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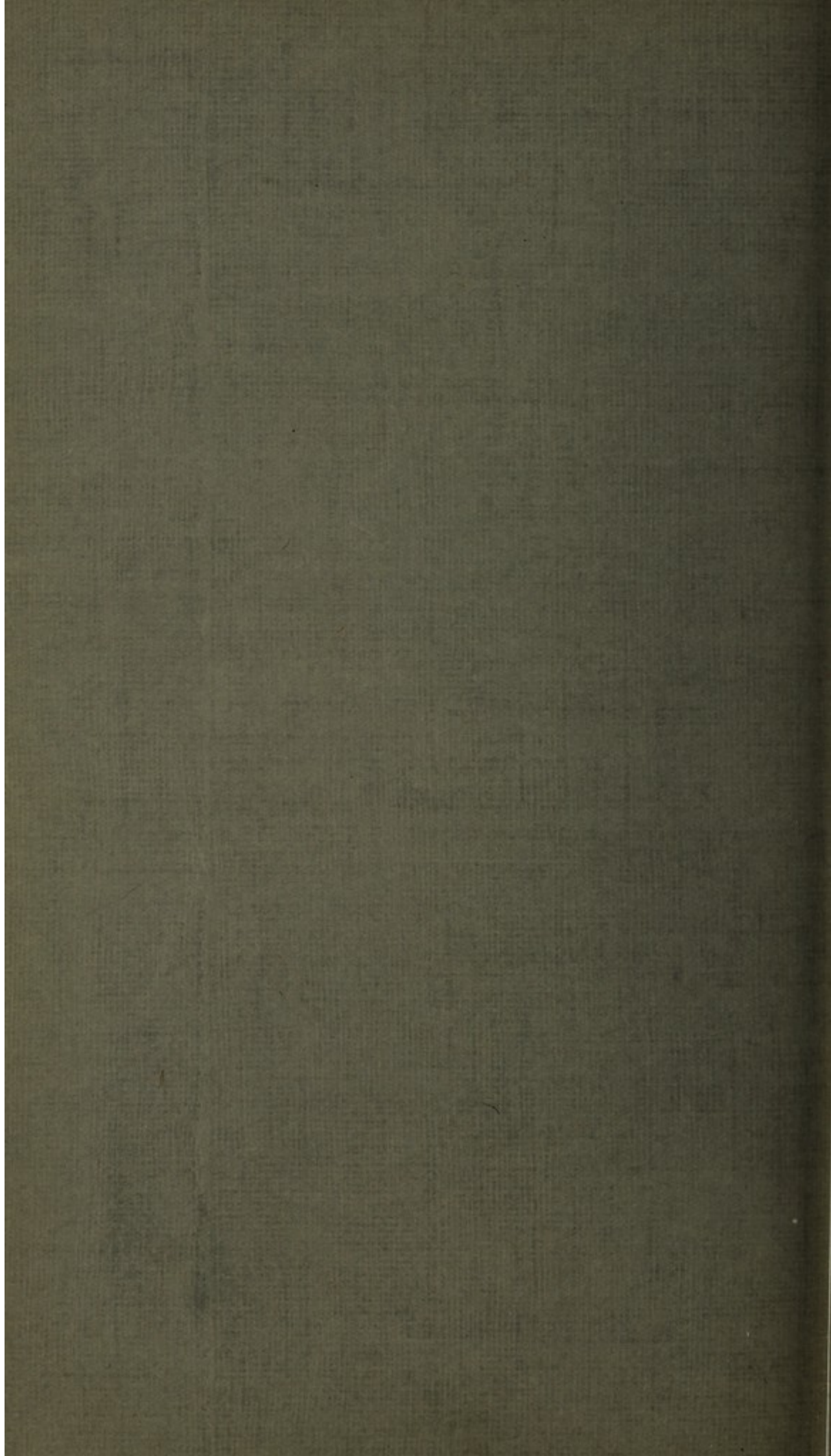
COUNTY BOROUGH OF BIRKENHEAD.

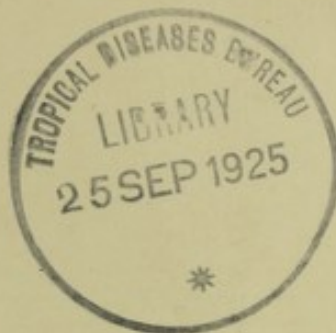


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FOR
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Medical Officer of Health, and
Chief Medical Officer for the Municipal Tuberculosis, Mental Deficiency,
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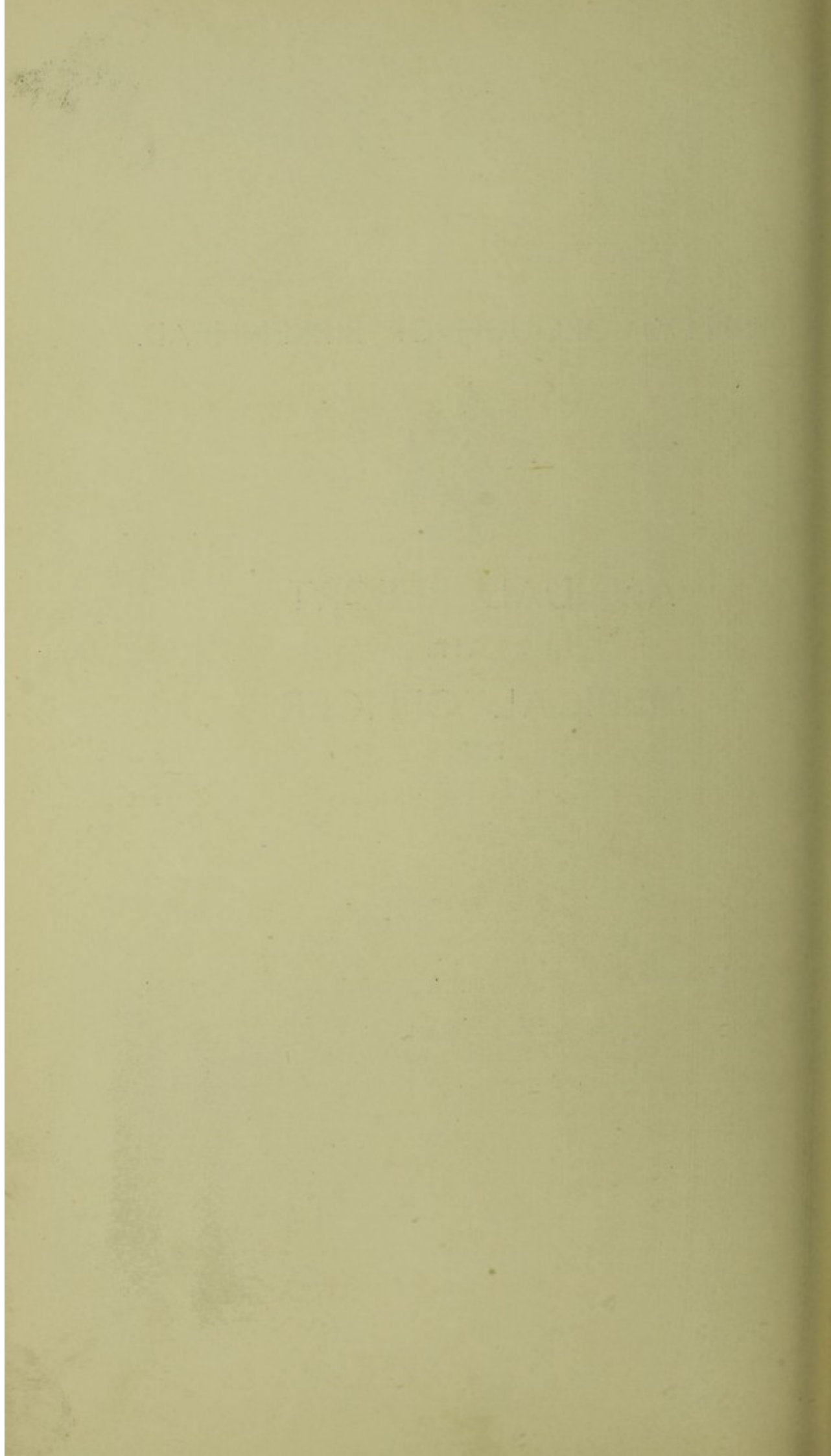
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SHORT STATISTICAL SUMMARY.

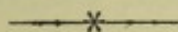
1924.

Area of Borough	3,909 acres, or a little over 6 square miles
Estimated population (at midsummer)	154,100
Number of persons per acre (density of population)	39.4
Estimated number of houses in Borough	27,731
Number of inhabited houses at time of census, 1921	26,630
Rateable value	£873,605
Estimated product of penny rate	£3,200
Birth-rate per 1,000 of the population	21.1
Death-rate ,, ,,	11.9
Average death-rate for the last ten years	13.5
Phthisis death-rate per thousand of the population	0.88
Infantile mortality rate (per 1,000 births)	91
Percentage of total deaths which were uncertified	0.05
Average number of children in elementary schools	23,891
Total children medically inspected during year	8,248

PREFACE.

In the following pages will be found a statement of the Health work carried out, and of the information collected and analysed in Birkenhead during the year 1924.

Acknowledgment is here gratefully made of help received from the officials in charge of other Corporation departments, from the Clerk to the Guardians, from the Secretary of the Mersey Docks and Harbour Board, and from the Manager of the Birkenhead Employment Exchange, who have kindly supplied information used in the body of the report; and of the efficient and loyal services rendered by all members of the staff of this department during the past year.



ADMINISTRATION.

Staff changes during the year.—Dr. Richardson Lovell and Dr. Campbell Brown relinquished their posts as Assistant Medical Officers, and their places were taken by Dr. A. R. Balmain and Dr. W. D. Hood; Dr. Hood going into residence at the Infectious Diseases Hospital.

Mr. H. L. Torrance was appointed to the new position of Veterinary Officer.

Miss Alexander, Miss Boydell, Miss Evans, Miss Gabbott, Miss Hood and Miss Robinson resigned their posts as Health Nurses; Miss Beattie, Miss Cotton, Miss Grogan, Miss Jones, Miss Kaneen and Miss Wilson being appointed to fill the vacancies.

Mrs. Williams was appointed to fill the post of Health Nurse which was vacant at the end of 1923.

Mr. H. L. Baty was appointed to the position of Housing Inspector which had been vacant for a considerable period, and Mr. R. Baker was appointed to fill the vacancy created on the clerical staff.

Mr. A. Wood was appointed as an additional District Sanitary Inspector.

Mr. S. G. Rackham resigned his post as Food and Drugs, etc., Inspector, and Mr. G. S. Reeman was appointed to fill the vacancy.

Messrs. H. T. Taylor (District Sanitary Inspector) and Isaac Taylor (Disinfecting Inspector) retired on superannuation during the year and their positions were filled by Messrs. G. Wills and E. Lea respectively.

General administrative arrangements.—The detailed arrangements made by the local authority for dealing with various branches of health work—*e.g.*, maternity and child welfare, tuberculosis, etc.—are set out in the appropriate sections of this report.

Staff.—The staff engaged on the work of the department consisted at the end of 1924 of the following:—

Medical Officer of Health and Principal Administrative Medical Officer:

D. MORLEY MATHIESON, M.A., M.D. (Edin.), D.P.H.

Assistant Medical Officers (whole time):

MARY A. S. DEACON, M.B.E., M.B., B.S., D.P.H.

H. MASON LEETE, M.D., B.S., B.Hy., D.P.H.

F. G. FOSTER, M.A., M.D., Ch.B., D.P.H.

A. R. BALMAIN, M.B., B.S., D.P.H.

W. D. HOOD, M.B., Ch.B., D.P.H.

Dental Surgeon (whole time):

P. WILSON SMITH, L.D.S. (Glas.).

Veterinary Officer (whole time):

H. L. TORRANCE, M.R.C.V.S., D.V.S.M. (Vict.).

Bacteriologist and Pathologist:

Professor J. M. BEATTIE, M.A., M.D., etc.

Analyst:

HERBERT E. DAVIES, M.A., B.Sc., F.I.C.

Inspectors:

ALFRED LONGSTAFF (Chief Inspector and Inspector under the Food and Drugs Acts).

JOHN M. CARNIE (Meat, Fish, and Abattoir Inspector); H. L. BATY (Housing Inspector), JOHN LEE, W. H. TILSTON, JOSEPH CROSHAW, GEORGE WILLS, A. WOOD (District Sanitary Inspectors); G. S. REEMAN (Workshops, Food and Drugs, etc., Inspector); E. LEA (Disinfecting Inspector); WILLIAM S. EDWARDS (Common Lodging Houses Inspector).

Matron, Isolation Hospital:

Miss EMILY YEOMANS.

Matron, Thingwall Sanatorium:

Miss M. A. GRAHAM.

Health Nurses:

Miss K. NIXON (Chief Health Nurse).

Mrs. L. E. FLETCHER (Health Nurse and Inspector of Midwives).

Miss BEATTIE, Miss COTTON, Miss CRAINE, Miss GRAHAM, Miss GROGAN, Miss JONES, Miss KANEEN, Miss LEWIS, Miss MEAKIN, Miss PARKINSON, Miss PEACE, Miss STEELE, Miss WILSON, Mrs. WILLIAMS.

Clerks:

JOSEPH BENNETT (Chief Clerk), JOHN OWEN (Senior Clerk).

ROLAND E. JONES, ERIC P. ROGERS, THOMAS OVERSBY, ROBERT BAKER, W. S. SHAW, J. CHALLINOR, N. WILSON, C. MARTIN, Miss E. M. PINCHES, Miss H. TREVETHAN, L. PINGUEY, J. CHEMINANT.

General:

NURSING STAFF, FEVER HOSPITAL—18.

DOMESTIC STAFF, FEVER HOSPITAL—17.

MALE STAFF, FEVER HOSPITAL—4.

NURSING STAFF, THINGWALL SANATORIUM—7.

DOMESTIC STAFF, THINGWALL SANATORIUM—7.

MALE STAFF, THINGWALL SANATORIUM—4.

OTHER STAFF—4.

WEATHER.

METEOROLOGICAL RESULTS.

The mean barometer reading for the whole year was 29.880 inches, as compared with a mean of 29.924 for the past 55 years.

The number of wet days in 1924 was 207.

The total amount of rainfall at Bidston was 32.521 inches, as compared with an average annual rainfall for the past 57 years of 28.501 inches. The abnormally heavy rainfall during the summer is well shown in the tables below.

The mean temperature for the year was 49.0° Fahrenheit.

In Tables A 1 and A 2 monthly and weekly results are set out: those in Table A 2 being for the 52 weeks ending December 27th, 1924.

TABLE A 1.

Meteorological observations during 1924. Monthly results.

1924	Mean Temperature	Mean Barometer	Rainfall—1 ft above ground
	° F.	INCHES	INCHES
January	40.8	29.882	1.858
February	39.2	30.057	0.502
March	40.3	29.863	0 909
April.....	44.2	29.858	1.684
May	52.8	29.818	5.221
June	56.7	29.979	1.855
July	59.4	29.839	3.802
August	57.5	29.787	4.938
September ..	55.8	29.767	3.366
October.....	50.1	29.866	3.355
November.....	45.7	30.017	1.876
December	45.4	29.824	3.155

TABLE A 2.
Meteorological observations during 1924. Weekly results.

Weeks	Barometer means reduced to sea level & to 32°F.	Means of Evaporation.	Thermometer means.	Rainfall.		Average percent'ge of cloud to clear sky.	Mean hourly horizontal motion of air in miles	Percent'ge of time wind blew fm S., SW. W. & NW.
				Hours.	Inches.			
1	30.118	41.2	42.0	22.2	1.019	82.85	16.41	69.04
2	29.536	34.4	36.1	18.5	0.416	70.00	21.00	21.43
3	29.522	39.2	41.0	17.2	0.527	88.57	19.60	30.95
4	30.055	41.3	43.5	31.1	0.838	67.14	18.83	59.52
5	30.391	41.1	48.0	7.8	0.056	72.85	25.75	100.00
6	29.915	41.1	43.0	11.1	0.221	92.85	26.90	77.97
7	29.799	34.8	36.7	0.6	0.018	75.71	15.84	17.26
8	30.343	36.7	38.7	2.9	0.089	74.28	12.53	48.21
9	29.950	34.0	36.3	12.4	0.274	72.85	23.51	60.71
10	29.844	33.8	36.0	12.4	0.317	55.71	12.35	45.83
11	30.210	37.4	43.3	0.0	—	25.71	16.07	8.93
12	29.867	37.0	39.9	9.5	0.203	51.43	11.60	39.28
13	29.498	39.8	42.8	7.7	0.269	88.57	13.20	18.45
1st Qr.	29.926	37.8	40.1	153.4	4.247	70.65	17.96	45.96
14	30.300	35.0	39.1	0.0	—	62.85	10.60	8.33
15	29.686	38.1	40.5	14.8	0.179	58.57	14.74	62.50
16	29.966	41.3	44.8	10.7	0.311	61.43	13.24	80.95
17	29.858	46.8	48.7	18.3	0.417	92.85	15.31	68.45
18	29.524	46.0	48.4	12.2	0.827	81.43	16.61	64.28
19	29.800	44.1	46.7	31.0	1.080	77.14	15.81	82.73
20	29.986	50.0	52.5	13.5	0.396	62.85	11.51	87.50
21	29.725	52.8	56.5	32.1	1.239	82.85	12.44	38.09
22	29.822	53.5	57.7	24.5	2.456	78.57	13.20	55.95
23	29.982	50.5	53.8	23.5	0.515	88.57	9.20	47.02
24	29.859	51.6	54.9	18.8	0.917	71.43	13.54	63.69
25	29.953	53.9	59.5	9.4	0.266	67.14	9.75	64.25
26	30.163	55.0	58.9	8.2	0.121	70.00	12.73	97.01
2nd Qr.	29.894	47.6	50.9	217.0	8.724	73.49	12.97	63.13
27	29.624	52.7	57.1	17.8	0.499	74.28	18.47	86.90
28	29.960	57.4	62.5	2.4	0.026	64.28	13.94	74.40
29	29.946	54.8	59.3	3.2	0.086	60.00	15.91	92.26
30	29.918	54.2	57.7	32.9	1.875	81.43	17.55	66.07
31	29.733	56.4	59.1	33.7	2.008	90.00	12.17	67.85
32	30.212	54.7	58.5	10.5	0.552	70.00	14.63	95.83
33	29.777	55.8	59.1	15.7	1.084	74.28	11.27	80.33
34	29.424	52.8	55.9	22.7	1.010	78.57	21.54	92.85
35	29.872	53.6	55.9	21.2	1.028	92.85	15.93	85.71
36	29.971	55.7	59.2	8.1	0.245	81.43	13.03	39.28
37	29.619	53.6	56.2	19.0	1.540	87.14	17.77	81.54
38	29.805	53.0	56.7	16.1	0.271	71.43	21.48	88.09
39	29.647	48.4	51.9	33.0	1.103	67.14	16.43	57.74
3rd Qr.	29.808	54.08	57.62	236.3	11.327	76.37	16.16	83.73
40	29.756	49.4	52.9	11.0	0.380	72.85	12.20	56.54
41	29.712	48.1	50.4	30.4	1.137	74.28	14.34	82.14
42	30.268	50.3	52.1	9.1	0.479	60.00	10.57	36.90
43	29.987	43.4	46.1	16.0	0.884	60.00	15.05	26.78
44	29.512	48.1	51.1	32.0	1.132	90.00	16.47	72.62
45	30.129	42.1	45.2	5.2	0.170	68.57	14.01	42.32
46	30.128	42.7	44.5	5.8	0.182	77.14	13.59	13.69
47	30.455	43.6	45.4	5.2	0.111	72.85	15.84	72.02
48	29.515	45.0	46.6	20.8	1.048	70.00	18.38	37.50
49	29.576	44.8	46.6	14.5	0.867	65.71	16.95	46.42
50	30.201	44.0	45.2	23.5	0.670	77.14	11.25	48.21
51	29.977	44.6	46.8	6.6	0.233	71.43	14.80	79.16
52	29.707	43.0	45.3	23.4	0.908	62.85	17.88	54.16
4th Qr.	29.917	45.3	47.5	203.5	8.201	70.98	14.72	51.42
Year ...	29.886	46.2	49.0	810.2	32.499	72.87	15.45	61.06

POPULATION, BIRTHS, AND DEATHS.

POPULATION.

Population.—The population of the Borough recorded at the time of the 1921 census was 145,592. This was certainly an understatement of the population; the census was taken in June, when a considerable number of residents were absent from the Borough. The estimated mid-year population, 1924, is 154,100. This estimate has been made by the Registrar-General on the basis of the "adjusted" 1921 figures, after allowance for the varying rate of natural increase as evidenced by the births and deaths in each area and of migration as indicated from other sources of information such as the change in the numbers in the Parliamentary Register and the migration returns obtained by the Board of Trade.

BIRTHS.

Births registered during 1924, and birth-rate.—During the year 3 252 births belonging to the Borough were *registered*. (This total includes 65 Birkenhead births registered in other areas and transferred to Birkenhead, and excludes 113 births belonging to other areas which occurred in Birkenhead and were transferred to the areas concerned. Among the latter are numerous births which occurred at the Birkenhead Maternity Hospital and the Birkenhead Infirmary.)

This corresponds to a birth-rate of 21.1 per 1,000 of the population.

