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BOROUGH OF MIDDLETON

ANNUAL REPORT

ON THE

HEALTH OF THE BOROUGH

(Including Report on Inspection of School
Children, Maternity & Child Welfare,
and Sanitary Inspector's Report),

FOR THE

Year Ending December 31st, 1923.

S. THOS. BEGGS, M.D., B.S., D.P.H.,
MEDICAL OFFICER OF HEALTH,
SCHOOL MEDICAL OFFICER,
MEDICAL OFFICER TO THE M. AND C. WELFARE CENTRE



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MEMBERS OF THE COUNCIL.

Mr. John Henry Wood, J.P., Mayor.

Aldermen :

- O Mr James William Bentley, J.P.
- X O Mr. Samuel Kent, J.P.
Mr. John Roberts.
- X O Mr. Albert Hilton, J.P.
Mr. Ralph Grundy, J.P.
- X O Mr. John Henry Wood, J.P.

Councillors :

- X O Mr. Frank Hilton.
- X Mr. John James Wood.
- X Mr. Frank Monk.
Mr. William Herbert Booth.
- X Mr. William Taylor.
- O Mr. Gerald William Bentley.
- X Mr. Adam Horrocks Hollingworth.
- O Mr. George Berry.
- O Mr. Arthur James Smethurst.
Mr. John William Wilcockson.
- X Mr. Alexander Kay.
- X O Mr. Victor Clarkson Wilde
- O Mr. Thomas Partington.
- O Mr. William Bellhouse Scott.
- X O Mr. Frederick Entwistle.
Mr. Joseph Cockshott.
- X O Mr. Thomas Johnson Hilton.
Mr. Joe Smith.

X—Health Committee. Chairman : Councillor Wilde.

O—Education Committee. Chairman : Councillor Scott.

PUBLIC HEALTH STAFF.

Office Held	Name.	Qualification.
*Medical Officer of Health, and School Medical Officer, M.O. to the M. and C. Welfare Centre	S. T. Beggs... ..	M.D., B.S., D.P.H.
School Ophthalmic Surgeon (Part Time)	P. A. Harry	M.D., B.Ch.
*Sanitary Inspector	C. H. Norton	
*Health Visitor and School Nurse	L. Green	Trained Nurse
„ „ „	S. J. Jones	Trained Nurse, C.M.B.
„ „ „	M. G. Howe	Trained Nurse.
Clerk.....	Miss P. M. Phillips	M.O.H. & S.M.O's Office.
„	Miss E. M. Howarth	„ „
„	Mr. J. Hall	Sanitary Inspec- tor's Office.
Consultant Tuberculosis Officer (County).....	J. L. Stewart	M.A , M.B., D.P.H.
Tuberculosis Nurse (County) M. A. Potter.....		
Veterinary Inspector and Surgeon (Part Time) ...	G. H. Locke	M.R.C.V.S.
* 50 Per Cent. grant towards salary made by the Ministry of Health.		

CLINICS AND HOSPITAL PROVISION.

Maternity and Child Welfare Centre—Wednesday and Thursday
Afternoons.

School Clinic—Each Morning.

Maternity.

St. Mary's Hospital, Manchester.

Fever.

Marland Joint Hospital, Rochdale.

Smallpox.

Chadderton, Royton & Crompton Joint Hospital, Chadderton.

Children.

Manchester Children's Hospital, Gartside Street, Manchester.
—Tonsils and Adenoids.

Manchester and Salford Skin Hospital, Quay Street,
Manchester—X Rays.

STATISTICAL SUMMARY.**General Statistics.**

Latitude, 53° 33 feet. 00 inches.

Longitude, 2° 11 feet. 50 inches.

Altitude (Market Place)- 275 feet above ordnance datum.

Rainfall, 40·029 inches. Rain 227 days. Sunshine 825·15 hours.

Humidity 82 per cent.

Direction of wind. No. of days :—N. 11 ; N E. 21 ; E. 28 ;
S.E 28 ; S. 47 ; S.W. 74 ; W. 116 ; N.W. 40.

Area (Acres)	4,775
--------------	-----	-----	-----	-----	-----	-----	-------

Population	28,870
------------	-----	-----	-----	-----	-----	-----	--------

Density of Population per acre	6·04
--------------------------------	-----	-----	-----	-----	-----	-----	------

Number of Inhabited Houses (Census 1921)	6,872
--	-----	-----	-----	-----	-----	-----	-------

Number of Families or Separate Occupiers (Census 1921)	6,894
---	-----	-----	-----	-----	-----	-----	-------

Rateable Value	£166,500
----------------	-----	-----	-----	-----	-----	-----	----------

Sum represented by a penny rate (Estimated)	£635
---	-----	-----	-----	-----	-----	-----	------

Poor Law Relief.

Number of persons relieved ending March, 1923	198
---	-----	-----	-----	-----	-----	-----	-----

„	„	Sept., 1923	425
---	---	-------------	-----	-----	-----	-----	-----

Amount expended ending March, 1923	...	£479 12s. 0d.
Amount expended ending September, 1923...	£786 16s. 3d.	
Total relieved ...	...	623
Total expended ...	£1,266 8s. 3d.	

Extracts from Vital Statistics.

No. of Births (1923). Legitimate	...	414
Illegitimate	...	12
No. of Deaths (1923)	...	356
Birth Rate (1923)	...	14·7
Death Rate (1923)	...	12·3
Maternity Deaths.—Sepsis	...	Nil.
Other causes	...	1
Infantile Deaths (under 1 year) Legitimate	...	30
Illegitimate	...	1
Infantile Death Rate	...	72
Deaths from Measles	...	6
Deaths from Whooping Cough (all ages)	...	1
Deaths from Diarrhoea (under 2 years)	...	4
Diarrhoea Death Rate...	...	0·13
Epidemic Death Rate...	...	0·51
Phthisis Death Rate	...	0·65
Cancer Death Rate	...	1·24

Decrease in 1923 on previous year—2·8 in Birth Rate.

0·8 in Death Rate.

Decrease in 1923 on 10 years' average—2·8 in Birth Rate.

2·0 in Death Rate.

0·41 in Phthisis Rate.

18 in Infant Mortality Rate.

LEGAL SUMMARY.

Public Acts Adopted in the Borough.

The Infectious Diseases (Prevention) Act, 1890, adopted on the 5th day of February, 1891.

The Public Health Acts Amendment Act, 1890, Parts 2 and 3, adopted on the 5th day of February, 1891.

The Notification of Births Act, 1907, adopted on the 1st day of July, 1908.

The Infectious Diseases (Notification) Act, 1889, making Ophthalmia Neonatorum a notifiable disease in the borough, came into force on the 1st June, 1910.

Public Health Acts Amendment Act, 1907, Part 2, Sections 34, 35, 36, 37, 38, 43, 44, 45, 46, 47, 48, 49, 50, and 51, comprised in Part 3, Part 4, Part 5, Part 6, and Sections 93 and 95 comprised in Part 10. Approved by the Local Government Board on the 21st February, 1910, and came into operation on the 11th April, 1910.

Sections 79 and 81 of Part 7 and Part 8, approved by the Secretary of State on the 3rd day of February, 1910, and came into force on that day.

The Public Health Acts Amendment Act, 1890, Part 4, which came into operation on the 1st day of October, 1911.

