Mothers & Children	51
Boarded-Out Children	33	Mortality Rates	12
Boarded-Out Committee	3	Non-Pulmonary Tuberculosis	99
Borough General Hospital	23, 109	Nose and Throat Clinic	44
Borough General Hospital Extension	23	Nursery	25
Borough General Hospital—Maternity Work	48	Officials, List of	5, 6
Cancer	88	Ophthalmia Neonatorum	104
Children's Act, 1908	33	Orthopaedic Clinic	44
Children 1 to 5 years	17, 36	Overcrowding	68
Clinics	26	Padgate Cottage Homes	25
Consultation Centres	42	Pathological Examinations	21
Deaf Persons, Welfare of	107	Pneumonia	85
Dis-infestation	66	Places of Entertainment	60
Death Rate	11	Population	11
Death Rates, Lancashire Towns	14	Post-natal Work	35
Deaths, Causes of	13	Premises and Occupations controlled by Bye-laws or Regulations	56
Dental Clinic	43	Puerperal Pyrexia	18
Diphtheria	83	Radium Treatment	91
Domiciliary Medical Services	19, 108	Rats and Mice Destruction Act	58
Encephalitis Lethargica	85	Road Deaths	15
Enteric Fever	85	Sanitary Circumstances of the Area	53
Expectant Mothers	35	Sanitary Inspector's Work	54
Factories and Workshops	56, 59	Scarlet Fever	83
Food Supply, Supervision of	71	Shops Acts	58
Foods and Drugs Act	73	Smallpox	81
Health Committee	3	Smoke Abatement	56
Health Propaganda	104	School Hygiene	61
Health Services, Cost of	27	Still Births	17
Health Services in the Borough	53	Social Conditions	10
Health Visitors' Work	31, 32	Specialists' Services	50
Hefferston Grange Sanatorium	96	Tuberculosis	92
Home Nursing,	20	Tuberculosis Regulations	116
Housing	63	Uncertified Deaths	14
Hospital Accommodation	22	Unmarried Mothers	25
Hospital Accommodation for Infants and Children	25, 50	Unemployed	10
Immunisation	83	Vaccination	81
Infectious Diseases	80, 88	Veneral Diseases	101, 129
Influenza	85	Vital Statistics	10
Insured Persons	10	Warrington Infirmary	22, 24
Isolation Hospital, Aikin St.	86	Water Supply	79
Infant Mortality	15	Whitecross Institution, Mental Wards	20
Laboratory Facilities	21	Whooping Cough	88
Local Government Act, 1929	19	X-Ray Examination	24, 97
Marriages	11		

PUBLIC HEALTH STAFF.

Office Held	Name.	Qualifications.	Other Offices Held.
a) Medical.			
Medical Officer of Health	Stuart F. Allison	M.B., Ch.B., 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
" " "	Miss M. I. Porteous	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)	M. Hurst	M.R.C.S. (Eng.) L.R.C.P. (Lond.)	
Female Resident Med. Officer (Borough General Hospital)	Winifred M. Doran	L.R.C.P. & L.R.C.S. (Edin.), L.R.F.P.&S. (Glasgow)	
Visiting Med. Officer (Borough General Hospital)	J. J. Manning	M.B., B.Ch.	
Venereal Diseases Officer	Ellis Pigott	M.B., Ch.B.	Part time.
School Dental Officer	Wm. C. Parr	L.D.S.	
" "	Miss I. M. Candon	L.D.S.	
Dental Officer (Borough General Hospital)	J. Ellis	L.D.S.	Part time.
Throat and Nose Surgeon	George E. Archer	M.B., Ch.B., F.R.C.S.	Part time.
X-Ray and Eye Surgeon	Ed. Fox (Deceased 3rd Apl., 1938)	F.R.C.S.	Part time.
Radiologist	John A. Ross	M.R.C.S., (Eng.)	Part time.
Ophthalmic Surgeon	O. M. Duthie	M.D., Ch.B.	Part time.
Orthopaedic Surgeon	Harman Taylor	M.B., Ch.B.	Part time.
Obstetric Surgeon (Caesarian operations)	D. H. Young		
Public Vaccinator (1)	Dr. Sinclair	M.B., Ch.B.	Part time.
Public Vaccinator (2)	Dr. W. E. Bowden	M.B., Ch.B.	Part time.
Pathologist	H. A. Mitchell	M.D.	Part time.
b) Others.			
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.
"	James Snailham	R.S.I. Certificate, Meat Inspector's Cert.	Housing Inspector. Special Tuberculosis Work.
"	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.

PUBLIC HEALTH STAFF—continued.

Office Held.	Name.	Qualifications.	Other Offices Held.
<i>(b) Others (continued).</i>			
Sanitary Inspector	Robert L. Winstanley	R.S.I. Certificate and R.S.I. Meat Cert.	General District Work
" "	Bezley Trepess	R.S.I. Certificate	General District Work
" "	William Hunt	R.S.I. Certificate, R.S.I. Meat Cert.	Infectious Diseases Work
Vaccination Officer	A. E. Price		Part time.
Matron of Isolation Hospital	Miss N. Roberts	General Trained, Fever Trained, State Registered T.B. Cert.	
Matron of Borough General Hospital	Miss C. M. 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	A. F. Pidgeon	A.C.C.S.	
Inspector of Midwives	Miss Knott	C.M.B. Cert., R.S.I. Cert.	Also Health Visitor.
Health Visitor	Mrs. Washington (Retired, April, 1938)	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 Smith	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 Wright	General Certificate Fever Trained	
" "	Miss Coventry	General Cert. S.R.N., State Cert. Midwife, H.Vs. Cert. R.S.I. Children's Nurse Cert.	
" "	Miss Fletcher	General Certificate, S.R.N., Fever Nurse, S.R., C.M.B., Cert. R.M.P.A.	
Dental Attendant	Miss Osborne		
Clerks	Wm. Lawless		Chief Clerk.
"	Wm. Knowles		Accounts and Stores Clerk.
"	Miss V. Dwerryhouse		Typist.
"	Miss M. Jones		Clerk (M. & C.W.)
"	Ernest Tarbuck		Clerk.
"	Harold Plinston		"
"	David Rustage		" T.B. Dispensary.
"	James Bate		Junior Clerk.

*To the Chairman and Members of the
Health Committee.*

Gentlemen,

I have the honour to submit the Annual Report on the Health Services and Sanitary circumstances of the Borough for the year 1938.

It is only necessary at this point to comment briefly on certain features of greater importance.

HOUSING

During the year a considerable effort was made to complete the work of dealing with unsatisfactory property scheduled under the Housing Acts. Demolition Orders were made on 234 houses, and 848 persons were rehoused in dwellings erected by the Local Authority. 290 cases of overcrowding were dealt with, and 2,069 persons were rehoused in suitable dwellings.

MATERNITY AND CHILD WELFARE.

The Municipal Midwives, appointed under the scheme formulated to meet the requirements of the Midwives Act, 1936, commenced their duties at the beginning of January, 1938. Throughout the year the scheme worked successfully and with a comparative absence of the difficulties usually attendant upon the initiation of a scheme of this nature and size. The benefits conferred upon mothers whose babies were born at home, have been substantial.

During the year, too, it was conveyed that a new Maternity Unit should be built at the earliest opportunity with a view to meeting the increasing demand for confinements in hospital, and furthermore to substitute premises now considered inadequate for that purpose.

BOROUGH GENERAL HOSPITAL

At the end of the year the buildings constituting the New Nurses Home and the extensions and alterations were approaching completion.

The equipment and apparatus required for the clinics, operating theatres, X-ray department, and laboratory, were being installed; the purchase of furniture, &c., was being arranged, and it was anticipated that the official opening would be held in the earlier part of the present year.

CUBICLE BLOCK

It was agreed that a Cubicle Block for the Isolation of selected infectious cases admitted to the Aikin Street Isolation Hospital should be erected there ; and it was authorised that plans and estimates should be prepared for submission to the Ministry of Health.

PAIL CLOSET CONVERSION.

This work proceeded apace. 404 conversions in private property were carried out during the year, a grant from the Corporation being made in each case. Furthermore, a scheme for the conversion of 720 pail closets to the water carriage system for property on the Westy Lane area was being prepared.

PUBLIC ABATTOIR

In spite of further representations, it was not found possible to make any advance towards providing premises for this purpose.

In certain branches of the Service we have received great assistance from voluntary workers, and I would like to express our gratitude to the Ladies' Committee of the Mothers' and Babies' Welcome for their invaluable assistance at the Consultation Centres.

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

We accord, in addition, our appreciation of all the assistance rendered, especially to ex-Service men and their families by the British Red Cross Society and the United Services Fund.

In conclusion, I wish to thank all my staff, whether at the Health Department or in the various Corporation Hospitals, for their loyal and industrious support in the many branches of work now included in the Health Services.

I wish, furthermore, to express my appreciation of the unfailing courtesy and consideration shown to me by all the other Corporation officials ; and to offer my sincere thanks to the Chairman, Deputy Chairman, and members of the Health Committee for their generous support and guidance.

It has, indeed, been a pleasure to work in such an environment.

During 1938 the health of the Borough was, on the whole, very good.

The **Population** at the mid-year 1938 was assessed by the Registrar-General as 78,140, compared with 79,322 at the Census in 1931.

Our **General Death Rate** for 1938 was 11.1 per 1,000 persons living, compared with 12.5 per 1,000 the previous year.

The **Birth Rate** was 16.4 per 1,000 compared with 17.1 per 1,000 in 1937.

The **Infantile Mortality Rate** was 72 per 1,000 children born, compared with 82 per 1,000 the year before, and 71 per 1,000 the average of the past 5 years.

The **Maternal Mortality Rate** was 2.94 per 1,000 births, compared with a Rate of 2.97 per 1,000 for England and Wales as a whole.

On page 12 a summary of the vital statistics is given, and on page 14, a table of the rates in 16 other towns in Lancashire. On perusal of this latter table, it will be seen that Warrington stands in a very favourable position.

I have the honour to be,

Your obedient Servant,

STUART F. ALLISON,

Medical Officer of Health.

Public Health Department,
Sankey Street, Warrington.

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 five years 1934–1938:—

TOTAL UNEMPLOYED.

1934.	1935.	1936.	1937.	1938.
22.1.34–4768	28.1.35–5798	20.1.36–4940	25.1.37–4940	17.1.38–4349
17.12.34–4856	16.12.35–4259	14.12.36–3202	13.12.37–3202	12.12.38–4316

INSURED PERSONS.

The number of insured persons in the Borough entitled to Medical Benefit on the 1st January, 1939, was 39,131, for which information I am indebted to Mr. Alfred Tilling (Clerk to the Warrington Insurance Committee).

VITAL STATISTICS.

Area	4532	acres
Population (Census 1931)	79322	
„ (R.G. 1938)	78140	
Number of separate dwellings occupied (1931).....	17341	
Number of families or separate occupiers (1931)	18474	
Rateable value (1st April, 1938)	£390687	

		Total	M.	F.	
Live Births {	Legitimate	1245	616	629	} Birth Rate 16.4
	Illegitimate	38	19	19	
Still Births.....	73	Rate per 1000 total births.....			53.8
Deaths.....	873	Death Rate (Areal comparability Factor)....			13.3
Percentage of total deaths occurring in Public Institutions.....					44.1
Number of women dying in, or in con- | from sepsis					3
sequence of, childbirth..... | from other causes					1
Deaths of Infants under One year of age per 1000 live births.....					72
Legitimate 92 ; Illegitimate 1 Total					93
Deaths from Measles (All ages)					4
„ „	Whooping Cough (All ages)				3
„ „	Diarrhoea (under 2 years of age)				8

POPULATION.—The Registrar-General's estimate for the mid-year 1938, was 78,140 (compared with the 1931 Census figures of 79,322), and last year's estimate of 78,500.

BIRTHS.—There were 1,445 births registered of children born in this borough in 1938; 185 births belonged to parents resident outside Warrington, while 23 children were born outside the borough to parents resident within.

Deducting the 185 births from the total registered, 1,445, and adding the 23 births, we have accredited to Warrington 1,283 births (635 males and 648 females).

The birth-rate for Warrington per 1,000 living of the population was 16.4 in 1938, compared with 17.1 in 1937, and 15.1 for England and Wales as a whole.

The total number of illegitimate births was 38 (19 males, 19 females), an increase from the previous year's total, when 33 such children were born (19 males and 14 females).

MARRIAGES.—There were 851 marriages during the year, the rate per 1,000 of population being 10.9. In 1937 there were 859 marriages, giving a rate of 10.9.

DEATHS.—998 deaths were registered as occurring in the Borough during 1938. Of these, however, 173 were non-residents. During the same period, 48 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 873 deaths accredited to Warrington for 1938, compared with 985 in 1937.

This gives us a death-rate of 11.1 per 1,000 persons living during 1938, compared with 12.5 in 1937 and 12.4 in 1936.

The death-rate for England and Wales was 11.6; for the 126 County Boroughs and Great Towns 11.7; and for London 11.4.

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.			
	Live Births.	Still-births.	All Causes.	Typhoid and Paratyphoid Fevers.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Diarrhoea and Enteritis (under two years).	Total Deaths under one year.		
England and Wales	15.1	0.60	11.6	0.00	—	0.04	0.01	0.03	0.07	0.11	5.5	53		
126 County Boroughs and Great Towns, including London	15.0	0.65	11.7	0.00	—	0.05	0.01	0.03	0.07	0.10	7.8	57		
148 Smaller Towns (Estimated Populations, 25,000—50,000) at census 1931	15.4	0.60	11.0	0.00	0.00	0.03	0.01	0.02	0.06	0.11	3.6	51		
London	13.4	0.48	11.4	0.00	—	0.06	0.01	0.03	0.05	0.06	13.1	57		
Warrington	16.4	0.9	11.1	—	—	0.05	0.01	0.03	0.12	0.6	6.2	72		
The maternal mortality rates for England and Wales are as follows :														
			{ per 1,000 Live Births....								Puerperal Sepsis.		Total.	
			{ " " Total Births ...								0.89		2.19	3.08
			{ per 1,000 Live Births ...								0.86		2.11	2.97
			{ " " Total Births ...								2.33		0.77	3.1
			{ " " Total Births ...								2.21		0.73	2.94

CAUSES OF DEATH	Sex	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
ALL CAUSES	M	485	47	2	9	15	17	18	26	56	84	129	82
	F	388	46	2	9	10	13	24	20	29	67	78	90
1 Typhoid and paratyphoid fevers	M												
	F												
2 Measles	M	3	1		2								
	F	1	1										
3 Scarlet fever	M												
	F	1				1							
4 Whooping Cough	M												
	F	3	1		2								
5 Diphtheria	M	5			1	4							
	F	5			2	3							
6 Influenza	M	2								1			1
	F	3			1						1		1
7 Encephalitis lethargica	M	1						1					
	F												
8 Cerebro-spinal fever	M												
	F	1		1									
9 Tuberculosis of respiratory system	M	39	1			1	1	7	5	13	6	5	
	F	14					6	7	1				
10 Other tuberculous diseases	M	2			1	1							
	F	2				1							
11 Syphilis	M	1	1										
	F												
12 General paralysis of the insane, tabes dorsalis	M	4							1		3		
	F	1									1		
13 Cancer, malignant disease	M	62					1		3	8	19	20	11
	F	50							5	11	18	10	6
14 Diabetes	M	4								1	2	1	2
	F	7									4	1	7
15 Cerebral hæmorrhage, etc.	M	25								1	7	10	7
	F	25								1	8	8	8
16 Heart disease	M	98				2	1	1	1	10	20	40	23
	F	106				1	1	5	8	9	19	30	33
17 Aneurysm	M	1							1				
	F												
18 Other circulatory diseases	M	34								3	5	18	8
	F	18								1	1	6	10
19 Bronchitis	M	15	1						1	1	3	5	4
	F	9	2							1		3	3
20 Pneumonia (all forms)	M	39	5		2	1	2	3	7	5	4	6	4
	F	25	8		1	1	1	7	1		2	3	1
21 Other respiratory diseases	M	5						1	2				2
	F	13						2	1		2	1	7
22 Peptic ulcer	M	6						1				4	
	F	1										1	
23 Diarrhœa, etc.	M	7	3	1	1		1						1
	F	5	3	1	1								
24 Appendicitis	M	3							1	1	1		
	F	2				1	1						
25 Cirrhosis of liver	M	1										1	
	F												
26 Other diseases of liver, etc.	M												
	F	3									2		1
27 Other digestive diseases	M	11	2			1	1	1	1			2	3
	F	9			1	1	2				1	4	
28 Acute and chronic nephritis	M	7				2	1			1	1	1	1
	F	5							2		1	2	
29 Puerperal sepsis	M	3					1	2					
	F	1							1				
30 Other puerperal causes	M												
31 Congenital debility, premature birth, malformations, etc.	M	32	32										
	F	30	30										
32 Senility	M	13										3	10
	F	8											8
33 Suicide	M	4					1			1		2	
	F	3									3		
34 Other violence	M	19			1	1	3		1	3	4	3	3
	F	11						1		1	2	3	4
35 Other defined diseases	M	42	1	1	1	2	5	3	1	7	9	8	4
	F	21	1			1			1	5	2	6	5
36 Causes ill-defined, or unknown	M				1								1
	F	2											

CAUSES OF DEATH.—The causes of death at the different periods of life are given in the table on page 13.

CAUSES OF DEATH IN ORDER OF FREQUENCY.

	1938.
1. Heart Disease	204=23.3%
2. Cancer	112=12.8%
3. Pneumonia	64= 7.3%
4. Other Defined Diseases	63= 7.2%
5. Tub. of Respiratory System	53= 6.1%
6. Other Circulatory Diseases	52= 5.9%
7. Congenital Debility, Premature Birth	52= 5.9%
8. Cerebral Hæmorrhage. etc.	50= 5.7%
Total Deaths	873 (1938)

The following table compares our main Statistics with those of other Lancashire Industrial Towns, the figures being obtained from the Registrar-General's Annual Summary.

	Population.	Birth Rate.	Death Rate.	Infantile Death Rate.
England and Wales		15.1	11.6	53
Barrow-in-Furness	66850	16.2	12.2	46
Blackburn	113000	12.3	14.8	69
Bolton	169400	13.5	13.2	45
Blackpool	125800	10.2	14.5	50
Bootle	74080	20.9	12.9	81
Burnley	88650	11.8	14.1	73
Bury	59380	12.8	13.7	67
Liverpool	827400	19.5	12.9	74
Manchester	732900	15.0	12.6	69
Oldham	126100	13.3	14.4	61
Preston	113200	15.6	13.0	71
Rochdale	91290	12.0	13.9	63
St. Helens	107200	18.2	11.4	70
Salford	199400	15.7	13.1	75
Southport	78600	10.2	15.5	70
Warrington	78140	16.4	11.1	72
Wigan	82530	16.5	13.0	99

UNCERTIFIED DEATHS.

The following causes of death (19 in all) were 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	1	—	—	7	9	19

ROAD DEATHS, 1938.

Fatalities on the highways of this country reach such a large total every year that the problem of prevention has necessarily become very prominent. The following are the figures relative to Warrington:—

	Warrington residents killed in Borough.	Warrington residents killed outside Borough.	Residents belonging to outside killed in Warrington.
Under 1 year	—	—	—
1 to 2 years	—	—	—
2 to 5 years	1	—	—
5 to 15 years	—	—	—
15 to 25 years	2	—	1
25 to 35 years	—	—	1
35 to 45 years	—	—	1
45 to 55 years	—	—	1
55 to 65 years	—	—	—
65 to 75 years	1	—	—
	<hr/> 4 <hr/>	<hr/> — <hr/>	<hr/> 4 <hr/>

INFANT MORTALITY.

There were 93 deaths of infants under 1 year of age during 1938, compared with 111 in the previous year, and instead of 1,347 births (1937), there were 1,283 births in 1938.

The infant mortality rate is based on the number of deaths per 1,000 births. The death-rate among infants in 1938 was 72. (For causes of deaths see page 16).

The proportion of the deaths in the first month of life, 53 out of 93, or 57%, mainly ascribed to ante-natal factors—that is to factors acting before the birth of the child—was higher than last year (in 1937 there were 60 out of 111, *i.e.*, 54%).

The causes of infant deaths are given on page 16.

No less than 33 were certified as due to Premature Birth.

During the year there were 3 infants born with Congenital Malformations, as against 2 in the year 1937.

There were 6 deaths from Gastro-enteritis.

28 of the babies were born and died in hospital, and of the remainder 21 were breast fed. The home conditions were reported poor in 5 cases.

Altogether 58 cases died in hospital.

34 in the Borough General Hospital.

4 in the Maternity Home.

2 in the Infirmary.

13 in Aikin Street Hospital, Ailing Babies' Ward.

5 in Aikin Street Isolation Ward.

INFANT DEATHS DURING THE YEAR 1938.

(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 .....	...	...	...	...	...	...	2	...	...	2
Scarlet Fever .....	...	...	...	...	...	...	...	...	...	...
Whooping Cough .....	...	...	...	...	...	...	...	...	1	1
Diphtheria and Croup .....	...	...	...	...	...	...	...	...	...	...
Erysipelas .....	...	...	...	...	...	1	...	...	...	1
Tubercular Meningitis .....	...	...	...	...	...	...	...	...	...	...
Abdominal Tuberculosis .....	...	...	...	...	...	...	...	...	...	...
Other T.B. Diseases .....	...	...	...	...	...	...	...	...	1	1
Meningitis (not T.B.) .....	...	...	...	...	...	...	...	...	...	...
Convulsions	1	1	...	1	3	...	1	...	...	4
Laryngitis .....	...	...	...	...	...	...	...	...	...	...
Bronchitis .....	...	...	1	1	2	...	...	...	1	3
Pneumonia (all forms) .....	...	1	1	1	3	2	4	2	2	13
Diarrhoea .....	...	...	...	...	...	...	1	1	...	2
Enteritis	1	...	...	...	1	1	1	1	...	4
Gastritis .....	...	...	...	...	...	...	...	...	...	...
Syphilis .....	...	...	...	...	...	...	...	...	1	1
Rickets .....	...	...	...	...	...	...	...	...	...	...
Suffocation .....	...	...	...	...	...	...	...	...	...	...
Injury at birth (overlying).....	...	...	...	...	...	...	...	...	...	...
Atelectasis .....	...	...	...	...	...	...	...	...	...	...
Violence .....	...	...	...	...	...	...	...	...	...	...
Congenital Malformation.....	3	1	...	...	4	1	...	...	...	5
Premature Birth.....	28	...	...	2	30	2	1	...	...	33
Atrophy, Debility and Marasmus	5	1	...	2	8	8	3	...	1	20
Other Causes	2	...	...	...	2	...	...	1	...	3
Total.....	40	4	2	7	53	14	12	7	7	93

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—5	Total
1938 {	M.R., 72	93	22	25	140
	{ 1283				
1937 {	M.R., 82	111	11	15	137
	{ 1347				
1936 {	M.R., 90	115	24	30	169
	{ 1214				
1935 {	M.R., 64	87	18	26	131
	{ 1341				
1934 {	M.R., 74	104	22	43	169
	{ 1401				
1933 {	M.R., 73	95	21	19	135
	{ 1299				

(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 36 and 39.