Birth-rate in recent years.—The birth-rates since 1911 (calculated on population figures not revised in the light of the 1921 census) are as follows:—

1911	28.4	per 1,000
1912	28.2	"
1913	28.7	"
1914	27.3	"
1915	27.4	"
1916	26.9	"
1917	22.4	"
1918	21.1	"
1919	22.5	"
1920	27.7	"
1921	25.8	"
1922	23.1	"
1923	21.4	"
1924	21.1	"

Comparison of birth-rate with rates for country generally.—

	Per 1,000 of population.
England and Wales	18.8
105 Great Towns (including London)	19.4
157 Other Towns above 20,000 population	18.9
London	18.7
Birkenhead	21.1

Sex-distribution of births.—Of the 3,252 births, 1,683 were males and 1,569 females; a proportion of 1,072; 1,000.

Legitimacy.—Of the 3,252 births registered, 139 were illegitimate; a percentage of 4.3.

Births notified during 1924.—During the year 3,291 births were notified in the Borough under the Notification of Births Acts, 1907 and 1915. Of these, 117 were still-births, leaving a total of 3,174 live births. This total includes births which occurred in the Birkenhead Maternity Hospital, the Birkenhead Infirmary and the Birkenhead Borough Hospital, many of which were transferable to other areas.

The following is an analysis of the above births:—

Births in Public Institutions:—

Maternity Hospital	287	(22 still-births)
Infirmary	211	(11 „)
Borough Hospital	7	(1 „)
Other births (including those in nursing homes):—		
Notified by doctors	260	(10 still-births)
Notified by midwives	2524	(73 „)
Notified by parents	2	(0 „)
	3291	(117 „)

Un-notified births.—The Registrars reported 78 cases of un-notified births. 34 of these were attended by medical practitioners, 43 by certified midwives and doctors, and 1 by the Maternity Hospital staff.

DEATHS.

Death-rate.—1,842 deaths occurred during the year; the total figure includes 104 deaths of Birkenhead residents which occurred outside the Borough, but excludes 165 deaths of non-residents which occurred in the area. This gives a death-rate of 11.9 per 1,000.

Deaths in recent years.—The death-rates since 1911 are as follows (the rates for 1912-1920 are given as they were published year by year, and are not calculated on revised estimates of population in the intercensal period):—

1911	16.0	per 1,000
1912	14.7	„
1913	14.9	„
1914	15.6	„
1915	15.6	„
1916	14.2	„
1917	13.3	„
1918	17.6	„
1919	13.7	„
1920	13.3	„
1921	11.6	„
1922	13.6	„
1923	11.0	„
1924	11.9	„

Seasonal deaths.—The following gives the deaths for each quarter of the years 1923 and 1924.

	No. of deaths	
	1923	1924
First quarter.....	472	593
Second quarter.....	426	433
Third quarter.....	316	356
Fourth quarter.....	459	460
Totals	1673	1842

Sex-distribution of deaths.—Of the total deaths 964 were males and 878 females, a proportion of 1,097: 1,000.

Coroners' Inquests.—Coroners' inquests were held regarding 116 deaths—that is, in 6.3 per cent. of the total deaths during the year. There were no deaths due to overlaying during the year.

Uncertified deaths.—In 1924, out of the 1,842 deaths registered, 1 was marked “not certified”, that is, 0.05 per cent. The cause of the death was entered in accordance with the statement of the person giving information to the registrar, viz.:—

Broncho-pneumonia, cardiac failure.

Causes of death.—From the beginning of 1920 the classification of causes of death previously employed was abandoned, and the recognised classification contained in the detailed international list was adopted. An analysis on this basis will be found in Tables P 1, P 2, and P 3.

Table P 1 (pages 8 to 17) shows the causes of death in detail, sub-classified according to age.

Table P 2 (page 18) is a condensed form of Table P 1.

Table P 3 (page 19) is similar to Table P 2 but shows a sub-classification according to districts instead of ages.

Infantile mortality.—There were 298 deaths of infants under 1 year old. This corresponds to an infantile mortality rate of 91 per 1,000 births.

There were 12 deaths in illegitimate infants under 1 year old; giving an illegitimate infant mortality rate of 86 per 1,000.

The causes of infant deaths, and the ages at which death occurred, are shown in Table P 4 (page 20).

The corresponding rates for each year since 1911 are given below:—

1911	136
1912	98
1913	117
1914	122
1915	122
1916	105
1917	95
1918	110
1919	102
1920	102
1921	75
1922	95
1923	62
1924	91

The higher infantile mortality rate as compared with that of 1923 (which was by far the lowest annual rate ever recorded for the Borough) was due chiefly to an increase in deaths from chest affections, and to a lesser degree to an increase in deaths associated with diarrhoea and with prematurity.

The following table will make this clear:—

Cause of death.	No. in 1923.	No. in 1924.	Increase.
(a) Pneumonia (all forms)	24	57	33
Bronchitis	13	26	13
Whooping Cough	2	14	12
Measles	—	5	5
(b) Diarrhoea and Enteritis	31	44	13
Premature Birth	38	51	13
(c) All other causes	96	101	5
	204	298	94

Deaths from Tuberculosis.—Tuberculosis was responsible for 10 per cent. of all the deaths recorded in the Borough in 1924. The deaths from the disease were as follows:—

Deaths from tuberculosis of the lungs	136
Deaths from other forms of tuberculosis	51
Total	187

This gives a tuberculosis death-rate of 1.21 per 1,000 of the population.

Of the 136 deaths from pulmonary tuberculosis during 1924, 125 occurred in individuals between 15 and 65 years old—that is, of a wage-earning age.

This subject is further dealt with in the “ Tuberculosis ” section of this report.

Deaths from epidemic diseases.—The seven “ principal epidemic diseases ” caused 138 deaths, as follows:—

Diarrhoea and enteritis (under 2 years)	51
Whooping Cough	36
Measles	38
Scarlet Fever	4
Diphtheria (including membranous croup)	8
“ Fever ” (enteric, typhus, and simple continued fever)	1
Smallpox	0

This corresponds to a death-rate from all these diseases of 0.89 per 1,000 of the population.

Deaths from other notifiable infectious diseases.—Pneumonia caused, in its various forms, 217 deaths; puerperal fever caused 3; encephalitis lethargica caused 2.

Deaths from certain non-notifiable infectious diseases.—Syphilis was returned as the cause of 4 deaths. With the existing system of death registration there is every likelihood that many deaths caused directly or indirectly by this disease are not so recorded in the death certificates.

Comparison of Birkenhead death-rates with those for country generally.—In Table P 5 (page 21) Birkenhead rates are shewn together with those for the country generally. The latter are provisional figures kindly supplied by the Registrar-General. Non-civilians are included in the figures for England and Wales, but not for other areas.

TABLE P 2.

Deaths: causes and ages.

Causes of death	Net deaths at the subjoined ages of residents, whether occurring within or without the district.								
	All ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards
All causes { Certified	1841	298	118	84	60	100	195	446	540
{ Uncertified	1	...	...	...	...	...	...	...	1
Enteric fever	1	...	...	...	...	...	...	1	...
Smallpox	...	...	...	...	...	...	...	...	...
Measles	38	5	17	13	3	...	...	...	...
Scarlet fever	4	...	2	2	...	...	...	...	...
Whooping cough	36	14	13	6	3	...	...	...	...
Diphtheria and croup	8	...	1	3	4	...	...	...	...
Influenza	30	1	2	...	1	2	4	14	6
Erysipelas	1	...	...	...	...	...	1	...	...
Phthisis (pulmonary tuberculosis)	136	2	...	4	5	48	46	28	3
Tuberculous meningitis	19	2	4	7	5	1	...	...	...
Other tuberculous diseases	32	2	4	7	4	4	8	1	2
Cancer (malignant disease)	179	1	...	...	...	1	16	89	72
Rheumatic fever	9	...	...	1	2	1	1	1	3
Meningitis	4	1	2	...	1	...	...	...	...
Organic heart disease	142	...	1	...	2	7	11	64	57
Bronchitis	174	26	4	1	1	1	12	51	78
Pneumonia (all forms)	217	57	49	25	9	8	22	21	26
Other diseases of respiratory organs	27	3	1	2	1	...	5	8	7
Diarrhoea and enteritis (under 2 years) ...	51	43	8	...	...	...	...	...	...
Appendicitis and typhlitis	7	...	...	...	1	2	3	1	...
Cirrhosis of liver	6	...	...	...	...	...	...	5	1
Alcoholism	...	...	...	...	...	...	...	...	...
Nephritis and Bright's disease	54	...	...	...	...	4	5	20	25
Puerperal fever	3	...	...	...	...	1	2	...	...
Other accidents and diseases of pregnancy and parturition	6	...	...	...	...	1	5	...	...
Congenital debility and malformation, including premature birth	106	102	2	2	...	...	...	...	...
Violent deaths, excluding suicide	47	1	3	5	7	5	10	11	5
Suicides	16	...	...	...	...	1	7	8	...
Other defined diseases	486	37	4	6	11	13	37	122	256
Diseases ill-defined or unknown	3	1	1	...	...	...	...	1	...
Totals	1842	298	118	84	60	100	195	446	541

TABLE P 3

Deaths: causes and districts.

Causes of death	Deaths in or belonging to localities at all ages						Total deaths in Public Institutions in the district
	Whole Borough	Birkenhead*	Tranmere*	Claughton Ward	Oxton Ward	Bebington Ward	
All causes { Certified	1841	1114	558	84	41	44	723
{ Uncertified	1	...	...	1	...	...	...
Enteric fever	1	1	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...
Measles	38	28	8	2	...	...	6
Scarlet fever.....	4	4	...	...	...	...	3
Whooping cough	36	25	10	1	...	...	1
Diphtheria and croup.....	8	4	3	...	...	1	6
Influenza	30	15	12	3	...	...	6
Erysipelas.....	1	1	...	...	...	...	1
Phthisis (pulmonary tuberculosis)	136	82	45	5	1	3	64
Tuberculous meningitis	19	11	8	...	...	...	14
Other tuberculous diseases.....	32	17	13	...	...	2	16
Cancer (malignant disease)	179	90	74	7	4	4	82
Rheumatic fever	9	5	4	...	...	...	3
Meningitis	4	3	...	...	...	1	3
Organic heart disease	142	68	53	6	7	8	30
Bronchitis	174	116	48	6	2	2	67
Pneumonia (all forms)	217	161	41	12	1	2	56
Other diseases of respiratory organs	27	16	10	1	...	...	12
Diarrhoea and enteritis (under 2 years)	51	43	7	1	...	...	24
Appendicitis and typhlitis	7	5	1	1	...	...	8
Cirrhosis of liver	6	3	1	...	...	1	5
Alcoholism	...	...	...	...	...	...	...
Nephritis and Bright's disease	54	28	22	3	...	1	19
Puerperal fever	3	3	...	...	...	...	2
Other accidents and diseases of pregnancy and parturition	6	4	2	...	...	...	6
Congenital debility and malformation, including premature birth	106	76	20	4	1	5	24
Violent deaths, excluding suicide	47	32	10	3	1	1	27
Suicides.....	16	7	6	3	...	...	1
Other defined diseases	486	264	159	27	23	13	234
Diseases ill-defined or unknown	3	2	1	...	...	...	3
Totals ..	1842	1114	558	85	41	44	723

* "Birkenhead" district comprises Argyle, Grange and Cleveland wards. "Tranmere" district comprises Clifton, Egerton and Mersey wards.

NOTE.—All deaths which occurred in institutions are classified in the district in which the patient resided.

TABLE P 4.

Infant deaths: causes and ages.

Causes of death		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	Over 4 weeks & under 3 months	3-6 months	6-9 months	9-12 months	Total under 1 year
All causes	Certified	85	12	16	5	118	47	39	40	54	298
	Uncertified	...	...	...	...	...	...	...	...	...	...
Smallpox		...	...	...	...	...	...	...	...	...	...
Chickenpox		...	...	...	...	...	...	...	1	...	1
Measles		...	...	...	...	...	...	...	...	5	5
Scarlet fever		...	...	...	...	...	...	...	...	...	...
Whooping cough		...	...	1	...	1	2	2	2	7	14
Diphtheria and croup		...	...	...	...	...	...	...	...	...	...
Influenza		...	...	...	...	...	...	1	...	...	1
Tuberculous meningitis		...	...	...	...	...	1	...	...	1	2
Abdominal tuberculosis		...	...	...	...	...	...	...	...	...	...
Other tuberculous diseases		...	...	...	...	...	...	...	2	2	4
Meningitis (not tuberculous)		...	...	...	...	...	...	...	1	...	1
Convulsions		3	...	...	...	3	...	1	...	...	4
Laryngitis		...	...	...	1	1	1	...	...	1	3
Bronchitis		1	...	2	...	3	6	5	5	7	26
Pneumonia (all forms)		1	1	1	1	4	9	13	13	18	57
Diarrhoea and Enteritis		1	2	1	...	4	12	11	10	7	44
Gastritis		...	...	...	...	...	2	1	...	1	4
Syphilis		...	...	...	...	...	2	...	...	...	2
Rickets		...	...	...	...	...	...	...	...	1	1
Suffocation (overlying)		...	...	...	...	...	...	...	...	...	...
Injury at birth		1	...	...	...	1	...	...	...	...	1
Atelectasis		4	...	...	...	4	...	...	...	...	4
Congenital malformations		2	1	...	...	3	3	...	...	...	6
Premature birth		45	2	3	...	50	1	...	...	...	51
Atrophy, debility and marasmus		17	3	5	2	27	5	3	1	3	39
Other causes		10	3	3	1	17	3	2	5	1	28
Totals ..		85	12	16	5	118	47	39	40	54	298

Net births in the year—

Legitimate 3113

Illegitimate 139

Net deaths in the year—

Legitimate infants 286

Illegitimate infants ... 12

TABLE P 5.

Death-rates: comparison with rest of country.

	Annual death rate per 1000 civilian population								Rate per 1000 births		Percentage of total deaths			
	All causes	Enteric fever	Smallpox	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Violence	Diarrhoea and enteritis (under 2 years)	Total deaths under 1 year	Certified causes of death	Inquest cases	Uncertified causes of death
England and Wales	12.2	0.01	0.00	0.12	0.02	0.10	0.06	0.49	0.44	7.3	75	92.3	6.6	1.1
105 County Boroughs and Great Towns including London (census population ex- ceeding 50,000)	12.3	0.01	0.00	0.18	0.03	0.12	0.08	0.45	0.40	9.2	80	92.5	6.9	0.6
157 Smaller Towns (1921 adjusted populations 20,000 to 50,000)	11.2	0.01	0.00	0.08	0.02	0.09	0.06	0.50	0.36	6.2	71	93.3	5.5	1.2
London	12.1	0.01	—	0.29	0.03	0.11	0.12	0.36	0.44	8.4	69	91.3	8.6	0.1
Birkenhead.....	11.9	0.006	—	0.24	0.02	0.23	0.05	0.19	0.40	15.6	91	93.6	6.3	0.05

LOCAL INDUSTRIES.

OCCUPATIONS.

The staple industries of the district are shipbuilding, ship-repairing and engineering.

Occupations of males and females aged 12 years and over.—A statement setting out the occupations of males and females aged 12 years and over at the time of the 1921 census was given in my annual report for 1923.

UNEMPLOYMENT.

The Ministry of Health requests Medical Officers to give in their annual reports an indication of the extent of unemployment and of the amount of poor law relief in their areas.

The returns of unemployment for each month of the year are shown below:—

TABLE O 1.
Unemployment during 1924.

Month	Live register	Increase or decrease in live register	Applicants placed	
			Locally	In other districts
January	6646	Dec. 118	261	46
February	5710	Dec. 936	338	18
March	5566	Dec. 144	333	91
April	5504	Dec. 62	499	20
May	4982	Dec. 522	390	56
June	4892	Dec. 90	409	22
July	4896	Inc. 4	460	71
August	4837	Dec. 59	230	45
September	5627	Inc. 790	239	72
October	6511	Inc. 884	341	38
November	6747	Inc. 236	210	55
December	5635	Dec. 1112	272	25

AMOUNT OF POOR LAW RELIEF.

The following is a statement of the sums expended in the relief of the poor in the Birkenhead Union for the year ended 31st March, 1925:—

Union Institution	£10,891	2	10
Union Infirmary	16,162	14	4
Children's Homes	2,631	4	8
Outdoor relief (actual cash payments to recipients of)	32,080	5	0
Outdoor relief (on loan to unemployed)	2,179	12	3
Lunatics in asylums and licensed houses (total cost of maintenance)	24,155	4	0
Persons maintained in other Institutions not under the control of the Guardians	6,565	11	11
	£94,665	15	0

The Birkenhead Union area covers the County Boroughs of Birkenhead and Wallasey, and the parishes of Bidston-cum-Ford and Noctorum. The populations of these three component parts were, in 1921:—

Birkenhead	145,592	(61.3 per cent.)
Wallasey	90,721	(38.2 per cent.)
Bidston and Noctorum ...	1,091	(0.5 per cent.)

WATER SUPPLY, FOOD, AND DRUGS.

ADMINISTRATIVE ARRANGEMENTS.

Staff.—In April, 1924, Mr. H. L. Torrance, M.R.C.V.S., D.V.S.M., joined the staff of the Department as Veterinary Officer and Chief Meat Inspector. Mr. Torrance's appointment has greatly added to the resources of the Department in dealing with the inspection of meat slaughtered in the Borough, of food stuffs in transit, of dairy cattle, &c.

WATER SUPPLY.

Particulars regarding the water supply of the Borough were given in detail in my annual report for 1921.

Bacteriological examinations.—Arrangements were made during the year for bacteriological examinations of the Alwen water supply to be carried out in the laboratory in the Medical Officer's Department. The procedure followed was indicated in my annual report for 1923.

During the past year, bacteriological examinations have been carried out in connection with—

53 samples of tap water in Birkenhead.

15 samples of water from tributary streams flowing into the Alwen Reservoir.

9 samples of water from Alwen Reservoir, before filtration.

7 samples of water at Alwen, after passing through the filtration apparatus.

MILK SUPPLY.

Source.—Milk is supplied to the Borough chiefly from farms in Cheshire, Shropshire, Denbighshire and Flintshire.

Milkshops, etc.—The total number of milkshops in the Borough is 145. There are in addition 8 purveyors of milk, 4 cowsheds and 64 farmers resident outside Birkenhead registered to purvey milk inside the Borough.

Milkshops are regularly inspected and the register of milk sellers is revised week by week.

During the year 302 notices to whitewash and efficiently to cleanse milkshops, cowsheds, and dairies were served on occupiers of such premises, and complied with.

Milk and Dairies Amendment Act, 1922.—15 applications have been received during the year from persons desiring to retail milk within the Borough. Of these 14 have been placed on the register as purveyors of milk. In the remaining case registration was refused owing to lack of suitable accommodation for the storage and sale of milk in the premises occupied by the applicant.

Section 4 of the Act prohibits the addition of any colouring matter, or water, or any dried or condensed milk, or any fluid reconstituted therefrom, or any skimmed milk or separated milk, to milk intended for sale. It was not necessary to take any action under this section during the year as no infringement had been reported.

The Milk (Special Designations) Order, 1923.—During the year two licences were granted to persons other than producers to retail *certified milk* within the Borough.

Quality of milk.—The composition of the various samples of milk taken in the Borough and analysed during the year 1924 is set out in Table F. 1 (page 27). From this table an indication of the general quality of the milk supply can be obtained.

Preservatives in milk and cream.—Samples taken under the Public Health (Milk and Cream) Regulations, 1912 and 1917, during the year showed the following results:—

1. *Milk, and cream not sold as preserved cream.*

Article	No. of samples examined for the presence of a preservative (a)	No. in which a preservative was reported to be present, and percentage of preservative found in each sample (b)
Milk	114	Nil.
Cream	1	1 0.43%

Nature of preservative in each case in column (b).....

Boric acid.

Action taken under the Regulations

The sample containing a preservative was taken informally. A formal sample taken later was sold as preserved cream and was correctly labelled. The vendor was cautioned with regard to the informal sample.

2. *Cream sold as preserved cream.*

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

(1) Correct statements made	3
(2) Statements incorrect	1
Total	4

(3) Percentage of preservative found in each sample.	Percentage stated on statutory label.
0.50	0.4
0.04	0.4
0.31	0.4
0.32	0.4

(b) Determinations made of milk fat in cream sold as preserved cream.

(1) Above 35%	4
(2) Below 35%	0
Total	4

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) of the regulations have not been observed.

Nil.

(d) Particulars of each case in which the regulations have not been complied with, and action taken:—

The sample which contained a preservative exceeding in amount that stated on the declaratory label was taken informally. A formal sample taken later contained boric acid within the prescribed amount. The vendor was cautioned with regard to the informal sample.

3. *Thickening substances.*

The Public Analyst has not found any evidence of the addition of any thickening substances to the samples of cream or preserved cream which have been analysed.

TABLE F 1.

Composition of milk samples taken during 1924.