BYE-LAWS.

Bye-laws relating to Nuisances, Common Lodging-houses, New Streets and Buildings, Slaughter-houses, Hackney Carriages, made on the 27th day of August, 1878, and allowed by the Local Government Board on the 30th day of December, 1878.

Bye-laws relating to Offensive Trades made on the 29th day of May, 1883, and allowed by the Local Government Board on the 1st day of August, 1883.

Bye-laws relating to New Streets and Buildings made on the 25th day of October, 1894, and allowed by the Local Government Board on the 3rd day of May, 1895.

Bye-laws relating to the Decent Conduct of Persons using Sanitary Conveniences made on the 4th day of July, 1895, and allowed by the Local Government Board on the 12th day of August, 1895.

Bye-laws with respect to Water Closets, and Waste-water Closets made under the Local Government Board's Provisional Orders Confirmation (No. 5) Act, 1901, on the 1st April, 1903, and confirmed by the Local Government Board on the 10th July, 1903.

Bye-laws with respect to New Streets made on the 7th December, 1904, and confirmed by the Local Government Board, on the 10th October, 1905.

Bye-laws with respect to houses let in lodgings made on the 7th day of April, 1909, and confirmed by the Local Government Board on the 5th day of June, 1909.

Bye-laws regulating Employment of School Children in Sale or Delivery of Milk or Newspapers, made on the 16th May, 1922, and confirmed by the Secretary of State on the 16th August, 1922.

Bye-laws with respect to Means of Escape in Case of Fire, made on the 6th October, 1920, and confirmed by the Minister of Health on the 13th December, 1920.

ORDERS

Order relating to the Closing of Hairdressers' Shops made by the Council and confirmed by the Home Secretary on the 25th September, 1906.

Order under the Shops' Act, fixing the day of the weekly half-holiday for the trade of a Boot and Shoe Dealer, made 9th November, 1912,

Order under the Shops' Acts, exempting the trade of a Clogger from the provisions of Section 4 of the Act, in regard to

the closing for the weekly half-holiday, made the 9th November, 1912.

Order under the Shops' Act, exempting the trade of a Grocer from the provisions of Section 4 of the Act, in regard to the closing for the weekly half-holiday, made the 6th January, 1913.

Closing Order under the Shops' Acts, with regard to the trade of a butcher, made on the 6th January, 1913.

RULES AND REGULATIONS.

Regulations relating to Dairies, Cowsheds, and Milkshops made on the 1st day of February, 1911, and which came into operation on the 1st April, 1911.

Regulations relating to the Management of Sanitary Conveniences made on the 25th day of October, 1894.

Regulations relating to the inspection of New Drains and Buildings made 1st October, 1896.

Regulations with respect to Dairies and Cowsheds, made on 1st day of February, 1911.

Regulations as to dipping of sheep within the Borough, sealed 4th August, 1921, and confirmed 9th August, 1921.

Regulations as to dipping of sheep removed into the Borough, sealed 4th August, 1921, and confirmed 9th August, 1921.

Middleton Corporation Act, 1910.

To the Mayor, Aldermen and Councillors of the Borough of Middleton.

Gentlemen,

I have the honour to submit the Annual Report on the Health of the Borough for 1923, ending 31st December.

The estimated POPULATION for 1923 as at the 30th June, 1923, was 28,870. This is based by the Registrar General on the adjusted 1921 figures after allowance for the varying rates of natural increase as evidenced by the Births and Deaths and of migration such as changes in numbers on the Parliamentary Register and returns obtained from the Board of Trade.

The estimated population for 1922 was 28,930.

The MARRIAGES during the year numbered 256 as compared with 260 for 1922.

The numbers of Births and Deaths as supplied by the Registrar-General are those registered during the calendar year, but are corrected for inward and outward transfers.

The numbers therefore differ from the figures compiled locally.

As compared with 1922 there is a decrease of 2·8 in the Birth Rate, and 0·8 in the Death Rate.

The male and female births were 224 and 190 respectively as compared with 260 and 249 for 1922.

The birth rate is the lowest recorded with the exception of the years 1917 and 1919.

The economic conditions and the housing difficulty are here reflected.

The DEATHS during the year were 179 male and 177 female, as compared with 195 male and 184 female for 1922. This gives a rate of 12·3 as compared with 13·1 for 1922. A decrease on the year of 0·8 and of 2·0 on the 10 years' average.

There is a decrease as compared with 1922 in the death rates of Tuberculosis of the Respiratory System, Scarlet Fever, and from Violence. The rates are the same in Infantile Mortality, but in Measles, Diarrhoea, and Enteritis (under 2 years) and Influenza there is an increase.

The most prevalent causes of death were diseases of the respiratory system—Pneumonia, Bronchitis and Phthisis; diseases of the circulatory system—Heart disease, Arterio-sclerosis, and Cerebral hæmorrhage are second, and cancer third.

The Infantile deaths were 15 male and 16 female as compared with 18 and 19 respectively for 1922.

The most prevalent cause of death in infants was Bronchitis and pneumonia. 16 deaths occurred under one month.

The deaths from cancer included 18 males and 18 females as compared with 16 and 23 the previous year; 23 deaths occurred between the ages of 45—65; 10 at 65 and over; one between 30 and 40, and one under 30.

Inquests during the year included—from Natural Causes 13; Accident 9; Suicide 1; Cause unknown 1; as compared with 16, 11 and 5 respectively for 1922.

The deaths of persons of 65 and over, included :—

Ward.	65—70	70—80	80—90	90 and over.
North.....	3	12	4	—
Central	2	15	2	—
South.....	7	13	4	—
East	9	10	1	—
Parkfield	11	12	3	—
West	3	25	—	—
Total...	35	87	14	—

CAUSES OF DEATH FOR THE YEAR.

	Males.	Females.
Measles	4	2
Scarlet Fever	2	1
Whooping Cough... ..	—	1
Diphtheria	1	—
Influenza	9	4
Tuberculosis of Respiratory System ...	10	9
Other Tuberculous Diseases	5	1
Cancer, Malignant Disease	18	18
Rheumatic Fever	—	3
Diabetes	1	—
Cerebral Hæmorrhage, etc.	12	13
Heart Disease	28	34
Arterio-sclerosis	7	10
Bronchitis	15	23
Pneumonia (all forms)	19	8
Other Respiratory Diseases	4	2
Ulcer of Stomach or Duodenum... ..	1	—
Diarrhœa, etc. (under 2 years)	3	1
Cirrhosis of Liver... ..	4	—
Acute and Chronic Nephritis	11	13
Other accidents and Diseases of Pregnancy and Parturition	—	1
Congenital Debility and Malformation, Premature Birth	3	6
Suicide	1	—
Other Deaths from Violence	5	2
Other Defined Diseases	14	24
Causes Ill-defined or unknown	2	1

Total, all causes—Males, 179 ; Females, 177.

Age incidence.

Under

1	1—2	2—5	5—15	15—25	25—45	45—65	65 and over
31	8	9	8	15	30	119	136

Sex.	Wards.					
	North	Central	South	East	Parkfield	West
Males.....	21	27	37	37	35	22
Females...	24	27	28	34	37	27
Total	45	54	65	71	72	49

Seasonal Distribution.