STILL-BIRTH INVESTIGATIONS.

Altogether 81 still-births occurring in the town during 1938 came to our knowledge, and in the majority of instances visits and investigations were made by the Health Visitors into the cases resident within the borough. These still-births occurred as follows :—

In the practices of doctors	....	....	8
In the practices of midwives	....	....	19
In Institutions {	B.G. Hospital	....	32
	Maternity Home	....	22
	Infirmery	....	—
54			
			81

Particulars were obtained of 68 cases.

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

Causes acting before labour :—

Maceration	.....	6
Ante-partum Hæmorrhage	.....	10
Illness of the Mother	.....	7
Albuminuria	.....	7
Prematurity	.....	2
		32

Causes acting during labour :—

Malpresentation	14
Deformity of the Child	10
Difficult labour	12
	<hr/>
	36
	<hr/>

MATERNAL MORTALITY.

During 1938, 4 mothers died during the lying-in period, including 2 septic abortion cases. This, therefore, gives a maternal mortality rate of 2.94 per 1,000 (live and still) births compared with a rate of 2.97 per 1,000 for England and Wales as a whole. In 1937, the Maternal Mortality Rate was 1.4 per 1,000 (live and still) births. An increasing vigilance is being directed towards reducing this mortality to a minimum.

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

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 No. of women attending A.N.C. (Municipal)	Not attending A.N.C. (Municipal)	No. of Registered Births living and still-born.
			War-rington.	Eng-land & Wales.	A.N. clinic	Own Dr.	Mid-wife.	Total				
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	10	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
1934	5	72	3.4	4.41	1	1	3	5	—	981 (67%)	470	1465
1935	15	64	10.6	3.93	6	6	1	13	2	976 (69%)	428	1404
1936	7	90	5.2	3.65	4	2	1	7	—	754 (56%)	583	1337
1937	2	82	1.4	3.11	1	—	1	—	—	973 (62%)	587	1560
1938	4	72	2.9	2.9	1	—	1	2	2	972 (63%)	554	1526

PUERPERAL PYREXIA.

	1938	1937	1936	1935	1934	1933	1932
No. of cases.	3	0.00	3	6	2	3	4
Deaths	1	—	—	4	1	3	1
Mort. Rate .....	.01	0.00	0.00	.040	.01	.03	.01
per 1,000 population.							
No. of Registered Births (including Stillbirths) }	1283	1410	1337	1404	1465	1369	1475
Mort. Rate % on No. of Births }	=.07% = 0.00% = .00% = .28% = .07% = .2% = .06%						

From the 1st October, 1937, the term Puerperal Fever has been withdrawn and all cases are now to be notified as Puerperal Pyrexia.

SECTION B.

General Provision of Health Services for the Area.

LOCAL GOVERNMENT ACT, 1929.

The Local Authority's Scheme under the Local Government Act, 1929, and a survey of the transferred Poor Law Hospital etc., were contained in the Annual Report for 1930.

DISTRICT MEDICAL SERVICES.

The following particulars refer to the Domiciliary Medical Services for the year 1938 :—

	£	s.	d.
Payment to doctors for services	577	2	6
Drugs and Medicines	580	13	5
Medical and Surgical Appliances	244	12	5
Miscellaneous	17	12	10
Total....	£1420	1	2

A complete list of the doctors and chemists who have been approved for service on the panel is given on page 108.

INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

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 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 following is a summary of the cases dealt with during the year 1938 :—

			Males.	Females.	Total.
Admissions	....	....	85	60	145
Discharges	....	....	93	74	167

MENTAL TREATMENT ACT, 1930.

The Lancashire Mental Hospitals Board have entered into an arrangement with Warrington Infirmary to subsidise the Clinic for Early Mental Cases at that Institution. This Clinic is under the supervision of Mental Specialists (Dr. J. E. Nichole, Medical Superintendent, Winwick Mental Hospital.)

There were 52 sessions in 1938 and 26 patients have been attending.

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. (Page 5).

On page 108 is given a list of the General Practitioners and Chemists serving on the panel of the Public Assistance Domiciliary Medical Service.

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 1938 were as follows :—

			Cases	Visits.	
Measles	8	149	} Total 2386 Visits.
Pneumonia	....	....	105	2150
Ophthalmia	....	....	1	11
Others	....	....	5	76

3.—MIDWIVES.

Particulars of the number of midwives practising in the area are given on page 29.

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 (admission)	278
2. Private practitioner's cases	609
3. Cases from Health Department	194
4. Cases from Borough General Hospital	58
5. Cases from Padgate Cottage Homes	17
6. Cases from Maternity Home	1
7. Before discharge from Isolation Hospital	2290
8. Contacts	513
9. Cases from Military Authorities	23
Total	3983

TUBERCULOSIS (specimen of sputum).

For private practitioners	74
For Dispensary	159
For Hefferston Sanatorium	277
For Borough General Hospital	110
For Aikin Street Hospital	11
For Maternity Home	1
Total	632

RINGWORM.

For diagnosis by School Medical Officer	21
---	----

4,636 specimens were examined during the year.

(b) WASSERMAN BLOOD EXAMINATIONS (Professor Maitland, Public Health Laboratory, Manchester).—See under V.D. Scheme (page 102).

(c) PATHOLOGICAL EXAMINATIONS.—152 specimens were examined at the following laboratories :—

Infirmary Laboratory, Warrington	4
Public Health Laboratory, Liverpool	82
University Laboratory, Liverpool	40
Public Health Laboratory, Manchester	26

(d) WATER, MILK AND FOODSTUFFS.—Bacteriological examinations, Public Health Laboratory, Manchester (page 71).

Chemical Analysis of Water, Milk and Foodstuffs (Mr. J. Graham Sherratt, Legh Street Chambers, Warrington), page 73.

6.—HOSPITALS.

Details were furnished in the Report for 1930 (pages 31 and 32) 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 1938, and of the work done.

- (i) Warrington Infirmary (117 beds). Average number available during 1938—110.
- (ii) Borough General Hospital (285 beds).
Classification given in table, page 23.
- (iii) Isolation Hospital (131 beds). See page 86.
- (iv) Hefferston Grange Sanatorium (80 beds). See page 96.
- (v) Maternity Home (20 beds). See page 47.
- (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 1938 and the two preceding years are as follows:—

IN-PATIENTS.

	1936	1937	1938
Number of in-patients in Hospital at beginning of year	78	62	75
Number of in-patients admitted during the year	2,213	2,420	2,470
Number of in-patients in Hospital at end of year	62	75	65
Average number of days' treatment	14.26	14.10	13.91

OUT-PATIENTS.

	1936	1937	1938
General cases	4,187	4,420	5,094
Eye cases	542	—	876
Dental cases	373	—	211
Pensions cases	1	—	—
Orthopædic cases	1,895	2,045	2,175
	<u>6,998</u>	<u>6,465</u>	<u>8,356</u>
Accidents and emergencies	5,495	5,876	6,140
Total	<u>12,493</u>	<u>12,341</u>	<u>14,496</u>
Total number of attendances:—			
Out-patients	17,019	18,323	19,516
Orthopædic cases	35,585	38,869	37,507
Total	<u>52,604</u>	<u>57,192</u>	<u>57,023</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, 1938, was 2,608.

The following table gives a comparison of the number of patients dealt with during the last 10 years, and shows the increase in the work since the hospital was appropriated :—

Year	Total Admissions	Maternity Cases.				Surgical Operations
		Total	Live Births	Still Births	Twins	
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
1934	2527	411	375	36	3 cases	297
1935	2881	553	518	40	5 cases	572
1936	3029	629	582	55	9 cases	599
1937	2756	468	449	36	17 „	507
1938	2608	441	409	32	7 „	599

* Year of transfer to Local Authority.

† Placed under administration of Health Committee.

In 1938 the highest number of beds occupied was 269 and the lowest 172 of the total 285 beds available. The daily average over the whole year was 230.3 beds occupied.

BOROUGH GENERAL HOSPITAL EXTENSION.

At the end of the year, the buildings were almost complete. The internal fittings were being installed and arrangements made for the purchasing of the necessary furniture.

Rapid progress was made with the erection of the Nursing Home, after the foundation stone was laid on the 28th September, 1937, by the late Alderman Peter J. Marron, J.P. For this progress we are indebted to the keen interest taken by the Architects, Messrs. William and Segar Owen.

INFIRMARY CONTRIBUTORY SCHEME ARRANGEMENT.

During the twelve months ending 31st December, 1938, 8 cases were dealt with in the Borough General Hospital under the above arrangement.

BLOOD TRANSFUSION SERVICE.

We have now a register of 50 Blood Donors, grouped as follows :—

Group 2	....	....	....	....	18
Group 3	....	....	....	....	6
Group 4	....	....	....	....	26
					<hr/> 50

SPECIAL DEPARTMENTS.

The following is a summary of the work carried out in the Special Departments at the Borough General Hospital during the year :—

Orthopædic Clinic.	Number of Cases	....	....	445
	„ „ Attendances	....	....	5565
X-Ray Department.	„ „ Cases	....	....	550
	„ „ Attendances	....	....	1451
Dental Clinic	„ „ Cases	....	....	203
	„ „ Attendances	....	....	203
Ante-Natal Clinic	„ „ Cases	....	....	559
	„ „ Attendances	....	....	1779

Total :—1757 Cases. 8998 Attendances.

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, conferences are from time to time (as occasion requires) held with the members of the Board of Management of the Local Infirmary.

7.—MATERNITY AND NURSING HOMES.

The only private Nursing Home at present in the Borough has been established in connection with the Local Infirmary by alterations and additions to the Nurses' Home. It will accommodate 25 patients, and during the year 214 cases were treated therein. This Nursing Home has been exempted from registration by the Local Authority.

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, 1938, was :—

Warrington children ....	....	....	....	45
Children from other areas ....	....	....	....	91
				<hr/>
				136
				<hr/>

9.—NURSERY FOR HEALTHY CHILDREN.

Children under 3 years of age are not admitted to the Cottage Homes, and as there is no nursery provision in the Whitecross Institution any healthy infants and children under the age of 3 have had to be accommodated in the wards of the hospital heretofore. During 1934, however, alterations to the Nurses' Home at Aikin Street Hospital enabled special accommodation to be provided for such cases. The Public Assistance Committee pay 20s. per week for any healthy child admitted to this Nursery, and it is also possible for any child of tender years to be looked after here in the event of the mother requiring hospital in-patient treatment. (See page 50).

9.—AMBULANCE FACILITIES.

There was no alteration in the arrangements, which have been described in previous Reports, for Ambulance Facilities for non-infectious and accident cases, and maternity cases.

10.—CLINIC AND TREATMENT CENTRES.

MATERNITY AND CHILD WELFARE.

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

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, Wednesdays and Thursdays at 10 a.m.

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

Post-Natal Clinic (i.e., for mothers after confinement) 11.15 a.m. Wednesdays at Health Department.

Consultation 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.

Methodist School, Knutsford Road, Fridays, at 2 p.m.

Aural Clinic for children under 5 years of age, sessions by a Throat and Nose Specialist, 2.30 p.m. Health Department, First Thursday in the month.

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 orthopaedic 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:

Orthopaedic Clinic, Borough General Hospital, once a month.

Children aged 5—14 years:

Orthopaedic 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 ESTIMATED COST OF THE HEALTH SERVICES.

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

1938-39 HEALTH SERVICES.

Expenditure			Income.		
£	s.	d.	£	s.	d.
9771	13	11	Maternity and Child Welfare	2880	19 0
7749	8	10	Health	258	18 7
7954	6	8	Blind Persons' Act (1920)	97	11 0
1018	1	11	Treatment of V.D.	287	14 5
10625	0	1	Infectious Diseases Hospital	1655	14 2
585	15	11	Small-pox Hospital	790	9 7
14043	2	3	Treatment of Tuberculosis	4633	0 11
39474	11	4	Borough General Hospital	14693	1 2
4358	3	4	Public Conveniences	1149	10 0
95580	4	3		26446	18 10
			£	s.	d.
Net Expenditure			69133	5	5
Net Product of 1d. Rate			1597	7	6
				s.	d.
Cost of Health Services				3	7.3

By net expenditure is meant expenditure after deducting income such as patients' payments. No account has been taken of the block grant payable under the Local Government Act, 1929, nor of the percentage grant in respect of the School Medical Service.

In considering all such comparisons it will be remembered that local circumstances exist which prevent the expenditure in different County Boroughs from being always strictly comparable. Still, the figures here given are not at all unfavourable to Warrington, especially when one considers that we have as complete a health service as any area, and that there is probably no area that has had less provided for it by philanthropic enterprise.

MATERNITY AND CHILD WELFARE WORK.

The Maternity and Child Welfare Scheme in Warrington is fairly comprehensive, and includes the following branches of work.

- (1) The supervision of the Midwifery Service under the Midwives' Acts.
- (2) The work of the Health Visitors in the homes, including the administration of the Notification of Births Acts.
- (3) Special supervision of Boarded-out children (Public Assistance Order, 1930), of children put out to nurse (Children Act, 1908, Part I.), and of illegitimate children.
- (4) Ante-natal supervision of and consultations for expectant mothers.
- (5) Post-natal supervision of mothers after confinement.
- (6) Discovery of and treatment of defects in children under 5 years of age, including routine medical inspection of children aged 3 years.
- (7) Work of Consultation Centres, together with treatment of certain minor ailments.
- (8) Dental Clinic for expectant and nursing mothers, and for children under 5 years of age.
- (9) Special Ear, Nose and Throat Clinic for children under 5.
- (10) Special Orthopædic Clinic for children under 5.
- (11) Institutional accommodation for maternity cases.
 - (a) Maternity Home.
 - (b) Borough General Hospital.
- (12) Specialist Services if required for maternity cases.
- (13) Hospital treatment of cases of puerperal pyrexia at the Isolation Hospital, Aikin Street.
- (14) Nursery at Aikin Street for healthy babies.
- (15) Hospital accommodation for infants and young children suffering from :—
 - (a) Measles or Whooping Cough.
 - (b) Marasmus.
 - (c) Ophthalmia Neonatorum.

- (16) Immunisation against Diphtheria.
- (17) Home nursing of cases of Measles, Whooping Cough or Pneumonia arising from these diseases and Epidemic Diarrhœa.
- (18) Supply of milk in necessitous cases to expectant and nursing mothers, and to children under 5 years of age.
- (19) Holiday Camp for Mothers.

A very large amount of work has been done under each of the above headings, which will now be considered in more detail :

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

Administration of the Midwives Act, 1902 to 1936.

There were, during 1938, 24 midwives registered as practising in the town. All of these hold the certificate of the Central Midwives Board.

In compliance with the requirements of the Midwives Act, 1936, four Municipal Midwives were appointed. These Midwives commenced duty on January 1st, 1938. A fifth midwife was found to be necessary if this important work was to be carried out in a satisfactory manner, and the Committee made the appointment to enable the midwife to commence duty on March 6th, 1938. 391 cases were attended by the five Municipal Midwives during the year.

POST-GRADUATE WORK.

The Local Authority pays the expenses for seven midwives to attend a post-graduate course each year when such is available within a reasonable travelling distance. In 1938 no such course was available.

The Warrington Branch of the Midwives' Institute becomes a more important institution each year. During 1938, monthly meetings were held at which various members of the medical profession gave lectures on midwifery and allied subjects.

ANTE-NATAL WORK.

This branch of their work is receiving more and more attention from the practising midwives in the town, and several midwives now hold ante-natal clinics in their own homes where their patients are examined regularly. In every case she is referred either to the patients' own private doctor or to the Municipal Ante-Natal Clinic at least once during their pregnancy, though in a certain number of cases patients still refuse the offer of medical advice.

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 1938 :—

Number of visits to midwives and homes	....	....	....	38
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	....	....	....	8
Number of classes held for instruction of midwives	....	....	....	2
Number of notifications of sending for medical aid received from midwives	....	....	....	277
Number of notifications of artificial feeding	....	....	....	13
Number of notifications of deaths of mother or child before attendance of a doctor	....	....	....	—
			mother	—
			infants	—
Interviews with independent midwives at Health Office	....	....	....	80
Laying out of a dead body (Baby)	....	....	....	—

PAYMENTS TO MIDWIVES IN NECESSITOUS CASES, &c.

The Local Authority has decided to pay the fees of Midwives attending necessitous cases of confinement as follows:—First child 35/-, each subsequent birth 30/-.

Furthermore, when a patient who has booked a midwife is sent into hospital by a medical man during the progress of labour, and when the midwife has given ante-natal supervision to the case, a fee of 10/- is paid, or in the case of an abortion, where the midwife has given assistance, 5/- is the fee paid by the Local Authority.

During the year 15 applications for the payment of fees were received and granted as follows:—

Ante-natal cases at 10/- each	....	....	....	6
Confinement (first labour) at 35/-	....	....	....	—
Confinement (subsequent labour) at 30/-	....	....	....	9
				15

In every case of difficulty the Midwife, in accordance with the rules of the Central Midwives' Board, must call in a Doctor and must notify the Medical Officer of Health that this has been done. During 1938 277 such notifications were received.

Under the Midwives Act, 1918, and Orders issued by the Ministry of Health in 1920 and 1922, the Local Authority must pay the fee (according to a special scale laid down) of any Doctor called in, and has power to recover it from the patient if they are able to pay.

The following were the cases during 1938 the reasons for sending for medical aid, and the number of accounts rendered by doctors for their services :—

						<i>Notifications from Midwives.</i>
Difficult Labour....	....	....	....	....	....	57
Malpresentation	....	....	....	....	....	17
Ante-partum Hæmorrhage	....	....	....	....	....	17
Post-partum Hæmorrhage	....	....	....	....	....	9
Illness during Pregnancy	....	....	....	....	....	44
Complications after Labour	....	....	....	....	....	97
Malformation	....	....	....	....	....	1
Condition of Infant	....	....	....	....	....	28
Stillbirths	....	....	....	....	....	2
Abortions	....	....	....	....	....	5
Total						277

The Doctor's account does not coincide entirely with the notifications, as notifications have to be made immediately, but the accounts have to be rendered within one month, and in some cases the patients pay their own fees to the Doctor.

The amounts paid under the special scale of fees was :—

Fees under (1)	67	at	£2/2/-	=	£140/14/-
Fees under (2)	8	at	£1/1/-	=	£8/8/-
Fees under (3)	61	at	£1/1/-	=	£64/1/-
Fees under (4)	5	at	£1/1/-	=	£5/5/-
Fees under (5) ....(Visits)	100	at	5/-	=	£25/-/-
Fees under (6)	10	at	10/-	=	£5/-/-
Fees under (7)	5	at	2/6	=	12/6
					£249/0/6

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 notified as belonging to Warrington in 1938 was 1,356 (1,283 live births and 73 still births).

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, and also that the births for non-residents which occurred in the borough are included.

1938—Number of births notified	....	....	1,526
Notifications received			
From Doctors	....	....	1 (duplicate)
From Municipal Midwives	....	....	391
From Independent Midwives	....	....	320
From Institutions	....	....	815
			<hr/> 1,527 <hr/>

There were no cases of non-notification of births in 1938.

The births in the Borough were attended by Midwives alone in 39% of the cases.

Attended by Doctors (and Midwives)	....	....	....	110
Attended by Midwives alone	....	....	....	599
Attended in Institutions	....	....	....	817
				<hr/> 1,526 <hr/>
Number of births with Doctors engaged to attend confinement	....	....	....	110
Number of births with Midwife engaged to attend confinement	....	....	....	599
(In 277 cases a Doctor was called in.)				
Number of births in Maternity Home	....	....	....	376
(Of these 288 were Warrington births and 88 live out of the Borough.)				
Number of births in Borough General Hospital	....	....	....	441
(Of these 350 were Warrington cases and 91 live out of the Borough.)				
Proportion of Warrington cases born in Institutions	78%	....	....	—
Number of births in Infirmary	....	....	....	—

SUMMARY OF WORK OF THE HEALTH VISITORS DURING 1938.

First Visits to infants	1233
Total visits to infants	4422
Infant death inquiries	65
Visits to children aged 1—5 years	10096
Inquiries into deaths, 1—5 years	19
Visits to expectant mothers	1801
Still-born and abortion visits	89
Visits to children out to nurse	75
" " Illegitimate Children	219
" " Boarded-out children	214
" " Measles cases	845
" " Whooping Cough cases	17
" " Puerperal Pyrexia cases	2
" " Chickenpox cases	13
" " Pneumonia cases	55
" " Ophthalmia Neonatorum	—
" " Orthopædic cases	83
" " Dirty Homes	10
" " Cases under Children's Act	27
" " Consultation Centres	764
" " Ante-Natal Clinic	153
" " Orthopædic Clinic	10
" " Ear, Nose and Throat Clinic	9
Other Visits	438
Nuisances reported	26
Interviews with parents, at Health Office	177

3. SPECIAL SUPERVISION OF BOARDED-OUT CHILDREN, OF CHILDREN PUT TO NURSE, AND OF ILLEGITIMATE CHILDREN.

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 two lady members, Mrs. Hazledine and Mrs. Starkey.

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

The highest number of children on the register during the year was 22.

All cases are visited at least twice a quarter till the age of 16 for the purposes of the Order, and reports are given at each meeting of the Boarding-Out Committee.

214 special visits were paid to 22 boarded out children.