Date of sample	Identification No. given in quarterly report	Percentage of fat	Percentage of solids not fat	Date of sample	Identification No. given in quarterly report	Percentage of fat	Percentage of solids not fat	Date of sample	Identification No. given in quarterly report	Percentage of fat	Percentage of solids not fat
Jan. 22	26	3.31	8.33	Apl. 1	113	4.08	8.92	Nov. 27	319	3.78	9.02
	27	3.29	8.40	8	114	5.05	8.79		320	4.05	8.85
	28	3.00	8.56		115	2.67	8.83		321	3.53	8.87
24	37	3.63	8.38		116	3.67	9.22	28	323	4.17	8.81
	40	3.66	8.34	11	123	3.70	8.72		324	3.62	8.50
29	41	3.47	8.23		124	3.88	8.56		325	5.00	9.13
	42	3.47	8.41		125	4.09	8.95		326	3.80	8.84
Feb. 2	43	3.89	9.19	May 20	178	4.90	8.50		327	3.58	8.64
	44	3.70	9.27		179	3.06	8.94		328	4.18	8.58
	45	5.80	8.81		180	3.02	9.16		329	3.57	8.73
	46	3.47	8.82		181	3.63	8.65		330	3.96	8.77
26	67	4.35	8.59	27	183	4.80	8.96	Dec. 1	333	4.05	8.93
	68	3.95	8.87		184	4.37	9.31		334	4.50	8.50
	69	4.35	8.97		185	4.07	9.39		335	4.92	8.68
Mar. 4	72	3.35	8.95		186	3.38	8.74		336	4.27	8.59
	73	3.60	8.74	June 17	201	3.83	9.04		337	3.35	8.59
	74	3.42	8.84		202	3.78	8.97		338	3.05	8.71
11	83	3.21	8.81		203	3.47	8.99	7	342	3.88	8.50
	84	3.41	8.74		204	3.61	9.09		343	3.45	8.41
	85	3.60	8.87		205	3.67	8.84		344	3.70	8.80
	86	3.12	8.90		206	3.90	8.74		345	4.15	8.16
	87	3.20	8.84	Aug. 12	233	3.40	8.99		346	3.58	8.74
	88	3.10	8.96		234	3.76	8.88		347	3.97	9.01
14	89	2.94	8.52		235	4.48	8.77	16	358	3.80	8.44
18	90	3.27	8.95		236	3.27	8.63	30	359	3.60	3.74
	91	3.10	8.96		237	3.98	8.86		360	3.02	8.70
	92	3.18	9.00		238	4.32	8.68		361	4.11	9.05
	93	8.20	8.92	Nov. 26	306	3.15	8.59		362	3.77	8.94
22	97	3.65	9.12		307	3.33	8.57		363	2.64	9.01
25	102	3.10	8.50		308	3.62	8.52		364	5.90	8.75
	104	3.18	8.64		309	3.55	8.77		365	4.21	8.71
	105	3.80	8.50		310	3.32	8.78	31	367	2.88	8.78
	106	3.31	8.99		311	3.35	8.73		368	4.48	8.72
	107	3.20	8.98	27	314	4.03	8.97		369	3.25	8.59
Apl. 1	108	3.60	8.92		315	4.62	9.04		370	3.60	8.44
	109	3.08	8.94		316	4.15	8.90		371	3.01	9.16
	110	3.32	8.60		317	3.30	8.72		372	3.78	8.80
	111	8.20	8.14		318	3.35	9.09		373	3.65	9.08
	112	3.68	8.88								

Average percentage..... Fat, 3.75 ... Solids (not fat), 8.74

OTHER FOODS.

Abattoirs in Birkenhead.—Particulars regarding these—the abattoir within the Woodside Lairages and the Corporation abattoir at Tranmere—were given in my annual report for 1920.

Food inspection.—The Meat and Food Inspector reports that during the year there were killed 67,396 oxen, 321 calves, 8,015 pigs, and 2,486 sheep and lambs; as set out in Table F 2.

TABLE F 2.

Animals dealt with during 1924.

	Oxen	Calves	Pigs	Sheep & Lambs	Total
No. of animals remaining over in lairages from 1923 (slaughtered in 1924).....	981	—	278	1	1260
No. of animals landed from vessels at Birkenhead during the year 1924—	417	—	888	4568	5873
(a) From Isle of Man	209405	—	58007	353055	620467
(b) From Ireland	52193	—	—	4252	56445
(c) From other places abroad					
Total.....	262996	—	59173	361876	684045
The above animals were dealt with as follows—					
A—Slaughtered in Birkenhead—					
(1) At Woodside lairages	67130	—	4696	462	72288
(2) At nos. 4 and 5 sheds	8	—	26	651	685
(3) At "Wallasey Stage," B'head ...	30	—	—	2	32
B—(1) Removed alive from the district	172648	—	54792	228879	456319
(2) Not slaughtered by end of 1924 (still in lairages)	1186	—	76	143	1405
Total	241002	—	59590	230137	530729
No. of animals slaughtered in Birkenhead not included in the above statement—					
At Municipal Abattoir... ..	228	321	3293	1371	5213
Total animals slaughtered in Birkenhead.....	67396	321	8015	2486	78218

The total number of carcasses seized was:—

At Woodside	566	weighing	192,505 lbs.
At "Wallasey Stage," B'head ..	2	"	1,868 lbs.
At nos. 4 & 5 Sheds	29	"	3,091 lbs.
At Tranmere Abattoir	25	"	3,511 lbs.
At shops	10	"	279 lbs.
At other premises	5	"	520 lbs.
Total	637	"	201,774 lbs.

160 of the above carcasses were seized on account of tuberculosis; their aggregate weight being 81,292 lbs. The remainder were seized on account of transit injuries, dropsy, sepsis, &c.

The number of parts of carcasses seized was:—

At Woodside	589	weighing	36,269 lbs.
At "Wallasey Stage," B'head	3	„	179 lbs.
At nos. 4 & 5 Sheds	1	„	14 lbs.
At Tranmere Abattoir	177	„	3,058 lbs.
Total	770	„	39,520 lbs.

Of the above, 696 were seized on account of tuberculosis; the aggregate weight being 36,616 lbs. 65 heads and 98 tongues, weighing 2,292 lbs., were seized on account of actinomycosis and actinobacillosis. 1 head and 2 tongues, weighing 36 lbs., were seized on account of papilloma.

The total weight of offal seized was 142,440 lbs.

Other articles of food.—The total weight of articles of food seized at various premises in the Borough was 4,534½ lbs.

One prosecution was taken under Section 117 of the Public Health Act, 1875, against a shopkeeper in the Borough, namely:—

For exposing for sale unsound fruit. A penalty of 10s. was imposed.

In 4 cases it was necessary to obtain magistrates' orders for destruction of diseased meat.

20 gallons of blood intended for food purposes were condemned on account of being stored in dirty receptacles.

SALE OF FOOD AND DRUGS ACTS.

During the year 373 samples were taken. Of these 120 were formal and 253 were informal. The articles sampled are set out in the following table.

TABLE F 3.

Samples taken during 1924.

Article	No. samples taken formally	No. samples taken informally	Article	No. samples taken formally	No. samples taken informally
Milk	114	1	Potted Shrimps	—	4
Butter	—	51	Cream (preserved)	1	3
Margarine ..	2	25	Mustard	—	4
Coffee	—	21	Liquorice powder	—	3
Self-raising flour.....	—	17	Sponge cake.....	—	3
Cocoa	—	14	Condensed milk	—	3
Rice	—	9	Boracic ointment	—	3
Glycerine	—	8	Castor oil	—	2
Sweets	1	8	Camphorated oil.....	—	2
Am. tincture quinine.....	—	7	Sausage	—	2
Zinc ointment.....	1	6	Glauber salts	—	2
Olive oil	—	6	Coffee mixture.....	—	1
Sago	—	6	Canned milk	—	1
White pepper	—	6	Honey	—	1
Baking powder	—	5	Cond. skimmed milk ...	—	1
Jam	—	5	Mince-meat	—	1
Lard	—	5	Rum and coffee	—	1
Malt vinegar	—	5	Marmalade	—	1
Epsom salts.....	—	5	Cream (fresh)	—	1
Medicine	1	4			

Samples analysed formally 120

Samples analysed informally 253

Total samples analysed during the year 373

Of the total number of samples analysed

- 11 samples of milk
- 4 samples of margarine
- 4 samples of potted shrimps
- 3 samples of butter
- 3 samples of zinc ointment
- 2 samples of medicine
- 1 sample of fresh cream
- 1 sample of preserved cream
- 1 sample of malt vinegar
- 1 sample of sponge cake
- 9 samples of milk.

were reported adulterated, and proceedings were taken in respect of:—

9 samples of milk

With reference to the remaining samples reported adulterated it was decided, after consideration of the circumstances, that it was inadvisable to institute proceedings.

Informal samples.—Suitable action was taken regarding each of the 14 informal samples reported adulterated.

Particulars of the defects found in those samples with regard to which proceedings were taken, and the result of the proceedings, are set out in Table F 4.

The composition of each sample of milk analysed during the year will be found in Table F 1.

TABLE F 4.

Samples with reference to which proceedings were taken.

Nature of adulteration and result of proceedings.

1924 Quarter ending	Article	No. of sample	Adulteration	Fine inflicted
Mar. 31	Milk	26	2 per cent added water	10/- including costs
	Milk	27	1 per cent added water	10/- ,,
	Milk	37	2 per cent added water	£1 10/- ,,
	Milk	40	2 per cent added water	10/- ,,
	Milk	41	3 per cent added water	£4 ,,
	Milk	42	1 per cent added water	£4 ,,
June 30	Milk	115	11 per cent deficient in fat ...	Case withdrawn
Dec. 31	Milk	363	12 per cent deficient in fat.....	£1 including costs
	Milk ..	367	4 per cent deficient in fat	£1 ,,

TUBERCULOSIS.

ADMINISTRATIVE ARRANGEMENTS.

The arrangements made by the Birkenhead Corporation for dealing with tuberculosis in the area include

(a) The provision of a dispensary or clinic, opened in 1913. (This clinic is used on one half-day each week in connection with cases from the area of the administrative county of Chester.)

(b) The provision of garden shelters (two) for suitable cases at a small rent.

(c) The retention since August, 1914, of twelve beds at Leasowe Hospital for cases of surgical tuberculosis in children.

(d) A joint arrangement with the Cheshire County Council, and the Councils of the County Boroughs of Wallasey, Chester, Stockport, and Stoke-on-Trent, for the provision of a sanatorium at Burntwood.

(e) The provision of a residential institution at Thingwall, Cheshire.

Staff.—The medical and health visiting staff for tuberculosis at the end of 1924 was as set out in the annual report for 1921. The clinical work at Thingwall Sanatorium and at the Tuberculosis clinic has been carried out by Dr. Mason Leete and Dr. Foster.

The Corkhill Fund.—Under the will of the late Mr. John Lloyd Corkhill, of Oxtou, a sum of money was provided for the assistance of persons suffering from consumption. By arrangement with the trustees, persons applying for help from the charity are passed through the municipal clinic for classification; and the trustees have been largely guided by the recommendations of the medical staff of the clinic.

PREVALENCE OF, AND MORTALITY FROM, TUBERCULOSIS.

Notifications.—The total number of primary cases of tuberculosis notified during 1924 was 294—208 pulmonary and 86 non-pulmonary. An analysis of these cases with reference to age and sex will be found in Table T 1 (page 39).

Mortality.—The total number of deaths, certified as due to tuberculosis, of patients who had previously been notified as suffering from the disease was 131—106 pulmonary and 25 non-pulmonary.

The total number of deaths, certified as due to tuberculosis, of patients who had *not* previously been notified as suffering from tuberculosis was 56—30 pulmonary and 26 non-pulmonary.

Adding these together, the total number of deaths certified as due to tuberculosis was as follows:—

Pulmonary	136
Non-pulmonary	51
	187

An analysis of the tuberculosis mortality for the past eleven years will be found in Table T 2 (page 39).

Number of known cases.—After making deductions for patients who had died during the year, or who had permanently left the district, or whose names have been taken off the register as provisionally cured, the total number of known cases of tuberculosis in Birkenhead at the end of 1924 was as follows:—

	Insured persons		Dependents of insured person	Neither insured persons nor dependents	Total
	Ex-service men	Others			
Pulmonary.....Male	99	345	107	58	609
Female ...	—	168	72	206	446
Non-pulmonary...Male	5	48	207	7	267
Female ...	—	32	226	20	278
Total...Male	104	393	314	65	876
Female ...	—	200	298	226	724
Total	104	593	612	291	1600

A complete revision of all the cases of tuberculosis on the register is carried out each year, with a view to seeing that only the names of patients still suffering from tuberculosis, and resident in Birkenhead, are kept on the roll. In connection with the revision the following procedure is observed:—

- (1) *Non-pulmonary tuberculosis.* Cases of non-pulmonary or surgical tuberculosis are struck off the register as cured when complete arrest of the disease has been maintained for three years.

- (2) *Pulmonary tuberculosis.*

- (a) *Patients who have probably been wrongly notified as tuberculous.*

If the conclusion is come to that a notified case is not, and probably never was, one of active tuberculosis, the name is crossed off the register at the time of the annual revision after obtaining, if possible, the assent of the notifying practitioner.

- (b) *Patients diagnosed on good evidence as suffering from pulmonary tuberculosis, who at a later stage appear to have been cured.*

Such cases are not removed from the register until at least five complete calendar years have elapsed since the date of notification and three complete calendar years after the disappearance of all symptoms.

Of the 136 patients who died from pulmonary tuberculosis during 1924, those who had been notified

Over four years numbered ...	4 (3.7% of total)
Under „ „ „ ...	8 (5.8 „)
„ three years „ „ ...	2 (1.4 „)
„ two years „ „ ...	13 (9.4 „)
„ one year „ „ ...	17 (12.4 „)
„ six months „ „ ...	16 (11.6 „)
„ three months „ „ ...	25 (18.2 „)
„ one month „ „ ...	11 (8.6 „)
„ one week „ „ ...	10 (7.2 „)

and those who had not been

notified numbered	30 (21.7 „)
-------------------------	--------------

Thus only 62.5% of these cases were notified to this department three months or more before death. Although this is a slight improvement on the three preceding years, which showed percentages of 58.7, 48.2, and 48.1 respectively, the general position with regard to notification must be looked upon as very unsatisfactory.

Of the 51 patients who died from non-pulmonary tuberculosis during 1924 those who had been notified

Over three years numbered...	2	(3.9% of total)	
Under three years	—	(—)	
„ two years	—	(—)	
„ one year	1	(2.0)	
„ three months	4	(7.8)	
„ one month	2	(4.0)	
„ one week	16	(31.3)	
and those who had not been notified numbered	26	(51.0)	

CASES DEALT WITH THROUGH THE TUBERCULOSIS CLINIC.

Attendances of patients at the clinic.

(a) During the year 1,145 patients made 1,529 attendances at the clinic for the purposes of medical examination. Of these, 473 had not been examined before at the clinic.

672 patients (who made 1,019 attendances) were cases who had previously been examined and were re-examined one or more times during the year for observation, treatment, or after-care purposes.

(b) In addition to attendances made for the purpose of medical examination, 739 other attendances were made by patients for weighing, interview, advice, or certification, and by patients' relations in connection with questions arising as to treatment, removal, home conditions, &c.

Examination of patients who were notified for the first time during 1924.—Of the 294 new patients notified in 1924, 105 were examined at the clinic during the year. Of these

- 94 had been sent down to the clinic by their own doctor for examination;
- 2 were ex-service men referred to the clinic as tuberculous cases by the Ministry of Pensions;
- 9 were sent for as contacts;
- 189 were not referred to, did not attend at, or were previously examined at, the clinic.

294

Classification of new cases.—The 473 new patients who attended during the year were classified as follows:—

		Insured		Depen- dent	Neither	Total
		Ex-service men	Others			
Classed as suffering from	Males	2	33	11	4	50
respiratory tuberculosis	Females	—	27	20	13	60
Classed as suffering from	Males	—	6	13	—	19
other forms tuberculosis	Females	—	1	23	1	25
Classed as non-tuberculous	Males	4	37	102	—	143
	Females ...	—	17	80	12	109
Classed as "suspect"	Males	1	18	14	1	34
	Females	—	7	17	9	33
Total... {		7	94	140	5	246
		—	52	140	35	227
Total.....		7	146	280	40	473

Pensions cases.—Included in the 473 new patients were 7 patients examined for pensions purposes, with the following results:—

Found to be suffering from respiratory tuberculosis	2
Found to be free from active tuberculosis	4
Found to be suspect	1
	7

In addition to the above 170 re-examinations were made for pensions purposes.

During the year the following reports were made in connection with the examination at the tuberculosis clinic (or at their own homes) of ex-servicemen:—

War Pensions Cttee.	M.P.M.S. D. 28	M.P.M.S. D. 28A	36 T.O.	M.P.O. 623	M.P.M.S. D. 122	Total
Birkenhead	*17	†77	4	—	—	98
Manchester	—	—	—	1	—	1
Liverpool	—	—	—	—	‡59	59
Total	17	77	4	1	59	158

* Includes 1 visit paid to pensioner's home.

† Includes 2 visits paid to pensioners' homes.

‡ Includes 1 visit paid to pensioner's home.

Examination of contacts.—132 persons who had been in close contact with known cases of tuberculosis were examined either at the clinic or at their own homes. Of these 4 were found to be suffering from respiratory tuberculosis, 5 were found to be suffering from other forms of tuberculosis, 104 were not suffering from tuberculosis, and 19 were classified as "suspect."

HOME VISITING, DISINFECTION, ETC.

During the year the health nurses paid 269 first visits and 1,857 re-visits to the homes of patients.

The number of houses disinfected after death or removal of patients was 149.

Spitting flasks were provided free of charge to 5 patients.

THINGWALL SANATORIUM.

(The Sanatorium was opened for the admission of patients on 4th November, 1921. The accommodation consists of 40 beds and 3 cots.)

Patients dealt with.—At the commencement of the year there were 42 cases under treatment in the Sanatorium.

82 patients were admitted during the year; 81 were discharged, 1 patient died; and 42 patients remained under treatment at the end of the year.

	Men	Women	Children (under 16)	Total
In Sanatorium January 1, 1924	18	7	17	42
Admitted during year.....	21	21	40	82
Discharged during year	34	16	31	81
Died in Sanatorium.....	1	—	—	1
In Sanatorium December 31, 1924	4	12	26	42

Type of cases.—Children now form the greater proportion of cases and adults are becoming fewer. This is due to the fact that the number of beds available at the Cheshire Joint Sanatorium at Burntwood has been increasing, and as this institution now absorbs the majority of adult patients, more beds are available at Thingwall for children. Again, it has been found that certain types of surgical tuberculosis do very well at Thingwall, and during the past year the number of patients suffering from that type has gone up. Children suffering from tuberculosis of the mesenteric glands, abdomen, bones of the hands and feet, and of some joints such as the knee and hip which have not reached the state of disintegration of the bones and cartilages and abscess formation, show marked improvement when treated in the open air and sunlight and under general sanatorium conditions.

The following table shows the proportion of pulmonary to surgical cases:—

	Adults.		Children.	
	Males.	Females.	Males.	Females.
Pulmonary	20	21	12	10
Surgical	—	—	14	3
Not tuberculous ...	1	—	1	—

Nature of treatment.—There have been no new forms of treatment tried during the year. The defatted vaccines were given up—as has

been the case in other sanatoria—as the results obtained did not appear to justify their continuance. The same applied to the sodium morrhuate treatment, which in some cases of pulmonary tuberculosis appeared actually to do harm. Two cases with lung disease had hæmoptyses whenever they had injections of this drug. Tuberculin has been exhibited to the surgical cases, and some seemed to derive benefit from it. When possible sun treatment has been given to the surgical cases with undoubtedly good results.

After accustoming the children to sunlight by a gradual exposure of the limbs and trunk they were allowed to go about on warm days clad in bathing drawers only. In one or two cases the browning of the skin was visible even until January, 1925. Open sores, sinuses, etc., appeared to dry up rapidly after exposure of the general body surface to the sun.

Results of treatment.—A general statement as to the condition at the time of discharge of 81 patients who left the Sanatorium during the year may be given here:—

Disease quiescent	24
Much improved	19
Improved	13
Not improved	11
Worse	7
Transferred to Cheshire Joint Sanatorium	3
Transferred to Leasowe Hospital	2
Admitted for observation, and found free from active tuberculosis	2
	—
	81
	—

Average duration of stay.—The average length of stay in the Sanatorium of patients discharged during the year was $29\frac{1}{2}$ weeks.

Development of grounds, etc.—During the year a considerable number of fruit trees, shrubs, and bushes were planted in the grounds of the Sanatorium.

A plentiful supply of potatoes and vegetables was obtained from the kitchen garden.

New recreation pavilion.—A new pavilion was generously presented to the Sanatorium by the Trustees of the Lloyd Corkhill Charity, and was formally handed over on 24th November.

Wireless installation.—A wireless installation was generously presented to the Sanatorium by a number of subscribers, and was formally handed over on 26th June.

CESHIRE JOINT SANATORIUM.

The Cheshire Joint Sanatorium was opened on the 6th November, 1923, for 50% of the approved bed accommodation.

Birkenhead has reserved 32 beds, and the available accommodation for Birkenhead cases at the end of 1924 was 23 beds.

Patients dealt with.—At the beginning of the year 15 Birkenhead patients were under treatment. During the year 36 Birkenhead patients were admitted, 28 were discharged, and 1 died. 22 patients remained under treatment at the end of the year.

	Men.	Women.	Children (under 16).	Total.
In Sanatorium. January 1, 1924	7	8	—	15
Admitted during year	25	11	—	36
Discharged or left Sanatorium during year	19	9	—	28
Died in Sanatorium	1	—	—	1
In Sanatorium December 31, 1924... ..	12	10	—	22

LEASOWE HOSPITAL.

The twelve beds reserved by the Corporation at Leasowe Hospital for cases of *surgical tuberculosis* among Birkenhead residents have been in occupation throughout the year.

There were 12 cases in hospital at the beginning of the year; 5 new cases have been admitted during the year, and 5 have been discharged or died; leaving 12 patients in hospital at the end of December.

The localisation of the disease in the 17 patients under treatment during the year was as follows:—

Tuberculosis of spine	5
" hip	4
" peritoneum	2
" knee	1
" elbow	1
" face	1
" ankle	1
" left femur	1
Under observation	1
	—
	17
	—

The 5 cases discharged or died were as follows:—

Tuberculosis of spine	2	(1 removed against advice, 1 quiescent)
" ankle	1	quiescent
" left hip	1	quiescent
" right hip	1	quiescent

TABLE T 1.