January ...30	April .....28	July ... ..23	October ...27
February 28	May .....33	August ...25	November 28
March.....31	June .....33	September 21	December 49

DEATHS OF INFANTS UNDER 1 YEAR

Causes.	Under		Ages—Months.												Total
	M.	F.	1	1	2	3	4	5	6	7	8	9	10	11	
Atelectasis	—	2	2	—	—	—	—	—	—	—	—	—	—	—	2
Premature Birth.....	3	4	7	—	—	—	—	—	—	—	—	—	—	—	7
Debility	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1
Convulsions	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1
DyspepticDiarrhoea	1	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Bronchitis.....	4	4	1	3	—	—	1	1	—	—	—	1	1	—	8
Pneumonia	3	1	1	1	1	—	—	1	—	—	—	—	—	—	4
Enteritis	2	1	—	1	1	—	—	1	—	—	—	—	—	—	3
Congenital Defects	—	3	—	1	—	1	—	1	—	—	—	—	—	—	3
Laryngeal Diphtheria.....	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Total.....	15	16	13	6	3	1	1	4	—	—	—	1	1	1	31
Comparison with 1922	18	19	13	2	—	2	4	4	4	2	2	1	2	1	37

1923. 30 Registered in Borough, and 1 Transferred Death.

1922. 29 Registered in Borough, and 8 Transferred Deaths.

BIRTH-RATE, DEATH RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1923.

(Provisional figures. The rates for England and Wales have been calculated on a population estimated to the middle of 1923, while those for the towns have been calculated on populations estimated to the middle of 1922, the mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns)

	Birth-rate Per 1,000	Annual Death Rate Per 1,000 Population.										Rate Per 1000 Births	
		All Causes.	Enteric Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis	Under 2 Years	Total Deaths under 1 year
England and Wales...	19.7	11.6	0.01	0.00	0.14	0.03	0.10	0.07	0.22	0.44	7.7	69	69
105 County Boroughs & Great Towns including London ...	20.4	11.6	0.01	0.00	0.15	0.03	0.12	0.09	0.22	0.40	9.9	72	72
157 Smaller Towns (1921 Adjusted Populations 20,000—50,000) ..	19.8	10.6	0.01	—	0.19	0.02	0.10	0.06	0.21	0.38	6.4	69	69
London ...	20.2	11.2	0.01	0.00	0.08	0.02	0.09	0.13	0.17	0.45	10.2	60	60
Middleton ...	14.7	12.3	0.00	0.00	0.20	0.10	0.03	0.03	0.45	0.24	9.3	72	72

The Vital Statistics for the two decennial periods 1891-1900, 1901-1910, compared with the last ten years, are given below:—(MIDDLETON BOROUGH.)

Period.	Per 1,000 of Population.				Enteric Fever.		Diphtheria and M'branous Croup.		* Diarrhoea.	Rate of Infant Deaths per 1,000 Births.
	Birth Rate	Death Rate	Epidemic Death Rate	Phthisis Death Rate	Cases.	Deaths.	Cases.	Deaths.		
Ten years										
1891-1900	27.0	18.5	1.71	1.53	160	31	82	48	148	162
1901-1910	23.5	16.6	1.39	1.35	62	11	165	44	110	145
Year 1913	20.9	12.9	0.70	0.73	5	1	8	—	14	98
" 1914	19.8	14.6	1.98	1.21	43	9	20	4	18	126
" 1915	17.5	16.1	0.93	1.47	9	1	31	6	10	93
" 1916	15.8	14.2	0.81	1.18	3	1	46	6	8	79
" 1917	14.5	15.3	0.90	1.29	4	2	39	5	6	114
" 1918	13.0	17.2	0.86	1.17	3	2	22	—	2	80
" 1919	14.0	14.0	0.54	0.68	1	—	35	2	4	76
" 1920	22.6	12.3	1.00	1.17	1	—	41	5	15	90
" 1921	19.4	13.3	0.69	0.79	8	—	17	1	9	78
" 1922	17.5	13.1	0.41	0.93	—	—	14	1	2	72
" 1923	14.7	12.3	0.51	0.65	5	—	11	1	4	72

* Prior to 1916, deaths at all ages are included in these figures; from 1916 onwards only those under two years of age.

COMPARATIVE VITAL STATISTICS 1923

District	Popu- lation	Birth Rate	Death Rate	Infantile Mortality Rate	Infantile Mortality Rate (per 1,000 Births), from Congenital Debility, Malformation, and Premature Birth.	Death Rate from, Pulmon- ary Tub- erculosis	Other Respira- tory Diseases
Accrington	44,180	14.2	12.3	58	36	0.76	0.15
Chadderton	28,340	17.0	13.7	110	40	0.54	3.3
Chorley.....	31,300	18.3	12.3	92	38	0.67	1.88
Colne	25,260	15.2	12.7	111	49	1.10	2.05
Darwen.....	38,980	15.4	13.5	78	34	0.56	2.92
Farnworth	28,890	17.8	12.0	69	33	0.7	2.9
Lancaster	40,990	17.2	12.1	83	24	1.07	0.09
Leigh	46,750	18.2	12.1	85	30	0.91	3.08
Nelson ..	40,380	14.2	11.1	76	45	0.47	1.7
Swinton and Pendlebury	32,000	17.0	12.3	104	38	0.90	1.65
Waterloo-with- Seaforth	30,090	19.1	12.0	83	43	0.86	2.19
MIDDLETON	28,870	14.7	12.3	72	21	0.65	1.14

INFECTIOUS DISEASES.

There has been a marked diminution in the total number of notifiable diseases during the year, 366 compared with 625 for 1922. The decrease is most marked in the case of Scarlet Fever, 97 compared with 240 in 1922, and Measles 11, compared with 164.

There is an increase however in Chickenpox and Pneumonia.

Nursed at Home...	...	269	Died	...	...	57
Removed to Hospital	...	97	Died	...	...	14

Disease.	Total cases at all ages	Cases Notified.											Hospital.		
		Years.											Total cases removed to Hos.	Deaths in Hos. belonging to district	
		Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 & over		
Diphtheria and Membranous Croup	11	2	—	—	1	2	5	1	—	—	—	—	1	7	1
Erysipelas	5	1	—	—	—	—	—	—	1	—	—	2	1	—	1
Scarlet Fever	97	—	1	2	3	7	47	16	6	12	3	—	3	57	2
Enteric Fever... ..	5	—	—	—	—	—	1	2	1	—	—	1	—	4	—
Poliomyelitis	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Ophthalmia Neonatorum	2	2	—	—	—	—	—	—	—	—	—	—	—	1	—
Acute Primary and Acute Influenzal Pneumonia	93	4	8	7	—	2	10	6	3	18	9	16	10	31	3
Pulmonary Tuberculosis	24	—	—	—	—	—	1	—	2	4	5	12	—	19	7
Other forms of Tuberculosis	12	—	—	—	—	—	4	3	3	1	—	—	1	5	1
Measles	11	—	2	2	2	1	4	—	—	—	—	—	—	6	—
Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Diarrhoea, etc. (under 2 years) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—
Chickenpox.....	105	6	4	15	10	7	56	7	—	—	—	—	—	—	—
Totals	366	15	15	26	16	19	128	35	16	36	17	31	12	71	14

SEASONAL INCIDENCE OF DISEASES.