SUPERVISION OF CHILDREN PUT OUT TO NURSE. 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, 1938—

No. of cases at the beginning of the year	4
No. of cases at the end of the year	4
Children legally adopted	—
" Returned to their parents	—
" Died during the year	—
" Transferred to other Local Authorities	—
Attained age of 9 years	—
Foster Mothers found unsuitable	—
New Foster Mothers found	—
Number of Homes	4
Number of Visits	75
Number of children attending Welfare Centre	1
Children in School	1

SUPERVISION OF ILLEGITIMATE CHILDREN.

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

219 special visits were paid to 92 illegitimate children.

4. ANTE-NATAL WORK.

In 96% of the 1,526 notified 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 972, which is 63% of the total births.

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

Number of births notified	1526
Number of mothers attending Municipal Clinics.....	972
Number of attendances at Health Office Clinic	2534
" " B.G.H. Clinic	1882
" " Maternity Home Clinic	323
Total number of attendances at all Ante-Natal Clinics	4739
Average consultations per patient 5.	—

(*This figure 1,526, includes cases residing in other areas which were confined in our hospitals.)

Most of the patients attending the Borough General Hospital Ante-Natal Clinic also attended at the Health Office Clinic at least once.

ESTIMATION OF HÆMOGLOBIN IN PREGNANT WOMEN

During 1938, the routine estimation of hæmoglobin during pregnancy was continued. It is found that during a normal pregnancy, the hæmoglobin value commences to fall when the patient is seven months' pregnant. Since last year it has become routine practice to try and counteract this tendency by dietetic advice and in suitable cases the administration of some iron preparation has met with very gratifying results.

DEFECTS FOUND AT ANTE-NATAL CLINIC.

CONTRACTED PELVIS.—12 cases. Three of these were delivered by Cæsarian Section, three were induced before term, and the others had normal confinements with small babies.

MALPRESENTATION.—13 cases. Version was successfully performed in 10 cases, while the others were delivered as breech presentations.

CARDIAC DISEASE.—14 cases. The most severe were admitted a few weeks before the date of confinement for rest.

ALBUMINURIA.—37 patients had Albuminuria during some period of their pregnancy. Twelve of these were mild cases of Pyelitis, and the remainder were cases of "Albuminuria of Pregnancy" with associated high blood pressure. All reacted well to treatment.

HYPEREMESIS GRAVIDARUM.—18 cases (mild type).

HYDRAMNIOS.—7 cases.

ANÆMIA.—45 cases. Twelve of these cases were suffering from a severe degree of anæmia and all improved greatly with treatment.

VARICOSE VEINS.—40 severe cases.

DENTAL CARIES.—162 cases. Treatment was advised in every case, either by their own dentist or at the B.G.H., but in many cases treatment was refused.

VENEREAL DISEASE.—5 cases of Syphilis, 12 cases of Gonorrhœa were referred to the V.D. Clinic. Thirty-four women suffered from a vaginal discharge which was non-venereal.

VARIOUS.—11 cases. These were mostly referred to their own doctor for treatment.

SEVERE BACKACHE—16 cases.

An increased use has been made of the X-ray plant at the Borough General Hospital in elucidating the diagnosis in cases of hydramnios breech presentation and multiple pregnancy. It has proved most helpful in establishing the presence or otherwise of pregnancies which are in doubt, and in all cases the certainty of the diagnosis of the true state of affairs has been most re-assuring to the patients themselves.

ANTE-NATAL CLINIC AT BOROUGH GENERAL HOSPITAL.

This Clinic is held at the Hospital twice 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 1938.....	599
No. of Attendances	1779

HOME VISITING OF EXPECTANT MOTHERS.

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	409	12	693	4	= 1118
No. of revisits paid by nurses	172	15	494	2	= 683
Total visits	581	27	1187	6	= 1801
No. of Expectant Mothers visited in their own homes only, and who did not attend Centre or Clinic	11	—	83	1	= 95
No. of 1st visits paid....	11	—	83	1	= 95
No. of revisits paid....	9	—	92	—	= 101
Total Visits	20	—	175	1	= 196

5. POST-NATAL WORK.

CLINIC.

In March, 1932, a post-natal clinic was started. This is held at the Health Office once a week (Wednesday, 11.15 a.m.), and is for

examination of women about six to eight weeks after their confinement. The object of this examination is to ensure that everything is normal again, and any defects resulting from the recent labour can be rectified

Beds are available for these cases when required in the Borough General Hospital, and the baby can be admitted if necessary, to the Nursery at Aikin Street.

6. DISCOVERY OF AND TREATMENT OF DEFECTS IN CHILDREN UNDER 5 YEARS OF AGE, INCLUDING ROUTINE MEDICAL INSPECTION OF CHILDREN AGED 3 YEARS.

For many years we have concentrated on the discovery and treatment of defects in children of pre-school age, with the result that the health of the entrants at our schools has been consistently better than the average ; in fact, the percentage of defective children requiring treatment on first attendance at Warrington schools in 1938 was only 4.5%, compared with over 15.8% for the country as a whole.

Percentage of Defects requiring treatment in children reaching school age :—

	1932	1933	1934	1935	1936	1937	1938
Warrington	13.46	10.93	13.38	6.39	6.4	7.2	4.5
England and Wales..	18.0	16.26	16.36	13.8	16.1	15.9	15.8

There are 3 main ways in which defects are discovered :—

- (a) Routine work of the Health Visitors in the homes.
- (b) Routine periodic medical inspection of toddlers by the Assistant Medical Officers at the Consultation Centres and Health Office every six months,
- (c) Special medical examinations at the Consultation Centres.

(a) ROUTINE WORK OF THE HEALTH VISITORS.

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 found.

In the first place a note is given to the mother or guardian in every instance advising 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 doctors have agreed that where they do not wish to treat a case themselves, but would like us to deal with it through one or other of our clinics, they will initial the note and hand it back to the parent.

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.

The following tables of the defects found in the children during 1938 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 41).

DEFECTS FOUND IN CHILDREN UNDER 1 YEAR BY HEALTH VISITOR DURING ROUTINE HOME VISITING.

Defects.	Referred to					How dealt with.				Result.		
	No.	Own Dentist	Own Doctor	Infant Welfare Centre	Ortho- pædic Clinic	Ear, Nose, & Throat Clinic	Under- treat- ment when found	Treated	Opera- tion	Still under- treat- ment	Cured	No treat- ment (refus- ed)
Hernia	4	—	3	1	—	—	1	4	1	3	1	—
Otorrhœa	1	—	1	—	—	—	—	1	—	—	1	—
Phimosis	16	—	4	5	—	—	7	15	10	—	15	1
Orthopædic Defects	19	—	—	15	15	—	4	17	2	12	5	2
Skin	4	—	—	2	—	—	2	3	—	1	2	1
Eye Defects	3	—	—	—	—	—	3	—	—	2	1	—
Spina Bifida	1	—	—	—	—	—	1	—	1	—	1	—
Hare Lip.....	1	—	1	—	—	—	—	1	—	—	1	—
Totals	49	—	9	23	15	—	18	41	14	18	27	4

DEFECTS FOUND IN CHILDREN (1-5) BY HEALTH VISITOR DURING ROUTINE HOME VISITING.

Over 1 Year.	No.	Referred to					How dealt with.					Result.		
		Own Dentist	Own Doctor	Infant Welfare Centre	Special Appro- priate Clinic	Hos- pital	Special Appro- priate Clinic	Under- treat- ment when found	Treated	Opera- tion	Still under- treat- ment	Cured	No treat- ment	Re- fused treat- ment
Orthopaedic	135	—	—	—	125	—	—	10	123	17	71	52	12	—
Dental Caries	383	12	—	—	371	—	—	—	312	—	—	312	51	20
Ear, Nose & Throat—														
Otorrhœa	9	—	2	—	—	—	9	—	9	—	7	2	—	—
Tonsils & Adenoids	60	—	7	45	—	2	37	8	41	35	5	35	20	—
Hernias	3	—	1	1	—	—	—	1	2	—	1	2	—	—
Phimosis	4	—	2	1	—	—	—	1	4	4	—	4	—	—
Eye Defects	41	—	3	32	—	—	—	6	32	3	32	1	1	—
Skin	10	—	2	3	—	7	—	4	10	—	6	4	—	—
Glands	4	—	3	1	—	—	1	—	4	—	—	4	—	—
Debility	8	—	—	7	—	1	—	—	—	—	2	6	—	—
Totals	657	12	20	90	496	10	47	30	537	59	124	422	84	20

(b) ROUTINE MEDICAL INSPECTION OF 3-YEAR-OLDS.

The scheme of routine inspection of children when three years of age, which was inaugurated in 1935, has been continued but amplified during the latter half of year by every 6 months.

The parents are in each case notified as to the importance of having their children examined, and are advised to avail themselves of the facilities offered. It is emphasised that defects found in this way may thus be remedied before the child starts school.

At each examination the importance of having their children immunized against diphtheria is stressed, and immunization is offered free of charge to any child with the consent of the family doctor.

The response to the two-year-old and subsequent examinations has been most encouraging; the mothers seem pleased to have their children examined. Out of 2,334 parents notified, 699 children have been examined, giving a 28.6% response.

The record of each inspection is entered on a special toddler's card which is available for the School Medical Officer later on.

DEFECTS FOUND REQUIRING MEDICAL TREATMENT ARE REFERRED
TO THEIR OWN DOCTOR.

The following table of defects is appended :—

Malnutrition (8.2% of those examined)	30	Eye Defects—	
Dental Caries	57	Strabismus	12
E.N.T. Defects—		Blepharitis	5
Ear	4	Skin Defects—	
Tonsils & Adenoids (slight enlargement)	110	Septic Sores	27
Nasal Catarrh	27	Urticaria	10
Cervical Adenitis	7	Other Skin Diseases	18
Speech Defect	1	Hernia	1
Mental Defect	8	Orthopaedic Defects—	
Enuresis	2	Flat Feet	27
		Rickets	8
		Other Defects	10
		Bronchial Catarrh	26
		Other Defects	13

(c) SPECIAL MEDICAL EXAMINATIONS BY THE MEDICAL OFFICER AT THE CONSULTATION CENTRES.

The following table shows a list of the defects discovered in the children :—

MAJOR DEFECTS FOUND AT CONSULTATION CENTRE BY M.O.

Defect.	No. of Cases.	Sent to own Doctor.	Sent to own Dentist.	Sent to Ailing Baby Ward, Aikin Street.	Sent to Dental Clinic at Health Dept. or to B.G.H. Clinic.	Sent to Specialist.	Results.			No. refused treatment or did not attend.
							No. Cured.	No. Improved.	No. still under treatment.	
Ear Defects :—										
Otorrhœa	12	9	—	—	3	3	9	2	1	—
Tonsils and Adenoids	22	—	—	—	—	22	16	—	6	—
Dental Caries	166	—	1	—	166	—	163	—	—	3
Rickets	22	—	—	—	—	22	14	—	8	—
General Debility & Malnutrition	34	6	—	8	20	—	30	4	—	—
Orthopædic Defects	34	3	—	—	—	31	21	4	9	—
Skin Defects	37	21	—	—	—	16	30	—	7	—
Hernia	2	2	—	—	—	—	2	—	—	—
Eye Defects	13	9	—	—	—	4	8	—	5	—
Enteritis	12	10	—	2	—	—	14	—	—	—
Bronchitis	41	41	—	—	—	—	38	3	—	—
Phimosis	5	3	—	—	2	—	5	—	—	—
Total	400	104	1	10	191	98	350	13	36	3

TREATMENT.

Any children found with defects are referred to the family doctor in the first instance, and only when he does not wish to treat them are they dealt with by us. Certain facilities are provided by the Local Authority, and practitioners frequently avail themselves of these for their patients.

Cases are dealt with as follows :—

Certain minor ailments at the Consultation Centres.

Children suffering from nutritional ailments in special ward at Isolation Hospital.

Dental cases at special weekly session at Dental Clinic at Health Office.

Tuberculosis cases at special clinic under Tuberculosis Officer.

Orthopædic cases at special clinic under supervision of Orthopædic Surgeon.

Squint cases, special supervision by Medical Officer, and when necessary referred to Ophthalmic Surgeon.

X-Ray diagnosis, if required, at Borough General Hospital Ray-room by arrangement with Radiologist.

Throat, nose and ear defects at special clinic, under the charge of a Specialist.

A useful factor in assisting with the work of "following up" is the daily "return" of all cases admitted to or discharged from the Borough General Hospital or the Infectious Diseases Hospital.

From the discharge lists the Health Visitors are able to pick out all cases in their districts and keep them under special observation until they have completely recovered.

7. WORK OF THE CONSULTATION CENTRES.

(For days and hours of opening of the five Centres see page 26).

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

I must here refer to the valuable services of the voluntary workers of the Ladies' Committee of the Mothers' and Babies' Welcomes, who assist us so well in the work of the 5 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.

These Centres all cater for children up to 5 years of age, *i.e.*, toddlers as well as infants.

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.....	6620	425	3388	4240	14673
Av. weekly	132	8	68	85	293
Latchford, Wash Lane—					
Total.....	3274	112	1596	1926	6908
Av. weekly	68	2	33	40	143
Thewlis Street—					
Total.....	3339	203	1972	1982	7496
Av. weekly	69	4	41	41	155
Bewsey—					
Total.....	3455	233	1944	2187	7819
Av. weekly	73	5	41	46	165
Sunshine Centre—					
Total.....	2651	215	2107	1119	6092
Av. weekly	55	4	44	23	126

The total attendances at all Centres were :—

Mothers	....	....	....	....	19,339
Expectant Mothers	....	....	....	....	1,188
Infants	....	....	....	....	11,007
Children 1—5	....	....	....	....	11,454

Number of consultations held by the Medical Officer in 1938.

(i) At the Centres.

No. of Sessions	Thewlis Street	Brick Street	Latchford	Bewsey	Sunshine	Total	Total
Infants	48	50	48	47	48		
{ 1st examination	110	219	99	152	88	= 668	} = 2256
{ Re-examination	288	394	213	447	246	= 1588	
Children	30	46	17	20	12	= 125	} = 3200
{ 1st examination	522	923	479	706	445	= 3075	
{ Re-examination							
Expectant Mothers	26	28	24	48	38	= 164	= 164
Nursing Mothers	103	230	104	131	98	= 666	= 666
Others	66	42	16	62	51	= 237	= 237
Toddlers	93	252	129	61	92	= 627	= 627
Total	1238	2134	1081	1627	1070	7150	= 7150

ii. At the Health Office.

Infants	26
Children	14
Expectant Mothers	8
Nursing Mothers	10
Others	30
Midwives	8
	96

(iii.) At Maternity Home.

Expectant Mothers	323
-------------------	-----

(iv.) At the Health Office.

Ante-natal Clinic :	
Expectant Mothers	2534

Total number of consultations held by M.O. in 1938 = 10,203
(in 1937 = 9,243).

8. DENTAL CLINIC for expectant and Nursing Mothers.

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 week and is for expectant and nursing mothers. Much valuable work has been done by Mr. Ellis, the Dental Officer, in connection with this clinic.

No. of cases treated at the clinic during 1938 :

Expectant Mothers	....	....	174 cases.
Nursing Mothers	....	....	31 cases.
			<hr/> 205 <hr/>

Since 1st December, 1937, Nursing and Expectant Mothers are treated at the Borough General Hospital Dental Clinic while the toddlers are referred to the School Dental Clinic by arrangement with the Education Committee. During 1938, 344 children under 5 were treated at the School Dental Clinic.

9. EAR, NOSE AND THROAT CLINIC.

In June, 1934, a clinic was started for children suffering from diseases of the ear, nose and throat. A Specialist from Manchester attends this clinic, which is now held on the first Thursday of each month at the Health Office.

During the year 42 cases attended the clinic, and 28 of these had operations at the Borough General Hospital.

Cases are sent by the Health Visitors to their family doctor, who refer them to this clinic if they deem it advisable.

	No. of cases.	No. of Operations.	No. Cured.	No. still under treatment.	No treat- ment.
T's. and A's.	37	27	26	5	6
Rhinitis	1	—	—	—	1
Otorrhœa	10	—	3	7	—

10. 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 number and ages of the children dealt with and the results :—

	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 treatment required	Treatment refused	No. of operations	No. of Massage	No. discharged cured	No. still under treatment	Sunlight
Males .. 77	—	3	—	2	5	24	25	9	9	6	1	8	5	29	—	49
Females 75	4	3	1	1	2	18	24	7	15	5	—	15	10	29	42	49

The total, 152 (77 males and 75 females), is larger than last year, when it was 104 (55 males and 49 females).

29 out of 77 males, and 29 out of 75 females were discharged as cured during the year.

The defects treated at the Clinic were :—

MALES		FEMALES	
Malformation	9	Torticollis	5
Rickets	31	Rickets	32
Debility	18	Debility	19
Talipes	1	Burn	1
Flat Foot	8	Flat Foot	3
Defective Gait	2	Malformation	6
Fracture	3	Cong. Disloc. of Hip.....	2
Paralysis	2	Talipes	6
Scalds	3	Fractures	1
	<hr/> 77	Total	<hr/> 75

ARTIFICIAL SUNLIGHT TREATMENT.

Ultra-Violet Ray treatment is carried out at the Orthopaedic Clinic. Cases are referred by General Practitioners, when necessary, and also from the Consultation Centres. Those that appear to benefit most are cases of rickets.

I am indebted to Mr. Harman Taylor for the following account of his work :—

"CHILD WELFARE SCHEME FOR CHILDREN UNDER FIVE YEARS OF AGE."

A reference to the statistics in connection with the above-named Clinic, shews that the majority of cases which have been referred to the Clinic, are children between the ages of one and three. The number of male patients as compared with the female does not shew any marked difference. This, therefore, suggests that the incidence of sex has no bearing upon the need for treatment.

It would appear that the large proportion of cases requiring treatment between the ages of one to three years, are babies who have not had the advantage of maternal feeding during the first year of life, but have had to be fed on cows milk. This is an interesting fact which has been noted. The reason why they have been referred for treatment is, that these babies have suddenly stopped gaining in weight, and have shewn signs of general debility. The treatment given in this class of case, has been exposure of the whole infant body to a course of Ultra Violet Rays. Attendance at the Clinic, twice weekly, for a period of three months, has shewn a marked improvement in the general condition of the infant. Thus the weight which is taken each month, has been found to increase, and the child begins to start crawling, and being able to sit up. After this period of time on Sunlight Treatment, the infants have once more regained their normal health, and they have continued to progress without having to resort to a second period of sunlight treatment.

Cases have been kept under observation for a period of a year, coming to the Clinic once every three months, and at the end of the year, if the general condition is satisfactory, they have been discharged as requiring no further treatment.

It is interesting to note that there have been no cases referred to the Clinic as suffering from any form of paralysis.

As regards congenital deformities, nine cases of club feet, have been referred to the Clinic, and these have all been satisfactorily dealt with by means of manipulation of the said feet, and maintaining the correct position by means of suitable splinting.

It is interesting to note that in no single case, has a parent refused the facilities of treatment offered. This is an interesting advance, and shews that the modern parent does not now hold the view that a congenital deformity must remain with the child for all time, whereas, when I first started this Clinic some years ago, quite a number of parents refused to allow me to straighten bow legs and knock-knees and club feet, because they were under the impression that as the child had been born so deformed, so it must remain for all time.

Once again, I reiterate what I have said in previous reports, namely, the great value of the early treatment of all cases of debility, deformity and defective growth in infants. The work of the Clinic clearly demonstrates the fact that this provision of early treatment saves a good deal of ill-health and crippling among the children when they reach school age.

The provision of Welfare Centres in various parts of the town, the instruction given by the welfare workers in these clinics, and the medical examinations of these infants by the Medical Officer of the M. and C.W. section of Public Health work, is rapidly eliminating the appearance of gross deformities such as bow legs and knock-knees in the children of the Borough. I do not see to-day the severe cases of deformities of the lower limbs as I used to see them in 1926. One can, therefore, state that this form of Public Health work, is well worth while, and is contributing its share in endeavouring to create an A.I. nation.

HARMAN TAYLOR.

11. INSTITUTIONAL ACCOMMODATION FOR MATERNITY CASES.

The following table gives the number of Maternity Cases dealt with in the Maternity Home and Borough General Hospital.

TOTAL CASES DEALT WITH IN BOROUGH GENERAL HOSPITAL AND MATERNITY HOME.

1930.....	520	out of 1656 births, i.e., 32%
1931.....	693	" " 1673 " " 42%
1932.....	660	" " 1554 " " 43%
1933.....	690	" " 1502 " " 46%
1934.....	758	" " 1609 " " 48%
1935.....	882	" " 1587 " " 56%
1936.....	938	" " 1570 " " 59.7%
1937.....	901	" " 1560 " " 57%
1938.....	817	" " 1526 " " 53.5%

(a) MATERNITY HOME.

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

There are now 22 beds (including two labour beds and 1 isolation bed).

During 1938, 368 children were born in the Institution, in 365 confinements, 3 sets of twins. Particulars follow:—

(1) No. of patients in Home 1st January, 1938	14
" " admitted during year	425
" " in Home, 31st December, 1938.....	18
(2) Average duration of stay	14 days
(3) No. delivered by doctors	32
(4) " " " midwives.....	336
Total	368

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

During Labour—

Ante-partum Hæmorrhage	4
Removal of Placenta	3
Forceps	4
Cæsarian Section	4
Prolapse of Cord	2
Twins	1

After Labour for—

(a) Mother—	(b) Infant—
Post-Partum	Asphyxia
Hæmorrhage 3	Neonatorum 4
Perinorrhaphy	
48	

During Puerperium for—

(a) Mother—	(b) Infants—
Engorged Breasts	Skin Conditions
4	6
Anæmia	Melæna
3	2
Raised Temperature 12	
Phlebitis	
1	
Milval Stenosis.....	
1	

(6)	No. of cases notified as puerperal sepsis	—		
(7)	" " " with temp. over 100.4 for 24 hours.....	12		
(8)	" " " with ophthalmia neonatorum	0		
(9)	No. of babies not entirely breast fed	52	(a) Supplementary	20
			(b) Supplementary, later complete artificial	26
			(c) Complete artificial from birth	6
(10)	Deaths.... 5 {	Asphyxia Pallida	1	
		Prematurity	1	
		Cerebral Hæmorrhage	3	
(11)	Still births	22	Antepartum Hæmorrhage	3
			Macerated fœti.....	3
			Anencephalic	5
			Uterine Inertia.....	5
			Obstructed Labour	2
			Eclampsia	1
			Prolapse of Cord	3

CHARGES FOR MAINTENANCE IN MATERNITY HOME.