New cases notified for first time during the year.

PRIMARY NOTIFICATIONS											
Age periods.....	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 and up
Pulmonary—Males	—	2	2	6	12	18	19	15	15	6	3
Females ..	—	3	3	10	18	31	25	9	7	3	1
Non-pulmonary—Males	2	19	12	8	2	1	2	1	—	1	—
Females ..	4	11	3	9	3	2	2	2	1	—	1
Totals.....	6	35	20	33	35	52	48	27	23	10	5
Total	294										

TABLE T 2.

Deaths from tuberculosis during the past eleven years.

Year	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Deaths from tuberculosis of the lungs—											
Number	141	173	177	172	167	146	116	154	141	109	136
Rate per 1000	1.02	1.23	1.24	1.18	1.13	0.97	0.76	1.04	0.94	0.72	0.88
A Males—											
Number	75	105	104	89	97	73	55	68	77	67	75
Rate	0.54	0.74	0.72	0.61	0.65	0.48	0.36	0.46	0.51	0.44	0.48
B Females—											
Number.....	66	68	73	83	70	73	61	86	64	42	61
Rate	0.47	0.48	0.51	0.57	0.47	0.48	0.40	0.58	0.42	0.28	0.40
Deaths from other forms of tuberculosis—											
Number ..	46	67	61	69	66	38	56	40	50	43	51
Rate per 1000	0.32	0.47	0.42	0.46	0.44	0.25	0.36	0.27	0.32	0.28	0.33
A Males (all ages)											
Number	23	44	36	36	40	24	36	21	25	21	25
Rate	0.16	0.31	0.25	0.24	0.27	0.16	0.23	0.14	0.16	0.14	0.16
B Females (all ages)											
Number	23	23	25	33	26	14	20	19	25	22	26
Rate	0.16	0.16	0.17	0.22	0.17	0.09	0.13	0.13	0.16	0.14	0.17
C Children (un. 5 yrs)											
Number	27	42	44	44	36	22	26	17	21	20	26
Rate	0.19	0.29	0.30	0.30	0.24	0.14	0.17	0.11	0.15	0.13	0.17
Deaths from tuberculosis (all forms) —											
Number	187	240	238	241	233	184	172	194	191	152	187
Rate per 1000	1.35	1.70	1.66	1.66	1.58	1.23	1.13	1.31	1.28	1.00	1.21
Rate per 1000 England & Wales	1.35	1.55	1.62	1.80	1.92	1.26	1.13	1.12	1.12	1.00	1.06

VENEREAL DISEASES.

ADMINISTRATIVE ARRANGEMENTS.

Dr. Richardson Lovell, who took up duty at the venereal diseases clinic on 6th November, 1922, relinquished his post on 30th September, 1924. Since the latter date the clinical work of the centre has been in the hands of Dr. F. G. Foster (male patients) and Dr. Mary S. Deacon (female patients).

The clinic is at the Borough Hospital, the arrangements being under the agreement of 1923.

There have been some slight modifications in the times at which patients attend. On Mondays and Wednesdays the clinic is now open at 5-30 p.m. instead of 6 p.m. As all the instrumental work is done on these evenings, this extra half-hour is allotted to patients who require this form of attention.

The irrigation rooms are now open every day except Sunday between 12 and 1 p.m., and male patients requiring irrigation can thus attend during their dinner-hour. The irrigation rooms were formerly open only on three days a week between 6 and 8 p.m., and thus patients suffering from acute gonorrhœa could have only three irrigations per week. This arrangement was inadequate, and the new facilities have proved most beneficial.

More, however, might still usefully be done; for example, the irrigation room might with advantage be open for male patients for at least an hour morning, noon, and evening; and better facilities might be provided for continuous treatment of gonorrhœa in women.

Gonorrhœa, if not treated vigorously from the first, proves difficult to cure, and tends to become chronic. Some patients have been under treatment for this disease for over a year.

GENERAL NOTES.

Patients who cease to attend.—One, if not the main, difficulty to be contended with is that many patients cease to attend before completion of treatment. As stated in last year's report, this is partly due to the fact that "the symptoms and signs of the diseases clear up before actual cure has taken place." Another reason is that Birkenhead, like other ports, has a "floating" population. Seamen, who are often on voyages which last for three or more months, are especially liable to expose themselves to infection, contract disease, find their way to the clinic and remain under treatment while they are in port—and then their ship leaves and they are lost sight of. In the last six months, natives of India, Africa, Denmark, Holland, and Spain have been for a short time under treatment at the clinic.

On the other hand, there is the wilfully ignorant and apathetic class who, when once the discomfort and the outwardly visible signs have disappeared, do not seem to take any further interest in their complete cure.

Changes in treatment.

(a) *Syphilis.*

Since the introduction of bismuth preparations in the treatment of syphilis, the use of injections of mercury has been abandoned. As well as causing much less discomfort, bismuth has proved more efficacious.

Galyl has now been given up in this, as in many other clinics.

(b) *Gonorrhœa.*

Douches are now given more systematically to all women suffering from gonorrhœa. In the treatment of male patients, Béniqué's sounds and negative-pressure catheters have been recently obtained and have proved an useful adjunct in clearing up chronic cases.

Bacteriological work.—Beyond the fact that all cases of cerebral or spinal syphilis are now being lumbar punctured and the fluid sent for Wassermann reaction, there has been no change in this work as compared with last year.

Posters.—Towards the end of the year metal placards were affixed in public urinals and lavatories throughout the town. At first these seemed to be efficacious in attracting cases to the clinic. Some, however, of the patients who attended by reason of these notices had never suffered from any form of venereal disease and had never exposed themselves to the risk of infection. Although such cases were only of psychological interest, yet the individuals often suffered from severe mental anxiety, and the advice tendered appeared to rid them of their neurosis and ease their mental stress. Two cases were found to be suffering from cancer and not from venereal disease.

It is to be regretted that so few persons avail themselves of the offer of abortive treatment after risk of infection. Only three such cases have presented themselves for this purpose, in spite of the advice tendered on these placards.

BACTERIOLOGICAL WORK.

(a) At the clinic 513 smears were examined for the presence of gonococci, 12 specimens were examined for the detection of spirochetes, and 1 specimen was examined for the detection of other organisms.

(b) At the University of Liverpool Professor Beattie examined 633 specimens, 434 of these being sent from the clinic, and 199 from private medical practitioners. Of the specimens sent, 622 were for the Wassermann reaction and 11 for the detection of gonococci.

TREATMENT OF BIRKENHEAD PATIENTS CARRIED OUT AT OTHER TREATMENT CENTRES.

So far as has been ascertained from official returns which have been received from other areas, 19 Birkenhead patients attended other treatment centres, as shown in Table V 3.

ISSUE OF SALVARSAN SUBSTITUTES.

Salvarsan substitutes were issued during the year by the Medical Officer of Health

To the Medical Officers of the treatment centre at the Borough Hospital

To the Medical Officer, Birkenhead Union Infirmary

To three approved local practitioners.

PROPAGANDA.

The following lectures were given under the auspices of the Merseyside Boroughs V.D. Education Committee, to which the Birkenhead Corporation pays an annual contribution:—

Feb. 18th—Old Chester Road. Lecture to Women's Labour Party by Dr. Deacon.

April 9th—Co-operative Hall, Catherine Street. Lecture to Trades' Council, Men, by Dr. Lovell.

May 8th—Co-operative Hall, Catherine Street. Lecture to Women by Dr. Deacon.

Oct. 24th—Town Hall. Public Lecture by Dr. Mackenna.

Nov. 27th—Co-operative Hall, Catherine Street. Lecture to Women by Dr. Deacon.

TABLE V 1.

Statement showing the services rendered at the Venereal Diseases Clinic during the year, classified according to the diseases dealt with.

	Syphilis		Soft chancre		Gonorrhœa		Conditions other than venereal		Total		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1. Number of persons who, on the 1st January, 1924, were under treatment or observation for ...	84	43	3	—	45	3	8	1	140	47	
2. Number of persons dealt with during the year in the out-patient clinic for the first time and found to be suffering from—											
Syphilis only	59	41	—	—	—	—	—	—	59	41	
Soft chancre only	—	—	14	1	—	—	—	—	14	1	
Gonorrhœa only	—	—	—	—	95	6	—	—	95	6	
Syphilis and soft chancre	3	—	3	—	—	—	—	—	6	—	
Syphilis and gonorrhœa	6	2	—	—	6	2	—	—	12	4	
Gonorrhœa and soft chancre	—	—	—	—	—	—	—	—	—	—	
Syphilis, soft chancre & gonorrhœa	1	—	1	—	1	—	—	—	3	—	
Conditions other than venereal ...	—	—	—	—	—	—	64	28	64	28	
Total—Item 2	69	43	18	1	102	8	64	28	253	80	
Total—Items 1 and 2	153	86	21	1	147	11	72	29	393	127	
3. Number of persons who ceased to attend the out-patient clinic											
(a) before completing the first course of treatment for	16	9	2	—	16	2	—	—	34	11	
(b) after one or more courses, but before completion of treatment for	4	8	—	—	—	—	—	—	4	8	
(c) after completion of treatment, but before final tests as to cure, of	11	2	2	—	17	1	—	—	30	3	
4. Number of persons transferred to other treatment centres after treatment for	3	1	—	—	6	—	—	—	9	1	
5. Number of persons discharged from the out-patient clinic after completion of treatment and observation for	4	1	2	—	21	—	—	—	27	1	
6. Number of persons who, on the 1st January, 1925, were under treatment or observation for ...	115	65	15	1	87	8	—	—	217	84	
Total—Items 3, 4, 5 and 6	153	86	21	1	147	11	—	—	311	108	
Out-patient attendances—											
7 (a) For individual attention by the Medical Officer	1473	771	98	1	1332	93	296	221	3199	1086	
(b) For intermediate treatment— e.g., irrigations, dressings, &c...	—	—	—	—	1174	—	—	—	1174	—	
Total attendances ..	1473	771	98	1	2506	93	296	221	4373	1086	
8. Aggregate number of "in-patient days" of treatment given to persons who were suffering from	59	28	25	—	94	29	19	20	197	77	
					For detection of				For		
					Spirochetes		Gonococci		Other organisms		Wassermann reaction
9. Examinations of pathological material—											
(a) Specimens which were examined at, and by the medical officer of, the treatment centre					12		513		1		—
(b) Specimens from persons attending at the treatment centre, which were sent for examination to an approved laboratory					—		1		—		433

TABLE V 2.

Statement showing the services rendered at the Venereal Diseases Clinic during the year, classified according to the areas in which the patients resided.

	Birkenhead	Cheshire	Liverpool	Newport	Arklow, Tland	Bootle	Preston	Glasgow	Dublin	Wallasey	Chester	Lancaster	Colchester	Stornoway	Durham	Aldershot	Total
A. Number of persons from each area dealt with during the year, at or in connection with the out-patient clinic for the first time, and found to be suffering from—																	
Syphilis	100	7	2	1	1	1	—	—	—	—	—	—	—	—	—	—	112
Soft chancre.. ..	17	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
Gonorrhœa	93	5	5	—	—	—	1	2	—	1	—	—	1	—	1	1	110
Conditions other than venereal... ..	73	10	2	—	—	—	—	—	1	3	1	1	—	1	—	—	92
Total.....	283	24	9	1	1	1	1	2	1	4	1	1	1	1	1	1	333
B. Total number of attendances at the out-patient clinic of all patients residing in each area	4962	385	45	1	1	1	4	2	2	47	1	3	1	2	1	1	5459
C. Aggregate number of "in-patient days" of all patients residing in each area	274	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	274
D. Number of doses of salvarsan substitutes given in the—																	
1. Out-patient clinic	1732	180	2	1	—	1	—	—	—	10	—	—	—	—	—	—	1926
2. In-patient department	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
to patients residing in each area																	

TABLE V 3.

Statement showing particulars of Birkenhead cases treated at Venereal Diseases Clinics in other areas.

Name of town	No. of patients	Disease	Attendances at out-patient clinic	No. of in-patient days	Doses of salvarsan substitutes given in	
					Out-patient clinic	In-patient department
Liverpool (David Lewis Northern Hos.)	14	Syphilis 13 Conditions other than venereal 1	164	—	69	—
Wallasey	2	Gonorrhœa 2	11	—	—	—
Greenwich	4	Syphilis 3 Gonorrhœa 1	62	49	8	—

TABLE V 4.

Statement showing the number of cases* dealt with at the Venereal Disease Clinic for the first time during the year classified under age groups.

Age of patients at date of first attendance at the treatment centre	Under 1		1 to 5		5 to 14		14 to 16		16 to 17		17 to 18		18 to 19		Over 19		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Syphilis—																		
(a) Congenital	—	1	—	2	1	4	—	—	—	—	—	—	—	—	—	—	1	7
(b) Acquired	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68	36	68	36
Soft chancre	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	1	18	1
Gonorrhoea	—	—	—	—	—	—	—	—	—	—	—	1	—	—	102	7	102	8
Conditions other than V. D. ..	4	2	—	3	—	2	—	1	1	—	1	1	—	—	58	19	64	28
*Total number of cases. ...	4	3	—	5	1	6	—	1	1	—	1	2	—	—	246	63	253	80
*Total number of individuals	4	3	—	5	1	6	—	1	1	—	1	2	—	—	235	61	242	78

* If any individual is found to be suffering from more than one venereal disease, the case should be accounted for under each disease, and in this event the total number of individuals shown above will be less than the total number of cases.

OTHER INFECTIOUS DISEASES.

INFECTIOUS DISEASES WHICH ARE NOTIFIABLE.

The infectious diseases which (in addition to tuberculosis, already dealt with) were compulsorily notifiable to the Medical Officer of Health at any time during the past year are as follows:—

Smallpox.
Scarlatina.
Diphtheria and membranous croup.
Erysipelas.
Typhus fever.
Typhoid fever.
Continued fever.
Relapsing fever.
Cerebro-spinal meningitis.
Acute encephalitis lethargica.
Acute polio-encephalitis.
Acute poliomyelitis.
Puerperal fever.
Ophthalmia neonatorum.
Cholera.
Pneumonia (acute primary and influenzal).
Malaria.
Dysentery.
Trench fever.

Cases notified in 1924.—During the year 1,020 cases of infectious diseases other than tuberculosis were notified to me. These are set out in Tables I 1 and I 2.

TABLE I 1.

Infectious diseases other than tuberculosis notified during 1924;
showing seasonal incidence.

Disease	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlatina	39	16	14	18	28	31	13	16	22	40	39	52	328
Diphtheria and membra- nous croup	7	10	8	11	11	6	7	13	8	14	23	26	144
Erysipelas	4	5	6	3	1	5	4	5	5	7	6	9	60
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	1	2	3	1	1	1	—	—	—	1	1	1	12
Continued fever.....	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	1	1	—	—	—	—	—	—	—	—	—	—	2
Encephalitis lethargica (acute).....	—	3	—	—	2	4	2	1	—	—	—	—	12
Polio-encephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis (acute)...	—	—	—	—	—	—	1	—	—	—	—	—	1
Puerperal fever	—	—	1	1	1	1	—	1	—	—	2	1	8
Ophthalmia neonatorum	5	3	3	8	6	2	3	3	1	3	3	8	48
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	59	57	43	48	27	19	11	10	31	53	30	14	402
Malaria	—	—	—	1	—	1	—	—	—	—	—	1	3
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—
Trench fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	116	97	78	91	77	70	41	49	67	118	104	112	1020

Case-rates of certain diseases.—The case-rates of certain diseases for Birkenhead, and for England and Wales, per 1,000 living, are set out below:—

	Case-rate per 1,00 living.	
	Birkenhead	England and Wales
Smallpox	—	0.10
Scarlet fever	2.12	2.16
Diphtheria	0.93	1.07
Enteric fever	0.07	0.11
Puerperal fever	0.05	0.06
Erysipelas	0.39	0.33

TABLE I 2.

Infectious diseases other than tuberculosis notified during 1924 ;
showing ages.

Disease	und. 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-35 yrs.	35-45 yrs.	45-65 yrs.	65 yrs. up	Total
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlatina	3	11	11	22	41	120	64	28	23	3	2	—	328
Diphtheria and membra- nous croup	1	4	8	12	14	60	28	5	8	3	1	—	144
Erysipelas	—	—	—	—	—	2	3	1	15	4	33	2	60
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	—	1	—	—	1	2	—	2	3	2	1	—	12
Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	1	—	—	—	—	—	—	—	1	—	—	—	2
Encephalitis lethargica (acute)	—	—	—	—	—	1	—	2	6	—	2	1	12
Polio-encephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis (acute) ..	—	—	—	1	—	—	—	—	—	—	—	—	1
Puerperal fever	—	—	—	—	—	—	—	2	4	2	—	—	8
Ophthalmia neonatorum	48	—	—	—	—	—	—	—	—	—	—	—	48
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	65	69	38	28	21	32	13	25	41	20	32	18	402
Malaria	—	—	—	—	—	—	—	—	—	2	1	—	3
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—
Trench fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	118	85	57	63	77	217	108	65	101	36	72	21	1020

Encephalitis lethargica.—12 cases were notified during the year. Of these 2 cases were treated in general hospitals, 5 were treated in the Infectious Diseases Hospital, and 5 were treated at home. All recovered with the exception of 2 cases (M. 66 years and M. 61 years ; both died at home).

The annual figures relating to notification of this disease are as follows:—

1919	4
1920	2
1921	3
1922	3
1923	14
1924	12

Cerebro-spinal fever.—2 cases were notified during the year, viz.—

Male, 20 years of age, and female, 8 months of age; treated at Infectious Diseases Hospital, Birkenhead, and subsequently recovered.

Smallpox.—There were no cases of smallpox notified in Birkenhead during the year. This disease was, however, present in epidemic form in many parts of England throughout the whole year, 3,792 cases being notified.

VACCINATION.

The following is the latest completed information relative to vaccination in the Borough and relates to the period 1st January, 1923, to 31st December, 1923, viz.:—

No. of births	2803
Successfully vaccinated	1944
Insusceptible	13
Had smallpox	—
Number in respect of whom statutory declarations of conscientious objection have been received	402
Died unvaccinated	119
Postponements, removals, or cases not found, etc.	325

DISINFECTION.

Books.—134 Public Library books were collected from infected houses and disinfected.

Dwellings.—594 house-disinfecting notices were served; 482 houses or parts of houses were disinfected during the year.

Bedding and clothes.—Infected bedding and clothes were collected from 743 dwellings and disinfected at the disinfecting station. In 346 further cases infected or discarded bedding and clothes were destroyed.

Visits and revisits paid to houses, etc., by Disinfecting Inspector.—3,451 visits and revisits to property were made during the year in connection with disinfection after infectious diseases (including tuberculosis).

Cleansing of persons.—A special bath is provided at the disinfecting station in Corporation Road for dealing with persons who *voluntarily* apply under the Cleansing of Persons Act, 1897. During the year no cases were dealt with.

ISSUE OF DIPHTHERIA ANTITOXIN.

During the year, in accordance with the provisions of the Diphtheria Antitoxin (outside London) Order, 1910, diphtheria antitoxin was issued to 10 medical practitioners; a total of 126,000 units was given out.

INFECTIOUS DISEASES HOSPITAL.

Resident Assistant Medical Officer.—On the resignation of Dr. Lovell, Assistant Medical Officer, it was decided by the Health Committee that the new Assistant Medical Officer appointed to fill the vacancy should reside at the Infectious Diseases Hospital. Dr. W. D. Hood, D.P.H., was appointed, and took up residence on 1st December, 1924.

Cases treated during 1924.—At the beginning of the year there were 42 patients in hospital. New cases admitted during the year numbered 364, making a total of 406 patients dealt with. 66 patients were in hospital at the end of the year.

The diseases treated, together with the sex of the patients and particulars as to recoveries and deaths, are shewn below.

TABLE I 3.

Patients sent in as suffering from	In hospital at beginning of year	Admitted during year	Died during year	Discharged cured during year	Remaining in hospital at end of year
Scarlet fever M.	17	117	1	111	20
F.	19	125	2	121	23
Diphtheria..... M.	1	48	3	34	11
F.	5	62	4	52	12
Enteric fever M.	—	—	—	—	—
F.	—	5	—	5	—
Encephalitis lethargica..... M.	—	3	1	2	—
F.	—	2	—	2	—
Cerebro-spinal meningitis ... M.	—	1	—	1	—
F.	—	1	—	1	—
Total	42	364	11	329	66

Scarlet fever.—Leaving out of account the 43 patients remaining in hospital at the end of the year, the total number of cases, notified as scarlet fever, dealt with in hospital during the year 1924 was 235

The number of these cases in which the diagnosis of scarlet fever was not confirmed was 10

The number of deaths among these non-scarlatina cases was 1

The number of deaths among the true scarlatina cases was 2

The scarlatina *case-mortality* was therefore 0.9%

Complications.—The complications met with among the 225 cases were as follows:—

5 (2.2%) suffered from arthritis.
 6 (2.6%) " " albuminuria.
 20 (9.0%) " " rhinitis.
 23 (10.0%) " " otorrhœa.
 43 (19.0%) " " adenitis.

Average stay in hospital.—The average length of stay in hospital of all notified cases was 36 days.

Time of admission.—Of the 225 cases—

54	were	admitted	on	the	2nd	day	of	disease.
73	"	"	"	"	3rd	"	"	"
52	"	"	"	"	4th	"	"	"
22	"	"	"	"	5th	"	"	"
9	"	"	"	"	6th	"	"	"
3	"	"	"	"	7th	"	"	"
2	"	"	"	"	9th	"	"	"
10	"	"	"	"	10th	"	"	or later.