Month.	Scarlet Fever	Diphtheria	Measles	Chickenpox	Erysipelas	Typhoid Fever	Pneumonia	Poliomyelitis	Ophthalmia Neonatorum	Tuberculosis
January	5	1	9	14	—	1	8	—	—	4
February	8	—	2	17	1	—	8	—	1	2
March	7	1	—	29	1	—	7	—	—	7
April	10	—	—	6	—	—	15	—	—	6
May	6	—	—	11	—	1	9	1	1	3
June	8	1	—	6	—	1	8	—	—	3
July	11	1	—	5	2	2	5	—	—	1
August	5	—	—	7	1	1	3	—	—	5
September ...	7	3	—	4	—	—	2	—	—	—
October	5	2	—	4	—	—	7	—	—	1
November ...	8	1	—	1	—	—	13	—	—	2
December	17	1	—	1	—	—	8	—	—	2
Total ...	97	11	11	105	5	5	93	1	2	36

HOUSING CONDITIONS.

Diseases.	Occupants															Bedrooms				
	2	3	4	5	6	7	8	9	10	11	12	15	1	2	3	4	5			
Pneumonia .	6	17	18	13	8	11	8	6	5	—	—	1	—	64	24	5	—			
Chickenpox...	3	9	24	21	21	8	2	9	3	2	3	—	1	67	31	2	4			
Measles	—	3	2	2	1	—	1	—	—	1	1	—	—	9	—	1	1			
Scarlet Fever.	1	11	18	25	16	14	5	3	3	1	—	—	—	64	29	4	—			
Tuberculosis..	2	7	4	5	7	5	2	4	—	—	—	—	—	25	10	1	—			
Other Diseases	2	2	6	2	2	4	3	3	—	—	—	—	1	17	5	1	—			
Total	14	49	72	68	55	42	21	25	11	4	4	1	2	246	99	14	5			

The extent of Overcrowding was 31.96 Per Cent.

Bedrooms	Occupants													
	1	2	3	4	5	6	7	8	9	10	11	12	15	Total
1	-	-	-	1	1	-	-	-	-	-	-	-	-	2
2	-	11	40	52	47	32	29	13	14	6	2	-	-	246
3	-	3	7	19	19	19	9	6	9	5	-	3	-	99
4	-	-	2	-	1	2	3	2	1	-	1	1	1	14
5	-	-	-	-	-	2	1	-	1	-	1	-	-	5
Total	-	14	49	72	68	55	42	21	25	11	4	4	1	366

The Schools were affected in 147 cases. Exclusions from School in consequence of Infectious Diseases numbered 250. No Schools were closed

The Health Visitors made 410 reports on Infectious cases and contacts and paid 975 visits to the homes. The following details are obtained in each case immediately notification is received from the Medical Attendant :—

Name.	Address	Persons.
Age.	School or Workshop.	Rooms.
Infectious Disease.	Vaccination.	
Date of { Onset.	Rash.	Home or Hospital.
{ Notification	Isolation.	
	Date of { Disinfection.	
	{ Discharge.	
Contacts during Onset to Notification Period.	Incubation Period.	
Places visited during Onset to Notification, and during Incubation Period.		
Domestic Animals kept.	Verminous conditions found.	
Milk—Source.	How stored.	
Food—Source.	How stored.	
Water.		
Sanitary condition of :—House.	Yard.	Drains and W.C.
Instructions given.		

The Sanitary Inspector is instructed as to removal to Hospital and Disinfection.

During the year a conference was held with the local medical practioners to discuss how far the domiciliary treatment of Scarlet Fever could be carried out and it was resolved that where the circumstances were suitable parents would be encouraged to undertake home treatment.

The "Milne" method of treatment is advocated and a supply of Eucalyptus Oil is available at the Health Office.

With regard to the "Milne" treatment I reported during the year that the difficulty of adopting this method as a routine was (a) the need of domiciliary nursing; (b) the state of overcrowding in many of the homes where Scarlet Fever cases occur; (c) the economic conditions. Given favourable conditions, means of isolation, intelligent attendance and fair economic conditions, Scarlet Fever can be safely nursed at home.

The proposal of making a charge on cases removed to hospital where the financial circumstances of the family permitted received your approval.

Typhoid Fever.

Five cases of Typhoid fever were notified during the year. 4 of the cases occurred in Poplar Street, and one at Rhodes.

The dates of notification were, May 5th, June 6th, July 7th, July 30th, and August 2nd.

The first case was a girl of 11, living in Poplar Street, who attended St. Gabriel's School. History of visiting Blackley a few weeks perviously and drinking water from an unknown source. House overcrowded, conditions poor, and surroundings bad.

The second case, resident next house but one to above was a boy aged 5, case complicated by pneumonia; house overcrowded, conditions poor.

The third case occurred in the same family as above, a girl aged 14.

The fourth case also occurred in Poplar Street, a girl of 19. The house was in an unsatisfactory condition, and infested with beetles.

The blood reaction in the first, second, and fourth cases was complete, but in the third case, weakly positive to *B. typhosus* and *B. paratyphosus*.

These four cases were removed to hospital.

The fifth case occurred at Rhodes, in a woman aged 63. The blood reaction to *B. typhosus* was incomplete but to para A. positive. History of eating stewed meat which tasted bitter 3 weeks prior. The case was nursed at home.

The Poplar Street area had been previously noted for strict sanitary supervision. The drains and sewers in the area received special attention by the Surveyor's Department during the year.

Diphtheria.

Eleven cases occurred as compared with 14 during 1922. One case died in Hospital.

Diphtheria Anti-toxin is held on supply at the clinic for use by medical practitioners.

The prompt and early use of anti-toxin reduces the mortality in Diphtheria. This should be given on clinical evidence without waiting for bacteriological confirmation, and in cases of severe laryngeal catarrh or "croup".

An initial dose of 8,000 units is necessary in an ordinary case of diphtheria.

For prophylactic use in the case of contacts, 500 to 1,000 units are sufficient.

After an attack of diphtheria a person becomes immune to a subsequent infection. In those who have not suffered from diphtheria it is known that a certain proportion are susceptible, while others are insusceptible

By means of the "Schick" test these two classes can be distinguished. By injecting into the skin 0.2 c.c. of a standardized diphtheria toxin a re-action is obtained by which the case is shown to be either immune or susceptible. In the case of the immune there is no change at the site of injection; in a susceptible case a redness of the skin occurs round the point of injection. By the administration of Toxin-anti-toxin an immunity of 95 per cent. can be induced in susceptible cases. Three inoculations are given in 1 c.c.m. doses at intervals of one week.

When given under 5 years of age no reaction is noticeable. In older cases 50 per cent. show local or constitutional reaction.

It is evident that the "Schick" test and active immunization are of particular value in diphtheria outbreaks.

RESPIRATORY DISEASES.

PNEUMONIA.

93 cases of Acute primary and Acute influenzal Pneumonia were notified as compared with 69 in 1922. 27 of the cases died.

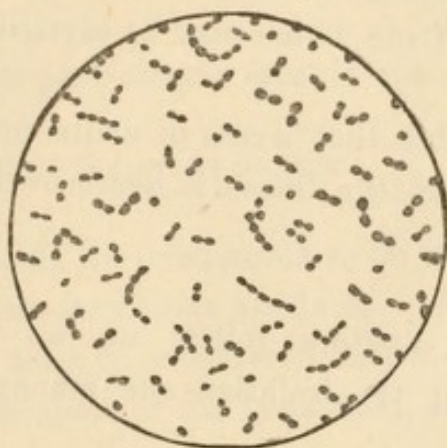
88 were nursed at home, and 5 removed to hospital. Skilled nursing was obtained in 14 of the cases.