All patients pay according to their means, the fees varying from single maternity benefit payment to £3 15s. a week.

(b) MATERNITY WORK AT THE BOROUGH GENERAL HOSPITAL.

There are now 26 beds (including 2 labour beds and 4 isolation beds).

During 1938, 448 children were born in the Hospital in 441 confinements (7 sets of twins). Particulars follow :—

(1)	No. of patients in Hospital, 1st January, 1938, 23 maternity cases.	
"	" " " admitted during year, 500 maternity cases.	
"	" " " in Hospital 31st December, 1938, 23 maternity cases	
(2)	Average duration of stay, 14 days.	
(3)	No. delivered by doctor	46
(4)	" " " midwives	395
	Total	441

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

(a) *Ante-Natal* 65.

Albuminuria	19
Cardiac Lesion	1
Ante Partum Hæmorrhage.....	5
Eclampsia	3
Hypercuiesis Gravidarum	2
Hydrammos	3
Anæmia	5
Contracted Pelvis	10

(a) *Ante-Natal—continued*

Central Placenta Previa	1
Debility	4
Acute Phthisis	1
Bronchitis	1
Pleurisy	3
Threatened Miscarriage	1
Mental Deficiency	1
Pyelitis	1
Adema of Legs and Feet	2
Varicose Veins of Legs	1
Large Child	1
	<hr/> 65

(b) During Labour 46. *In Hospital in all 3 stages.*

Ante-partum Hæmorrhage	3
Cæsarian Section	3
Removal of Placenta	6
Breech and Extended Legs	3
Twins	2
Prolapse of Cord	1
Obstructed Labour	11
Uterine Inertia	12
Intra-partum Eclampsia	2
Perineal Tear	1
Post Partum Hæmorrhage	2
	<hr/> 46

(c) After Labour.

Perinorrhaphy	5
Post-Eclampsia	1

(d) During Puerperium 14

(e) For Infants 21.

Prematurity	13
Spina Bifida	2
Marasmus	1
Cerebral Hæmorrhage	2
Hydrocephalus	1
Congenital Heart Disease	2
	<hr/> 21

		Delivered	
		In Hospital.	At Home.
(6) No. of cases notified as			
Puerperal Septicæmia		—	—
(7) „ „ „ with temp. over 100.4 for 24 hours		1	1
(8) „ „ „ with Ophthalmia neonatorum.....		—	—
(9) „ „ „ with Pemphigus „		—	—
(10) No. of babies not entirely breast-fed	62	{ (a) Supplementary 20 (b) Supplementary, later complete artificial 4 (c) Complete artificial from birth 38	

	Cases where all 3 stages of labour were dealt with in Hospital.	Partial treatment of delivery at Home.	Undelivered.	
(11) No. of Maternal deaths	3	—	— = 3	
(12) „ Infant deaths.....	21 within 10 days of birth			
(Prematurity 13, Marasmus 1, Meningocele 5, Congenital Heart 2).				
(13) No. of Still Births	32	{	Obstructed Labour	5
			Fœtal abnormalities....	3
			Albuminuria	1
			Ante-Partum	
			Hæmorrhage	2
			Abnormal	
			Presentations	9
			Prematurity	5
			Intra Uterine Inertia....	2
			Fœtal Deaths.....	4
			Threatened Eclampsia	1

12. SPECIALIST SERVICES.

Consultants are available for all lying-in cases in either the Maternity Home or the Borough General Hospital, and also for any General Practitioner in the town wishing to avail himself of their services, on application to the Medical Officer of Health.

A General Practitioner with special qualifications and experience is available for Cæsarian Operations at the Maternity Home.

13. INSTITUTIONAL TREATMENT OF PUERPERAL PYREXIA, ETC., AT AIKIN STREET HOSPITAL.

Twelve cases of Puerperal Pyrexia were dealt with at Aikin Street.

14. NURSERY AT AIKIN STREET FOR HEALTHY BABIES.

Special facilities have been provided in the old Nurses' Home, consisting of a day-room and dormitory, with necessary annexes, and provides accommodation for 6 children under 2 years of age.

The number dealt with in 1938 was 22, and the average duration of stay was 70 days.

All these cases were dealt with on behalf of the Public Assistance Committee.

15. HOSPITAL ACCOMMODATION FOR INFANTS AND CHILDREN.

(a) MEASLES OR WHOOPING COUGH.

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

(b) MARASMUS, DEBILITY AND DIETETIC AILMENTS.

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

AILING BABY WARD, 1938.

(1) No. of cases admitted, 1938	45
" " " still in Hospital, 31st December, 1938	8
(2) Average duration of stay, 52 days.	
(3) Reasons for Admission.	
Marasmus and Malnutrition	25
Gastro-Enteritis	6
General Debility	4
Pneumonia	1
Bronchitis	2
Spina Bifida	1
Prematurity	6
(4) No. of Cases Discharged.	
Cured	31
Improved	0
Died	13
No. still in Hospital	9
(5) No. of Cases of Infectious Diseases occurring among the Patients admitted.....	Nil

DEATHS IN BABY WARD.

Cause of Death.	Age.	Residence in Hospital.
1. Marasmus	3 months.	4 hours.
2. Marasmus	1 month.	15 days.
3. Marasmus	2 months.	39 days.
4. Marasmus	3 weeks.	5 days.
5. Convulsions	2 months.	19 days.
6. Premature Baby	2 days.	6 hours.
7. Premature Baby	3½ months.	91 days.
8. Premature Baby	2 months.	41 days.
9. Premature Baby	3 weeks.	11 days.
10. Premature Baby	1 week.	3 days.
11. Enteritis	16 months.	2 days.
12. Pneumonia	7 months.	2 days.
13. Premature Baby	1 month.	15 days.

(c) OPHTHALMIA NEONATORUM.

No cases occurred in 1938.

17. HOME NURSING (see page 20).

18. 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 1938 :—

FRESH MILK.				Necessitous Nursing Mothers	Expectant Mothers	Ailing Babies
No. of cases	....	....	....	237	191	193
No. of quarts	....	....	....	8243	5618	7195

Total cost, 21,056 quarts, £656 2s. 6d.

DRIED MILK.

In addition 512 lbs. of dried milk were distributed free of cost. 3,150 lbs. of dried milk were sold at the Consultation Centres.

20. HOLIDAY CAMP FOR MOTHERS.

Once again, through the generosity of the Council of Social Service and the local Rotary Club, 50 necessitous mothers were provided with a week's holiday at Prestatyn, which was very greatly appreciated by those who attended.

The cases are selected by the Health Visitors and submitted to the Council of Social Service for approval. One Health Visitor attends at the Camp at Prestatyn each year, and the Rotary Club arranges for transport.

SECTION C.

Sanitary Circumstances of the Area.

I am indebted to Mr. J. H. Hughes, Borough Surveyor for the following remarks as to Rivers and Streams, Drainage and Sewerage and Privy Conversion :—

(1) RIVERS AND STREAMS

- (a) Heads of Agreement have been settled with the Warrington Rural District Council for the taking in by the Corporation of the sewage from Winwick. The formal agreement is now in course of preparation.
- (b) The Warrington Rural District Council are proceeding with their drainage scheme for the Padgate and Fearnhead portions of their district, and have formally submitted a request to the Corporation for this sewage to be treated at the Westy Lane Works of the Corporation. This matter is now being considered by the Warrington Corporation with a view to Heads of Agreement being prepared, and it is more than likely that the request of the Warrington Rural District Council will be acceded to.

(2) DRAINAGE AND SEWERAGE

- (a) The laying of sewers in the Orford district at an estimated cost of £8,000, referred to in the previous report dated the 24th February, 1938, has now been completed.
- (b) A storm-water relief sewer has been laid down Longshaw Street at a cost of £3,500, for the relief of flooding in the Folly Lane and Ellen Street areas.
- (c) The Council have approved a scheme for a storm-water relief sewer in Winwick Road opposite the end of Alder Lane, to prevent flooding in time of storm in Winwick Road and Alder Lane. The estimated cost of the work is £3,500.
- (d) A sewer has been laid from Orford to the new R.A.F. Recruit Depot at Padgate, at a cost of approximately £8,400.
- (e) An extension to this foul sewer has also been laid to the Balloon Barrage Station at Orford. The estimated cost is £1,368.
- (f) Storm water sewers estimated to cost £5,073 are now in course of being laid to the Balloon Barrage Station at Orford from the end of Capesthorne Road.

- (g) New sewers have been provided in the Orford area in Capesthorpe Road, Warren Road, Birtles Road, Burton Road, Park Road and Povey Road at an estimated cost of £8,300 to replace shallow and imperfectly constructed sewers.

PRIVY CONVERSION

The first instalment for the conversion of pail closets to the water carriage system is in course of preparation.

This first instalment will cover the conversion of 720 houses, principally in the Westy Lane area.

In addition to this, 404 conversions have been carried out privately, a grant from the Corporation being made in each case.

According to the latest return there are now :—

(1) WATER CLOSETS

in dwelling-houses	8034
„ schools	388
„ factories and workshops	1594
„ offices and shops	320
„ picture palaces	64
„ theatres	8
„ public institutions	218
„ railway stations	31
„ public conveniences	52
„ hotels	53

10,762

(2) PAIL CLOSETS.—12,637.

(The proportions in 1937 were w.c.'s 9,872, pails 13,047.)

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).

The accommodation at the Health Department is overcrowded, unsuitable and inadequate, adding to the difficulties of the work, and new premises are highly desirable and essential.

Altogether 4,857 visits have been paid by the inspectors, which, added to those paid to cases of infectious disease and tuberculosis, make up a total of 11,016 during the year as follows :—

VISITS PAID BY INSPECTORS.

Visits to deal with property, nuisances, etc.	4,857
Visits to deal with cases of infectious disease (p. 88)	4,776
Visits to deal with cases of tuberculosis (p. 95)	1,383
Total	11,016

The following table shows the number of **nuisances** found and dealt with during 1938:—

A SUMMARY OF NUISANCES DEALT WITH DURING THE YEAR.

Insufficiently ventilated rooms.....	89
Dirty dwellings	5
Defective floors	126
Defective walls and ceilings (plaster)	215
Dirty walls, ceilings and floors	2
Defective roofs	477
Defective spouting	155
Defective and absent slopstones and pipes	44
Blocked drains	174
Defective drains	12
Defective pavements in yards and passages	9
Defective chimneys, ranges and fireplaces	147
Damp walls and floors of dwellings	171
Defective window frames and sills	128
Defective pail closets and ash-places	83
Defective or absent ashplace doors.....	35
Defective or absent closet doors	21
Defective water closets	10
Accumulation of manure	15
Accumulation of refuse	1
Defective and dangerous yard and closet walls	69
Dirty walls, passages, yards and closets	1
Defective dwelling house doors	42
Animals kept so as to be a nuisance	—
Defective dwelling house walls	70
Dirty and choked w.c.'s	—
Pail closet conversions	24
Defective or absent yard gates	18
Defective washing boilers	27
Defective staircases	5
Insufficient sanitary accommodation	—
Defective wash-houses	—
Defective wash basins, baths and taps.....	4
Insufficient water supply	—
Miscellaneous	13

Total Nuisances 2192

Preliminary Notices sent calling attention to Nuisances 489 covering 1181 Nuis.
Legal Notices served to abate Nuisances295 covering 667 Nuis.

Out of the total number of nuisances found, 2,038, or 92.98%, were abated during the year under review, the remainder being carried forward into 1939, for suitable measures to be adopted. 154 nuisances remained unabated at the end of the year 1938.

SMOKE ABATEMENT.

During the year 146 observations were made of chimneys with a view to the detection of the emission of black smoke. In five instances black smoke was emitted for a period in excess of the bye-law.

In all cases the works engineer and furnace-man were interviewed. Suggestions for smoke abatement being given. Further observations of these chimneys showed much improvement.

The Health Committee decided to continue the Course of Lectures and Demonstrations on "Fuel Economy and Smoke Abatement," the lecturer being Mr. S. N. Duguid, B.Sc. Tech.).

The following are the results of the session's work :—

SESSION 1937-38.

EXAMINATION OF THE MANCHESTER AND DISTRICT REGIONAL SMOKE ABATEMENT COMMITTEE.

Number of Students enrolled, 17.

Examination held Wednesday, 12th April, 1938.

Number of entries for examination, 14.

Examination results :—Passes, 11 ; Failures, 3.

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 controlled by bye-laws or regulations. The following is a summary of the work in this respect :—

	No. of Premises	No. of Inspections
Workshops	130	146
Factories (Sanitary Accommodation).....	—	40
Canal Boats	25	30
Common Lodging Houses.....	7	121
Bakehouses	62	55
Milkshops and Shops where Bottled Milk is sold.....	330	270
Cowsheds	8	46
Ice-cream (premises where manufactured)	42	66
Slaughter Houses	9	970
Butchers	111	145
Premises where Potted Meat, Sausages, etc. are prepared	82	242
Fried-fish Shops	106	73
Tripe-boilers' Premises	3	31
Gut Scrapers.....	1	37
Artificial Manure Works	1	52
Refuse Tips.....	3	6
Stables and Middensteads.....	157	97
Pig-Styes	20	33
Places of Entertainment	18	17
Hairdressers	133	21
Schools	25	34
Public Conveniences	25	12
Marine Stores.....	2	29
Smoke Observations	94	146
Number of Premises Disinfected after Cases of Infectious Disease	618	
Number of Articles Disinfected by Steam Disinfector	4473	

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

FACTORIES AND WORKSHOPS.

	Factories and Work- shops.	Workshop Bake- houses.	Factory Bake- houses.	Total.
Want of Cleanliness—				
Walls and Ceilings	7	—	3	10
Defective Wall	—	—	—	—
Blocked Drains	1	—	—	1
Storage of Unsuitable Articles.....	—	—	—	—
Accumulation of Refuse, Receptacle Unsuitable	1	—	1	2
Sanitary Accommodation—				
Insufficient	—	—	—	—
Unsuitable or Defective	7	—	1	8
Absence of Closet	—	—	—	—
Dirty Walls and Ceilings	6	—	—	6
	22	—	5	27

BUTCHER'S SHOPS (111).

Accumulation of Refuse, Absence of Refuse Receptacle	1
--	---

HOUSES LET IN LODGINGS (10).

Blocked Drain	1
Verminous Dwellings	1
Dirty Walls and Ceilings	1
Defective Roof	1

RESTAURANT KITCHEN (17).

Want of Cleanliness (Walls and Ceilings)	1
--	---

FRIED FISH SHOPS (106).

Accumulations of Fish Offal	1
-----------------------------------	---

SHOPS.

Absence of Washing Facilities	1
Dirty Walls and Ceilings	1
Defective Blocked Drains and Gullies	4
Sanitary Accommodation—	
Absence Sanitary Accommodation	3

STABLES (157).

Accumulations of Manure	15
Accumulations of Refuse	1
	<hr/>
	16
	<hr/>

RATS AND MICE DESTRUCTION ACT, 1919.

The Borough Surveyor is the officer authorised by the L.A. for the administration of this Act, which places a penalty on the Occupier (not Owner) of any land (including premises, etc.), who fails to take all practicable steps to rid his property of rats and mice.

Prepared baits to the number of 41,472 have been laid, and a very large percentage of them taken, on the various tips adjacent to water course, etc. 936 rats were caught in traps and destroyed.

THE SHOPS ACTS, 1912-1936 SHOPS (HOURS OF CLOSING) ACT, 1928 SHOPS (SUNDAY TRADING RESTRICTION) ACT, 1936 RETAIL MEAT DEALER'S SHOPS (SUNDAY CLOSING) ACT, 1936.

Each of the above Acts aim at improving the working conditions of the shop assistants and undoubtedly have done much to reduce the number of working hours. The difficulty of the inspector is not with the shops where assistants are employed but with the small shops on the outskirts of the town. In these shops the persons employed are members of the shopkeeper family who very often resent having to close their shops at the statutory hours. The Local Authority made an order under the Shops (Sunday Trading Restriction) Act, 1936, permitting the sale of provisions up to 10 a.m. on Sunday morning, and it is not an easy matter for shopkeepers to comply as the customers do not purchase the necessary goods before the time permitted on Sunday morning. Numerous customers have left several shops who endeavour to comply with the requirements of the Act. This also refers to shops on the outskirts as the provision shops in the centre of the town have always closed on Sunday.

The butchers in this town welcomed the Retail Meat Dealer's Shop (Sunday Closing) Act, 1936. Previous to the act coming into operation a few small shops were opened for about two hours each Sunday morning.

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

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH Including Inspections made by Sanitary Inspectors.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers prosecuted.
(1)	(2)	(3)	(4)
Factories with mechanical power.....	70	—	—
Factories without mechanical power	151	—	—
†Other Premises under the Act (including works of building and engineering construction but not including out-workers' premises).	1493	—	—
Total	1714	—	—

†Electrical Stations should be reckoned as factories.

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of defects in respect to which Prosecutions were instituted.
	Found.	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
Want of cleanliness	11	11	—	—
Overcrowding	—	—	—	—
Unreasonable temperature	—	—	—	—
Inadequate ventilation	—	—	—	—
Ineffective drainage of floors	1	1	—	—
Sanitary Conveniences :—				
Insufficient	—	—	—	—
Unsuitable or Defective	15	15	—	—
Not Separate for Sexes	—	—	—	—
Other Offences	18	18	—	—
<i>(Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937).</i>				
Total	45	45	—	—

THE HOME WORKERS ORDER.

The occupiers of one factory, also of one workshop, complied with the requirements of Section 110 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 13 homeworkers, 3 resident in Warrington, and 10 in adjacent urban or rural districts. Of the Warrington homeworkers, 1 is engaged in making wearing apparel and 2 as file and tool maker, and of the ten resident outside the borough, 9 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.

PHARMACY AND POISONS ACT, 1933.

The number of listed sellers on the Register under Part II of the Poisons list, was 43. These premises along with those of Authorised Sellers (Registered Pharmacist) are visited by an Inspector appointed by the Pharmaceutical Society of Great Britain.

Miss Stephenson, the Inspector, reported as follows for the year 1938 :—

“I am glad to state that after investigation I found no evidence of any infringement of the Act taking place in Warrington.”

CANAL BOATS.

12 canal boats inspected 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 by the Manchester Port Sanitary Inspector, who is on duty on the Ship Canal between Eastham and Manchester.

PLACES OF ENTERTAINMENT.

There are eleven Picture Houses and one other place of entertainment open each evening for the benefit of the public. In addition we have 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.)	51
2. To Water Engineer (Defective fittings resulting in waste of water, etc.)....	6
3. To Cleansing Superintendent (Absence of ashbins and pails, defective ashbins or leaking pails, non-removal of house refuse, etc.).....	53

SCHOOLS.

As in previous years a Special Report on the health of the School Children of the Borough has been issued.

The Medical Officer and his staff deal with the sanitary condition of the Schools, and with all cases of infectious diseases 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 11,025. The number of cases of notifiable infectious disease occurring among school children in 1938 is shown as follows :—

Scarlet Fever	146
Diphtheria	84
Pulmonary Tuberculosis	1
Other Tubercular Diseases	15
	<hr/>
	246
	<hr/>

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

Measles	723
Whooping Cough	102
Chickpen Pox	358
Mumps.....	245
Sore Throat	216
German Measles	22
	<hr/>
	1666
	<hr/>

In order to minimise as far as possible the risk of the conveyance of infection, school children are referred to the Assistant 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 1938 are shown in the next table:—

Scarlet fever convalescents (examined prior to return to school)	99
Diphtheria convalescents (examined prior to return to school)	102
“Contacts” with cases of diphtheria	174
“Contacts” with cases of scarlet fever.....	66
Sore Throats	52
Rash	8
Nasal Discharge	3
Aural Discharge	1
	<hr/>
	505
	<hr/>

Further particulars of 4,776 visits paid by the Inspectors in case of infectious disease in the homes of the children will be found on page 88.

SECTION D.

Housing.

The number of houses in the Borough at the end of 1937, according to the Rate Books, was 20,082 and classified as follows :—

Mansions	2
Charitable Institutions	9
Houses and Shops	1094
Licensed Premises	142
Private Dwellings	19235
	<hr/>
	20482
	<hr/>

HOUSING REQUIREMENTS.

The applications received from persons living in lodgings or unsuitable dwellings has considerably reduced during the last two years. This is due to the number of houses built by the Local Authority and by private enterprise within the Borough and also to the large number of houses built by private enterprise in the rural districts surrounding the Borough.

HOUSING APPLICANTS.

The total number of applications received since commencement of registration in 1920 to the end of 1938 is 8920

The number of tenancies granted by the Committee, 1920, to the end of 1938	2782	} 2827
Number of tenancies granted during the year 1938, under Housing Act, 1924	45	

The number of applicants who have been allowed to become lodgers in Corporation houses..... 1095

Number who have removed or obtained accommodation elsewhere 4645

At present we have remaining on the Register :

Applicants living in overcrowded houses	6
Applicants not living in overcrowded houses	308
Applicants not living within the Borough	39
	<hr/>
	353
	<hr/>

Number of interviews with applicants at Health Office in 1938 = 1339

Number of visits to houses of applicants = 283

In addition 869 exchanges have been permitted by the Committee to tenants of Corporation Houses with tenants of privately owned houses, and 1027 tenants of Corporation houses have been permitted to take lodgers.

NUMBER OF NEW HOUSES BUILT IN 1938.

269 new houses were built by private enterprise in the town during the year, and 506 under the L.A.'s schemes. The new houses were erected on the Long Lane and Alder Lane sites ; 12 were A4 Type houses, 291 were A3 Type houses, 89 were A2 Type houses and 114 were B4 type houses.

HOUSE BUILDING DURING 1938.

BY THE CORPORATION.		B4	A4	A3	A2
Under 1935 Act.	Long Lane Site	114	—	32	—
Under 1930 Act.	Alder Lane Site	—	12	259	89
Total....				506	
By Private Enterprise				269	
Total....				775	

The total number of houses built during the period 1911 to 1938, by private enterprise and the L.A. was 6,725 (3,631 by the L.A.), or an average of 240 per year.

The number of persons who have taken advantage of the Small Dwellings Acquisition Act and purchased their own houses is 1,870 up to the end of December, 1938.

HOUSING ACT, 1930.