Diphtheria.—Leaving out of account the 23 patients remaining in hospital at the end of the year, the total number of cases, notified as diphtheria, dealt with during the year was 93

The number of cases in which the diagnosis of diphtheria was not confirmed was 22

Among the true diphtheria cases, the number of deaths (3 of which occurred within 24 hours after admission to hospital) was... 7

The diphtheria *case-mortality* rate was therefore 10%

Tracheotomy.—The number of cases showing laryngeal obstruction was 8. In 4 of these cases tracheotomy was performed.

Average stay in hospital.—The average stay in hospital of all notified cases was 35 days.

Time of admission.—Of the 71 true cases—

11	were	admitted	on	the	2nd	day	of	disease.
13	"	"	"	"	3rd	"	"	"
13	"	"	"	"	4th	"	"	"
14	"	"	"	"	5th	"	"	"
8	"	"	"	"	6th	"	"	"
6	"	"	"	"	7th	"	"	"
3	"	"	"	"	8th	"	"	"
1	"	"	"	"	9th	"	"	"
2	"	"	"	"	10th	"	"	or later.

Enteric fever.—5 cases were admitted notified as enterical. The diagnosis was confirmed in 3 of these. There were no deaths.

Encephalitis lethargica.—5 cases were admitted, and 1 died.

Cerebro-spinal meningitis.—2 cases were admitted under this notification. In neither case was the diagnosis confirmed. Both cases recovered.

E. P. SMITH MEMORIAL FUND.

2 suitable cases received benefit from this fund during 1924.

HOME NURSING.

The arrangement made between the Corporation and the Birkenhead District Nursing Society, dating from 1st July, 1919, provides for the home nursing of cases of influenza and pneumonia. During the year 1924 the Society's nurses paid 1,732 visits in respect of 111 cases.

MUNICIPAL LABORATORY.

Examination of clinical material.—The nature and number of the examinations, etc., made at the Municipal Laboratory during 1924 is shown in the following table:—

Examination	Pos.	Neg.	Total
Sputum for <i>B. tuberculosis</i>	62	332	394
Other material for <i>B. tuberculosis</i>	—	5	5
Cultures for <i>B. diphtheriæ</i>	140	278	418
Blood tests (Widal) against enteric group	2	15	17
	204	630	834

Other examinations were made as follows:—

Cerebro-spinal fluid	4
Urine	53
Miscellaneous	7
	<u>64</u>

Bacteriological examinations of water.—Examinations of the Alwen water supply were conducted at the laboratory during the year. The routine examinations were made weekly and included the following tests:—

- (a) Estimation of total micro-organisms per cubic centimetre. (Incubation carried out for 24, 48, 72 hours and 7 days on gelatine and agar at room temperature, and on agar at 37°C for 24, 48 and 72 hours.)
- (b) Examination for presence of organisms of the *B. coli* group in 100, 50, 10, 5 and 1 cc.; incubating for 24, 48 and 72 hours.
- (c) Further examinations arising out of positive findings (if any) under (a) and (b) above; in the case of (b) for mobility, liquefaction of gelatine, indol formations, sugar reactions, etc.
- (d) Control tests were carried out as a routine to check the technique and material used for the examinations.

The weekly routine tests are made on the water as supplied in Birkenhead—drawn direct from the mains. In addition, every month a bacteriological examination is made of (a) raw Alwen water taken from the lake before filtration and (b) the water immediately after it has passed the filters. These samples are brought to the laboratory as rapidly as possible by motor transport. Without entering into detailed results it may be said that the Alwen water supply is of remarkable bacteriological purity and remained consistently so throughout the year. The local Alwen tests showed that the filters are worked in a most efficient manner and that water of great purity is delivered to the mains. The weekly routine tests show that the water as supplied to the consumers has undergone no deterioration; and is, from a bacteriological point of view, most satisfactory.

MENTAL DEFICIENCY.

ADMINISTRATIVE ARRANGEMENTS.

The work of dealing with cases of mental deficiency in the Borough in accordance with the provisions of the Mental Deficiency Act, 1913, is carried out under the Mental Deficiency Committee, with the Town Clerk as clerk to the committee.

Mentally defective children between the ages of 7 and 16 are dealt with by the Education Committee under the Elementary Education (Defective and Epileptic Children) Acts, 1899 and 1914.

At the end of 1924 the medical staff engaged on the work of ascertainment of cases, certification, etc. consisted of the Medical Officer of Health and Assistant Medical Officers; and 15 nurses gave part time to home visiting.

CASES DEALT WITH UNDER MENTAL DEFICIENCY ACT, 1913.

During the year 8 new cases were reported; bringing the total number of cases dealt with under the Mental Deficiency Act, 1913, since that Act came into force, to 202.

4 cases were sent to institutions by judicial order.

6 cases were placed under supervision pending institutional vacancy arising; 1 case was placed under home supervision; 3 cases were removed to hospital under Lunacy Acts; 1 case was discharged from institution.

1 case died during the year.

8 first visits and 213 revisits were paid to the homes of mental defectives by the health nurses.

CASES DEALT WITH UNDER THE ELEMENTARY EDUCATION (DEFECTIVE AND EPILEPTIC CHILDREN) ACTS, 1899 and 1914.

Reference to this subject will be found in the school medical inspection section of this report (page 71).

WELFARE OF THE BLIND.

ADMINISTRATIVE ARRANGEMENTS.

The administrative arrangements throughout the year were as set out in my annual report for 1923.

GENERAL FACTS REGARDING BLIND PERSONS IN BIRKENHEAD.

Number and ages of blind persons.—The total number of blind persons in Birkenhead coming within the scope of the Blind Persons Act, 1920, on 31st March, 1925, was 131; of these 69 were males and 62 females.

Age.			M.		F.		Total.
0— 5	...	...	—	...	—	...	—
5—16	...	...	2	...	5	...	7
16—21	...	...	4	...	2	...	6
21—30	...	...	6	...	1	...	7
30—40	...	...	7	...	3	...	10
40—50	...	...	10	...	7	...	17
50—60	...	...	10	...	10	...	20
60—70	...	...	15	...	16	...	31
Over70	...	...	15	...	18	...	33
Total			69	...	62	...	131

Age incidence of blindness.—So far as can be ascertained the age of onset of blindness is set out below:—

Age at onset of blindness			M.		F.		Total.
0— 1	...	...	11	...	11	...	22
1— 5	...	...	2	...	2	...	4
5—10	...	...	2	...	2	...	4
10—20	...	...	9	...	5	...	14
20—30	...	...	5	...	1	...	6
30—40	...	...	7	...	4	...	11
40—50	...	...	7	...	7	...	14
50—60	...	...	5	...	15	...	20
60—70	...	...	12	...	7	...	19
Over70	...	...	2	...	4	...	6
Not ascertained	...	...	7	...	4	...	11
Total			69	...	62	...	131

Blind persons who are otherwise defective.—Thirteen of the blind persons on the register were handicapped in addition by other physical or mental defects:—

	M.	F.	Total.
Mentally defective	1	1	2
Deaf	3	4	7
Otherwise physically defective	3	—	3
Both mentally and physically defective	—	1	1
	7	6	13

Children under 16 years of age.—These numbered 7; 2 boys and 5 girls. The 2 boys and 3 of the girls were attending school; the other 2 girls were not attending school.

Conditions as regards employment.—The following table shows the position of blind persons in the area over the age of 16 with reference to employment:—

	M.	F.	Total.
Employed	20	4	24
Trained but unemployed...	3	4	7
Under training	2	—	2
Not trained, but probably trainable	7	3	10
Probably unemployable ...	35	46	81
	67	57	124

The occupations of the *employed* blind in the area were as follows:—

Agents, collectors, etc.	2
Basket and cane workers	7
Brush makers	2
Clerks	2
Home teachers	1
Knitters	1
Musicians and music teachers ..	1
Newsvendors	1
Tuners	3
Boot repairers	1
Miscellaneous	3
Total	24

HOUSING AND GENERAL SANITATION.

ADMINISTRATIVE ARRANGEMENTS.

The staff engaged on the work of housing and general sanitary inspection consisted, at the end of the year, of the Chief Inspector, one housing inspector, and five district sanitary inspectors.

The five district sanitary inspectors devoted such time to the work of housing inspection as their other duties permitted.

GENERAL.

Area of the Borough.—The area of the Borough (land and inland water) was at the time of the 1921 census 3,909 statute acres. This area is largely built over, or otherwise occupied, by domestic buildings, docks, factories, railway stations, and sidings, etc.

Number of dwelling houses in the Borough.—The approximate number of dwelling houses of all descriptions within the Borough, excluding institutions, on 31st December, 1924, was 27,731.

New dwellings erected, 1921-1924.—The new dwellings erected in the Borough between the date of the census and the end of 1924 were as follows:—

(1) Between the date of the census and 31st December, 1923	
(a) With State assistance under the Housing Act, 1919	
(i) By the Local Authority	254
(ii) By other bodies or persons	19
(b) Other	54
	———— 327
(2) During 1924	
(a) With State assistance under the Housing Acts, 1919 or 1923	
(i) By the Local Authority	202
(ii) By other bodies or persons	84
(b) Other	114
	———— 400
Total	727

The number of houses not complying with the building byelaws or the requirements of the Minister of Health erected during 1924 with the consent of the local authority under Section 25 of the Housing, Town Planning, etc., Act, 1919, was 5.

Uninhabited property.—The following is a return of uninhabited property in Birkenhead for the past year:—

District	Half-year ended 30th June, 1924					Half-year ended 31st Dec., 1924				
	Private houses	Shops	Cottages	Dock cottag's	Total	Private houses	Shops	Cottages	Dock cottag's	Total
Birkenhead.....	12	10	3	—	25	5	10	2	—	17
Claughton and Oxtan	73	4	3	40	120	46	1	5	40	92
Tranmere and Bebington ...	60	8	—	—	68	77	19	2	—	98
Totals ..	145	22	6	40	213	128	30	9	40	207

The total uninhabited and unoccupied property, 31st December, 1923, was 202, so that there was an increase of 5 at the end of 1924 as compared with the previous year.

ADMINISTRATIVE ACTION TAKEN IN CONNECTION WITH HOUSING AND GENERAL SANITATION.

(a) Mainly under Housing Acts.

During the twelve months ending December 31st, 1924, work was carried out by the department under the provisions of the various Housing Acts, and the regulations made by the Local Government Board dated 2nd September, 1910. The particulars of this work are as follows (the arrangement is based on that suggested by the Ministry of Health):—

Inspection.

- (1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts). All these houses were also recorded under the Housing (Inspection of District) Regulations, 1910 1168
- (2) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 98
- (3) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respect reasonably fit for human habitation 832

Remedy of defects without service of formal notices.

- Number of defective dwelling-houses rendered fit in consequence of *informal* action by the local authority or their officers 9

Action under statutory powers.

A. *Proceedings under section 28 of the Housing, Town Planning, etc., Act, 1919.*

- (1) Number of dwelling-houses in respect of which notices were served requiring repairs 823

(2) Number of dwelling-houses which were rendered fit—	
(a) by owners	
(1) Houses in respect of which notices were served during 1924	285
(2) Houses in respect of which notices were served prior to 1st January, 1924.....	235
(b) by local authority in default of owners	—
Total	520

(3) Number of dwelling-houses in respect of which closing orders became operative in pursuance of declarations by owners of intention to close

—

B. Proceedings also taken under the Public Health Acts in connection with above properties.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	345
(2) Number of dwelling-houses in which defects were remedied—	
(a) by owners	345
(b) by local authority in default of owners	—

C. Proceedings under sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909.

(1) Number of representations made with a view to the making of closing orders.....	98
(2) Number of dwelling-houses in respect of which closing orders were made.....	6
(3) Number of dwelling-houses in respect of which closing orders were determined, the dwelling-houses having been rendered fit	—
(4) Number of dwelling-houses in respect of which demolition orders were made	12
(5) Number of dwelling-houses demolished in pursuance of demolition orders	12

(b) Mainly under Public Health Acts.

In addition to the housing work outlined above, other work, of which the following is a summary, was carried out by the inspectors during the year. (The work of scavenging, removal of refuse, and care of sewers is entirely dealt with by the Borough Surveyor's department.)

Number of houses inspected (not included in preceding section)	5002
Number of re-inspections of houses.....	20313
Number of unhealthy conditions reported and investigated	7060
Number of formal notices given	1231
Number of informal notices given	3687
Number remedied after formal notice and without proceedings	1231

Number of cases in which proceedings had to be taken	—
Number abated after proceedings	—
Defects referred for action:—	
(a) to Borough Surveyor	354
(b) to Water Engineer	224
(c) to Borough Treasurer	122
(d) to Director of Education	2
(e) to West Cheshire Water Co.	4
Number of excavations made for the purpose of testing the condition of house drains	54
Number of smoke tests applied to drains of premises reconstructed under the supervision of this department	78
Number of water tests applied to drains.....	36
Number of smoke tests applied to the drains of new buildings, in conjunction with the Borough Surveyor's department	184
Number of smoke observations taken	14
Number of smoke nuisances from factory and other chimneys reported to the Health Committee	8
Number of schools specially examined by the district inspectors	36
Number of cowsheds inspected	8
Number of dairies and milkshops inspected	259
Number of inspections <i>re</i> offensive trades	182
Number of sewer ventilators inspected	55
Number of street gullies inspected	33
Number of caravans inspected	48
Number of caravans re-inspected	94
Number of back passages inspected	189
Number of investigations regarding the keeping of pigs, fowls, and other animals	48
Miscellaneous inspections (not included above)	598

(c) **Actual defects in domestic dwellings dealt with under (a) and (b) above.**

The following is a summary of sanitary improvements effected at dwelling houses during the year under the provisions of the Public Health and Housing Acts:—

<i>Houses—</i>		New sash cords provided ...	959
Roofs repaired..	773	Window fasteners renewed...	435
Chimney stacks pointed or repaired	94	Windows made to open	192
Rainwater gutters repaired or renewed	510	Firegrates repaired	739
Down spouts repaired or renewed	288	Ovens repaired or renewed...	89
Down spouts disconnected from drains	5	Plastering to firegrates repaired	210
Walls pointed or repaired ...	531	Hearthstones repaired or renewed	157
Lighting improved	2	Floors relaid or repaired.....	769
Ventilation improved	64	Skirting boards repaired or renewed	178
Windows repaired	446	Wall plaster repaired	1666
		Ceiling plaster repaired	787

Walls cleansed.....	989	Drains—inspection chambers	
Ceilings cleansed.....	809	provided	1
Doors repaired.....	551	Drains ventilated	9
Door fasteners repaired or re-		Drains cleansed	1002
newed	974	Self-cleansing gulleys provided	48
Sinks repaired or renewed ...	71	<i>Water closets—</i>	
Sink waste pipes repaired ...	259	Roofs repaired.....	359
Sink waste pipes trapped ...	8	Walls repaired.....	252
Washing boilers repaired ...	163	New basins fixed.....	129
Washing boilers—new pans		Connections repaired	340
provided	36	Cisterns repaired or renewed.	105
Washing boilers—firegrates		New flush pipes fixed	16
repaired	129	Provided with a sufficient	
Washing boilers—flues repaired	48	supply of water	138
Dampness remedied	43	Doors repaired or renewed ...	323
Nuisances from animals abated	20	<i>Ashpits—</i>	
Yard surfaces relaid or re-		Provided with roofs	16
paired	593	Provided with doors	69
Yard surfaces—proper means		Roofs repaired.....	68
of drainage provided	11	Walls repaired.....	46
<i>Drainage—</i>		Cemented inside ..	27
New drains constructed	22	Abolished.....	180
Old drains reconstructed.....	120	Ashbins provided... ..	952
Drains repaired	109	<i>Miscellaneous—</i>	
		(not included above)	841

(d) Increase of Rent and Mortgage Interest (Restriction) Acts, 1920-1923.

During the year 3 applications for certificates under section 2 of the Act were received and considered by the Health Committee. 2 certificates were granted, and 1 application was withdrawn.

Enquiries were subsequently made in order to keep a record of the work carried out after the granting of the certificates. 8 revisits were paid in this respect, and the whole of the defects stated in the certificates were remedied and the houses put into a satisfactory state of repair.

(e) Theatres, music halls, &c.

(Ministry of Health Circular No. 120, dated 25th August, 1920).

5 visits were made to theatres, music halls and other places of entertainment in which the conditions as to ventilation, structure of dressing rooms, &c., had been found not to be satisfactory and which had previously been reported upon to the Health Committee and to the Clerk to the Borough Justices for the information of the licensing authorities.

(f) Rats and mice.

The following is a summary of the work carried out by the district inspectors under the provisions of the Rats and Mice (Destruction) Act, 1919.

No. of premises inspected	185
No. of visits and revisits	267
No. of notices served on occupiers	112
No. of notices served on owners	54
No. of premises satisfactorily dealt with	98
No. of premises still under observation or where work is being carried out	12

(g) Inspection of lodging houses, &c.

During the year the inspector of common lodging houses, &c. paid regular visits to common lodging houses, and houses let in lodgings, and to the Corporation tenement dwellings. The number of inspections carried out is lower than was recorded last year, the inspector of lodging houses having been engaged for about three months on disinfection work while there was a vacancy on the disinfecting staff. The following is a summary of the work done:—

Registered common lodging houses (14 in number):	
Day inspections	2534
Night inspections	76
Insanitary conditions reported and dealt with	29
Houses let in lodgings (788 in number):	
Day inspections	762
Night inspections	—
Insanitary conditions reported and dealt with	74
Corporation tenement dwellings (132 in number, visited weekly): No. of visits	3960
Insanitary conditions reported and dealt with	174

FACTORIES, WORKSHOPS AND WORKPLACES.

FACTORY AND WORKSHOP ACTS, 1901 AND 1907.

The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his annual report to the Council to report specifically on the administration of that Act in workshops and work-places. The following is a summary of the work carried out during the year.

1.—Inspection of factories, workshops and workplaces.

Premises	No. of		
	Inspections	Written notices	Prosecutions
Factories (including Factory Laundries)	55	1	—
Workshops (including Workshop Laundries) ...	1935	33	—
Workshops (other than Outworkers' premises)...	48	—	—
Total.....	2038	34	—

2.—Defects found in factories, workshops and workplaces.

Particulars	No. of defects			Number of prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts*—</i>				
Want of cleanliness	45	45	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances.....	22	22	—	—
Sanitary accommodation—				
Insufficient ..	2	2	—	—
Unsuitable or defective	27	27	—	—
Not separate for sexes	—	—	—	—
<i>Offences under the Factory & Workshops' Acts—</i>				
Illegal occupation of underground bake-house (s. 101)...	1	1	—	—
Other offences	1	1	1	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total.....	98	98	1	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Home work.—Lists were received from employers as follows:—

From employers sending twice in the year—4 lists (10 workmen).

From employers sending once in the year—7 lists (2 contractors, 12 workmen).

In each case the work handled was the making of wearing apparel.

Registered workshops.—The workshops on the register at the end of the year were:—

Bakehouses	60
Confectioners	57
Laundries	44
Other workshops	352
Workplaces	24
	537

Other matters.—During the year 1 instance of failure to affix the abstract of the Factory and Workshop Acts was dealt with.

At the end of the year there were 26 underground bakehouses in use in the Borough.

RAG FLOCK ACT, 1911.

Pursuant to the provisions of the above Act, 7 visits were made.

At the time of these visits the rag flock being used or stored on the premises was to all appearance in a satisfactory condition; no samples were, therefore, taken for the purpose of analysis.

POISONS AND PHARMACY ACT, 1908, AND ORDERS, 1909.

During the year 1 new application was made for a licence to sell poisonous substances under the provisions of Section 2 of the Poisons and Pharmacy Act, 1908, and 3 applications were made for renewal licences. Licences were granted in each case.

Visits were made to 10 shops and premises in the Borough, in which insecticides containing poison were likely to be kept for sale, but no infringement of the Act was reported.

MATERNITY AND CHILD WELFARE.

ADMINISTRATIVE ARRANGEMENTS.

General arrangements.—Provision has been made by the local authority for carrying out the requirements of:

1. The Notification of Births Acts, 1907 and 1915.
2. The Midwives' Acts, 1902 and 1918.
3. The Maternity and Child Welfare Act, 1918.

The authority's scheme now includes:—

1. Inspection of midwives practising in the area.
2. Health visiting.
3. The provision of four post-natal clinics.
4. The provision of an ante-natal clinic.
5. The supply of free milk, etc., for necessitous mothers and infants.
6. Home visiting in connection with cases admitted to the Birkenhead Day Nursery.
7. The provision of treatment at the Borough Hospital of cases of complications preceding and following confinement, and of cases of confinement where the home conditions are bad.
8. The payment in whole or in part of fees to medical practitioners called in by midwives to attend to difficult cases of confinement.
9. The payment in whole or in part of fees to midwives in attendance upon temporarily necessitous cases.
10. The provision of home nursing for children under five suffering from certain diseases, and for expectant and nursing mothers.
11. Financial support of certain institutions engaged in work in the interests of mothers and infants belonging to the Borough, namely, Birkenhead Day Nursery, Birkenhead and District Rescue Association, The Birkenhead and Wirral Invalid Children's Association, and The Birkenhead Maternity Hospital.

The infant welfare or post-natal clinics are held at Hamilton Square, Brassey Street, St. Paul's Road, and Mount Grove. The Hamilton Square clinic was opened in 1916; Brassey Street and St. Paul's Road clinics in 1919; the Mount Grove clinic in 1923.