Home Conditions

Cases nursed in living room	...	...	39.
Cases not in separate room	...	...	6.
Cases not in separate bed	...	...	2.

The number of occupants and the number of bedrooms are given under Table, page 22.

Pneumonia is an acute infective inflammation of the lungs in the lobar or lobular, (or Broncho-pneumonia) forms. Either may occur as a primary or secondary infection.



Pneumococci as seen under the microscope.

The bacterial causation in lobar pneumonia is Fränkel's pneumococcus. This germ is found in healthy throats, and may invade the tissues when vitality is lowered. It lives in dried sputum for weeks, hence any **INDISCRIMINATE** spitting, even by healthy persons may be a source of infection. The germ has also been found in the dust of rooms, hence **DRY** sweeping of rooms is dangerous. It has also been found on eating utensils. Therefore cups, glasses, spoons, forks, etc., should be sterilized by **BOILING** water. Handkerchiefs also become contaminated. A child's mouth or nose should **NOT** be wiped by another person's handkerchief. Direct sunlight has the power of killing the germ in a few hours. In badly lighted, and dark places the germ can survive for weeks.

The spread of pneumonia is induced by (a) crowded badly ventilated and dark rooms ; (b) exposure and fatigue, by lowering

the natural resisting power of the body ; (c) malnutrition, poverty and insufficient clothing for the same reasons ; (d) insanitary surroundings ; (e) an attack of influenza, measles or whooping cough ; (f) rickets, scarlet fever, diphtheria, diarrhoea.

One attack of pneumonia does not immunize a patient against a subsequent attack.

Being an infectious disease, isolation of the patient is required, and where this cannot be carried out in the home, provision is required for institutional treatment, such provision in this area is not sufficient. Breathing the breath, or cough spray of a patient is dangerous, infection from which may be carried as far as 10 feet.

It is inadvisable that a case of acute pneumonia should be nursed at home where the house is overcrowded, where isolation cannot be carried out.

The Health Visitors follow up all cases and printed instructions requiring the isolation and management of the cases are given.

Efforts are made to obtain the the services of the District Nurse in cases nursed at home,

The following instructions are left at the home in each case :—

“It must be remembered that Pneumonia is an Infectious Disease, and measures applicable to the spread of infection apply to Pneumonia.

It is absolutely necessary that in the management of a case of Pneumonia, there should be an abundance of fresh air. To nurse Pneumonia in an ill-ventilated, stuffy room, is to endanger the patient's life. Good nursing is essential, and if possible a

trained nurse should be available. If the case cannot be properly isolated and nursed at home, then it is better for the patient to be removed to Hospital.

The breath, cough spray, and sputum are infectious.

All discharges from the patient should be disinfected.

Avoid breathing the patient's breath or cough spray.

Strict attention to the doctor's directions are most important.

Pneumonia is particularly fatal in the very young and old.

Heart failure is the great danger.

It is inadvisable for pneumonia to be nursed at home, where there are not the best conditions available. Not only the patient's chance of recovery must be considered, but there is the danger of infection to other members of the household, especially children and old people.

Pneumonia is a frequent complication of measles, and this is one of the reasons why measles must be looked upon as a most serious disease in children."

TUBERCULOSIS.

36 cases were notified as compared with 41 in 1922.

25 cases died as compared with 33 in 1922.

Of the new cases notified during the year, 15 died.

Age Periods Years	New Cases				Deaths			
	Pulmonary		Non-Pul.		Pulmonary		Non-Pul.	
	M	F	M	F	M	F	M	F
5-10	1	—	3	1	1	—	2	—
10-15	—	—	2	1	—	—	—	—
15-20	1	1	2	1	—	—	—	1
20-25	1	1	—	1	1	1	—	—
25-35	1	—	—	—	1	2	—	—
35-45	5	1	—	—	2	1	2	—
45-55	6	2	—	—	4	2	—	—
55-65	2	2	—	—	1	3	—	—
65 and over ...	—	—	—	1	—	—	—	—
Totals	17	7	7	5	10	9	4	1

Date of Notification in fatal cases.

	1923	1922
Less than 1 month before death	4	8
„ 1-2 months „	3	1
„ 2-3 months „	3	1
„ 3-4 months „	2	1
„ 4-5 months „	1	2
Over 6 months before death	2	2

With regard to the notification of Tuberculosis, medical practitioners were circularised during the year by the Ministry of Health in Circular 425 as follows :—

“Under the Public Health (Tuberculosis) Regulations, 1912, it is the statutory duty of every practitioner throughout the country, within 48 hours of his first becoming aware that any of his patients is suffering from tuberculosis, to notify the case to the Medical Officer of Health of the district in which the patient is residing unless he has reasonable grounds for believing that the case had already been notified to that Officer. In any case of doubt

the practitioner should ascertain from the Medical Officer of Health whether the case has already been notified before deciding that it is not necessary for him to notify. The Public Health Act, 1896, provides substantial penalties for any wilful neglect or refusal to carry out the Regulations.

The prompt notification of all cases of tuberculosis is of importance in the interests of the community as well as of the patient. In this way only can full and early co-operation be secured between the medical practitioner, the Medical Officer of the district and the Tuberculosis Officer, in order that all possible steps may be taken to prevent the spread of infection, to discover other possible cases which have been in contact with the patient, and to ensure that the patient receives, to the fullest extent possible, the treatment best suited to his condition. If in any particular case the practitioner considers that the circumstances are such as to render it unnecessary or contrary to the interests of the patient for the home to be visited by these officers or their staff, it is open for him to arrange with the officers concerned for such visits to be dispensed with."

Home Conditions.

The number of occupants and the number of bedrooms will be found under table page 22 and conditions of isolation in the Tuberculosis Officer's Report.

REPORT OF THE TUBERCULOSIS OFFICER FOR THE YEAR 1923.

During 1923, thirty-six notifications of patients suffering from Tuberculosis were received. Of these, twenty four were notified as suffering from Tuberculosis of the lungs, and twelve from non-pulmonary Tuberculosis.

Of the twenty-four pulmonary cases, twenty-one were found to have tubercle bacilli in the sputum, one had no expectoration, and one was in Asylum when notified, and in one case the sputum was not examined.

The twelve non-pulmonary cases are classified as follows according to the localisation of the disease :—

Glands	...	..	...	5
Abdomen	...	...	...	1
Hip ...	...	...	...	1
Meninges	...	...	...	3
Skin ...	...	...	...	2

Twelve of the notified pulmonary cases died during the year. Two of the cases of tuberculous Meningitis died during the year. There were no other deaths among the non-pulmonary cases.

All the notified cases were visited by the Tuberculosis Nurse and a report was forwarded on the housing conditions.

Housing defects were reported in two cases and these were remedied by the end of the year.

In visiting and supervision special attention is paid to the open cases, i.e., cases where tubercle bacilli are present or have been found in the sputum. On the 1st January, 1923, there were forty-six such cases known to be living in the Borough. On the 31st December, 1923, there were forty-nine positive cases living. These figures include quiescent and arrested cases.