The programme for dealing with insanitary dwellings either by Clearance Areas or as Individual Unfit Houses was prepared in the year 1930 and revised by request of the Ministry of Health in the year 1933. The completed programme of local requirements and of the action intended to be taken under the Housing Act, 1930, during a period ending December, 1938, was as follows :—

CLEARANCE AREAS :—

James Street (127 houses to be demolished, 570 persons to be displaced).
 Dolmans Lane (54 houses to be demolished, 252 persons to be displaced).
 Stanley Street (24 houses to be demolished, 151 persons to be displaced).
 Turner Street (113 houses to be demolished, 506 persons to be displaced).

IMPROVEMENT AREAS.

Dial Street (39 houses to be demolished, 178 persons to be displaced).

INDIVIDUAL UNFIT HOUSES

(326 to be demolished, 1,309 persons to be displaced).

The following progress had been made at the end of the year 1938 :—

All the Clearance Areas have been dealt with ; the inhabitants had been displaced and the houses demolished.

In regard to the Improvement Area, the Council decided that progress should be made by dealing with the 39 houses as individual unfit houses. These houses have now been dealt with. 2 have been repaired by consent of the local authority. 37 have had demolition orders made on them and the tenants with one exception, have been re-housed.

Of the 326 individual unfit houses, 294 have been demolished, 17 permanently closed, and in 15 instances the house has been made fit.

In addition to the houses enumerated in the above programme, 110 individual unfit dwellings have been demolished and the occupants re-housed.

A further inspection of the property in the borough was made during the year, and it is anticipated that at least 260 houses will be demolished in consequence of this latest survey. By the end of the year 1938, over 100 of the houses have been dealt with.

The following is a summary of the Houses dealt with in this Borough since the coming into operation of the Housing Act, 1930 :—

Number of Houses demolished in Clearance Areas	264	
Number of Individual Unfit Houses demolished	531	
	<hr/>	795
Number of Individual Unfit Houses Closed	33	
Number of Houses made fit on an undertaking accepted by the Local Authority or under Section 17 to 20 of the Housing Act	33	
	<hr/>	66
Total		<hr/> 861

In addition to the houses demolished, 48 caravans which had become permanent dwellings in the town have been destroyed and the occupants re-housed.

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

During 1938 we have continued to treat with cyanide gas, the furniture and effects removed from all condemned houses before placing the tenant in a new municipal house.

In overcrowded houses, a careful inspection is made by the Sanitary Inspector, and if any evidence of vermin is found the furniture and effects are fumigated with cyanide gas before being transferred to a new house.

Also in cases of re-let houses the same procedure is adopted.

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 the end of the year, 1938, 1244 households had been dealt with.

Advice and instruction is given to tenants, as to the importance of keeping the houses free from vermin and the necessary precautions to be taken to prevent re-infestation.

INSPECTION OF CORPORATION HOUSES.

During the year frequent inspections were made of Corporation houses by officials of the Health Department.

The houses generally are kept in a fairly satisfactory condition, and there is evidence of improvement in cleanliness by a majority of the tenants since transfer from the old conditions to the new. Unfortunately, however, some tenants do not respond satisfactorily.

The latter have been repeatedly visited with a view to inducing them to take advantage of their new environment.

A special investigation was made during the inspection of the houses for evidence of vermin (bugs, fleas, cockroaches and beetles).

It was found that in 83 houses inspected the furniture of which had been treated with Cyanide Gas during the course of removal from condemned houses, three showed signs of vermin.

In the case of 61 houses where the tenants were transferred previous to the adoption of this treatment and removal by the Local Authority, 6 (or 10.1%) were affected with vermin.

In 231 cases where persons had obtained houses after being in lodgings in privately-owned houses, and when their furniture had not been treated, 29 (or 12.5%) were found to be affected.

INSPECTION OF CORPORATION HOUSES.

Types of Houses Inspected.	Number	Number found Clean.	Number of houses found unsatisfactory.	Number of houses in which were signs of vermin.	Number of houses fumigated with Cyanide Gas.	Number of houses in which minor defects were found.
1930 Act, houses where furniture, &c., had been fumigated at time of removal	83	74	9	3	3	4
1930 Act, houses where furniture &c., was not fumigated	61	54	7	6	4	3
1924 Act, houses, furniture, &c., not fumigated	231	204	27	29	26	10
1919 Act, houses, furniture, &c., not fumigated	31	25	6	6	2	3
	406	357	49	44	35	20

Arrangements have been made for the treatment of verminous houses with Cyanide Gas. With this process it is necessary for the houses to be vacated for at least 2 days owing to the poisonous nature of the material used.

The process can only be used in semi-detached houses, or where several houses can be vacated at one time. In the latter case, at least, one house must be empty on each side, in addition to the house under fumigation, so that a barrier is formed between the houses under fumigation and any occupied ones. This arrangement will however have to be revised when the Hydrogen Cyanide Regulations, 1938, come into operation.

Where possible the tenants are requested to stay with friends or relatives for 48 hours. The Corporation has also set aside a furnished house for the use of those temporarily dispossessed of their homes. Up to the end of 1938, 190 houses have been treated.

INTERNAL PAINTING AND DECORATION.

The Town Council adopted a report of the Borough Surveyor in July, 1935, and all houses are to be re-decorated and painted internally every 5 years.

POULTRY, PIGEONS, ETC.

The Corporation will not allow poultry to be kept by any tenant of a Corporation house. Members of the National Homing Federation who make an application through the Local Secretary may be granted a licence to keep homing pigeons.

HOUSING ACT, 1936.

HOUSING ACT, 1936—OVERCROWDING.

(a) (1) Number of Dwellings overcrowded at the end of the year, 1938	432
(2) Number of Families dwelling therein	464
(3) Number of Persons dwelling therein	3262
(b) Number of New Cases of overcrowding reported during the year	46
(c) (1) Number of Cases of overcrowding relieved during the year	290
(2) Number of Persons concerned in such cases	2069
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the L.A. have taken steps for the abatement of overcrowding	—
(e) Any other particulars with respect to overcrowding conditions upon which the M.O.H. may consider it desirable to report.	—

The Local Authority is building suitable houses to deal with the worst overcrowded cases.

OVERCROWDING.

Number and type of Municipal Houses erected during the year 1938 to re-house Overcrowded Families :—

Type.	No. Built.
A3—6 persons	32
B4—7 persons	65
B4—8 persons	27
B4—9 persons	22
Total	146

122 of which were tenanted and 5 re-tenanted

In addition, Overcrowded Families were re-housed in 50 existing Municipal Houses as they became vacant and 6 exchanges were arranged between overcrowded families in municipal houses.

Number and type of houses in building at the end of the year to re-house Overcrowded Families—Nil.

(a) **Statistics.**1. **INSPECTION OF DWELLING HOUSES DURING THE YEAR 1938.**

(1) (a) Total Number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1542
(b) Number of inspections made for the purpose	4780
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected recorded under the Housing Consolidated Regulations, 1925	387
(b) Number of inspections made for the purpose	893
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	260
(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	1038

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	743
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3. **ACTION UNDER STATUTORY POWERS DURING THE YEAR.**

A.—Proceedings under sections 9, 10 and 16 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs.....	—
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	—
(b) By Local Authority in default of owners.....	—

B.—Proceedings under Public Health Act.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	295
--	-----

- (2) Number of dwelling-houses in which defects were remedied after service of formal notices :—
- | | |
|--|-----|
| (a) By Owners | 270 |
| (b) By Local Authority in default of owners | Nil |

C.—Proceedings under sections 11 and 13 of the Housing Act, 1936 :—

- | | |
|--|-----|
| (1) Number of dwelling-houses in respect of which Demolition Orders were made..... | 245 |
| (2) Number of dwelling-houses demolished in pursuance of Demolition Orders | 127 |

D.—Proceedings under section 12 of the Housing Act, 1936 :—

- | | |
|--|-----|
| (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made | 3 |
| (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 1938, there were eight cowsheds within the town. They have been regularly visited, and the cattle kept therein examined by the Veterinary Inspector.

There are 65 premises registered for the sale of milk, and in addition 265 shopkeepers sell milk in enclosed 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	65
Number found to contain tubercle bacilli	7
Number of cows giving milk containing tubercle bacilli, which were found and dealt with	5
Samples of milk submitted to the Public Analyst	62
Number found adulterated	12
Samples of fresh cream submitted to the Public Analyst	6

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 24 years (1915 to 1938) it has been possible to trace 189 cows giving milk containing tubercle bacilli. These animals were at once removed from the milking herds and slaughtered.

42 samples were submitted for the detection of dirt or injurious bacteria. In 9 cases the result was unsatisfactory.

12 out of the 62 samples of milk submitted to the Public Analyst did not conform to the Sale of Milk Regulations (see page 74).

The Milk (Special Designations) Order, 1936, has fixed the designations of milk as follows :—"Tuberculin Tested," "Accredited" and "Pasteurised."

Several persons resident outside retail "Tuberculin Tested Milk" by motor vehicle in the Borough. Pasteurised Milk forms a very large proportion of the milk sold within 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 "Tuberculin Tested."

Also the free milk supplied to the necessitous expectant and nursing mothers and ailing children is "Tuberculin Tested" or Pasteurised.

(b) MEAT AND OTHER FOOD.

The Public Health (Meat) Regulations, 1924.

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

There is no public abattoir in this Borough. We have 8 private slaughter-houses (2 registered, 6 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 observe that no cruelty takes place.

12 notifications were received from Pigkeepers of their intention to slaughter one or more of their pigs. All the carcasses and internal organs were examined and found correct.

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

22 beasts, 4 sheep, 5 pigs with their offals, and in addition, 804lbs. of offal. The chief cause for condemnation in both beasts and pigs was tuberculosis.

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	104 $\frac{1}{2}$ cwts.
Beast Offal	7 "
Sheep Carcases and Offal	11 $\frac{1}{2}$ "
Pig Carcases and Offal	8 $\frac{1}{2}$ "
Imported Beef and Offal	2 $\frac{3}{4}$ "
Fish and Poultry	1 $\frac{3}{4}$ "
Fruit	16 tins.
Lunch Tongue, Corned Beef, Boiled Ham and Jellied Veal	106 lbs.

Slaughter of Animals Act, 1933.

This Act came into operation on the first day of January, 1934. It is now an offence to slaughter any animal in a slaughter-house or knacker yard unless it is first stunned by a mechanically operated instrument in proper repair.

34 applications were received from slaughter-men for a licence to slaughter animals, and all were granted after due inquiry. This is in conformity with Sec. 3 of the Slaughter of Animals Act, 1933.

(c) ADULTERATION, ETC., OF FOODS.

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

I am indebted to Mr. Graham Sherratt, the Public Analyst, for the following report upon the samples analysed under the Food and Drugs Act during the year ended 31st December, 1938.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Report of Public Analyst for the County Borough of Warrington upon the samples analysed during the year ended 31st December, 1938.

To the Chairman and Members of the Health Committee, County Borough of Warrington.

Gentlemen,

I beg to submit for your consideration the following Report upon the samples analysed by me, under the Food and Drugs (Adulteration) Act, 1928, and related Acts, during the year ended 31st December, 1938.

NUMBER OF SAMPLES ANALYSED.

The number of samples analysed during the year was 182, an increase of six samples over the previous year. The number was made up as follows :—

Formal samples	25
Informal samples	157
	<hr/>
	182
	<hr/>

The number of samples reported as adulterated or below legal standard, was 18, or 9.9 per cent. In addition, unfavourable comment was made upon 8 samples of milk, which, although they satisfied the minimum requirements of the Sale of Milk Regulations, 1901, were of markedly poor quality. Further reference is made to these samples in the section of this Report dealing with milk.

The following table shows the number of samples analysed and the number and percentage of samples found to be adulterated, each year since 1931 :—

	1931	1932	1933	1934	1935	1936	1937	1938
Number of samples analysed	169	161	149	174	172	195	176	182
Number of samples found adulterated	8	12	24	14	13	11	10	18
Percentage found adulterated	4.7	7.5	16.1	8.0	7.5	5.6	5.7	9.9

VARIETY OF SAMPLES ANALYSED.

The samples analysed in 1938 included 17 main classes of foods. The number of each variety is given in a table at the end of this Report.

DAIRY PRODUCE.

MILK.

Sixty-two samples of Milk were analysed in 1938 and twelve of these were reported against as failing to comply with the Sale of Milk Regulations, 1901. The Regulations state that milk shall be presumed not to be genuine, until the contrary is proved, if it does not contain at least 3.0 per cent. of fat and 8.5 per cent. of solids-not-fat. As long as the Regulations are retained in their present form, it is incumbent upon the public analyst to report as "adulterated" any sample in which the solid constituents do not attain the prescribed minima, although the deficiency may be due to natural causes and no abstraction of fat or addition of water may have occurred. When the Regulations were made, the addition of water could be inferred only by the "dilution effect" upon the solid constituents, and specific tests for the presence of extraneous water were not known. Now, however, it is possible to apply to milk tests of a positive character and to detect the presence of extraneous water irrespective of the content of fat or solids-not-fat. The application of these tests not infrequently shows that a sample of milk classed as "adulterated" according to the Sale of Milk Regulations is really milk of poor, but genuine quality. Several of the samples referred to below come within this category.

INDIVIDUAL SAMPLES OF MILK CLASSED AS "ADULTERATED".

No. 75. The sample was deficient in solids-not-fat to the extent of 1.2 per cent. Application of the "freezing-point test" indicated that the milk was naturally of poor quality and that the deficiency was not due to the presence of extraneous water. It was recommended that further samples from the same supply should be taken after the lapse of some weeks.

No. 76. This sample was deficient in fat to the extent of 6.6 per cent., but the analysis did not yield any evidence that fat had been abstracted deliberately. In most of these cases it is found on inquiry that there is a very uneven interval between the times at which the herd is milked, and in these circumstances, deficiencies of fat are common. Recommendation was made that further samples should be taken from this supply.

No. 77. The sample was deficient in solids-not-fat to the extent of 3.5 per cent. After full investigation, it was concluded that the deficiency was due to natural causes, and no action was recommended.

Nos. 99 and 100. These two samples were both taken from one vendor in the Borough, and were found to be deficient in solids-not-fat to the extent of 3.5 per cent. and 1.2 per cent. respectively. The samples were taken on a Sunday morning in August and, unfortunately, were slightly sour by the time they reached the laboratory the following morning. In consequence, certain tests could not be applied to the samples and no positive proof was obtained that the deficiencies were due to the presence of extraneous water. The milks had been pasteurised in bulk, and the variations from the average composition that are known to occur sometimes in the milk from individual cows or small herds are unlikely to be apparent in the mixed milk from a number of different sources. Probably, therefore, the samples were not genuine. Inquiry was made by the Inspector, and, two days later, six further samples from the same supply were received for analysis. Four of these samples, representing pasteurised milk as sold, and corresponding with samples Nos. 99 and 100, were genuine and of average composition. The remaining two samples, Nos. 477 and 478, were taken on delivery from one of the suppliers to the pasteurising firm. No. 477 was deficient in solids-not-fat to the extent of 2.3 per cent. and deficient in fat to the extent of 6.6 per cent. No. 478 was deficient in solids-not-fat to the extent of 2.3 per cent., but had a normal content of fat. In both cases, the analyses indicated that the deficiencies were due to natural causes.

Whilst the examination of these samples demonstrated that one of the sources of supply to the pasteurising firm was of inferior quality, this would account for the deficiency in the original samples only if the individual supply had been passed through the pasteurising plant as a unit and without admixture with any other milk. This procedure would be contrary to normal commercial practice and does not appear to be a satisfactory explanation. It was recommended, therefore, that further samples of milk from this firm should be taken periodically.

Nos. 101, 102 and 103. These were deficient in fat to the extent of the following amounts :—

	No. 101.	No. 102.	No. 103.
Extent of deficiency in fat	6.6%	10.0%	16.6%

The samples were taken from three shops selling milk "over the counter" and, in each case, the churn or other vessel from which the milk was taken contained only a small quantity at the time of sampling. It is very probable, therefore, that the deficiencies in fat were the consequence of insufficient stirring of the milk, so that progressive impoverishment of the bulk occurred each time a portion was withdrawn. Recommendation was made that these vendors should be warned of the serious consequences that might follow carelessness in regard to stirring milk before sale.

Nos. 481 and 484. Both samples were deficient in solids-not-fat to the extent of 2.3 per cent. In each case the deficiency was due to natural causes and no further action was taken.

The above account concludes the review of individual samples of milk that failed to conform to the requirements of the Sale of Milk Regulations. Mention must be made, however, of a series of eight samples of milk, Nos. 31—38, received in February, 1938. The samples were taken on delivery

from various contractors supplying pasteurised milk to schools in the borough and in every case they were found to be below average quality in fat content, the actual percentage figures being as follows :—

No. of sample	31	32	33	34	35	36	37	38
Fat, per cent.	3.4	3.3	3.2	3.2	3.4	3.3	3.1	3.2

Collected analyses of many thousands of samples of milk by different workers have indicated that the average fat content is about 3.6 to 3.7 per cent. Although from a variety of causes, the fat in milk from individual cows or even from the mixed milk of a single herd may be considerably below or above this average, experience has shown that the mixed milk from a number of herds rarely deviates substantially therefrom. Pasteurised milk as sold by retail is nearly always comprised of mixed supplies, because the process is economically possible only to large dealers. It is reasonable to expect, therefore, that such milk should not deviate markedly in fat content from the average. Moreover, nearly all the large concerns engaged in pasteurising, regularly test the quality of the raw milk they buy, and have every facility for ascertaining the fat content of the pasteurised milk they distribute. In spite of these facts, the analyses of the samples under consideration revealed that, compared with milk average of quality, the samples were deficient in fat in amounts ranging from 5.5. to 14 per cent. It is true that all the samples reached the minimum for fat required by the Sale of Milk Regulations, but this limit is purposely fixed at a low figure in order to avoid injustice, as far as possible, to individual suppliers having only a few cows, and it bears no relationship whatever to milk of average quality. It is not possible to form an opinion as to whether these few samples were typical of the milk supplied to schools in the Borough, but the matter might repay further investigation. Systematic sampling and analysis at frequent intervals of the milk supplied to schools by the various contractors could provide valuable information for any Committee considering future contracts, by indicating from which sources the best value was to be obtained for money expended.

COMPOSITION OF MILK SOLIDS.

The following table gives the average figures for the solid components of samples of milk analysed during the four quarters of the year. The table does not include samples that failed in any respect to satisfy the requirements of the Sale of Milk Regulations.

	Percentage.	1938	1937	1936	1935	1934	1933
Jan.-Mar.	Fat	3.2	3.3	No	4.1	3.6	3.5
	Solids-not-fat	8.7	8.9	Samp- les.	8.7	8.9	8.7
April-June	Fat	3.4	3.5	3.6	3.7	3.8	3.5
	Solids-not-fat	8.8	8.7	8.8	8.7	8.7	8.7
July-Sept.	Fat	3.4	3.7	3.7	3.8	3.9	3.6
	Solids-not-fat	8.8	8.7	8.7	8.7	8.7	8.6
Oct.-Dec.	Fat	3.9	3.6	4.1	3.9	4.0	4.0
	Solids-not-fat	8.9	8.6	8.9	8.8	8.7	8.8

OTHER DAIRY PRODUCE.

FRESH CREAM.

Six samples described as fresh cream were analysed in 1938. One of these samples, No. 85, had been pasteurised or otherwise subjected to heat treatment, and, therefore, was not sold under a correct description. The distinction between fresh cream and heat-treated cream has been referred to in previous reports, and is regarded as of some importance, not only because of the inferior flavour of the heated article but also because the latter is nearly always of much lower fat content. The sample in question contained 27.6 per cent. of fat, whereas the remaining samples, which were all correctly described as fresh cream, contained from 48.3 to 53.6 per cent. of fat.

CHEESE.

Two samples of cheese were analysed in 1938. Both samples had been made from full-cream milk and were satisfactory in all respects.

BUTTER.

Thirty-one samples of Butter were analysed during the year. The samples were of satisfactory quality, free from admixture with foreign fat or preservatives, and none contained water in excess of 16 per cent., which is the maximum permitted by the Food and Drugs Act, 1928, Section 11.

OTHER VARIETIES OF FOOD.

SAUSAGES.

During the year, twelve samples of sausages were analysed, and five were reported against because they contained sulphur dioxide preservative without disclosure of its presence having been made at the time of sale. The Public Health, (Preservatives in Food) Regulations permit the use of sulphur dioxide preservative in sausages to the extent of 450 parts per million, but its presence must be declared to the purchaser at the time of sale. Of the twelve samples examined, six did not contain preservative, one had a label declaring the presence of sulphur dioxide and five contained preservative but were not accompanied by a label having the necessary declaration. The amount of sulphur dioxide in the preserved samples ranged from 180 to 250 parts per million.

It is interesting to compare the composition of the samples. The main ingredients of sausage are meat, cereal "filler," species, salt and flavouring principles. It is usual to include a proportion of water in order to facilitate the operation of filling the material into the skins, but, judging from the analysis of the samples, the quantity of water found to be necessary by different manufacturers is very variable. The following is the approximate composition of the samples received, as determined by analysis:—

No. of sample.	1	2	3	4	5	6	58	59	60	62	64	66
Composition:—												
*Meat	63	63	48	59	53	56	69	67	74	69	63	58
Bread "filler"	31	23	50	24	28	38	21	8	11	20	21	29
Added water	6	14	2	17	19	6	10	25	15	11	16	13

*Including fat.

SHREDDED SUET.

Early in 1938, three samples of shredded suet were received for analysis, the samples having been taken in connection with other samples reported upon adversely in the latter part of 1937. Mention of these samples was made in the Report for 1937, and it will be unnecessary to make any further comments upon them here.

FISH AND CRUSTACEANS.

Ten samples of sardines and brislings, two samples of prawns and two samples of shrimps were analysed in 1938. Sardines are sometimes contaminated with lead from the vessels in which they are cooked before canning,

and special search was made in the samples for this or other heavy metals. The results were negative in all cases. The oil in which the fish were packed was examined and found to be olive oil in each sample.

Arsenic to the extent of ten parts per million was found in one of the samples of prawns. The natural occurrence of this substance in prawns and other shell fish has been noted on many occasions and the amount in this instance was not higher than has been found previously. It may be noted, however, that the other sample of prawns contained only one part per million of arsenic, and the sample of shrimps contained respectively 2.5 and 3.0 part per million. Other poisonous metals, as copper, lead and zinc, were either absent entirely or present only in negligible amounts in all the samples of fish and crustaceans.