The ante-natal clinic, which is held at No. 9, Hamilton Square, was opened in 1920.

The arrangements for home nursing came into force on 1st July, 1919. An agreement between the Corporation and the Birkenhead District Nursing Society provides for the nursing at home of cases of ophthalmia neonatorum; of measles, whooping cough, epidemic diarrhoea, and poliomyelitis in children under the age of five years; and of illnesses of women associated with pregnancy and confinement.

New arrangements made during past year.—

New agreement with Birkenhead Borough Hospital.—An agreement (which became operative on 1st April) has been made between

the Corporation and the Birkenhead Borough Hospital whereby accommodation and treatment is provided at the hospital for cases of complicated pregnancy, for cases of complicated or difficult labour, and for cases in which complications follow confinement. Cases where the home environment is such as to make confinement at home dangerous are also covered by the arrangement. Patients who attend the ante-natal and post-natal clinics coming within the above categories can be treated at the hospital, and all the midwives practising in the town have been instructed to notify me of any cases who in their opinion should be dealt with under the scheme. In cases of urgency patients may be sent by midwives direct to the Borough Hospital. The new agreement takes the place of the previous agreement with the hospital, which dated from 16th April, 1917.

Payment of midwives' fees.—On the 1st November a scheme, approved by the Ministry of Health, for the payment of certain fees to midwives came into operation. This scheme (except under circumstances of extreme urgency) is confined to temporarily necessitous cases, as distinct from destitute cases which fall to be dealt with by the Poor Law Authority. If on engagement for a confinement a midwife considers that the patient is unable, by reason of temporary disability, to pay all or part of her fees, she may apply to the Corporation, stating her opinion that the case is one which might properly be attended as a private patient, but in respect of which all or part of her fees should be paid by the Corporation. On receipt of such an application, enquiries are made by a member of the Health Nursing Staff, and consideration of her report in conjunction with the circumstances of the case determine the decision of the Committee as to the payment of the fees, in full or in part.

Perambulator shelter, Mount Grove Clinic.—During the year a shelter for perambulators was erected at the post-natal clinic in Mount Grove.

STAFF.

The executive medical staff engaged on maternity and child welfare work at the end of the year consisted of Dr. Deacon (ante-natal clinic, and Hamilton Square and Brassey Street post-natal clinics); Dr. Leete (St. Paul's Road post-natal clinic); and Dr. Foster (Mount Grove post-natal clinic).

In addition to the Chief Health Nurse and the Inspector of Midwives, the equivalent of the whole time of six nurses was, throughout the year, nominally available for infant welfare work; but owing to resignations of members of the staff, and the difficulty experienced in filling vacancies, the actual staff was considerably under this strength.

INSPECTION AND SUPERVISION OF MIDWIVES.

Work under this section is concerned with the administration of the Midwives' Acts, 1902 and 1918; the visiting of the homes of midwives, inspecting their instruments, etc., advising them on the details of their work and on their duties as set out in the above Acts, and in the rules issued by the Central Midwives' Board.

Number of midwives.—During the year 1924, 90 midwives entered their names on the local register as practising in the Borough. Of these, 9 subsequently left the district, and their names have been removed from the register accordingly. 3 midwives gave notice of change of addresses.

Of the 90 midwives, 81 were trained and 9 untrained.

Number of cases attended by midwives.—The cases attended by midwives alone (no doctor being in attendance) numbered 2,524; just over three-quarters of the total births in the Borough.

Visits of inspection.—The inspector of midwives paid 194 quarterly and 139 special visits of inspection.

Interviews in office.—41 midwives were interviewed during the year.

Cases of puerperal fever in practice of midwives.—The inspector investigated 8 cases.

Cases requiring medical help.—459 cases were notified by midwives in which medical aid had been called in, as against 451 last year. The inspector made 198 special inquiries regarding cases requiring medical help.

Notifications received from midwives.—45 cases of stillbirths were notified; 10 cases were notified of infants receiving artificial feeding; 3 cases were notified in which death had occurred in the practice of midwives; 4 cases of laying out dead bodies were notified.

Supply of silver nitrate to midwives.—Supplies of a colloid preparation of silver nitrate were issued to 3 midwives at cost price.

HOME VISITING OF EXPECTANT MOTHERS, MOTHERS, AND YOUNG CHILDREN.

Home visiting.—The following is a summary of the visits paid by the health nurses in connection with expectant mothers, mothers, and young children:—

2899 routine first visits were paid to infants.

2214 routine revisits were paid to infants under one year

6827 routine visits were paid to children over 1 year and under 5 years old.

40 first visits and 22 revisits were paid in connection with the investigation of stillbirths.

472 visits were paid in connection with cases of pneumonia.

48 cases of ophthalmia neonatorum were visited and kept under supervision.

143 first visits were paid to expectant mothers.

143 first visits were paid to expectant mothers.

262 visits were made in connection with deaths of infants.

1929 visits were made in connection with miscellaneous matters.

Cases reported for special action.—The following cases after being visited were reported for special action:—

- 4 cases of sanitary defects in houses were passed to the Chief Sanitary Inspector.
- 9 cases were referred to the Charity Organisation Society.
- 1 case was reported to the Society for the Prevention of Cruelty to Children.
- 3 cases were referred to the Invalid Children's Association.
- 1 case were referred to the Poor Law Relieving Officers.

POST-NATAL CLINICS.

The main features of the work carried out at these clinics were set out in my annual report for 1923.

At the end of the year the clinics were being held as follows:—

Hamilton Square clinic: Monday and Wednesday afternoons, 2 to 5 p.m.

Brassey Street clinic: Thursday afternoon, 2 to 5 p.m.

St. Paul's Road clinic: Tuesday afternoon, 2 to 5 p.m.

Mount Grove clinic: Friday afternoon, 2 to 5 p.m.

The following table gives an indication of the work done at the clinics during the year:—

	Hamilton Sq. (101 sessions)		Brassey Street (51 sessions)		St. Paul's Road (48 sessions)		Mount Grove (48 sessions)	
	1st visits	Re- visits	1st visits	Re- visits	1st visits	Re- visits	1st visits	Re- visits
Attendances made by infants under 12 months	426	3360	222	2553	223	2247	151	1053
Attendances made by children aged 1—2 years.....	20	389	4	497	8	527	5	149
Attendances made by children aged 2—5 years.....	5	166	11	166	—	130	8	69
Children examined by Doctor...	423	1699	233	1273	230	893	131	459
Mothers advised by Doctor regarding their own health...	18	228	39	145	7	57	24	45

Voluntary workers.—I have again to put on record the invaluable assistance given by voluntary workers at the various clinics.

Sewing classes.—22 sessions were held during the year. 23 mothers attended and paid 132 visits.

Supply of Milk.—Dried milk was sold at the clinics to suitable cases.

During the year supplies of milk were given free under the Milk (Mothers and Children) Order, 1919, to

- 122 expectant mothers
- 150 nursing mothers
- 143 children.

The income scale was the same as that set out in my annual report for 1921.

The need for the very strictest economy in connection with the expenditure involved has been fully realised. Applications for free milk are allowed to go forward only where the doctors at the clinics have satisfied themselves, by a medical examination of the cases on whose behalf the applications have been made, that the supply is essential on grounds of health.

Milk is given only to—

- (a) Nursing mothers who are actually suckling their children ;
- (b) Expectant mothers in the last three months of pregnancy ;
- (c) Children up to twelve months whose mothers are unable to nurse them.

ANTE-NATAL CLINIC.

At the ante-natal clinic 51 sessions were held during the year ; 346 new cases were seen, and 1,633 revisits were made. The total attendances thus numbered 1,979 visits.

Condition with regard to pregnancy.—The condition of the 346 cases with regard to pregnancy, at the time of their first attendance, was as follows:—

- (a) 37 were in their first pregnancy.
- (b) 219 were in their second or subsequent pregnancy (53 of these patients had attended the clinic during a previous pregnancy ; 10 had attended during two previous pregnancies ; and 1 had attended during three previous pregnancies).
- (c) 90 were not pregnant.

Attendances.—The attendances made during the year were as follows:—

Attendances made by the new cases as classified above:

(a)	130
(b)	1549
(c)	102

Attendances made during 1924 by patients who were attending the clinic at the end of 1923 198

1979

Abnormalities.—The abnormalities or diseases found to be present in the new cases who attended the clinic during 1924 were as follows:—

- (a) Women who came to the clinic in their first pregnancy

Abnormality	No. of cases
Albuminuria	2
Scabies	1
Adherent placenta	1
Retroversion of uterus	1
Miscarriage	1

(b) Women who came to the clinic in their second or subsequent pregnancy

Abnormality	No. of cases
Venereal disease	4
Albuminuria	3
Puerperal fever	2
Varicose veins	2
Tuberculosis	2
Rheumatism	2
Diabetes	1
Cyst in vulva and miscarriage	1
Retroversion of uterus	1
Varicose ulcer	1
Other defects	2

(c) Women who were not pregnant when they first attended the clinic

Abnormality	No. of cases
Anæmia after confinement	18
Retroversion of uterus	14
Venereal disease	12
Kidney disease	3
Conditions associated with menopause	3
Cardiac disease	2
Tuberculosis	2
Dyspepsia	2
Vaginitis	2
Cystic swelling in vagina	1
Uterine tumour	1
Prolapse of uterus	1
Torn peritoneum	1
Dysmenorrhœa	1
Abscess of breast	1
Hæmorrhoids	1
Appendicitis	1
Other defects	13

Progress of pregnancies.

- (a) Of the 37 women who came in their first pregnancy
 25 were delivered before the end of 1924, having 16 boys and 9 girls
 2 had miscarriages
 1 has left the town and has not been traced
 9 were not delivered before the end of the year.
- (b) Of the 219 in their second or subsequent pregnancy
 169 were delivered before the end of the year; 8 had twins (7 boys and 9 girls), 82 had boys, and 73 had girls, and 6 had stillborn children
 4 had miscarriages
 3 left the district
 43 were not delivered before the end of the year.

Maternity outfits.—19 outfits were lent out and returned during the year.

OTHER PROVISION MADE BY THE LOCAL AUTHORITY.

Cases dealt with at Borough Hospital.—From the 1st April, 1924 (date of commencement of agreement) up to the end of the year, 11 cases were admitted into the Borough Hospital under the terms of the agreement; the number of bed-days being 209.

Cases dealt with by the Birkenhead District Nursing Society.—During the year the Society's nurses paid 1,620 visits to 71 cases, as per agreement between the Society and the Corporation. In addition 2 120 visits were paid to 90 cases in children under 5 years of age not included in the agreement.

Cases of confinements attended by medical practitioners.—In 100 cases where doctors were called in to difficult cases of confinement the doctors' fees were paid by the Corporation under the provisions of the Midwives Act, 1918.

Cases of temporarily necessitous cases attended by midwives.—In 2 cases where midwives attended temporarily necessitous cases of confinement the midwives' fees were paid by the Corporation under the provisions of the Maternity and Child Welfare Act, 1918.

AGENCIES ASSISTED BY THE LOCAL AUTHORITY.

The Corporation gives financial support to certain other institutions, etc., for general services rendered in connection with maternity and child welfare work.

Birkenhead Maternity Hospital.—Here 22 beds are provided for maternity cases, but no beds are specially set apart for patients sent from this department. Under the direction of the Hospital Committee a clinic for mothers and babies is held at Grange Mount, Birkenhead.

Birkenhead Day Nursery.—Here accommodation is provided for 24 day children and 14 boarders.

Birkenhead and Wirral Invalid Children's Association.—Arrangements are made by this association to send children to convalescent homes, and to provide massage treatment for cases of infantile paralysis, etc.

Birkenhead and District Rescue Association.—This association provides 34 beds at St. Faith's Home for unmarried mothers and their children—22 beds for babies and 12 for mothers.

The grants made by the Corporation to the above agencies for the current financial year were as follows:—

Birkenhead Maternity Hospital.....	£200
Birkenhead Day Nursery	75
Birkenhead and Wirral Invalid Children's Association	30
Birkenhead and District Rescue Association	50
	£355

AGENCIES NOT PROVIDED OR ASSISTED BY THE LOCAL AUTHORITY.

Other agencies whose work in Birkenhead touches the welfare of mothers and infants, but which are not provided or assisted by the Birkenhead Corporation, are the following:—

- The Birkenhead Union.
- The Birkenhead and Wirral Children's Hospital.
- The Charity Organisation Society.
- The Society for the Prevention of Cruelty to Children.
- The Naval and Military War Pensions Committee.
- The Sisters of Charity (St. Elizabeth's) Welfare Centre,
Claughton Road, Birkenhead.
- The Gynæcological Clinic at the Borough Hospital.

HEALTH OF SCHOOL CHILDREN.

ADMINISTRATIVE ARRANGEMENTS.

The arrangements made by the Birkenhead Education Committee for promoting the health of the children attending elementary and secondary schools in the Borough have been carried out during the past year on the general lines indicated in my annual report for 1921.

Staff.—During the year an arrangement was made between the Education Committee and the Health Committee, and received the approval of the Board of Education, by which the Assistant Medical Officers were appointed Assistant School Medical Officers. With the exception of Dr. Campbell Brown (who resigned in August) and Dr. A. R. Balmain (who succeeded Dr. Brown in October), the doctors engaged in school medical inspection and treatment devoted part only of their time to this work; Dr. Deacon, Dr. Foster and Dr. Lovell each carrying out medical examinations in schools and examinations at the general clinics.

Co-ordination with other health work.—As in previous years, there has been close co-ordination between the school medical service and the other public health arrangements of the borough.

Possible extensions in existing arrangements calling for consideration—

1. *Open-air school.*—I have once again to direct attention to the absence of arrangements in Birkenhead for open-air school teaching for delicate and physically subnormal children. The value of open-air schools has been proved beyond question, and the provision of such schools should be regarded as an essential part of the local education authority's arrangements.

The results obtained in open-air teaching have an important bearing on the question of the design and placing of school buildings generally and will more and more influence our conception of the desirable setting for educational work.

In a recent note for the "School Government Chronicle" I made the following reference to this subject:—

"There is a growing recognition of the need for careful selection of sites for new school buildings. It will be increasingly realised that schools should not be erected in congested, smoke-fouled, unhealthy and depressing parts of urban districts, but that so far as is possible they should be placed on the outskirts of towns, among healthy and inspiring surroundings.

"More consideration will be given to healthful design than has been done in the past. In particular, facilities for semi-open-air teaching will be provided, classrooms being so constructed that one side can be thrown completely open and an approximation to the wholesome clean-air conditions found in modern sanatoria arrived at.

"Again, the number of true 'Open-air Schools' is bound to increase. No one who has had experience of the transformation these schools can effect in the physique of children, and of the impetus they give to the development of increased power to resist disease, would hesitate to recommend their establishment in ever-increasing numbers.

"The period of school life is subordinate in importance only to the antenatal and birth-to-five-years-old periods in the physical economy of the individual. In the past much harm has undoubtedly been done by herding together school children for a great part of the day during those precious nine years in the stagnant, debilitating and frequently infected atmosphere of wrongly designed school buildings, where 'ventilation' has meant a meagre ration of air supplied from outside in the form of justly-resented draughts."

2. *Dental inspection and treatment.*—The provision for this work is still on the limited scale to which reference was made in my last annual report. No dental attention is being given to children now entering school, or who entered subsequent to 1921. The group which is being dealt with—children born in the years 1914, 1915, 1916—is receiving adequate inspection annually, and regular treatment, with excellent results; but the other children in the elementary schools remain outside the scope of the local authority's arrangements.

3. *Orthopædic scheme.*—The following scheme for the early detection, treatment, and after-care of children suffering from crippling conditions was submitted to the Education Committee in November, 1924. The scheme has been adopted by the Committee, and submitted to the Board of Education for approval.

DRAFT OF AN ORTHOPÆDIC SCHEME FOR CHILDREN IN BIRKENHEAD.

1. *The term "orthopædics."*—As the Committee are aware, the term "orthopædics" was originally applied to the study of deformities in children. It has by extension come to be employed in a wider sense, covering the study of crippling and deforming conditions in persons of all ages, and of the detection, treatment and prevention of such conditions.

2. *Need for orthopædic schemes.*—For some time the Board of Education has been urging upon the larger of the local education authorities the need for the establishment of orthopædic schemes in their districts. It is recognised that in an area which has no carefully organised and co-ordinated scheme the incidence of crippling must remain high, many cases will receive treatment too late to enable them to be dealt with advantageously, many will go untreated altogether, and the kindly and sympathetic activities of voluntary agencies, however efficient these may be, will be robbed of much of their potential usefulness.

3. *Cases to be dealt with.*—The cases which have to be dealt with in an orthopædic scheme include paralysis due to injury, or to an infectious disease which attacks the spinal cord; tuberculous

inflammation and destruction of the knee, hip, elbow, spine or other joints and their surrounding structure, producing deformities of the grossest and most disabling nature; deformities caused before or during birth; defective bone formation due to rickets; and distortions such as lateral curvature of the spine which arise from bad habits or faulty training. *The incidence of crippling conditions is highest in the pre-school period—from birth up to five years of age.*

4. *The extent of the problem.*—This naturally varies in different districts; thus, for example, rickets is much more prevalent in some districts than in others. The accepted view is that, taking the country as a whole, 13 out of every 1,000 children of school age suffer from crippling conditions; and that in 8 out of each 13 cripples the cause is tuberculosis. It may be assumed that the number of crippled children in Birkenhead is approximately 300, and that about 30 new cases occur each year.

5. *The objects of an orthopaedic scheme.*—These are—

1—Prevention.

2—Early detection.

3—Treatment (a) immediate.

(b) convalescent or after-care treatment.

6. *Prevention.*—I have placed this first, because it is the most important object to be kept in mind. There is nothing spectacular or superficially attractive about the prevention of disease; the more efficient preventive measures are, the less in the way of results there is to be seen or displayed, and the less important and necessary these measures appear to the uninstructed and perhaps uninterested onlooker. It is only when the mechanism of prevention and control becomes strained to breaking-point, and, say, an epidemic occurs, that the imagination is stirred and a lively interest awakened.

There is hardly one of the crippling conditions of childhood which is not preventable, and which will not, I am confident, in time be prevented. This will not be effected until there can be secured for our developing child-life clean air, clear sunlight, wholesome food and skilled physical training.

7. *Early detection.*—This comes next in importance to prevention. So long as the causes which produce crippling remain at work it is essential that every endeavour be made to aim at early discovery, so as to secure the application of treatment before marked deformity has occurred, and, if possible, in the pre-deformity stage.

8. *Treatment.*—The knowledge of the treatment of crippling conditions has been largely extended in recent years. It is based on the following:—

(a) Immobilisation of affected parts to secure complete rest.

(b) The application of splints and bandages to reduce and correct deformities.

(c) Later, the careful application of massage and electricity to build up wasted or undeveloped muscles and awaken functional activity.

(d) In particular cases, surgical operations for the removal of deformities.

- (e) Natural and artificial sun treatment, X-Rays, general hygienic measures, &c.

9. *Present special provision in Birkenhead.*—Special measures for dealing with cripples have been taken in Birkenhead by—

- (a) The municipality. Since August, 1914, the Health Committee of the Corporation have retained 12 beds at Leasowe Hospital for the treatment of cases of non-pulmonary tuberculosis. These beds have been kept constantly in use, the majority of the cases dealt with being tuberculous condition of bones and joints. The patients are selected by the Assistant Medical Officers and pass in the first instance through the Municipal Tuberculosis Clinic.

- (b) The Birkenhead and Wirral Invalid Children's Association. The work carried out by this Association dates back to 1916, and includes the provision of splints, spinal chairs, massage, remedial exercises, &c., and sending selected cases to convalescent homes. The Association is recognised by the Corporation and receives annual grants as follows:—

From the Education Committee	£40
From the Health Committee	£60
From the M. & C. W. Committee	£30

In addition, children receive operative and other treatment for crippling conditions at the Birkenhead Board of Guardians' Infirmary at Tranmere and at the Birkenhead and Wirral Children's Hospital, many being referred from the latter institution to the Invalid Children's Association for splints, massage, &c.

10. *Essentials of a scheme for Birkenhead.*—The essential elements of an orthopædic scheme are—

- (a) an orthopædic clinic.
- (b) hospital accommodation for non-tuberculous cases.
- (c) an orthopædic surgeon.
- (d) an orthopædic nurse.
- (e) a masseuse.
- (f) provision of splints, &c.

11. *Orthopædic clinic.*—This is the central unit and clearing-house of the scheme. To the clinic cases suffering from, or suspected to be suffering from, crippling conditions will be sent by medical practitioners practising in the area, by the Corporation's medical staff, by the staff of hospitals, &c., in the area, and by school teachers. At the clinic these cases will be examined and suitable treatment will be prescribed. At the clinic, also, certain forms of treatment will be carried out—massage, remedial exercises, fitting of splints, &c.

It would appear that the most suitable place for the Birkenhead Clinic is the premises occupied by the Birkenhead and Wirral Invalid Children's Association. These are central, and close to the other clinics; the premises (which are the property of the Education Committee and are let to the Invalid Children's Association by the Committee at an inclusive rental of £75 per annum) are already

equipped for carrying on remedial exercises, &c., and skilled staff is available. The most convenient time would appear to be Saturday mornings.

12. *Hospital accommodation.*—Provision for hospital treatment should be made at Leasowe Hospital; the Education Committee providing for non-tuberculous conditions, and thus supplementing the provision already made by the Health Committee for tuberculous conditions.

The patients dealt with will include short-stay cases (tenotomies, wrenchings, &c.), remaining in hospital for a few days only; but for others a longer stay will be necessary (operation of osteotomy for rickets, congenital deformities, &c.).