Sixteen of the positive cases died during the year. There was one removal from the district.

The condition as to isolation at home of the positive cases was as follows :—

Separate bedroom...	...	30
Separate bed only...	...	16
Unable to have separate bed		21

Nineteen of the positive cases were in institution for treatment or isolation at some time during the year.

During the year, fifty-one new patients were sent to the Dispensary by their Doctors, for diagnosis and arrangements for treatment. There were four hundred and fifty-five re-attendances of old cases at the Dispensary, and the Nurse made eight hundred and forty-nine domiciliary visits during the year. Twenty contacts were examined at the Dispensary.

One hundred and thirty-four specimens of sputum and urine from Middleton were examined at the Ashton Laboratory during the year. Of these, forty were positive, and ninety-four were negative.

During the twelve months, thirty-one patients were discharged from Institutions as follows :—

From Sanatoria	...	...	...	...	10
„ Pulmonary Hospitals for advanced cases					7
„ General Hospital for treatment of Non-Pulmonary Tuberculosis	...	...			11
„ Sanatoria for treatment of Non-Pulmonary Diseases in children	...				1
„ Manchester Skin Hospital	...	...			1
„ Observation Hospital	...	...	...		1

The results on discharge were as follows :—

Disease quiescent or arrested	...	...			1
Improved	...	...	...	...	8
I. S. Q.	...	...	...	...	2
Cured...	...	...	...	...	5
Relieved	...	...	...	...	4
Worse	...	...	...	...	5
Died	...	...	...	...	4
Transferred to Hospital from Sanatorium...					1
Diagnosis not confirmed (observation case)					1

In regard to School Children, there were twenty-three cases on the books on 31st December, 1923. These cases may be classified as follows :—

Active Pulmonary ...	...	...	...	3
Quiescent Pulmonary ...	...	...	...	2
Active Non-Pulmonary ...	...	...	...	7
Quiescent Non-Pulmonary...	...	...	...	11

Five cases were taken off the books during the year as cured.

One child was granted treatment in Manchester Royal Infirmary, one at Leasowe Sanatorium, two at Eastby Sanatorium, two at Pendlebury Children's Hospital, one at Bury Observation Hospital, and one at the Manchester Skin Hospital.

VENEREAL DISEASE.

The facilities for treatment under the County Scheme as affecting Venereal Disease in this area have been published in previous reports. Outfits for Wassermann Tests, etc., can be obtained by general practitioners from the County Medical Officer on application on Form V.I. At the time of application the medical practitioner should state at which Laboratory he desires the examination to be made and when the specimen is collected it should be posted without delay to the laboratory selected.

Note—A specimen must be sent to the Laboratory by LETTER POST ONLY and must be conspicuously marked "fragile with care," and bear the words "Pathological Specimen," and also the signature and address of the medical practitioner who sends it.

In order to save medical practitioners the trouble of applying

for repayment of postage, a uniform payment of 6d. to cover out-of-pocket expenses in the transmissions of specimens will be made by the County Council for each specimen sent to the Laboratory. Pathologists will send to the County Medical Officer of Health the number of specimens sent by each practitioner, and the County Council will pay the mounts shown by this Statement to be due to each practitioner.

The specimen should be collected in accordance with the "Instructions for collecting specimens" which will be sent with each outfit.

Form V. 4 should be filled in and sent with each specimen. To ensure secrecy, the patient's name is not entered on the Form, but an identification number or letter should be given. A note of the number or letter should be retained for use in correspondence, or for any subsequent examination. The pathologist will forward the results of his examination to the medical practitioner on Form V. 5.

Application for Salvarsan and its approved substitutes can be made on Form V. 2. The following printed forms can also be obtained from the County Medical Officer, viz. :—

- (a) Warning to patient as to care after administration of Salvarsan Substitute (Form V. 3).
- (b) Particulars to be supplied by the medical practitioner with each specimen sent to the Laboratory (Form V.4).
- (c) Report of pathologist respecting specimen sent by medical practitioner (Form V. 5.)
- (d) Instructions to patients suffering from Syphilis (Form V. 6).

- (e) Instructions to patients suffering from Gonorrhœa (Form V. 7).
- (f) Information to the public on the dangers of Venereal and on the facilities for treatment (Form V. 8).
- (g) Leaflet to Seamen (Form V. 14).

No record is available of the number of Venereal Diseases occurring in the area, but a decrease in the incidence of these diseases throughout the country is taking place.

CAUSES OF SICKNESS.

Diseases of the Respiratory System including Bronchitis, Broncho-pneumonia, Lobar pneumonia and Tubercle of the Lung, were the most prevalent cause of sickness during the year.

There are many contributory factors leading to these conditions, many of them are preventable. The forerunners often are simple catarrhal conditions which are neglected, or do not receive the attention they merit from a preventive point of view.

Atmospheric conditions play their part, humidity, fog, smoke, chemical pollution, and dust in the air ; certain occupations predispose to respiratory affections. Inhalation of fumes, gases, and metallic, mineral or organic dust are known to have a harmful effect on the respiratory Passages. These effects are aggravated in ill-ventilated and overcrowded workrooms. Respiratory diseases are thus found to be high among cotton workers, printers, drapers, file makers, grinders and certain classes of miners, etc. Recurrent catarrh leads to Bronchitis, and Bronchitis to further complications.

Overcrowded and badly ventilated living rooms give rise to the same catarrhal conditions. Micro-organisms are found in the air of such rooms, in proportion to the degree of overcrowding.

The effects on children are seen in Nasal Catarrh, Enlarged Tonsils and Adenoids, which predispose to Bronchitis, broncho-pneumonia and tubercle.

Zymotic diseases again lead to respiratory complications, especially measles, whooping cough and influenza.

Lowered vitality following acute diseases will bring into activity a latent tubercular focus. Oral sepsis and inflammatory conditions of the throat, may lead to extensions to the respiratory passages, much of which is preventable by giving due attention to the hygiene of the mouth, nose and throat.

CANCER has increased during recent years, and the death rate has gone up about 20 per cent. during the last 20 years.

Certain conditions are known to induce Cancer, and among these which are preventable are continued irritation, chronic constipation, septic conditions, tubercle and syphilis of the skin.

Certain occupations predispose such as workers in tar, pitch, anilin, mineral oils, chromic acid and its preparations.

Cases of cancer arising from these sources are notifiable by medical practitioners to the Chief Inspector of Factories.

Not more than 10 per cent. of cancer cases are curable at the time they first come under treatment, largely due to patients not seeking medical advice early enough.

A periodic medical examination of persons over 40, and earlier medical advice would save many lives.

Of the cases proving fatal during the year 75 per cent. affected the gastro-intestinal tract. Most of these cases begin in minor ailments which in their turn are set up by neglect of hygienic habits.

Dyspepsia, indigestion, gastritis, gastric ulcer, and constipation, are due to dietetic errors and the want of strict observance of the rules of health. The beginnings are often induced in early life, little attention is given to them and medical advice is not sought until pathological changes have set in. Decayed and Septic teeth interfere with mastication, and germs which thrive in and around such teeth are swallowed, a habit of bolting food is induced, appetite is impaired, meals are not taken with regularity, the action of the saliva is interfered with by drinking with each bite, constipation results, and indigestion sooner or later is complained of. Food stuffs are wrongly selected, and tea, spices, and alcohol are abused. Add to these conditions the worries and stress of life and the consummation of all the factors acting repeatedly brings about a state of chronicity and irritation which ends in cancer.