GROUND ALMONDS.

Six samples of Ground Almonds were examined, and found to be genuine. A few years ago, considerable adulteration of this article was known to take place, either in the form of abstraction of some of the valuable almond oil or by substitution of cheaper ground nut kernels, such as peach kernels, for ground almonds. Samples of ground almonds have been analysed in Warrington each year for a number of years, but no case of adulteration has been detected.

LARD.

Ten samples of lard were analysed in 1938. The samples were all genuine, but lard is a substance that may easily be adulterated with cheaper fats, and it is known that admixture of lard with such substances as beef dripping is not altogether uncommon. Adulteration of this type appears to be most frequent in English refined lard and is not very common among imported lards. For this reason, it is recommended that the number of samples of English refined lard that are sent for analysis should be increased in 1939.

MINCEMEAT.

Five samples of Mincemeat were analysed during the year and were found to be genuine. Special attention was paid to contamination by copper in the samples, because, in 1937, a sample was found to contain 25 parts per million of this metal. The highest amount of copper found in the samples in 1938 was 8 parts per million, which may be regarded as satisfactory.

One sample of mincemeat contained sulphur dioxide preservative. Preservative may not be added to mincemeat as made, but sulphur dioxide is permitted in dried apple and in candied peel, which are ingredients, and it may occur, therefore, quite legitimately in mincemeat if the amount does not exceed the maximum that could be introduced from the preserved fruit. The sample contained much less sulphur dioxide than the maximum permitted on this basis of calculation.

The remaining samples consisted of cooked meats (8), ground rice (6), tea (6), coffee (10) and vegetable fat (1). They were all of satisfactory quality.

PRESERVATIVES.

As in previous years, the majority of samples submitted have been specially tested for preservatives. With the exception of samples of sausage to which reference has been made, no case of contravention of the Public Health (Preservatives in Food) Regulations, was detected.

I am, Gentlemen,

Yours, faithfully,

J. GRAHAM SHERRATT, B.Sc., F.I.C.,
Public Analyst.

LIST OF SAMPLES ANALYSED IN 1938.

Name of Article examined.	Number of samples analysed.			Number of sample found to be adulterated.		
	Formal.	In- formal	Total.	Formal.	In- formal	Total.
Almonds (ground).....	—	6	6	—	—	—
Butter	—	31	31	—	—	—
Cheese	—	2	2	—	—	—
Coffee	—	10	10	—	—	—
Cream (fresh)	—	6	6	—	1	1
Lard	—	10	10	—	—	—
Meat (cooked)	—	8	8	—	—	—
Mincemeat	—	5	5	—	—	—
Milk	25	37	62	4	8	12
Prawns	—	2	2	—	—	—
Rice (ground)	—	6	6	—	—	—
Sardines (brisling).....	—	10	10	—	—	—
Sausages	—	12	12	—	5	5
Shredded Suet	—	3	3	—	—	—
Shrimps	—	2	2	—	—	—
Tea	—	6	6	—	—	—
Vegetable Fat	—	1	1	—	—	—
	25	157	182	4	14	18

PURITY OF WATER SUPPLY.

13 samples of water were obtained and submitted for bacteriological examination and 12 samples were submitted for chemical analysis.

In 10 cases Bacterium Coli were not found in 100 C.C.

In 3 cases Bacterium Coli were found in 100 C.C., but not found in 10 C.C.

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 and 115.

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 86).

During 1938, the following cases of infectious disease were notified :—

Scarlet Fever	245	Compared with	91 in 1937
Enteric Fever.....	1	"	1 "
Pneumonia	198	"	225 "
Erysipelas.....	38	"	43 "
Diphtheria	131	"	142 "
Tuberculosis :—			
Pulmonary	85	"	100 "
Non-Pulmonary	26	"	22 "
Encephalitis Lethargica ..	—	"	2 "
Smallpox	—	"	— "
Measles.....	834	"	66 "
Puerperal Pyrexia	13	"	16 "
Cerebro Spinal Fever	—	"	— "
Poliomyelitis	—	"	2 "
Ophthalmia	—	"	5 "
Pemphigus.....	—	"	— "

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

Diphtheria	10
Scarlet Fever	1
Puerperal Pyrexia	3
Cerebro Spinal Fever	1
Encephalitis Lethargica	1
Erysipelas	—

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.

VACCINATION OFFICER'S RETURNS.

For the year ending December 31st, 1938.

	District.	
	No. 1.	No. 2.
Number of children registered during 1938, and residing in No 1 and No. 2 Districts.....	521	647
Number of cases submitted on Form H to the Public Vaccinators	321	523
Cases Vaccinated in No. 1 and No. 2 Districts.....	268	372
Number refused Vaccination.....	40	36
Cases postponed	12	110
Cases removed or Vaccinated by other Doctors after Form H has been sent.....	1	4
Number of Q Notices sent during 1938.....	253	336

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 :—

The following is the return of the Vaccination Officer for the year 1938,
compared with previous years :—

	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Births	1540	1625	1640	2272	2034	1808	1784	1642	1741	1645	1634	1651	1567	1593	1581	1475	1400	1533	1519	1497	1560	1283
Successfully vaccinated	1183	876	1050	1433	1295	1244	1216	1192	1158	1119	1161	1146	888	893	873	888	817	760	876	825	861	640
Insusceptible of vaccination	1	3	1	4	2	1	5	2	1	8	—	4	2	7	7	5	1	3	6	2	5	5
Died unvaccinated	78	107	116	121	120	87	75	98	87	96	87	76	100	71	116	82	83	79	76	96	95	88
Exemptions	334	285	332	574	484	400	325	278	325	313	286	365	408	458	441	435	407	461	462	392	481	439
Removed : Address unknown	1	12	19	18	46	52	20	35	31	30	41	39	43	31	25	23	26	17	26	47	35	30
Had Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Children born in other districts but vaccinated here	8	10	24	17	14	14	17	12	13	13	12	12	12	5	9	3	3	2	5	1	5	11

SCARLET FEVER.

During 1938 there were 245 cases, 1 death (compared with 91 cases and no deaths during the previous year).

Out of the 245 cases 164 (or 67 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 834 cases notified, with 4 deaths (compared with 66 cases and 1 death in 1937).

10 cases were treated in hospital during 1938. The District Nurse attended in the patients' own homes, in accordance with our arrangements, 8 cases, paying altogether 149 visits (see page 20).

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

1826 visits were paid by the Inspectors to the homes of children affected.

It is satisfactory to note that parents are inclined to obtain medical advice for cases of measles more frequently than formerly, and the Health Visitors report that in almost all cases a doctor is in attendance before the case is reported to the Health Department.

GERMAN MEASLES.

No cases came to our notice during 1938.

DIPHTHERIA AND MEMBRANEOUS CROUP.

In 1938 there were 131 cases notified, with 10 deaths (97 per cent. removed to hospital). The death rate was 0.13 per 1,000.

These figures show an improvement over the previous year when there were 142 cases, the death rate being 0.13 per 1,000, and considering the severe type of disease, the results were better than in many areas.

Immunization against Diphtheria.

During the year, 1667 children of school age were immunized at the Schools and School Clinic, 37 at the Isolation Hospital and 385 below school age at the Consultation Centres (M. & C.W.), making a total of 2557 in all, as compared with 1,314 in the previous year.

In every instance the written consent of the parents or guardians is previously obtained and no child is immunized unless consent is given.

At the schools the Head Teachers always assist by getting the written consent of the parents, and they also muster the children when they have to be treated. A nurse is always in attendance to assist in the treatment, and keeps a careful record of it on a special card used for this purpose.

Number of cases immunized during 1938 :—

At Schools and School Clinic	1667
At Fever Hospital	37
At Infant Welfare Centres.....	385
Total.....	2089

The following leaflet, which has been circulated in the town, gives some further particulars :—

PROTECTION AGAINST DIPHTHERIA.

Are Diphtheria and Croup dangerous diseases ?	Yes ; about 1 patient in every 20 of those who contracted them in England last year died. The others undergo a long illness, which is very weakening.
Is it possible or probable that your children will contract them ?	They are fairly prevalent at the present time and nobody can be safe from them, unless steps are taken to obtain protection from them.
What can be done to protect children against them ?	The only safe and efficient method is inoculation against Diphtheria.
What is this method ?	Three small injections are made at fortnightly intervals into one arm.
Is it safe ?	It is safe and quite harmless.
Does it cause any pain ?	Very little pain.
Does it make the arm sore ?	No, no soreness results from the injection.
Does it upset the child ?	No ; no indisposition of any kind is produced as a result ; only in adults occasionally there is some indisposition ; never in children.
What is the best age to have it done ?	The sooner the better after a child is 12 months old.

Is it efficient ?	It fails to protect only about 2 in every 100 done, and that is why children are asked to come up for a final test 3 months after the last inoculation.
Why wait 3 months ?	The protection is not fully established until some months after inoculation.
It's rather slow !	It's slow, but it is sure ; and it lasts the longer for that.
How long does the protection last after the inoculation ?	For a great many years, and probably for life.
Is it advisable to wait until the children have been exposed to Diphtheria infection ?	No, it is best to have the inoculation over some months before they are exposed to the infection.
What is to be done	See your own Doctor, or call either at the Health Department, Sankey Street, or one of the Infant Consultation Centres, or the School your Child attends, in order to make an appointment for him or her to be immunised.

ENTERIC FEVER.

There was 1 case notified during 1938, with no deaths.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

No cases of Puerperal Fever were notified. 13 notifications were received during the year for cases of Puerperal Pyrexia (see page 18).

ERYSIPELAS.

38 cases of this disease were notified during 1938, and 9 of the cases were removed to hospital for treatment.

ACUTE PRIMARY AND INFLUENZAL PNEUMONIA.

The total number of notifications received was 198 and out of these cases death resulted in 64 instances. 12 cases of pneumonia were removed to hospital for treatment.

INFLUENZA.

5 deaths occurred during the year from Influenza or Influenzal Pneumonia, as against 74 deaths in the 1937.

ENCEPHALITIS LETHARGICA (" Sleepy Sickness ").

Only 2 cases of this disease were notified, 1 death occurring during the year.

AIKIN STREET ISOLATION HOSPITAL.

The main diseases at present treated at the 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 Warrington Rural, and Lymm Urban Districts are admitted, and a charge is made which is payable by the authority concerned.

Summary of Number of Patients and Diseases for 1938:—

	From the Borough	From Warrington Rural District	From Lymm Urban District	From Other Districts	Total
In Hospital, 31st Dec., 1937	43	12	5	2	62
Admitted in 1938 :—					
Scarlet Fever	164	15	2	—	181
Diphtheria	127	5	3	—	135
Typhoid	1	—	—	—	1
Encephalitis Lethargica	—	—	—	—	—
Measles	10	—	—	—	10
Whooping Cough	7	—	—	—	7
Pneumonia	1	—	—	—	1
Erysipelas	9	—	—	—	9
Puerperal Fever	12	—	—	—	12
Others	3	—	—	—	3
Total treated 1938	377	32	10	2	421

In Hospital, 31st Dec., 1938

Scarlet Fever	21	4	—	—	25
Diphtheria	15	—	—	—	15
Puerperal Pyrexia	—	—	—	—	—
Pneumonia	—	—	—	—	—
Others	8	2	—	—	10
Total	44	6	—	—	50

DEATHS, in Aikin Street Hospital, 1938.

Diphtheria	8	—	—	—	8
Pneumonia	5	—	—	—	5
Erysipelas	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—
Typhoid	—	—	—	—	—
Measles	3	—	—	—	3
Others	25	1	—	—	26
Total	41	1	—	—	42

TREATMENT OF CASES IN HOSPITAL.

SCARLET FEVER.

The incidence of Scarlet Fever was higher than in the previous year, 245 cases being notified. One death from this disease occurred during the year. 164 Warrington cases and 17 cases from other districts were treated in the hospital.

DIPHTHERIA.

The number of Warrington patients admitted to hospital (127) was less than in the previous year (1937) 140.

Immunisation of the Nursing Staff against Diphtheria has been carried out, and children convalescing from Scarlet Fever are immunised against Diphtheria if the parents desire it.

MEASLES.

There were 10 patients admitted. I am pleased to note that only 4 deaths from this disease occurred in the Borough during 1938. It has not been possible to admit all cases of Measles; only those with chest complications.

ERYSIPELAS.

9 patients were admitted as against 17 in the previous year—Serum being given in all cases. There were no deaths from this disease during 1938.

NEW WARD REQUIRED.

It would be a very great advantage to this hospital if we could have a cubicle ward erected. Not only is the whole accommodation of the hospital severely taxed during epidemics, but we are in need of more cubicles for the isolation of suspicious or observation cases. The accommodation in the cubicle ward would be ideal for dealing with cases of Puerperal Fever.

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)	723
German Measles	22
Whooping Cough	128
Chicken-pox	415
Mumps.....	249
	<hr/>
	1537

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.

WHOOPING COUGH,

like Measles, is a very fatal disease in young children ; 128 cases came to our notice during 1938. There were 3 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	272
Revisits to premises where cases of Scarlet Fever, Diphtheria, or Enteric Fever had occurred to ascertain as to contacts, &c.	344
Revisits to premises where cases of Scarlet Fever or Diphtheria have been treated at home	251
Visits to premises where cases of Measles have occurred	914
Revisits to premises while the cases of Measles were being treated	912
Visits to homes of children reported by Education Department as being absent from School owing to either Whooping Cough, Chickenpox, or Mumps	792
Revisits to homes of children suffering from either Whooping Cough, Chickenpox, or Mumps	811
Visits to homes when children are absent from school with a Sore Throat or suspicious Rash	216
Visits to homes where cases of Influenza or Pneumonia have occurred	178
Visits to premises <i>re</i> cleansing and disinfection after cases of infectious disease	86
Total	4776

CANCER.

The number of deaths from Cancer during 1938 was 112, an increase of 11 compared with 1937.

The male deaths numbered 62, being a decrease of 1 on the previous year. The female deaths were 50, being an increase of 12 compared with 1937.

There was a decrease of 3 in the number of male deaths from Cancer of the mouth and throat. An increase of 7 deaths from Cancer in the alimentary tract, and a decrease of 5 in other sites.

In females there was an increase of 3 in deaths from Cancer in the alimentary tract, and an increase of 9 in deaths from Cancer of the genito-urinary tract.

The deaths from Cancer in this area during the year 1938 occurred in the following age periods :—

Ages	0-	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-	Total
FEMALES	—	—	—	—	—	—	5	11	18	10	6	50
MALES	—	—	—	—	1	—	3	8	19	20	11	62

These 112 deaths give a death-rate of 1.38 per 1,000 persons living, compared with 1.30 per 1,000 in 1937.

The following table gives the number of deaths from Cancer during the 33 years, and it is apparent that there has been a steady increase until the year 1934. Since then there has been a slight decrease.

	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	1.47
32	111	1.39	
33	126	1.55	
34	132	1.62	
35	115	1.43	
1936	114	1.43	1.38
37	101	1.30	
38	112	1.41	

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.

The number of such report cards received from the Borough General Hospital for the past 6 years has been :—

1933	40
1934	30
1935	32
1936	30
1937	34
1938	26

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 seven years :—

FAMILY HISTORY.

				Relatives who had previously died of Cancer				
Year	No. of Deaths from Cancer	No. whose relatives, etc. had died from Cancer		Par-ents	Wife or hus-band	Bro-thers or Sis-ters	Other Rela-tives	Several cases in family and relatives.
1932	111	7	6.3%	5	1	1	—	—
1933	126	14	11.1%	6	4	—	4	—
1934	132	22	16.6%	7	4	6	4	1
1935	115	18	15.6%	9	3	3	3	—
1936	114	19	16.6%	7	4	6	1	1
1937	101	18	17.8%	6	4	6	1	—
1938	112	22	19.6%	13	3	3	2	1

ARRANGEMENTS FOR RADIUM TREATMENT.

Arrangements have been made for free Radium Treatment for residents of this district at the Liverpool Radium Institute. A charge of 4s. per day for maintenance being made for cases that have to be admitted to the Institute and 2s. 6d. per day maintenance for patients receiving treatment as out-patients. The Local

Authority has agreed to defray part or the whole of the cost of this for necessitous Warrington cases. "Recommends" and full particulars are available on application to the Medical Officer of Health.

During 1938 the Medical Officer gave 18 recommends to 15 new patients resident in Warrington also 5 to patients resident in the outside area, also 3 recommends to patients who had received radium treatment prior to 1938.

WARRINGTON CASES.

The sites of the disease were :—

Breast	2
Uterus or Vagina	5
Tongue, Mouth, Lip and Cheek	6
Neck and Glands	—
Lung.....	—
Oesophagus	—
Rectum.....	—
Scrotum	—
Rodent Ulcer	—
Nose	2

The Local Authority also contributes £100 per annum to the Manchester and Salford Medical Charities Fund, and recommends can be obtained for patients who desire treatment in hospitals in that district.

Since the scheme with the Radium Institute was commenced in 1931, 167 recommends have been given to 153 patients resident within the Borough (12 patients have had 2 recommends, 1 patient has had 3 recommends).

The following table gives the condition of the patients, as far as can be ascertained, at the end of 1938 :—

Said to be recovered	14
Said to be much improved	15
Said to be slightly improved	13
Said to have temporary improvement but not maintained	10
Died in Radium Institution	13
Died since discharge	76
Removed, and present address not known	9
Recent cases still under treatment	3

153

X-RAYS FOR DIAGNOSIS.

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

TUBERCULOSIS.

NO. OF CASES IN THE BOROUGH.

To our knowledge the number of persons suffering from Tuberculosis resident in Warrington at the end of 1938 was 469 divided as follows :—

	Males.	Females.	Total.
Pulmonary	175	106	281
Non-Pulmonary	87	101	188
	<hr/> 262	<hr/> 207	<hr/> 469

and living in close contact with these 469 cases were 1975 persons.

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 1938 was 111, compared with 122 for 1937.

A summary of all new cases under the different ages and sexes is given in the table in the Appendix, page 123.

79 or 71.2 per cent. of the notifications were new cases coming to the Tuberculosis Officer before notification for his opinion as to diagnosis :—

53 were sent by Private Practitioners.

22 were seen at or referred from the Borough General Hospital and Warrington Infirmary.

3 were referred by Health Department Staff.

1 were contacts.

In addition to the 111 notifications, 8 cases (5 pulmonary and 3 non-pulmonary) came to our knowledge from other sources (*e.g.*, 4 transferred from other districts, 3 on the Local death return and 1 posthumous notification).

DEATHS.

The number of persons certified as having died from Tuberculosis during 1938 was 57 (53 pulmonary and 4 other forms). This gives us a death-rate of 0.72 per 1,000.

DEATHS DURING 1938 DIVIDED INTO AGE PERIODS:—

	Pulmonary	Non-Pulmonary	All forms
1938	0.67	0.05	0.72

Extracts from the special tables that have to be prepared annually for the Ministry of Health, are given on pages 123 to 136.

Age Periods Years	Pulmonary		Non-Pulmonary	
	Male	Female	Male	Female
0	1	—	—	—
1	—	—	—	—
2	—	—	1	—
5	1	—	1	1
15	1	—	—	1
25	7	6	—	—
35	5	7	—	—
45	13	1	—	—
55	6	—	—	—
65	5	—	—	—
75 and upwards	—	—	—	—
Total.....	39	14	2	2

35 (or 66%) of the 53 pulmonary deaths died in Institutions.

18 (or 34%) of the 53 pulmonary deaths died at home.

10 of the 18 cases who died at home had previously received institutional treatment.

NON-NOTIFIED DEATHS.

There were 4 non-notified deaths during 1938—2 pulmonary cases and 2 non-pulmonary cases. One of these died in the Borough General Hospital, Warrington, 2 in the Warrington Infirmary and one at Home.

The percentage of such deaths has fallen very considerably since 1920, when it was 21.5%, in 1938 it was 7%.

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—1935 (5 years)	27	418	6.45
1936— (1 year)	4	75	5.33
1937— (1 year)	2	74	2.70
1938— (1 year)	4	57	7.0

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.

Number of attendances in 1938 :—

	Adults	Children	Total
New cases	257	128	385
Old cases	201	63	264
Attendances for examination	993	339	1332

In addition to these attendances for examination there were also 2,083 for interviews, etc., making a total of 3,415.

Evening Sessions were held at monthly intervals throughout the year for the benefit of persons who are at work during the day.

X-RAY EXAMINATIONS.

Number of cases X-Rayed in 1938 was 1,424, of these 407 were at the Borough General Hospital and 1,017 at Hefferston Grange Sanatorium.

CONTACTS.

During 1938, 94 contacts with cases of the disease were specially examined by the Tuberculosis Officer, and of these 1 was found to be suffering from Tuberculosis.

The number of contacts examined during the year to new cases notified = 84.7%.

The average during the last eight years is as follows :—

	No. of Contacts examined.	No. of New Notified cases.	Percentage of Contacts examined
1931—1938 (8 years)	1153	978	118%

CO-OPERATION WITH GENERAL PRACTITIONERS.

The relations of the Tuberculosis Department with the local doctors are excellent, and 206 patients were sent up for special examination during 1938 by private practitioners.

WORK IN THE HOMES.

Visits paid during 1938 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	85	26
Visits paid to homes of notified cases, to ascertain progress of patient, if instructions are being carried out, etc., etc.	721	484
Visits to arrange for disinfection and cleansing of homes after death or removals to institutions or another address	25	—
Miscellaneous visits to doubtful cases, etc.....	22	20
	<hr/> 853	<hr/> 530
	<hr/> 1383 <hr/>	

AFTER CARE.

Details of the work under this head were given in the Report for 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 to patients in this branch of our work.

OTHER WORK.

Disinfection, 86 houses.
 Bacteriological Examination of Sputum, 632.
 Certificates for Ministry of Pensions, 28.
 Certificates for United Services Fund, 20.
 Applications to Red Cross Fund for Assistance, 8.
 Applications to Council of Social Service for Assistance, 26.

TREATMENT OF TUBERCULOSIS.

HOME NURSING AND EXTRA NOURISHMENT.

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

During 1938, 39 patients received extra nourishment in the form of milk and virol. Cost of same £63 2s. 9d.

DENTAL TREATMENT.