It does not appear desirable that the Committee should retain beds at the hospital, at any rate for the present. An arrangement should rather be made for payment on a patient-day basis. From inquiries which I have made I gather that an arrangement of this kind would be acceptable to the hospital authorities.

As to cost, it would appear that a sum of £150 should be inserted in the estimates of the first year's working to cover this item.

13. *Orthopædic surgeon.*—It is essential that the services of a specialist orthopædic surgeon be obtained in connection with the clinic. Approximately one attendance per month will probably be found necessary during the first year of working, though a few additional attendances may be found necessary from time to time—for example at the outset, when some accumulation of cases may have to be dealt with.

In view of the fact that Mr. Hartley Martin, the Senior Surgeon of Leasowe Hospital, has charge of all the tuberculous cripples at present sent to hospital from the area by the municipality, and on the assumption that non-tuberculous cases requiring hospital treatment will also be sent to Leasowe, I have to recommend that the services of Mr. Hartley Martin should if possible be secured for the orthopædic clinic.

14. *Orthopædic nurse.*—A nurse specially trained in orthopædic work should be in attendance at the orthopædic clinic every Saturday morning. On the mornings when the surgeon is in attendance she will assist him; on the other mornings she will receive new cases, supervise treatment, fit splints, &c.

Mr. Hartley Martin, I am informed, has a specially trained nurse (on the staff of Leasowe Hospital) who assists him at other clinics which he attends. It would appear to be desirable that the services of this nurse be obtained.

15. *Massage; remedial exercises; provision of splints, &c.*—The Birkenhead and Wirral Invalid Children's Association employs one masseuse for seven sessions per week, and another for five sessions per week. The Association also provides splints, &c., and renders other services to patients. I have to recommend that the Association be requested to continue to carry out those services under the new scheme.

As regards payment for this work and for the use of premises; the Committee will recollect that an annual grant of £40 is paid to the Association in recognition of work done at present (see above, paragraph 9) and that the premises at 46, Albion Street are let to the Association with the proviso that the Committee may have the use of them for clinic purposes on Saturday mornings.

It would not appear to be necessary to make any new financial arrangement with the Association at the present time, although this matter may require reconsideration in the light of experience.

16. *General supervision.*—The Board of Education require that the Committee's Chief Medical Officer should be the administrative Medical Officer for the scheme. The detailed working of the scheme should be subject to the general supervision and approval of the Medical Officer, acting on behalf of the Education Committee.

17. *Co-operation of medical practitioners, &c.*—It is of the greatest importance to the success of the scheme that the co-operation of the general medical practitioners in the area and of the medical staff of the Birkenhead and Wirral Children's Hospital and of the other medical institutions in Birkenhead should be secured.

18. *Future developments.*—In this report I intentionally make no reference to certain developments which may call for consideration at a later date, such as the provision of special vocational training for cripple children up to and beyond the age of 16, or the provision of convalescent and recovery hospital accommodation.

19. *Provisional estimate of cost.*—The following is a provisional estimate of the cost for one year of the scheme outlined above:—

Treatment at Leasowe Hospital	£150
Orthopædic surgeon: fees	50
Orthopædic nurse: part of salary	20
Payment to Birkenhead and Wirral Invalid Children's Association	40
Sundries and contingencies	10
Total	£270
Deduct Government grant	135
Net annual cost to Education Committee	£135

MEDICAL INSPECTION AND TREATMENT (ELEMENTARY SCHOOLS).

(A) INSPECTION.

Number of elementary schools and school children.—The number of elementary schools in the borough is:

Council Schools	16	
Voluntary Schools	19	Total 35

The recognised accommodation of these schools on the 31st December, 1924, was:

Council Schools	13,284	
Voluntary Schools	12,715	Total 25,999

The average number of scholars on the rolls during the year was:

Council Schools	11,493	
Voluntary Schools	12,398	Total 23,891

The average attendance was:

Council Schools	10,014	
Voluntary Schools	10,772	Total 20,786

Children inspected.—The following elementary school children were medically inspected during the year:—

1. At Routine Inspections	7529
2. At Special Inspections in the ordinary schools	260
3. As prospective entrants to the Institute for Boys, the Girls' Secondary School, St. Francis Xavier's College and the Catholic Institute	243
4. As entrants to the Cloughton Road Special School for Mental Defectives	46
5. Under the Employment of Children Bye-laws	170
Total	8,248

The numbers examined in each school are given in Table S 7.

Re-examination of defective children.—During the year 1,198 children who at a previous examination had been found to require medical care were re-examined by the Assistant Medical Officers.

Co-operation of parents.—Parents attended at the examination of 4,740 (62.9 per cent.) of the 7,529 children dealt with at routine inspections; and 235 (96.7 per cent.) of the 243 prospective entrants to secondary schools.

Vaccination.—In the ordinary inspections children were examined as to vaccination marks. Of the 7,529 children examined

1590 (21.1%) showed no marks.
2530 (33.6%) showed one mark.
881 (11.7%) showed two marks.
305 (4.1%) showed three marks.
2223 (29.5%) showed four or more marks.

Infectious diseases.—Enquiry was made at each inspection as to the infectious diseases from which the children had suffered in the past. The information elicited is summarised in Table S 5.

Defects found requiring medical or dental treatment.—Out of the 7,789 children inspected at routine and special inspections, 1,807 were found to have defects requiring medical attention. The defects found were as follows:—

<i>Skin Diseases.</i>	Code Group.	Special Cases.
Ringworm	14	7
Scabies	21	1
Impetigo	19	16
Other diseases	16	12

<i>Eye Defects.</i>		
Defective vision and squint (for further details see Table S 2	411	102
External eye disease	40	16
<i>Ear Defects</i>		
Defective hearing	16	4
Ear disease	30	10
<i>Teeth Defects</i>	461	7
<i>Nose and Throat Defects.</i>		
Enlarged tonsils	126	5
Enlarged tonsils and adenoids	83	3
Adenoids	44	6
<i>Pulmonary Tuberculosis.</i>		
Definite	1	—
Suspected	15	—
<i>Non-Pulmonary Tuberculosis.</i>		
Glands	2	—
Other forms	3	1
<i>Other Defects or Diseases</i>	417	60

A full statement regarding the defects found, setting out the number of defective children, is given in Table S 2. In Table S 7 the defective children are classified according to the schools attended.

(B) TREATMENT.

The parents or guardians of all children found at routine examinations to be defective are informed immediately of the need for medical advice or treatment. Such parents are visited at their homes by the Health Nurses and urged to obtain this advice or treatment, the Assistant Medical Officers making periodical re-examinations in the schools to ascertain what action has been taken.

During the past year the Health Nurses paid 1,544 visits to the homes of defective children in connection with "following up"—1,117 first visits and 427 re-visits; and 1,198 defective children were re-examined by the Assistant Medical Officers. In addition, the Nurses paid 17 special visits.

Head teachers can do much to ensure that the scheme of school medical inspection bears fruit in the way of an improved standard of health among children of school age. The teacher who realises the educational importance of good health to the scholar can by active co-operation with doctors and nurses help very materially to achieve that end; it is therefore highly gratifying to note the increasing interest shown by the teaching profession in the work of the school medical service.

Treatment of children found, at medical inspections held during 1924, to be suffering from defects which required medical attention.—As has been stated above, 1,807 out of the 7,789 children examined at routine or special inspections in elementary schools during 1924 were found to be suffering from defects requiring medical attention; of these 1,807, 434 or 24 per cent. received treatment before the end of the year.

Details of the various types of ailment treated will be found in Table S 4.

Treatment carried out at the Eye Clinic.—Children who were found by the Assistant Medical Officers to require spectacles, and whose parents were not in a position to secure the necessary attention privately, were seen at the Eye Clinic by Dr. Campbell Brown in the earlier, and by Dr. A. R. Balmain in the later part of the year.

During the year 312 new cases were examined, 485 children attended for re-examination, and 518 pairs of spectacles were supplied. The total cost of all the spectacles which were ordered during the year was £109 4s. 8d.; of this, £80 7s. 1d. was recovered from the parents.

The following is a summary of the visual defects of cases (new or re-examined) for whom spectacles were prescribed during the year:—

			%
Hypermetropic group:	Hypermetropia	117	20.7
	Hyp. Astigmatism	226	39.9
Myopic group:	Myopia	70	12.3
	Myopic Astig.	75	13.2
	Mixed Astig.	54	9.5
Heterometropia		21	3.7
Emmetropia		4	.7
		567	100

The following conditions were also recorded among the new cases who attended the clinic:—

Cataract	2
Nystagmus	2
Coloboma iris and choroid	1
Corneal opacities	4
Optic neuritis	2
Optic atrophy	1
Conical cornea	1
Amblyopia	1

The cases of strabismus in new cases noted during the year were as follows:—

Convergent: Right eye, 18; left eye, 21; alternating, 2; double, 2.
Divergent: Left eye, 1.

Treatment carried out at the X-Rays Clinic.—Comparison with last year's figures shows a notable decrease in the number of cases of ringworm of the scalp. There can be little doubt that for this decrease treatment by X-Rays has been largely responsible, the rapidity of this treatment reducing greatly the period of infectivity of the disease and so minimising its spread from affected cases to other children.

During the year 55 cases were treated at the X-Rays Clinic, 53 for ringworm, 1 for favus, and 1 for alopecia. This number comprised 33 boys and 22 girls, of whom the average age was 8 years.

231 exposures to X-Rays were given; the average duration of exposure, which is strictly regulated by the pastille dose, was about 14 minutes. In most cases the whole scalp was done; this means an exposure to 5 separate areas of the head in order to ensure complete depilation.

All cases treated did well, with one exception. The hair fell out in 12 to 21 days and the new hair usually presented the soft, silky and curly appearance so characteristic after this treatment.

The exception is a case of alopecia not due to ringworm, and it is doubtful if any treatment will be of avail in this case.

No cases of X-Rays burns were noted during the year.

Children are allowed to return to school as soon as depilation is complete, viz., in about three weeks to a month from commencement of treatment.

Treatment carried out at the General School Clinic.—At this Clinic treatment is given for such defects as otitis media, external eye disease, impetigo, scabies, ringworm, etc.

The scheme for the treatment of cases of malnutrition, etc., was continued, as described in the annual report for 1920.

Details of the work will be found in Tables S 4 and S 6.

The number of children who received treatment at this Clinic was 1,952; the new cases seen during the year numbered 1,673; the total attendances numbered 9,583.

Treatment of uncleanliness.—The average number of visits paid during 1924 by the Health Nurses to each school was 12.3.

The total number of examinations of children made by the nurses in the schools was 19,696.

The number of individual children found unclean was 5,218.

The attention of the parents was directed to the condition of these children, and a considerable improvement was, in the aggregate, obtained.

The number of notices served on parents was 65.

The number of children compulsorily cleansed was 30.

115 home visits were paid; 88 first visits and 27 re-visits.

DENTAL INSPECTION AND TREATMENT (ELEMENTARY SCHOOLS).

(A) INSPECTION.

Scope of past year's work.—The work of dental inspection and treatment proceeded during 1924 on the lines of the curtailed scheme decided upon by the Education Committee and described in my annual report for 1922. This scheme was practically limited to the periodical re-inspection and treatment of *those children who had been examined in the original dental inspection* which was carried out during 1921 and the first part of 1922.

Number inspected.—4,667 children were dentally inspected during the year as follows:—

Aged eight years	895
Aged nine years	2418
Aged ten years	1354
	4667

The figures for the preceding year (1923) were:—

Aged seven years	1353
Aged eight years	2260
Aged nine years	169
	3782

Number requiring dental treatment.—Of the 4,667 children inspected, 2,454 (52.6%) were selected as requiring treatment, the parents being advised to obtain this treatment privately, or, if unable to do this, at the Dental Clinic.

Cleanliness of teeth.—The children examined were classified according to cleanliness of teeth as follows:—

Clean	1830
Fairly clean	2294
Dirty	543
	4667

Condition of gums.—The following figures show the condition of the gums of the children examined:—

Gums healthy	3869
Gums inflamed	535
Gums septic	263
	4667

Condition of bite.—This was found to be as set out below:—

Bite good	2979
Bite fair	1277
Bite bad	411
	4667

(B) TREATMENT.

Notices were sent out to the parents of the 2,454 children found to require dental treatment, with the following results:—

Refused to have treatment done	245	(10.0%)
Stated that treatment would be obtained privately ...	631	(25.7%)
Requested treatment at the Dental Clinic	1578	(64.3%)
	2454	

Treatment at the Dental Clinic.—Of the 1,578 children for whom treatment at the clinic was requested

1239 were treated before the end of the year	
293 did not attend when sent for	
46 were awaiting treatment at the end of the year	
1578	

In addition to the above 1,239 children treated at the clinic following on inspections held in 1924, 11 were treated who had been inspected in 1923 and had not been treated before the end of that year; and 302 children who were brought by the parents of their own initiative to the clinic were also treated. The total number of children treated at the clinic during 1924 was therefore

Following on 1923 inspections	11
Following on 1924 inspections	1239
Brought by parents of their own initiative	302
	1552

Details of treatment carried out.—This was as follows:—

Temporary teeth extracted	1774
Temporary teeth filled	132
Permanent teeth extracted	73
Permanent teeth filled	1310
Total extractions	1847
Total fillings	1442
Anæsthetics—general	—
local	1083
Scalings	1138
Dressings	510

The total attendances at the clinic numbered 1,940.

The number of treatments completed during the year was 1,414.

MEDICAL INSPECTION AND TREATMENT (SECONDARY SCHOOLS AND CONTINUATION SCHOOLS.)

The powers and duties of local education authorities with regard to medical inspection and treatment in secondary schools and continuation schools are set out in Section 80 of the Education Act, 1921.

This Section makes it the *duty* of the local education authority to provide for the medical inspection of pupils in certain specified classes of schools, and also in such other schools or educational institutions (not being elementary schools) provided by them as the Board may direct. The Section does not *require* provision to be made for the medical inspection of pupils in secondary schools which are *not provided* by an authority, or in certain other higher education institutions not specifically referred to in the Section or directed by the Board of Education. It is, however, the expressed opinion of the Board that the pupils in such institutions will equally benefit from systematic medical inspection; and the Section *empowers* local education authorities to provide for the medical inspection of pupils attending *any* school or educational institution, whether aided by them or not, *if so requested by or on behalf of the persons having the management thereof*.

Schools at which medical inspection is carried out.—Medical inspection is arranged for at the following schools:—

	No. on Roll.
(a) Provided by the Local Education Authority—	
The Birkenhead Institute (Boys)	529
The Girls' Secondary School	362
(b) Not provided by the Local Education Authority—	
The Higher Tranmere High School for Girls	224

There are no continuation schools provided by the local education authority at which medical inspection has to be carried out.

Scope of medical inspection.—The existing arrangements provide for the examination of every child in the schools inspected once in each year; and for the re-examination of children found to be defective.

The opinion of the Board of Education in this connection is expressed in Circular 1153:—"In view of the many defects that may arise during the critical period of adolescence, the Board attach great importance to arrangements being made for all pupils to come annually, as a matter of routine, under medical supervision."

Birkenhead Institute.—At the annual inspection (held in December, 1924) 417 children were inspected. Included in that number there were 64 children now examined for the first time as secondary school children. 107 were found to have defects requiring medical or dental advice, the defects found being as follows:—

Defective teeth	52
Defective vision	17
Nose and throat defects	20
Deformities	9
Heart disease	6
Other defects	5

Girls' Secondary School.—At the annual inspection 347 girls were examined—306 in the senior school and 41 in the junior school.

Included in the above total (347) there were 54 children now examined for the first time as secondary school children.

Of the 347 children examined, 95 were found to have defects requiring medical or dental attention; the defects found being as follows:—

Defective teeth	64
Defective vision	26
Deformities (spinal curvature, pigeon chest, etc.)	4
Heart and circulation defects	4
Nose and throat defects	5
Skin disease	1
Other defects	4

All the children found to be defective were kept under observation and re-inspected later in the year. By the end of the year 56 out of the 95 had received appropriate treatment as shown below:—

	Treated by end of year	Per- centage.
Defective teeth	29	45
Defective vision	17	65
Deformities	4	100
Heart, etc., defects	2	50
Nose and throat defects	2	40
Skin diseases	1	100
Other defects	4	100

Higher Tranmere High School for Girls.—34 girls were examined. Of these 4 were found to have defects requiring medical or dental treatment. The defects were as follows:—

Defective teeth	3
Defective vision	1

MISCELLANEOUS.

Examination of entrants to the Girls' Secondary School, the Birkenhead Institute, St. Francis Xavier's College, and the Catholic Institute.—During the year 106 elementary school children were examined with a view to their admission to the above schools and to the new secondary schools for boys which are being provided by the Committee. 33 were found to require treatment for 35 defects, the latter being as follows:—

Defective teeth	23
Eye defects	10
Nose and throat defects	1
Other defects	1
	35

The Special School for Mentally Defective Children.—The accommodation at the Special School for the year 1924 was 154. The average number on the rolls during the year was 138, and the average daily attendance was 114.

Six visits were paid to the school during the year by the Assistant Medical Officer. At these visits examinations were held of children suspected to be mentally deficient, with reference to their suitability for admission to the Special School. The results were as follows:—

Total number examined—Boys	40	
Girls	6	
		46
Number certified for admission—Boys	26	
Girls	4	
		30
Number not certified for admission—		
(a) Regarded as fit for ordinary school—Boys...	12	
Girls..	2	
		14
(b) Recommended for admission to School for the Blind—Boys	1	
Girls	—	
		1
(c) Recommended for Home for Epileptics—		
Boys	1	
Girls	—	
		1

As it is not possible to admit all the children nominated for the Special School, a careful selection is made from those presenting themselves for examination. Those children who are found capable of profiting from the ordinary instruction of their own school are not admitted, nor, on the other hand, are totally ineducable children.

23 children were permitted to leave the school after medical examination, as follows:—

Fit for work	12
*Left over 16 years of age	4
Transferred to elementary schools	3
Physically unfit	1
Died	1
Left the district	1
Referred to Mental Deficiency Act Committee	1
Total	23

*These will be followed up by the Voluntary Care Committee.

Of the 12 children who left to take up work—

2 are employed as domestic servants;
2 are employed as errand boys;
4 are employed in a shipyard;
1 is employed in a boatbuilding yard;
2 are employed in dairies;
1 is usefully employed at home.

The average ages of the children attending the school, and their classification, are shown below:—

CLASS.	BOYS AVERAGE AGE.	GIRLS AVERAGE AGE.
Class 1—Boys.....	12½	—
Class 2—Boys and Girls	12	12
Class 3—Boys.....	11	—
Class 4—Boys and Girls	9¾	11
Class 5—Boys and Girls	9	9½
Class 6—Boys and Girls	9	9

School dinners have been provided throughout the year at a cost to the parent of 2d. per day.

Daily average supplied 85
Total cost for the year.....£141/10/-

The weekly menu was:—

MondayScotch broth; boiled suet pudding.
TuesdayIrish stew; currant pudding.
Wednesday...Minced meat and potatoes; sago pudding.
Thursday ...Soup; fig or date pudding.
Friday.....Potato pie.

Provision of meals.—No figures are available for the calendar year 1924. During the financial year—1st April, 1924, to 31st March, 1925, 1,221 children have been supplied with 111,734 meals. Meals were provided five days per week, with the exception of Bank and Public Holidays.

Birkenhead and Wirral Invalid Children's Association.—During the year cases of deformity, paralysis, etc., were from time to time referred to this Association, and valuable assistance was given—massage and other suitable treatment being provided.

The following table shows the number of massage cases among children of school age dealt with by the Association during the year:—

	Sent from School Clinics	Other cases	Total
Children under treatment at the end of 1923	34	17	51
New children treated during the year	31	16	47
Children discharged during the year—Sent to hospitals or died	13	6	19
Children who ceased attending before completion of treatment or left the town ..	14	9	23
Children under treatment at end of 1924	38	18	56

The 65 cases referred from the school clinics to the Association were as follows:—

Disease	No. of cases
Scoliosis	5
Spinal curvature	5
Chest deformity	2
Infantile paralysis	9
Bronchitis (chronic)	4
Rickets and pigeon chest	15
Depressed sternum	5
Post-pneumonia	1
Stiff arm from accident	1
Loss of power right arm	1
Debility	3
Round shoulders	7
Knock knee	1
Old surgical Tb.	1
Wasted muscles	1
Rheumatic joints	1
Flat feet	1
Lordosis	1
High shoulders	1
	—
	65
	—

Assistance has also been given to children of school age in the following ways:—

	Sent from School Clinics	Other cases	Total
Children supplied with milk	119	93	212
Children supplied with tonics	204	150	354
Children supplied with surgical apparatus..	7	90	97
Children sent to convalescent and country hospitals	45	41	86

In every case the parents pay something towards the cost of treatment.

TABLE S 1.

Return of Medical Inspections during 1924 (see note *a*).

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections (see note <i>b</i>)	
Entrants	2389
Intermediates	2478
Leavers	2662
Total	7529

Number of other routine inspections (see note *c*)

B.—OTHER INSPECTIONS.

Number of special inspections (see note <i>d</i>)	2961
Number of re-inspections (see note <i>e</i>)	1198
Total	4159

NOTES ON TABLE S 1.

(a) The return refers to a complete calendar year.

(b) This heading relates solely to the routine medical inspection of the three ordinary age groups, *i.e.*, to medical inspections carried out:—

(i) in compliance with Article 7 of the Consolidated Regulations relating to Special Services—Grant Regulations No. 19.