There is no doubt of personal predisposing factors, but heredity has not been proved to any important extent in cancer.

More attention to the hygiene of the mouth, stomach and bowels and earlier and prompt treatment of minor ailments affecting these parts is called for.

The right time to form correct HABITS of health is in the nursery and at the school.

THE PREVENTION OF DISEASE.

The people's part in health matters requires co-operation on their part in the prevention of disease, and education on health matters is essential if the best results are to be obtained by the Health Committee in all steps taken by them to improve and further individual and communal Health.

If a fraction of the enthusiasm were shewn by the public in these matters, as is given to a football match, the death rates would be reduced and the health category of the community improved.

The amount of Sickness which is preventable and can be prevented by the people themselves is enormous.

This is well exemplified in the sickness rates among infants, school children and insured persons.

More stress in the education of Health and Hygiene is required in the schools, and in the homes.

The Welfare Centre and Clinic are carrying out this work.

“ Mere legislation in this as in other fields will prove abortive, unless it is continuously and steadily supported by an intelligent and well informed public opinion.”

The steps taken during the year were (a) The publication of Health Notes in the local press. The following articles appeared weekly :—

Public Health and the Housing Problem.

Clean Milk—The Grading of Milk.

What is “ Certified ” Milk ?

Sanitation—The Responsibility of the Occupier.

The Responsibility of the Occupier—Nuisances, Infectious Diseases, Dirty Houses.

The Responsibility of the Dairyman.

The Responsibility of the Parent.

Common Winter Ailments.

Public Opinion concerning the Prevention of Disease.

The importance of Proper Food in regard to Health.

Infant Welfare and Mortality.

The Industrial Employment of Mothers.

Prevention of Disease. Suggestions to Householders.

The Care of the Mother and Child.

Diseases Conveyed by Food.

The Necessity for Vaccination.

Overcrowding, Ventilation and Personal Cleanliness.

Clothing.

Cancer as a Preventable Disease.

Infectious Diseases—A warning.

Smallpox in relation to Vaccination.

The Smoke Nuisance and its Effects.

The Destruction of Flies and Vermin.

Important Social Problems.

The Physiology of Digestion.

The People's part in Health Matters.

The Use and Value of Food.

A Day at the Welfare Centre.

Climate and Health.

Carriers of Disease.

Decay of the Teeth and Physical Degeneration.

The Prevention of Colds and Deafness in School Children.

Exercise and Fatigue.

Self Help in Health. (Health Week).

Prize Essay by a girl age 13 "What I learned at the Welfare Centre."

The Impressions of a Visit to the Health Exhibition.

The Importance of the Control of Household Refuse.

The Cancer Problem.

Pneumonia.

The Dangers of Dust and Dirt.

The Use and Abuse of Tea.

The Germs of Disease.

(b) Health Week. The efforts made during Health Week were comprehensive and successful. These comprised :—

- 1 A Health Exhibition in the Public Library.
- 2 Lectures Illustrated by Lantern Slides.
- 3 Cookery Demonstrations.

- 4 Demonstrations in the management of patients and First Aid.
- 5 Demonstrations by school children in Physical Culture, etc.
- 6 Press Article on "Self Help in Health."
- 7 Cinema Films.
- 8 Baby Week was combined with Health Week.

(c) The Prevention of Infantile diseases has been dealt with at the Welfare Centre in instructing mothers by means of Health Talks, demonstrations, and advice in the prevention of disease.

(d) School Medical Inspection has been instrumental in preventing disease in school children.

(e) Steps taken in the prevention of Infectious Diseases is referred to under that section. More support from the people is here required.

(f) Sanitary action taken during the year.

THE STATE OF VACCINATION IN THE BOROUGH.

Return by Vaccination Officer.

Period covered by Return.	Number of Births re- turned in Birth List Sheets.	Successfully Vaccinated	Insusceptible of Vaccin- ation.	Number in respect of whom Statutory Decla- rations of Conscien- tious Objection have been received	Died Unvaccinated.	Left the District or not to be found.	Number not accounted for in previous columns at date of this Return	Postponement by Med- ical Certificate.
From 1st January, 1922, to 31st Dec., inclusive.....	490	115	1	354	14	4	2	—
From 1st Jan., 1921 to Dec. 31st, 1921, inclusive	540	157	1	339	33	3	6	1

A Pamphlet advising vaccination of children before entering school was issued during the year.

NURSING, HOSPITAL AND AMBULANCE PROVISION.

Domiciliary nursing is carried out by two district nurses provided by the Middleton District Nursing Association.

The number of cases dealt with during the year was 186, entailing 6,284 visits to the houses.

The certified midwives attended 256 confinements during the year as "midwife" and 79 as "nurse."

3 cases of Tuberculosis were admitted to Hospitals during the year and 20 to Sanitaria.

St. Mary's Hospital, Manchester, received 32 in-patients and 40 out-patients.

The Children's Hospital dealt with 46 in-patients and 148 out-patients.

The Manchester and Salford Hospital for Skin Diseases treated 83 cases with an attendance of 487.

The number of infectious cases treated at Marland Joint Fever Hospital was 68.

Ambulance Service.—2 motor ambulances.

Infectious cases removed to Hospital—

Diphtheria ...	...	...	7
Scarlet Fever ...	...	...	57
Typhoid Fever ...	...	...	4

Total ...	68
-----------	----

General cases dealt with—

Accidents	44
Operation cases, etc. ...	267

Total ... 311

To Manchester Hospitals	207
From Manchester Hospitals	41
To Oldham Hospitals	30
From Oldham Hospitals	21
Taken to other places	12

Homeless Children.

12 children were provided for during the year at the Scattered Homes, in North Street.

LABORATORY WORK.

(a) Bacteriological Investigation, carried out at the Public Health Laboratory, Manchester.

Nature of Specimen.	Number.	Found Positive.	Found Negative.
Diphtheria	10	2	8
Typhoid	7	6	1
Tuberculosis	1	1	—
Bovine Tuberculosis Milk	20	—	20
Milk	1	—	1
Mussels	1	—	1
Cockies	1	—	1
Liver of Cow	1	Bacillary Necrosis	
Hair for Ringworm ...	23	13	10

(b) Specimens examined at Tuberculosis Laboratory, Ashton-under-Lyne.

Sputum and Urine ..	134	40	94
---------------------	-----	----	----

(c) Food and Drugs.

1.—Samples taken by County Police Authority.

Description of Sample.					No. of Samples purchased.	Result of Analysis.
Milk	...	...	...	...	57	All genuine.
Mustard	...	...	...	...	1	Genuine.
Tapioca	...	...	...	...	1	do.
Margarine...	...	...	...	...	2	do.
Lard	...	...	...	...	2	do.
Butter	...	...	...	...	3	do.
Coffee	...	...	...	...	3	do.
Bi-carbonate Soda	...	...	...	...	2	do.
Baking Powder	...	...	...	...	1	do.
White Pepper	...	...	...	...	2	do.
Ginger	...	...	...	...	1	Contained 2 p.c. Calcium Sulphate.
Total					75	

No proceedings were taken.