Arrangements have now been made to enable necessitous Tuberculosis patients requiring Dental Treatment to obtain it at our Borough General Hospital. Four cases were 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 1938 cases treated :—

Warrington—	Pulmonary Cases			Observation	Non-Pul.	Total
	Early	Medium	Advanced			
Adults	22	47	58	9	2	138
School children	1	1	—	2	1	5
Under school age	—	—	—	—	—	—
Cheshire C.C.	5	14	33	3	—	55
Lancashire C.C.	1	5	6	—	—	12
Total.....	29	67	97	14	3	210

OBSERVATION CASES.

14 of these completed the period of observation, and 2 were found to be suffering from Tuberculosis and retained for treatment. Urgent cases are admitted almost immediately. Average period of waiting 3 days.

RESULTS OF SANATORIUM TREATMENT.

During 1938, 149 cases left Hefferston Grange Sanatorium, Weaverham, 108 were Warrington cases, and 41 were cases treated for the Lancashire or Cheshire County Councils :—

	Early	Medium	Advanced	Observation	Non-Pul.	Total
Quiescent	15	21	17	—	2	55
Improved	1	10	9	—	—	20
No material improvement	—	2	3	—	—	5
Died in Sanatorium	—	4	13	—	—	17
Observation cases—						
Tuberculosis	—	—	—	2	—	2
Not Tuberculosis	—	—	—	9	—	9
Total Warrington Cases....	16	37	42	11	2	108

The above table includes all cases which have left the Sanatorium. The Ministry of Health Returns on page 130 only show cases which have received treatment for at least 28 days in the Sanatorium, the Borough General and other hospitals.

Considering that there is no selection of cases in our Sanatorium, but that all types are dealt with — early, intermediate and advanced — these results must be looked on as very satisfactory, for in about half the cases the disease is apparently arrested (55 out of 99 definite cases).

41 cases discharged from Hefferston Grange Sanatorium who were treated for the Lancashire or Cheshire County Councils.

	Early	Medium	Ad- vanced	Obser- vation	Total
Quiescent	3	3	4	—	10
Improved	—	3	5	—	8
No material improvement	—	2	1	—	3
Died in Sanatorium	1	4	12	—	17
Observation cases—					
Tuberculous	—	—	—	—	—
Not Tuberculous	—	—	—	3	3
Total.....	4	12	22	3	41

The average duration of treatment for all cases was 25 weeks, 1 day.

The longest period of treatment was 145 weeks.

Cases undergoing treatment at Hefferston on December 31st, 1938 :—

	Early	Medium	Ad- vanced	Obser- vation	Non Pul.	Total
Warrington cases	4	13	18	—	1	36
Cheshire C.C.	1	5	14	—	—	20
Lancashire C.C.	1	2	3	—	—	6
Total.....	6	20	35	—	1	62

X-RAYS EXAMINATIONS.

The new X-Ray installation at Hefferston Sanatorium was first brought into use during the month of August, 1936, and is operated by Dr. Delmege. 561 patients were screened and 456 films were taken, making a total of 1017 X-Ray examinations.

Dr. J. A. Delmege has submitted the following notes on treatment :—

The main lines of treatment remain such as they were last year—rest under sanatorium conditions, supplemented by surgical measures in suitable cases. Gold is not so much extensively used as it was, and no advances have been recorded in chemothermotherapy.

During 1938, 15 cases were treated by artificial pneumothorax receiving 207 re fills, and in 5 other cases this treatment was tried and either proved impossible or had to be abandoned almost at once.

One case was sent to Manchester Royal Infirmary for thoracoplasty treatment by Mr. Graham Bryce.

11 cases were treated by Phrenic Division and 1 received gold.

RECREATION.

The recreational facilities at the Sanatorium have been fully used, particulars of which were furnished in the 1931 Report.

Our best thanks are due to the Chaplain, the Rev. John W. Wilkie, who visits the wards and conducts a weekly service for the patients, and also to the Reverend Father J. E. Seddon, who is regular in his attendance at the Sanatorium.

We have also to thank the various Bands and Concert Parties from Warrington who have provided entertainment at different times, which has been much appreciated.

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 treated in the Borough General Hospital during 1938 :—

	Early	Medium	Ad- vanced	Obser- vation	Total
Adults	6	19	28	10	63
School Children.....	1	—	1	1	3
Under School Age.....	—	—	—	—	—
Totals	7	19	29	11	66

Condition on discharge of the 55 cases who left the Borough General Hospital.

	Early	Medium	Ad- vanced	Obser- vation	Total
Improved	3	6	1	—	10
No Material Improvement.....	1	1	3	—	5
Died	—	3	14	—	17
Observation Cases—					
Found Tuberculous	—	—	—	3	3
Found not Tuberculous	—	—	—	8	8
Transferred to Hefferston Sanatorium for further treatment	3	4	5	—	12
Totals	7	14	23	11	55

The following cases were still undergoing treatment on December 31st, 1938 :—

	Early	Medium	Ad- vanced	Obser- vation
Adults	—	5	6	—
Children	—	—	—	—
Totals	—	5	6	—

In addition to the above Warrington cases, 9 pulmonary cases have been treated for Lancashire County Area and other Authorities.

Dr. Delmege visits the hospital once a week and sees all chest cases, those suitable for Sanatorium treatment being transferred to Hefferston Grange.

After discharge from the Sanatorium and Borough General Hospital, the cases are kept under observation by the Tuberculosis Health 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 1938 at various hospitals, in addition to 3 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	1	4
" " Hip	3	1	—	2
" " Hand	—	1	—	1
" " Knee	—	1	2	1
" " Abdomen.....	1	3	—	—
" " Gland.....	3	11	6	15
" " Skin	3	1	18	1
" " Other forms	2	3	—	—
" " Observation cases	—	3	—	—
Totals	13	28	27	24

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

	In-patients.		Out-patients.	
	Adults.	Children.	Adults.	Children.
Borough General Hospital	5	26	6	23
Warrington Infirmary	5	2	13	1
Robert Jones and Agnes Hunt Orthopædic Hospital, Oswestry	1	—	—	—
Manchester Skin Disease Hospital....	1	—	7	—
Other Manchester Hospitals	1	—	—	—
Totals	13	28	26	24

RESULTS OF TREATMENT.

IN-PATIENTS.

Thirty-seven of the 41 cases that received treatment in Residential Institutions were discharged.

The following table shows their condition on discharge :—

	Quiescent	Improved	No im- provement	Transferred to other Hospitals	Observation Cases found not T.B.	Died	Total
Borough General Hospital	14	9	—	—	3	3	29
Warrington Infirmary	2	2	—	2	—	—	6
Robert Jones and Agnes Hunt Orthopædic Hospital	—	—	—	—	—	—	—
Skin Diseases Hospital, Man- chester	—	1	—	—	—	—	1
Other Manchester Hospitals	—	1	—	—	—	—	1
Totals	16	13	—	2	3	3	37

Four cases were still undergoing treatment on December 31st, 2 at Borough General Hospital, 1 at Warrington Infirmary and 1 at Robert Jones and Agnes Hunt Hospital, Oswestry.

OUT-PATIENTS.

MANCHESTER SKIN DISEASES HOSPITAL.

One case was transferred to another Hospital.

Six cases are still attending. The cases have made a total of 61 attendances.

WARRINGTON INFIRMARY.

Two cases attending for Artificial Sunlight treatment and dressings for skin diseases were discharged, as recovered.

Twelve cases were still attending for treatment on December 31st.

A total of 215 attendances have been made, 141 were for artificial sunlight treatment and dressings, and 74 for treatment at the Skin Disease Clinic.

BOROUGH GENERAL HOSPITAL.

26 cases were discharged. 23 much improved, and 3 were transferred for in-patient treatment.

The Cases attending the various hospitals for out-patient treatment have made a total of 215 attendances, 141 were for Artificial Sunlight, 74 for Skin Treatment.

Five patients were supplied with Surgical Appliances 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.

I am indebted to Dr. Ellis Pigott, assisted by Dr. M. I. Porteous for much valuable work done under our scheme at the Warrington Infirmary.

During the year 1938 the work at the Venereal Diseases Clinics, has been conducted on the same principle as in 1936.

TOTAL ATTENDANCES FOR THE PAST FIVE YEARS :—

	1934	1935	1936	1937	1938
Warrington	5988	7595	8071	9041	11444
Lancashire	1801	2048	2282	3293	3133
Cheshire	1167	1645	1557	2760	2407
	8956	11288	11910	15094	16984

As will be seen from the above table there has been in the last four years a steady increase in the total attendances. The year 1938 showing an increase of more than 5696 attendances than in the year 1935.

The new cases admitted for the five years were :—

	1934	1935	1936	1937	1938
	195	240	202	216	230

Admittances during 1935, 1936, 1937 and 1938, classified according to diseases were :—

	1935	1936	1937	1938
Syphilis	60	53	51	59
Gonorrhœa	143	128	140	141
Non-V.D.	37	21	25	30
Total.....	240	202	216	230

Total intermediate attendances for the treatment of Gonorrhœa were as follows :—

1933	1934	1935	1936	1937	1938
5464	5503	7445	7823	10660	12197

These figures show a steady increase, especially marked in 1937, this was largely due to the fact that we were successful in persuading the women patients to attend more regularly, and to the following up of patients by Dr. Porteous at the Ante-Natal Clinics.

Intermediate attendances of female patients suffering from Gonorrhœa were :—

		1935	1936	1937	1938
Total.....		533	1001	4578	5019
CASES DISCHARGED AS CURED.					
	1934	1935	1936	1937	1938
Syphilis.....	34	39	39	40	38
Gonorrhœa	88	100	102	91	133
Non-Venereal	33	37	21	25	30
Total.....	155	176	162	156	201

The pathological work, with the exception of Wasserman reactions and the Gonococcal compliment fixation tests is now carried out at the Clinic.

MICROSCOPIC EXAMINATIONS.

	1935	1936	1937	1938
Treponema	34	31	23	27
Gonococci	361	630	990	1117

The work at the Clinic has been carried out on much the same lines as in 1936. Biarsamide has been introduced for the treatment of Neuro-Syphilis and Sulphonamide in the form of Soluseptasine is being tried in the treatment of certain meta static complications of Gonorrhœa. The examination of microscopical specimens at the Clinics has saved much time in obtaining the results, besides being financially economical to the County Borough.

1. PATHOLOGICAL EXAMINATIONS.

WASSERMAN BLOOD TESTS.

	Results		Total.
	Pos.	Neg.	
For General Practitioners	1	17	18
For V.D. Clinic	86	231	317
For Health Department, Maternity Home and Borough General Hospital	3	67	70
	90	315	405

2. FREE TREATMENT AT THE INFIRMARY CLINIC.

The number of attendances, 16,984 was the highest on record.

A part-time Orderly, with special qualifications, is in attendance to assist in the intermediate treatment of cases at the Clinic and with the bacteriological work.

This Orderly undertakes the supervision of irrigation work in the Male Clinic, and such bacteriological work as detailed to him by the Venereal Disease Officer. The experiment has proved very successful and added greatly to the efficiency of the Clinic.

For hours of consultation, etc., see page 26.

3. PROVISION OF SALVARSAN SUBSTITUTES.

The number of doses of arsenobenzene supplied during 1938 is as follows :—

To Private Practitioners.....	10 doses.
To Treatment Centre	975 doses.

A total of 985 doses as compared with 633 doses in 1937.

Further particulars are given in the Special Return which has to be submitted annually to the Ministry of Health (see page 129).

PREVENTION OF BLINDNESS.

The scheme for prevention of blindness under Section 66 of the Public Health Act, 1925, which was inaugurated experimentally in 1933, received the approval of the Minister of Health in 1935, as a permanent scheme.

Full particulars of the facilities provided

(a) under existing services,

and (b) under Section 66 (Public Health Act, 1925)

were given in 1934 report. A summary of the work carried out during the year 1938 is given below.

- (a) Special sight saving class for 28 partially-sighted children, at Evelyn Street School, well attended. Children re-examined at least once a quarter by the Ophthalmic Surgeon.

Altogether 28 children attended the special class at one time or another during the year 1938. At the end of the year there were 17 children in attendance.

Cases of markedly defective vision in young persons aged 14—16 years, followed up after leaving school, and in this connection 130 letters were sent to parents warning them of the necessity for periodically seeking the advice of a competent ophthalmologist.

From information obtained from the local agents for the N.O.T.B. (Messrs. Curry and Paxton, Legh Street, Warrington), there were altogether 200 cases (142 males and 58 females) dealt with by them under the Treatment Board's Scheme.

OPHTHALMIA NEONATORUM.

No cases of this disease were notified in Warrington during 1938.

All Midwives are supplied with colossal silver 1 in 2,000, for use as prophylactic drops in the eyes of all new-born children, after thorough cleansing.

HEALTH EDUCATION.

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.

By arrangement with the Central Council for Health Education, a periodical supply of posters on Health Subjects has been received and displayed in the frame obtained from the Empire Marketing Board, which Messrs. Joseph Crosfield and Sons have kindly permitted us to use outside their works in Liverpool Road.

Numerous leaflets on various subjects have been issued and circulated to the public during the year.

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 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, and I am indebted to Mr. J. Hawthorn (the Secretary of that body) for the following Report:—

BLIND PERSONS ACT, 1920—1938.

I have pleasure in reporting to you upon the activities of the Society during the twelve months ended December, 1938. The usual statistical information is also appended.

PREVENTION OF BLINDNESS.

The Society continues to co-operate with your own department, with the Warrington Infirmary, with the Manchester Royal Eye Hospital and similar Institutions on the question of treatment of suspected cases, and it is very pleasing to find many results of astounding success. The services of Dr. O. M. Duthie, M.D., who has been attending the Warrington Infirmary throughout the year are greatly appreciated on every hand.

LEGISLATION FOR THE BLIND.

During the year the Blind Persons Act, 1938, became operative and strict attention has been paid to the amending details required by the Act. The assessment of means in the operation of the Scheme of Assistance to the Unemployable and other Necessitous Blind Persons is now in conformity with the new legislation. The Act also provides for a reduction from 50 to 40 years of age for Old Age Pension purposes—this matter has also received attention.

WORKSHOPS.

It is again with regret that I have to report that nothing further has been done regarding the question of Workshop accommodation; the need for extensions or alternative accommodation is a problem that should be considered if blind persons are to work under comfortable conditions.

Employment during the year has only been fairly good. The general health of the employees has been good throughout the year.

CERTIFICATION OF BLINDNESS.

During 1938, 30 new cases were registered and 3 additional cases removed "in" to Warrington; on the other hand 10 deceased persons were removed from the Registers, 2 cases removed "out" of the district, and 2 cases were decertified. The net increase is 19 cases, and there were 200 Registered Blind Persons in Warrington at the end of the year.

TRAINEES.

At the end of 1938, there were 11 Warrington blind persons in training in various crafts; on completion of training they will be employed in the Society's Workshops.

SOCIAL AMENITIES.

The Committee of the Voluntary Society has vigorously maintained the various Social Amenities for the blind. The numerous concerts, annual trips, &c., were well attended and thoroughly enjoyed.

CHRISTMAS FUNCTIONS.

The usual Christmas Functions were arranged and every Registered blind person was the recipient of a gift of socks, stockings or other woollen wear, together with a grant of "half a crown"—from Voluntary Funds.

HOLIDAYS FOR THE BLIND.

The precedent created in previous years of providing holidays for all unemployable blind persons coming within the Society's care, has been maintained. The cost approximates £400 to the Society's Voluntary Funds.

VISITING.

In addition to regular professional visits by the Home Teaching Staff, personal contact is also made through the Ladies Committee. Whitecross cases are now visited regularly every fortnight when opportunity is taken to present each with a small gift of food, tobacco or sweets.

THE SICK BLIND.

The Society pays much attention to the needs of the sick blind and supplements from Voluntary Funds grants made under the Corporation's Scheme of Financial Assistance. The Executive Committee have placed on record their appreciation of their Chairman's (Mr. Furness's) inspiration in this respect: Mr. Furness personally raised well over £100 during the past year for this service alone.

UNEMPLOYABLE GRANT SCHEME.

Constant attention has been given to case work required in connection with the Corporation's Scheme of Assistance for the Unemployable and other Necessitous Blind. The generosity of the Corporation in maintaining its Grant Scheme at a figure of 27s. 6d. per week, is appreciated on every hand. From a health point of view, I think it is true to say that the blind are obtaining the fullest possible measure of benefit from the greater financial assistance now available to them—certainly their standard of life is improved.

HANDICRAFT, &c., CLASSES.

The Society maintains several handicraft classes, and in Warrington these are held at the Institute twice per week. Games, particularly dominoes, are also enjoyed at these meetings which are important too in the encouragement of fellowship amongst the Blind. Handicrafts are also taught on these occasions, outings and Christmas treats are additional amenities amongst those who attend these classes.

WIRELESS FOR THE BLIND.

The Society continues to receive a very reasonable complement of sets from the "British Wireless for the Blind Fund." The sets are erected and maintained at the Society's own expense.

In conclusion I beg to state that as this report goes to Press, I shall shortly be severing my official connection with the Society after 10 years' service as the Society's Superintendent and Secretary; I therefore take this opportunity of extending my personal thanks to those members of the Council and Officials with whom my work has been particularly associated and whose co-operation at all times has not only been appreciated by me, but has in no small way assisted me in saying that I have had ten happy years' service in Warrington.

I am,

Yours faithfully,

J. HAWTHORN,

Superintendent and Secretary.

REGISTRATION PARTICULARS as at 31st December, 1938.

Number on Register at date: 110 males, 90 females—total 200

AGE PERIOD OF REGISTERED CASES.

	0-5	5-16	16-21	21-30	30-40	40-50	50-60	60-70	70-80	over 80	Total
Males	—	2	3	8	14	14	11	30	15	13	110
Females	—	2	4	4	8	9	11	19	17	16	90
Total	—	4	7	12	22	23	22	49	32	29	200

AGES AT WHICH BLINDNESS OCCURRED.

	0-1	1-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	over 70	Total
Males	9	—	3	8	16	7	11	19	21	16	110
Females	7	2	3	6	3	3	14	14	19	19	90
Total	16	2	6	14	19	10	25	33	40	35	200

DEFECTIVE CASES

(Blind cases with additional defects).

	Males.	Females.	Total.
(a) Mental	5	3	8
(b) Physical	8	5	13
(c) Deaf	3	5	8
(d) Combination of (a), (b) or (c)	5	2	7
Total	21	15	36

WELFARE OF THE DEAF.

A scheme has been drawn up by the Public Assistance Committee as a result of Circular 1337 issued by the Ministry of Health. With the approval of the Ministry of Health the Local Authority now makes an annual grant to the Warrington and District Society for the Deaf and Dumb of 10s. per head of those afflicted residents within the County Borough. In return, the Society is to pay special attention to the problem of "placement" of deaf persons in employment, and will furnish quarterly reports showing details of "placement" and consultations with Schools for the Deaf and Dumb, *re* trainees.

PUBLIC ASSISTANCE COMMITTEE—DOMICILIARY MEDICAL SERVICE

LIST OF DOCTORS, CHEMISTS, &c.

ALLAN, A., "Sherwood," Manchester Road (Partner to Drs. Anderson, Grant and Barber).	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 8 p.m. (Thursdays, 9 to 10 a.m.; Sundays, 9.30 to 10 a.m.)
BARBER, Arthur Richard, 3, Manchester Road (Residence: 24, Salisbury Street).	...	...	...	...
BINNS, George, "Stoodley," Walton Road, Stockton Heath (Partner to Drs. Anderson, Grant and Allan).	...	...	...	...
BOURHILL, Charles John George, 1, Sharp Street (Residence: Orford House, Orford)	...	...	...	8.30 to 9.30 a.m.; 5.30 to 7.30 p.m. (Sundays, 9.30 a.m.) 9 to 10 a.m.; 12 noon to 12.30 p.m.; 6 to 7.30 p.m. (Thursdays, 9 to 10 a.m.; Sundays, 10 to 10.30 a.m.)
BOWDEN, William Ernest, 29, Bold Street, Warrington (Assistant: Feodora May Walshe BOURHILL)	...	...	...	9 to 9.30 a.m.; 6.45 to 8 p.m. (Sundays, 9.30 a.m. to 10 a.m.) 9.30 to 10 a.m.; 5.30 to 6 p.m. (Sunday: No Surgery)
Branch Surgery: 71, Liverpool Road	...	...	...	10 to 11 a.m.; 6.30 to 6.45 p.m. (Wednesday evening excepted)
Branch Surgery: 641, Knutsford Road	...	...	...	9 to 10 a.m.; 6 to 7.30 p.m. (Sundays excepted)
EYNON, Isabella Duff, 715, Knutsford Road (Partner to Drs. Murphy and Young)	...	...	...	9 to 9.30 a.m.; 7 to 8 p.m. (Thursdays, 9 to 9.30 a.m.) 9.45 to 10.15 a.m.; 6 to 7 p.m. (Thursdays, 9.45 to 10.15 a.m.) 2 to 3 p.m.; 6 to 7.30 p.m. (Thursdays, 2 to 3 p.m.)
FINNIGAN, E., "Red House," Fearnhead Do. 186, Orford Lane, Warrington	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 5.30 to 7 p.m. (Thursday, 9.30 to 10 a.m.)
GANDHI, Feroze Hormaz Dinshaw, 111, Liverpool Road (Residence: London Road, Stockton Heath)	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7.30 p.m. (Except Thursday and Sunday)
GLENTON, Ernest Edward, 23, O'Leary Street Do. 276, Manchester Road	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 8 p.m. (Thursdays, 9 to 10 a.m.)
GOOLD, E.C., 10, Egypt Street GRANT, William, 3, Manchester Road (Residence: 28, Salisbury Street)	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7.30 p.m. (Thursdays, 9 to 10 a.m.) 9 to 10 a.m.; 6 to 7.30 p.m. (Sundays, 9 to 10 a.m.) 9 to 10.30 a.m.; 6 to 7.30 p.m. (Sundays, 9 to 10 a.m.—Urgency)
(Partner to Drs. Anderson, Barber and Allan).	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7.30 p.m. (Tuesdays, 9 to 10 a.m.)
HEALY, Patrick Joseph, 9, Lower Wash Lane	...	...	...	9 to 10 a.m.
HENNESEY, A., St. J., 2, Museum Street	...	...	...	6 to 7.30 p.m. (Sundays excepted)
MANNING, John Joseph, 1, Tanners Lane	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 8 p.m. (Sundays, 9 to 10 a.m.)
MEIKLE, David, 129, Lovely Lane (Residence: 33, Walton New Road, Lower Walton)	...	...	...	9 to 10 a.m.
MURPHY, Bernard, Latchford House, 715, Knutsford Road Do. "Kenilworth," Victoria Road, Grappenhall	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7.30 p.m. (Sundays, 9 to 10 a.m.) 9 to 10 a.m.; 6 to 7.30 p.m.; (Thursday 9 to 10 a.m.; Sunday: no Surgery)
(Partner to Drs. Eynon and Young)	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7.30 p.m. (Thursdays and Sundays, 9 to 10 a.m.)
RAFFERTY, John, 1, Bewsey Road	...	...	...	9 to 10 a.m.; 2 to 3 p.m.; 6 to 7 p.m. (Thursdays, 9 to 9.30 a.m.; Sundays, 9.30 to 10 a.m.)
REES, T. 13, Palmyra Square	...	...	...	9 to 10 a.m.; 6 to 7.30 p.m.; (Thursday 9 to 10 a.m.; Sunday: no Surgery)
SINCLAIR, George Alexander, Ivy Lodge, Froghall Lane	...	...	...	9 to 10 a.m.; 6 to 7.30 p.m. (Thursdays and Sundays, 9 to 10 a.m.)
YOUNG, Donald H., 715, Knutsford Road (Partner to Drs. Eynon & Murphy)	...	...	...	2 to 3 p.m.; 6 to 7 p.m.
WILLIAMS, D. S., 260, Padgate Lane, Padgate	...	...	...	9 to 9.30 a.m.; 2 to 2.30 p.m.; 6 to 7 p.m. (Thursdays, 9 to 9.30 a.m.; Sundays, 9.30 to 10 a.m.)