(ii) on the school premises (or at a place specially sanctioned by the Board under Article 44 (*h*) of the Code);

(iii) for the purpose of making a report on each child on the lines of the approved Schedule set out in Circular 582.

(c) Under this heading may be recorded *routine* inspections, if any, of children who do not fall under the three code age-groups, *e.g.*, *routine* inspections of a fourth age-group or of other groups of children, as distinct from those who are individually selected on account of some suspected ill-health for a "Special" Inspection.(d) A Special Inspection is a medical inspection by the School Medical Officer himself or by one of the Assistant Medical Officers on his staff of a child specially selected or referred for such inspection, *i.e.*, not inspected at a routine medical inspection as defined above. Such children may be selected during a visit to the school or may be referred for inspection by the teachers, health nurses, attendance officers, parents, or otherwise. It is immaterial for the purpose of this heading whether the children are inspected at the school or at the Inspection Clinic or elsewhere. If a child happens to come before the School Medical Officer for special inspection during a year in which it falls into one of the routine groups, its routine inspection is entered in Part A of Table S 1 and its special inspection in Part B. The inspection to be recorded under the heading of special inspections is only the first inspection of the child so referred for a particular defect. If a child who has been specially inspected for one defect is subsequently specially inspected for another defect, such subsequent inspection is recorded as a special inspection and not as a re-inspection.

(e) Under this heading are entered the medical inspections of children who as the result of a routine or special inspection come up later on for subsequent re-inspection, whether at the school or at the inspection clinic. The first inspection in every case is entered as a routine or special inspection as the case may be. Every subsequent inspection of the same defect is entered as a re-inspection.

Nothing is included under the head of special inspections or re-inspections except such inspections as are defined above. Attendances for treatment by a nurse or for examinations by anyone other than a doctor on the staff of the School Medical Service are not recorded as medical inspections. If, however, at any such attendance, a child is also examined by a member of the authority's medical staff, this is recorded as a special inspection or re-inspection as the case may be, even if treatment is also given; but such attendance may also of course be recorded as an attendance for treatment.

TABLE S 2.

A Return of Defects found by Medical Inspection during the year ended 31st December, 1924.

Defect or disease (1)	Routine Inspections		Special Inspections	
	No. of defects		No. of defects	
	Requiring treatment (2)	Requiring to be kept under observation, but not requiring treatment (3)	Requiring treatment (4)	Requiring to be kept under observation, but not requiring treatment (5)
Malnutrition	12	—	14	1
Uncleanliness	—	—	—	—
(See Table S 4, Group V.)				
Skin	12	—	131	—
Ringworm—Scalp	2	—	72	—
Body	21	1	50	—
Scabies	19	—	454	—
Impetigo	16	—	134	—
Other diseases (non-tuberculous)	24	—	79	—
Eye	6	1	130	—
Blepharitis	1	—	4	—
Conjunctivitis	2	1	—	—
Keratitis	2	1	—	—
Corneal opacities	342	7	143	—
Defective vision (excluding squint)	69	4	41	—
Squint	7	3	67	—
Other conditions	16	—	6	—
Ear	25	—	140	—
Defective hearing	5	—	37	—
Otitis media	128	47	32	—
Other ear diseases	44	2	9	—
Nose and throat	83	3	15	—
Enlarged tonsils only	25	1	138	1
Adenoids only	23	17	17	—
Enlarged tonsils and adenoids	2	1	1	—
Other conditions	461	1	46	—
Enlarged cervical glands (non-tuberculous)				
Defective speech				
Teeth				
Dental diseases (see note a)				
(See Table S 4, Group IV.)				
Heart and circulation—				
Heart disease—Organic	16	3	9	—
Functional	5	4	19	—
Anæmia	43	3	48	4
Lungs	42	18	82	2
Bronchitis	82	—	119	4
Other non-tuberculous diseases	1	1	3	—
Tuberculosis	15	—	5	1
Pulmonary—Definite	2	—	2	—
Suspected	—	—	—	—
Non-pulmonary—Glands	—	—	—	—
Spine	—	—	—	—
Hip	1	—	3	—
Other bones and joints	—	—	—	—
Skin	2	—	1	—
Other forms	1	—	3	—
Nervous system	2	—	30	2
Epilepsy	5	3	9	—
Chorea	2	—	2	—
Other conditions	6	—	5	—
Deformities	18	4	14	—
Rickets	133	10	924	8
Spinal curvature				
Other forms				
Other defects and diseases				

TABLE S 2—Continued.

B. Number of *individual children* (see note *b*) found at *routine medical inspection* to require treatment (excluding uncleanness and dental diseases).

Group. (1)	Number of children.		Percentage of children found to require treatment (see note <i>d</i>). (4)
	Inspected (see note <i>c</i>). (2)	Found to require treatment. (3)	
CODE GROUPS:			
Entrants.....	2389	402	16.8
Intermediates.	2478	580	23.4
Leavers	2662	582	21.9
Total (code groups)	7529	1564	20.8
Other routine inspections.....	—	—	—

NOTES ON TABLE S 2.

(a) The figures included in this space refer to the findings of the Medical Staff and not those resulting from dental inspection in the schools by the School Dental Surgeon. The findings of the School Dental Surgeon are recorded in Table S 4 Group IV

(b) No individual child is counted more than once in this part of Table S 2, *i.e.*, under B., even if it is found to be suffering from more than one defect.

(c) The figures in this column are the same as those given in Table S 1 A.

(d) The figure in this column is the percentage of the figure in column (3) of that in column (2).

TABLE S 3.

Return of all exceptional children in the area (see note a).

			Boys	Girls	Total
<i>Blind</i> (including partially blind) (see note b)	(i) Suitable for training in a school or class for the totally blind	Attending certified schools or classes for the blind	4	3	7
		Attending public elementary schools (see note c)	1	-	1
		At other institutions	-	-	-
		At no school or institution	-	-	-
	(ii) Suitable for training in a school or class for the partially blind	Attending certified schools or classes for the blind	-	-	-
		Attending public elementary schools (see note c)	4	5	9
		At other institutions	-	-	-
		At no school or institution	-	-	-
<i>Deaf</i> (including deaf and dumb and partially deaf) (see note d)	(i) Suitable for training in a school or class for the totally deaf or deaf and dumb	Attending certified schools or classes for the deaf	4	5	9
		Attending public elementary schools (see note c)	-	-	-
		At other institutions	-	-	-
		At no school or institution	-	-	-
	(ii) Suitable for training in a school or class for the partially deaf	Attending certified schools or classes for the deaf	-	-	-
		Attending public elementary schools (see note c)	-	-	-
		At other institutions	-	-	-
		At no school or institution	-	-	-
<i>Mentally defective</i>	Feeble-minded (cases not notifiable to the Local Control Authority.) (see note e.)	Attending certified schools for mentally defective children	96	42	138
		Attending public elementary schools (see note c)	-	-	-
		At other institutions	-	-	-
		At no school or institution	-	-	-
	Notified to the Local Control Authority during the year	Feeble-minded	1	-	1
		Imbeciles	-	-	-
		Idiots	-	-	-
			-	-	-
<i>Epileptics</i>	Suffering from severe epilepsy (see note f)	Attending certified special schools for epileptics	2	-	2
		In institutions other than certified special schools	2	-	2
		Attending public elementary schools (see note c)	-	-	-
		At no school or institution	-	1	1
	Suffering from epilepsy which is not severe (see note g)	Attending public elementary schools (see note c)	3	2	5
		At no school or institution	-	-	-
			-	-	-
			-	-	-
<i>Physically defective</i>	Infectious pulmonary and glandular tuberculosis (see note h)	At sanatoria or sanatorium schools approved by the Ministry of Health or the Board	1	5	6
		At other institutions	-	-	-
		At no school or institution	1	2	3
			-	-	-
	Non-infectious but active pulmonary and glandular tuberculosis (see note h)	At sanatoria or sanatorium schools approved by the Ministry of Health or the Board	10	7	17
		At certified residential open air schools	-	-	-
		At certified day open air schools	-	-	-
		At public elementary schools (see note c)	11	10	21
		At other institutions	-	1	1
		At no school or institution	4	3	7
			-	-	-
			-	-	-
			-	-	-

TABLE S 3—Continued.

<i>Physically defective (continued)</i>	Delicate children (<i>e.g.</i> , pre-or latent tuberculosis, malnutrition, debility, anæmia, etc. (see note <i>h</i>))	At certified residential open air schools	—	—	—
		At certified day open air schools.....	—	—	—
		At public elementary schools (see note <i>c</i>).....	5	5	10
		At other institutions	1	—	1
		At no school or institution	—	4	4
	Active non-pulmonary tuberculosis (see note <i>h</i>)	At sanatoria or hospital schools approved by the Ministry of Health or the Board	12	8	20
		At public elementary schools (see note <i>c</i>).....	2	1	3
		At other institutions	2	—	2
		At no school or institution	1	1	2
	Crippled children (other than those with active tuberculous disease), <i>e.g.</i> , children suffering from paralysis, &c., and including those with severe heart disease (see note <i>h</i>)	At certified hospital schools	—	—	—
		At certified residential cripple schools	1	—	1
		At certified day cripple schools	—	—	—
		At public elementary schools (see note <i>c</i>).....	2	3	5
		At other institutions	—	2	2
		At no school or institution	1	3	4

NOTES ON TABLE S 3.

(a) This Table is a return of all children in the area for whom the Local Education Authority are responsible and who (except in the case of children suffering from epilepsy which is not severe) have been ascertained to be blind, deaf, defective or epileptic within the meaning of Part V of the Education Act 1921. It is the statutory duty of every Local Education Authority formally to ascertain all defective children in their area irrespective of the actual provision now made for their instruction in Special Schools. It is assumed by the Board of Education that every authority will have a complete list of such children compiled from returns made continuously during the year and kept constantly up to date. In order to secure uniformity, authorities are requested to make up this Table from their list of defective children as it stands on the last day of each calendar year.

Children who are living in residential schools in the area but who come from other areas are not included in this Table; but children are included who are living in residential schools outside the area and who are being maintained there by the authority.

For the purpose of this Table no child is included whose defect has not been ascertained by the School Medical Officer or a medical member of the authority's staff.

The definitions of defective children as given in the Act are as follows—

A blind child is a child who is too blind to be able to read the ordinary school books used by children.

A deaf child is a child who is too deaf to be taught in a class of hearing children in an elementary school.

Mentally and physically defective children are children who, not being imbecile and not being merely dull and backward, are defective, that is to say, children who by reason of mental or physical defect are incapable of receiving proper benefit from the instruction in the ordinary public elementary schools, but are not incapable by reason of that defect of receiving benefit from instruction in such special classes or schools as under Part V of the Act may be provided for defective children.

Epileptic children are children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary public elementary schools.

NOTES ON TABLE S 3—Continued.

(b) For the purpose of this return the Board require that children who are blind within the meaning of the Act should be divided into two categories, *i.e.*, (1) those who are totally blind or so blind that they can only be appropriately taught in a school or class for totally blind children, and (2) those who though they cannot read ordinary school books, or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school or class for the partially blind.

It should be understood that children who are able by means of suitable glasses to read the ordinary school books used by children without fatigue or injury to their vision, are not included in this Table.

(c) The Board emphasises the fact that it should be understood that none of the children in this Table (except children suffering from epilepsy which is not severe) should in fact be attending public elementary schools. When the heading is retained, it is merely because at present the insufficiency of Special School accommodation makes it impossible to do better for some defective children than to allow them to attend the ordinary school. No space is left for the entry of children with infectious pulmonary tuberculosis attending public elementary schools, as these children should, of course, be promptly excluded from such schools.

(d) Children who are deaf within the meaning of the Act are classified for the purpose of this Table as (1) totally deaf or so deaf that they can only be appropriately taught in a school or class for the totally deaf, and (2) partially deaf, *i.e.*, those who can appropriately be taught in a school or class for the partially deaf.

(e) This category includes only those children for whose education and maintenance the Local Education Authority are responsible, and who are not eligible for notification to the Local Control Authority under the Mental Deficiency Act.

(f) In this part of the Table only those children are included who are epileptic within the meaning of the Act.

(For practical purposes the Board are of opinion that children who are subject to attacks of major epilepsy in school should be recorded as "severe" cases and excluded from ordinary public elementary schools.)

(g) In this part of the Table are entered the remainder of the epileptic children in the area, *i.e.*, children whose disease is of such a kind as not to unfit them for attendance at an ordinary public elementary school.

(h) The exact classification of physically defective is admittedly a matter of difficulty. The Board request School Medical Officers to record these defective children as accurately as possible under the selected sub-headings, taking care that *no child is entered under more than one sub-heading.*

TABLE S 4.

Return of Defects treated during the year ended 31st December, 1924
(see note a).

TREATMENT TABLE.

Group I.—Minor Ailments (excluding uncleanness, for which see Group V).

Defect or disease (1)	Number of defects treated, or under treatment during the year		
	Under the Authority's scheme (see note b.) (2)	Otherwise (3)	Total (4)
Skin—Ringworm—scalp	119	—	119
body	71	—	71
Scabies	46	6	52
Impetigo	437	1	438
Other skin diseases	109	1	110
Minor eye defects	265	5	270
(external and other, but excluding cases falling in Group II.)			
Minor ear defects	165	6	171
(see note c)			
Miscellaneous	565	41	606
(e.g., minor injuries, bruises, sores, chilblains, &c.)			
Total ..	1777	60	1837

Group II.—Defective Vision and Squint (excluding minor eye defects treated as minor ailments—Group I.)

Defect or disease (1)	Number of defects dealt with			
	Under the Authority's scheme (see note b.) (2)	Submitted to refraction by private practitioner or at hospital, apart from the Authority's scheme (3)	Otherwise. (4)	Total (5)
Errors of refraction (including squint) (operations for squint should be recorded separately in the body of the report)	567	24	—	591
Other defect or disease of the eyes (excluding those recorded in Group I)	12	—	—	12
Total	579	24	—	603

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's scheme 537
(b) Otherwise 24

Total number of children who obtained or received spectacles—

(a) Under the Authority's scheme 518
(b) Otherwise 24

TABLE S 4—Continued.

Group III.—Treatment of Defects of Nose and Throat.

Number of defects.				
Received operative treatment.			Received other forms of treatment.	Total number treated.
Under the Authority's scheme, in clinic or hospital (see note b. (1))	By private practitioner or hospital, apart from the Authority's scheme. (2)	Total. (3)		
—	15	15	10	25

Group IV.—Dental Defects.

(1) Number of children who were—		
(a) Inspected by the Dentist—		
Routine age groups—aged 8	895	
aged 9	2418	
aged 10	1354	
Special (see note d)	4667	
	—	4667
(b) Found to require treatment	2454	
(c) Actually treated	1552	
(d) Re-treated during the year as the result of periodical examination (see note e)	1239	
(2) Half-days devoted to—Inspection	55	
Treatment	260	
	—	315
(3) Attendances made by children for treatment	1940	
(4) Fillings.....Permanent teeth	1310	
Temporary teeth	132	
	—	1442
(5) Extractions.....Permanent teeth	73	
Temporary teeth	1774	
	—	1847
(6) Administrations of general anæsthetics for extractions	—	
(7) Other operations.....Permanent teeth	320	
Temporary teeth	190	
	—	510

Group V.—Uncleanliness and Verminous Conditions (see note f).

(i) Average number of visits per school made during the year by the Health Nurses	12.3
(ii) Total number of examinations of children in the schools by Health Nurses	19696
(iii) Number of individual children found unclean	5218
(iv) Number of children cleansed under arrangements made by the Local Education Authority	80
(v) Number of cases in which legal proceedings were taken—	
(a) Under the Education Act, 1921	—
(b) Under School Attendance Byelaws	—

NOTES ON TABLE S 4.

(a) The Table deals with all defects treated during the year, however they were brought to the Authority's notice, *i.e.*, whether by routine inspection, special inspection, or otherwise, during the year in question or previously.

(b) This heading includes all cases that received treatment under definite arrangements or agreements for treatment made by the Local Education Authority and sanctioned by the Board of Education under Sections 16 and 80 of the Education Act, 1921. Cases which, after being recommended for treatment or advised to obtain it, actually received treatment by private practitioners, or by means of direct application to Hospitals, or by the use of hospital tickets supplied by private persons, etc., are entered under other headings.

(c) The Board request that if any treatment is given for more serious diseases of the ear (*e.g.*, operative treatment in hospital) it should not be recorded here but in the body of the School Medical Officer's Annual Report.

(d) The heading "Specials" in this Table relates to all children inspected by the School Dentist otherwise than in the course of the routine inspection of children in one of the age groups covered by the Authority's approved scheme, namely, to children specially selected by him, or referred by medical officers, parents, teachers, etc., on account of urgency. The number inspected in each age group is separately shown, as well as the total, but under "Specials" only the total number is given.

(e) It should be understood that all the cases entered under this head are also entered under head (c)

(f) A statement as to the arrangements made by the Local Education Authority for cleansing verminous children and a record of the cases in which legal proceedings were taken are included in the body of the School Medical Officer's report.

N.B.—Groups I—V above cover all the defects for which treatment is normally provided as part of the School Medical Service. The Board request that particulars as to the measures adopted by the Authority for providing treatment for other types of defect (*e.g.*, for orthopædic treatment) or for securing improvement in types of defect which do not fall to be treated under the Authority's own scheme and for which the Authority neither incur expenditure nor accept any responsibility, together with a statement of the effect of the measures taken, should be included in the body of the School Medical Officer's report; such particulars following the headings of Table S 2.

TABLE S 5.

Past Infectious Diseases (Elementary School Children).

(1) Children aged 3—7		No. of Cases.	Percentage.
No Infectious Disease	477	20.0	
Measles	1659	70.0	
Whooping Cough	1057	44.3	
Scarlet Fever	80	3.4	
Diphtheria	31	1.3	
Chicken Pox	567	23.8	
Mumps	287	12.0	
(2) Children aged 8—14		No. of Cases.	Percentage.
No Infectious Disease	262	5.1	
Measles	3444	67.0	
Whooping Cough	2268	44.1	
Scarlet Fever	330	6.4	
Diphtheria	139	2.6	
Chicken Pox	1632	31.7	
Mumps	1107	21.5	

Note.—The same child may have had more than one of these diseases

TABLE 5. C.
Defects dealt with at the Minor Ailments Clinic month by month.

Month	NUMBER OF ATTENDANCES FOR TREATMENT							RESULTS	
	Ringworm	Impetigo	Scabies	Ey diseases	Ear diseases	Other defects	Total No. of attendances	No. cured	No. of new cases
January	132	229	8	113	108	295	885	53	153
February	122	212	21	224	105	371	1055	45	163
March	101	172	18	219	139	457	1106	64	179
April	43	96	9	184	94	225	657	35	98
May	80	206	17	234	205	327	1069	43	163
June	63	163	14	204	153	327	924	39	149
July	30	64	5	106	62	157	424	10	52
August	52	97	3	62	46	110	370	14	63
September	95	159	7	112	43	299	715	33	147
October	41	187	17	155	84	300	784	22	154
November	45	176	14	141	128	386	890	42	218
December	84	228	12	82	116	288	810	20	134
Totals.....	888	1989	145	1856	1283	3542	9683	420	1673

TABLE S 7.

Number of children examined at Routine Medical Inspections in the Schools and number found defective in each School.

SCHOOL.	Entrants	Intermediates	Leavers	Total ordinary inspections	Parents present	*Number of defective children	Number of defects found	CLASSIFICATION OF DEFECTS													Totals	
								Malnutrition	Skin diseases	Eyes	Ears	Nose and throat	Cervical glands (non-tubercular)	Defective speech	Teeth	Heart and circulation	Lungs	Tuberculosis (pulmonary)	Tuberculosis (non-pulmonary)	Nervous system		Deformities
Bidston Avenue	111	82	107	300	223	71	79	—	2	22	1	19	3	—	22	4	2	—	2	—	2	79
Brassey Street Infants ..	61	75	—	156	113	25	28	—	2	12	—	7	4	—	1	2	—	—	—	—	—	28
Cathcart Street	101	112	113	326	219	67	75	—	1	14	2	9	2	—	37	1	2	1	1	1	3	75
Hemingford St. Infants..	94	82	—	176	152	55	60	—	3	12	—	12	4	—	7	6	6	—	—	2	8	60
Laird Street	91	126	87	304	203	68	75	—	5	27	—	22	2	—	7	3	1	—	—	—	8	75
Mersey Park	100	119	79	298	186	33	34	—	3	7	1	1	—	—	19	—	—	—	—	1	2	34
Pilgrim Street	76	77	46	199	133	62	73	—	4	21	2	12	—	—	14	2	8	—	—	1	9	73
Rock Ferry	116	115	150	381	239	55	68	1	3	21	2	15	—	—	16	—	5	—	—	3	2	68
Temple Road Infants	—	44	—	44	36	4	4	—	—	2	—	—	—	—	1	—	—	—	—	—	1	4
The Woodlands	96	105	118	319	203	79	93	—	2	17	4	17	—	—	32	—	11	1	1	—	7	93
Well Lane.....	123	91	103	317	226	54	66	—	2	18	1	14	3	—	19	—	—	—	1	2	6	66
Woodchurch Road	128	109	89	326	206	47	52	—	3	15	—	6	—	—	17	—	3	1	—	1	6	52
Park Road Temporary ..	24	45	—	69	51	11	12	1	1	2	—	1	—	—	4	—	—	—	—	2	1	12
Chapel Road Street ..	77	97	—	114	70	90	93	2	2	9	3	3	—	—	8	—	2	1	1	2	5	83
Price Street ..	—	14	20	40	26	11	12	2	—	2	—	3	—	—	3	—	—	—	—	—	—	12