MEDICINE, &c., when ordered by a Doctor on the panel, can be obtained from any of the persons or firms on the following list:—

BAMFORTH and Co., 74, Winwick Street, and 17, Padgate Lane.	HILL-SMITH (Warrington), LTD., 62, Buttermarket Street; 77, Bridge Street; 115, Orford Lane; and 306, Liverpool Road.
BOOTS CASH CHEMISTS, Market Gate and 126, Bridge Street.	PHYLLIS TWISS (trading as Twiss & Co.), 717, Knutsford Road.
S. FRYAR, 99, Orford Lane.	J. MAWSON WILFORD, 270, Knutsford Road.
W. GLENTON, 2, Hallfields Road.	J. RYMER YOUNG, LTD., 40, Sankey Street, and 1, King Street.
OSCAR HARRIS, 747, Knutsford Road, and 63, Sankey Street.	
T. H. H. TURTON, 118, Bewsey Road.	

Appendix I.

Borough General Hospital.

Particulars extracted from Page 1, Form Hosp. 6 (Ministry of Health),
year ending 31st December, 1938.

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	14
	No. of probationer nurses	48

ACCOMMODATION. Total number of beds provided in the Hospital for sick and maternity cases at 31st December,

(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, 1938.

Classification of Wards	Number of Wards.	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)	(2)									
1. Medical	21	40	40	25	23	39 Cots 27 Beds	—	213 Beds and Cots	201	
2. Surgical		26	26	22	21		27			
3. Chronic sick		20	20	24	21		23			
4. Children .....		....	....	....	....		....
5. Venereal	4	10	7	10	....	12	8	32	15	
6. Tuberculosis	3	4	4	7	4	(1 cot 1 bed)	1	13	10	
7. Isolation .....		....	....	17	16	....	1	17	16	
8. Maternity	4	....	....	....	....	....	....	....	....
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	97	105	85	80	60	285	242	

BOROUGH GENERAL HOSPITAL (continued).
Statistics relating to the year ended 31st December, 1938.

(A) IN-PATIENTS.

1. Total number of admissions (including infants born in hospital).....	2527
2. Number of women confined in hospital	408
3. Number of live births (7 sets of Twins).....	416
4. Number of stillbirths	32
5. Number of deaths among the newly-born (<i>i.e.</i> , under four weeks of age)*.....	25
6. Total number of deaths among children under one year (including those given under 5)	47
7. Number of Maternal deaths among women confined in hospital.....	3
8. Total number of deaths	313
9. Total number of discharges (including infants born in hospital)	2186
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, 1898. (b) Exceeding four weeks but under thirteen weeks, 503. (c) Exceeding thirteen weeks, 98.	
11. Number of beds occupied (a) average during the year 230.3 ; (b) highest 269 on 4/12/38 ; (c) lowest 172 on 31/8/38.	
12. Number of surgical operations under general anæsthetic (excluding dental operations)	297
13. Number of abdominal sections	45

*This figure relates 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.

OUT-PATIENT DEPARTMENT (B.G.H.).

2. Total number of persons seen in the out-patient department	1757
3. Number of these persons who were subsequently admitted for in-patient treatment in the Institution	88

4. Number of these persons who had received in-patient treatment in the Institution 112
5. Total number of attendances in the out-patient department 8998
6. If there is an ante-natal clinic, give the number of women seen and the total number of attendances :—
559 Women. 2680 Attendances.
7. If there is a Venereal Disease clinic, give the number of patients seen and the total number of attendances..... None

OUT-PATIENT DEPARTMENT (B.G.H.).

	Cases.	Attendance.
Orthopædic Department	445	5565
X-ray Department	550	550
Dental Department	203	203
Ante-Natal Clinic	460	2680
Total.....	1658	8998

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, 1938.

DISEASE GROUPS	Children (under 16 years of age).		Men and Women.	
	Dis- charged	Died	Dis- charged	Died
A. Acute infectious disease.....	6	—	22	2
B. Influenza	1	1	14	2
C. Tuberculosis—				
Pulmonary	2	1	36	20
Non-Pulmonary	17	2	11	2
D. Malignant disease	—	—	27	31
E. Rheumatism—				
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheuma- tism and chorea.....	2	—	15	—
(2) Non-articular manifestations of so- called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica).....	—	—	44	1
(3) Chronic arthritis.....	—	—	11	2
F. Venereal disease.....	—	—	—	—
G. Puerperal pyrexia.....	—	—	15	—
H. Puerperal fever—				
(a) Women confined in the hospital.....	—	—	—	1
(b) Admitted from outside	—	—	4	3
I. Other diseases and accidents connected with pregnancy and childbirth.....	—	—	91	2
J. Mental diseases—(a) Senile Dementia	—	—	—	—
—(b) Other	—	—	—	—
K. Senile decay	—	—	20	20
L. Accidental injury and Violence.....	9	—	44	4
<i>In respect of cases not included above :</i>				
M. Disease of the Nervous System and Sense Organs	29	2	90	25
N. " " Respiratory System	120	15	197	60
O. " " Circulatory System	6	2	87	48
P. " " Digestive System	8	4	107	8
Q. " " Genito-urinary System..	36	—	58	15
R. " " Skin	37	—	88	3
S. Other diseases	68	11	43	4
T. Mothers and infants discharged from Maternity Wards and not included in above figures—				
Mothers	—	—	429	—
Infants	357	—	—	—
U. Any person not falling under any of the above headings.....	35	—	—	—
Totals	733	60	1453	253

Appendix II.

NOTIFIABLE INFECTIOUS DISEASE.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1938.

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	245	164	1
Diphtheria	131	127	10
Enteric Fever	1	1	—
Puerperal Pyrexia	13	12	3
Pneumonia	198	12	64
Erysipelas	38	9	—
Polio-Encephalitis	—	—	—
Encephalitis Lethargica	1	1	1
Measles (notifiable under 5 years)	834	10	4
Ophthalmia	—	—	—
Malaria	—	—	—
Cerebro Spinal Meningitis	—	—	1
Continued Fever	—	—	—
Poliomyelitis	—	—	—

NOTIFIABLE DISEASES, NOTIFICATIONS, 1938.

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	No. of Cases Re- moved to Hos- pital.
Scarlet Fever	2	3	19	15	20	104	54	14	13	1	...	...	245	164
Diphtheria	1	3	8	5	6	63	23	12	7	3	...	...	131	127
Measles.....	82	159	191	189	210	3	...	...	...	...	...	...	834	10
Pneumonia	8	14	8	13	8	33	21	8	40	18	20	7	198	1
Erysipelas	1	...	2	...	...	...	...	1	8	5	14	7	38	9
Puerperal Pyrexia .....	...	...	...	...	...	...	...	...	13	...	...	...	13	12
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever.....	...	...	...	...	...	...	...	...	1	...	...	...	1	1

Appendix III.

MINISTRY OF HEALTH RETURNS.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

Part I.—Summary of Notifications during the period from the 1st January, 1938, to the 31st December, 1938, 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.												
	0-	1-	5-	10-	15-	20-	25-	35-	45-	55-	65-	Total (all ages)	
Pulmonary Males	-	-	-	-	2	2	11	8	19	8	4	54	60
„ Females	-	-	-	2	7	7	4	4	3	4	-	31	41
Non-pulmonary Males	-	3	5	2	3	1	-	-	-	-	-	14	16
„ Females	1	2	3	4	1	-	1	-	-	-	-	12	19

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	-	-	-	-	-	-	2	1	-	-	3
„ Females.....	-	-	-	-	-	1	1	-	-	-	2
Non-pulmonary Males	-	-	1	1	-	-	-	-	-	-	2
„ Females	-	-	-	-	1	-	-	-	-	-	1

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.....	2	1
{ transferable deaths from Registrar General.....	—	—
Posthumous notifications	—	1
"Transfers" from other areas (other than transferable deaths)	3	1
Other Sources if any (specify).....	—	—

Part III.

NOTIFICATION REGISTER.

Number of cases of Tuberculosis remaining on the 31st Dec., 1938, 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	
	175	106	281	87	101	188	469
Number of cases removed from the Register(s) during the year by reason <i>inter alia</i> of :—							
1. Withdrawal of notification	—	1	1	1	2	3	4
2. Recovery from the disease	9	2	11	17	8	25	36
3. Death (all causes)	38	13	51	3	4	7	58
4. Otherwise	8	5	13	9	17	26	39

TUBERCULOSIS (continued)

RETURN FOR THE YEAR 1938.

(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) :	51	25	—	2	4	2	9	8	55	27	9	10	101
(a) Definitely tuberculous	—	—	—	—	—	—	—	—	2	5	1	2	10
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	83	49	31	16	179
(c) Non-tuberculous													
B.—Contacts examined during the year :—	—	1	—	—	—	—	—	—	—	1	—	—	1
(a) Definitely tuberculous	—	—	—	—	—	—	—	—	—	—	—	2	2
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	10	26	21	34	91
(c) Non-tuberculous													
C.—Cases written off the Dispensary Register as :—	4	4	—	—	2	1	6	3	6	5	6	3	20
(a) Recovered	—	—	—	—	—	—	—	—	95	80	54	53	282
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)													
D.—Number of Cases on Dispensary Register on December 31st	159	98	3	1	32	53	47	32	191	151	50	33	425
(a) Definitely tuberculous	—	—	—	—	—	—	—	—	2	5	1	4	12
(b) Diagnosis not completed													

TUBERCULOSIS (continued)

1. Number of cases on Dispensary Register on January 1st	448	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years.....	4
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	43	4. Cases written off during the year as Dead (all causes).....	54
5. Number of attendances at the Dispensary (including Contacts)	1386	6. Number of Insured Persons under Domi- ciliary Treatment on the 31st December	152
7. Number of consultations with medical prac- titioners :— (a) Personal	122	8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	41
(b) Other	177	10. Number of :— (a) Specimens of sputum, etc., examined (b) X-ray examinations made..... in connexion with Dispensary work	355 407
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	1383	12. Number of "T.B. plus" cases on Dispensary Register on December 31st.....	114
11. Number of "Recovered" cases restored to Dis- pensary Register, and including in (A) a and A (b) above.....	1		

(B) Number of Dispensaries for the treatment of Tuberculosis
(excluding centres used only for special forms of treatment).

Provided by the Council One.
 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.....	76	4	—	—	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	1	12	13	—
	Adult females	—	6	6	—
	Children	—	7	7	—
	Total	1	25	26	—
Number of patients suffering from pulmonary tuberculosis	Adult males	39	84	67	26
	Adult females	20	38	37	7
	Children	—	4	1	1
	Total	59	126	105	34
Number of patients suffering from non-pulmonary tuberculosis	Adult males	1	8	7	—
	Adult females	—	5	3	—
	Children	4	23	23	3
	Total	5	36	33	3
Grand Total	65	187	164	37	51

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			
Tuberculous	3	—	—	2	—	—	—	—	—	1	—	—	5	—	1
Non-tuberculous	4	4	2	4	2	1	—	—	—	1	—	2	8	6	6
Doubtful	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	7	4	2	6	2	1	—	—	—	2	—	2	13	6	7

† 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 but exceeding 28 days			3-6 months			6-12 months			More than 12 months			*Totals			
		M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch				
Class T.B. minus	Quiescent	2	—	—	13	5	—	3	2	—	1	1	—	19	8	—	27
	Not quiescent.....	1	2	—	3	3	1	3	—	—	—	—	—	7	5	1	13
	Died in institution.....	3	1	—	1	1	—	—	—	—	—	—	—	4	2	—	6
Class T.B. plus Group I	Quiescent	—	—	—	—	1	—	—	1	—	1	—	—	1	2	—	3
	Not quiescent.....	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Class T.B. plus Group II	Quiescent	—	—	—	4	—	—	2	3	—	1	—	—	7	3	—	10
	Not quiescent.....	1	—	—	4	2	—	1	—	—	1	—	—	7	2	—	9
	Died in Institution.....	1	—	—	—	1	—	2	—	—	1	—	—	4	1	—	5
Class T.B. plus Group III	Quiescent	1	—	—	—	2	—	3	4	—	6	1	—	10	7	—	17
	Not quiescent.....	2	—	—	2	1	—	1	1	—	3	1	—	8	3	—	11
	Died in Institution.....	5	2	—	2	2	—	1	—	—	—	—	—	8	4	—	12
TOTALS (Pulmonary)		16	5	—	30	18	1	16	11	—	14	3	—	76	37	1	114

* Note.—Patients whose stay in residential institutions has not exceeded 28 days are no longer to be included in this table. (See Circular 1368).

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 but exceeding 28 days			3-6 months			6-12 months			More than 12 months			*Totals
		M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch	
Bones and Joints	Quiescent	—	—	—	—	—	3	—	—	1	—	—	4	4
	Not quiescent.....	1	—	—	—	—	1	—	—	—	1	1	2	3
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Abdominal	Quiescent	—	—	—	1	—	—	—	—	—	—	1	—	1
	Not quiescent.....	—	—	2	—	—	—	—	—	—	—	—	2	2
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Organs	Quiescent	—	—	1	—	—	—	—	—	—	—	—	1	1
	Not quiescent.....	3	—	—	—	—	—	—	—	—	—	3	—	3
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Peri-pheral glands	Quiescent	1	—	4	—	—	2	—	—	—	—	1	6	7
	Not quiescent.....	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution.....	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS (Non-Pulmonary).....		5	—	7	1	—	6	—	—	1	—	6	15	21

* Note.—Patients whose stay in residential institutions has not exceeded 28 days are no longer to be included in this table. (See Circular 1368).

	1933						1934						1935						1936						1937						1938					
	4	2	1	1	3	3	4	1	1	1	1	3	3	1	2	4	4	3	2	2	9	15	2	10	12	16	2	7	4	11	6	21				
(a) Remaining on Dispensary Register on 31st December.																																				
Disease Arrested.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Adults M.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Children	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Condition not ascertained during the year	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Total on Dispensary Register at 31st December	7	3	7	7	12	12	15	3	6	2	11	22	2	2	1	3	6	6	19	5	6	4	15	31	3	4	6	15	25	24	4	11	6	21		
(b) Not now on Dispensary Register and reasons for removal therefrom																																				
Discharged as																																				
Adults M.																																				
Children																																				
Recovered																																				
Lost sight of, or otherwise removed from Dispensary Register	5	—	4	4	2	6	6	1	—	2	3	9	—	1	—	1	16	10	12	3	5	12	20	13	1	—	1	1	2	3	—	—	—	—		
Adults M.	10	3	4	4	12	19	14	—	3	12	15	9	—	6	10	16	12	12	3	5	12	20	13	—	—	—	5	10	15	10	2	5	7	3		
Children	5	—	5	5	5	10	6	—	6	5	11	6	1	6	8	15	12	12	4	2	4	10	10	—	—	—	2	5	7	5	—	—	—	—		
Dead	3	—	1	1	—	1	3	1	—	—	—	1	—	1	—	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total written off Dispensary Register	23	3	14	14	19	36	29	2	9	19	30	25	1	14	18	33	29	7	7	16	30	45	14	—	—	8	16	24	18	—	2	8	10	—		
Grand Totals	30	6	21	21	48	48	44	5	15	21	41	47	3	15	21	39	48	12	13	20	45	45	4	4	14	31	49	42	4	13	14	31	—			

	1933				1934				1935				1936				1937				1938									
(a) Remaining on Dispensary Register on 31st December.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Disease Arrested.	1	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adults M. F. Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Disease not Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adults M. F. Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condition not ascertained during the year	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total on Dispensary Register at 31st December	1	5	—	3	9	4	1	2	5	12	5	4	2	13	24	4	2	1	17	24	5	2	—	—	—	—	—	—	—	—
Transferred to Pulmonary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Not now on Dispensary Register and reasons for removal therefrom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Discharged as Adults M. F. Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recovered	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lost sight of, or otherwise removed from Dispensary Register	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adults M. F. Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dead	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Adults M. F. Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total written off Dispensary Register	5	4	7	9	25	8	2	2	5	17	1	2	1	1	5	—	2	1	3	6	1	1	1	1	1	4	—	2	1	3
Grand Totals of (a) and (b) excluding those transferred to Pulmonary.	6	9	7	12	34	12	3	4	10	29	6	6	3	14	29	4	4	2	20	30	6	3	1	11	21	4	5	4	9	22

APPENDIX IV VENEREAL DISEASES.

RETURN relating to all persons who were treated at the Treatment Centre at Warrington during the year ended the 31st December, 1938.

	Syphilis.		Soft Chancre		Gonorrhœa		Con- ditions other than venereal		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	42	36	....	....	44	53	....	....	86	89
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection....	....	....	....	....	....	....	....	....	....	....
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—										
Syphilis, primary	8	1	....	....	....	....	....	....	8	1
" secondary	2	2	....	....	....	....	....	....	2	2
" latent in 1st year of infection	5	5	....	....	....	....	....	....	5	5
" all later stages	14	9	....	....	....	....	....	....	14	9
" congenital	7	6	....	....	....	....	....	....	7	6
Soft Chancre .....	....	....	....	....	....	....	....	....	....	....
Gonorrhœa, 1st year of infection .....	....	....	....	....	80	45	....	....	80	45
" later .....	....	....	....	....	2	14	....	....	2	14
Conditions other than venereal....	....	....	....	....	....	....	18	12	18	12
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection .....	....	1	....	....	....	1	....	....	....	2
<i>Totals of Items 1, 2, 3 and 4.....</i>	78	60	....	....	126	113	18	12	222	185
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	22	16	....	....	87	46	18	12	127	74
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—										
Syphilis, primary .....	....	....	....	....	....	....	....	....	....	....
" secondary .....	....	....	....	....	....	....	....	....	....	....
" latent in 1st year of infection	1	....	....	....	....	....	....	....	1	....
" all later stages	3	2	....	....	....	....	....	....	3	2
" congenital .....	....	2	....	....	....	....	....	....	....	2
Soft Chancre .....	....	....	....	....	....	....	....	....	....	....
Gonorrhœa, 1st year of infection .....	....	....	....	....	8	5	....	....	8	5
" later .....	....	....	....	....	2	1	....	....	2	1
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15)	2	1	....	....	5	3	....	....	7	4
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	1	....	....	....	1	1	....	....	2	1
9. Number of cases remaining under treatment or observation on 31st December	49	39	....	....	23	57	....	....	72	96
<i>Totals of Items 5, 6, 7, 8 and 9.....</i>	78	60	....	....	126	113	18	12	222	185
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—										
Syphilis, primary .....	....	....	....	....	....	....	....	....	....	....
" secondary .....	....	....	....	....	....	....	....	....	....	....
" latent in 1st year of infection .....	....	....	....	....	....	....	....	....	....	....
" all later stages	1	....	....	....	....	....	....	....	1	....
" congenital .....	....	1	....	....	....	....	....	....	....	1
11. Number of attendances :—										
(a) for individual attention of the medical officers	1586	1160	....	....	1166	801	48	26	2800	1987
(b) for intermediate treatment, e.g., irrigation, dressing .....	....	....	....	....	7178	5019	....	....	7178	5019
<i>Total Attendances</i>	1586	1160	....	....	8344	5820	48	26	9978	7006
12. In-patients :—										
(a) Total number of persons admitted for treatment during the year .....	....	1	....	....	1	....	....	....	1	1
(b) Aggregate number of "in-patients days" of treatment given .....	....	21	....	....	22	....	....	....	22	21
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals.	
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	1	1	1	....	5	4	....	1	7	6

VENEREAL DISEASES (continued)

	Arsenobenzene Compounds	Others	Bismuth
14. Chief preparations used in treatment of Syphilis :—			
(a) Names of preparations.....	Stabilarsan Biarsamide Sulphostab.	—	Hypoloid Bi. Bismustab Chlorostab
(b) Total number of injections given out-patients and in-patients).....	546	392	975

	Microscopical		Serum Tests			
	for spirochetes	for gonococci	Wassermann	for Gonorrhoea	Cerebro Spinal Fluid	Others for diagnosis of Venereal Disease
15. Pathological Work :—						
(a) Number of specimens examined at and by the medical officer of the treatment centre.....	27	1117	....	....	....	20
(b) Number of specimens from patients attending at the centre sent for examination to an approved laboratory .....	....	....	271	17	1	....

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	44	5	10	59
Soft Chancre	90	33	18	141
Gonorrhoea	19	6	5	30
Conditions other than venereal				
<i>Total</i>	153	44	33	230
B. Total number of attendances of all patients residing in each area	11444	3133	2407	16984
C. Aggregate number of "In-patient days" of all patients residing in each area	22	....	21	43