2.—Samples taken by Local Authority.

Milk	...	...	...	...	64	1 Slightley watered. 3 contained 2, 2, & 2·5 parts by volume per 100,000 of cowdung.
Cocoa	...	...	...	...	3	Genuine.
Margarine	...	...	...	...	6	do.
Ground Ginger	...	...	...	...	6	do.
Butter	...	...	...	...	4	do.
Lard	...	...	...	...	5	do.
Chocolate	...	...	...	...	1	do.
Cheese	...	...	...	...	4	do.
Cream	...	...	...	...	2	1 contained '26 per cent. of Boric Acid.
Sugar	...	...	...	...	1	Genuine.
Pepper	...	...	...	...	1	do.
Coffee	...	...	...	...	3	do.
Sausage	...	...	...	...	2	do.
Tinned Pears	...	...	...	...	3	1 contained $\frac{3}{4}$ of a grain of tin per pound.

Total ... 105

No legal proceedings were taken.

SANITARY ADMINISTRATION.

The WATER SUPPLY derived from the Middleton and Heywood Water Works, has been ample and of good quality.

A sample of water taken at Lands End Works, Rhodes, during the year, was found to be satisfactory on chemical and bacteriological analysis.

Four cottages in Stanycliffe Lane have had Town Water Supply laid on.

Seven houses without proper and sufficient water supply in various wards in the borough have been connected up with the Town Supply.

The extensions during the year were :—

70 yards 3 ins. diameter, Water Main, Moss Way.

45 yards 4 ins. diameter, Water Main, Stannicliffe Road.

The number of houses in the area not receiving the Heywood and Middleton Water Supply is 51.

The number of houses without baths totals 6,118.

FOOD.

(a) Places where food is prepared were noted during the year, and 77 premises were tabulated and referred to the Sanitary Inspector for investigation and report. These included the sale and preparation of fish and chips, peas and beans, bread, dinners, cakes, ice-cream, tripe, boiled ham, minced meat.

A special report on the Ice Cream Works at Henry Street, received your attention and the recommendations made, were approved.

(b) The cleanliness of food in handling and exposure on sale, to flies and dust require more attention.

The following resolution received your support :—

“ That the Government be requested to introduce a Bill to make illegal the practice common among the vendors of bread of accepting from customers unused bread in exchange for fresh, this Council being of opinion that such practice provides a means of spreading contagion and infection, and, in consequence, prejudicial to the health of the community.”

(c) Chemical colouring matter and preservatives in food and metallic contamination of canned food were dealt with in the following resolution :—

“ That this Council being of opinion that the use of chemical colouring matter and preservatives in food, constitutes a serious menace to the community, calls upon the Ministry of Health to exercise, without delay, the power which it already possesses to safeguard the public in this respect ;” and “ That this Council urges the Ministry of Health, in the interests of the public, to take into consideration the serious position in relation to metallic contamination of canned foods ”

(d) MILK. With a view to improving the cleanliness in the preparation of milk in this area a special report on Cowsheds, of which the following is an extract, was made and received the approval of your Committee :—

The farmer does not give sufficient attention to the necessity of a pure air supply. It is the rule to find ventilators, where they exist, stuffed up. 800 cubic feet per cow is not available in a number of the cowsheds. The farmer's rooted objection to fresh air is related to the temperature of the cowshed, and he believes the cows milk better when housed in dark sheds. It is well known that cow's milk is richer when the cows are in the open fields, than when housed in stuffy, dark, ill-ventilated, overcrowded cowsheds.

The stalls and floors require more frequent swilling with water and the walls and ceilings more frequent limewashing. The walls should be free from splashing by excreta. The cleansing of the cows also shows much contrast. Some are clean and groomed, others unsatisfactory. The construction of the floors and channelling is important as regards the cleanliness of the cows.

The procedure adopted in milking cannot be considered satisfactory. Appliances (nail brush, soap, and hot water supply)

are not seen, overalls are not worn, attention to the cleanliness of udder and teats is not always given before milking.

Bottled Milk.

A request was made to firms distributing bottled milk in the area to stamp the date of bottling on the containers.

Instructions were issued to farmers during the year on UDDER DISEASES.

“How to distinguish Felon and Tuberculosis—

Tuberculosis of the Udder

The disease is more chronic; IT TAKES LONGER TO DEVELOP, the affected quarters become greatly enlarged. The softest part is near the teat. As a rule no pain is shewn on handling, and in an old case the swollen quarter is hard, almost like a piece of wood, the skin covering it being loose and the glands nodular.

The milk from a Tubercular quarter shews no marked difference from the ordinary as seen by the naked eye, except for a certain wateriness in old cases.

In many cases of Tubercular Udder there may also be some loss of condition for some weeks before, together with a persistent cough. It does not follow, however, that there will be any evidence of disease other than in the Udder, as cases of Tubercular Udders occur where the cow is otherwise apparently in the best of health.

Advise to Farmers.

It is quite clear from the Milk and Dairies (Amendment) Act, 1922, that THE RESPONSIBILITY OF DETECTING TUBERCULOSIS OF THE UDDER IS ON THE OWNER of Dairy Cattle, and it is essential in his own interest that he should

Chronic Inflammation of the Udder.

The onset is GENERALLY SUDDEN. This ailment also gives rise to hardness, but there is a shrinkage of the diseased quarters, and the GREATEST HARDNESS IS NEAR THE TEAT.

The milk from a less severe case of "Felon" is mostly a watery whey, with lumps of curd which often require considerable force to expel them from the teat; in more severe cases there may even be a considerable proportion of pus.

periodically examine the Udders of all his cows. The best time to do this is soon after they are milked, and a weekly examination would not be a lengthy matter. In doubtful cases it will be advisable to obtain the opinion of the veterinary surgeon. Whenever he has any grounds for suspicion, the only course for the owner is to stop the use of the milk from the cow. In the Borough of Middleton, where the milk clauses are in operation, the owner must notify to the Middleton Sanitary Authority any such cow, whether on premises inside or outside the Borough. The cow will thereupon be inspected.

The Middleton Sanitary Authority trust that all milk producers will use their best endeavours to prevent the sale of Tuberculosis Milk to the public."

Registration of Milk Shops under the Milk and Dairies (Amendment) Act, 1922, requires to be made on uniform conditions, as affecting adjacent authorities as at present the conditions of registration vary in the different adjoining areas.

SEWAGE SYSTEM.

The sewerage of the Borough is under the charge of the Borough Surveyor.

Periodic cleansing and repairing was carried out, and special attention given to the area bounded by Olive, Castle and Collinge Streets, and the Railway at Middleton Junction.

About 2 miles of new sewers have been constructed during the year. These have included foul and surface water sewers

The nuisance arising from sewer gas in Mills Hill Road, has been remedied by fixing Ventilation shafts to the sewer, sealing all manholes and trapping gullies.

A scheme prepared for the reconstruction of the Greengate Street joint sewer and storm overflow and the Middleton Branch Sewer is in operation.

The laying of a main intercepting sewer through Alkrington Wood from Moss Lane to Rhodes has been approved.

The Mersey & Irwell Joint Committee reported during the year with reference to the pollution of Wince Brook, that Oldham Corporation was constructing six additional humus tanks and renewing the contact beds.

The sewage of one house found to be draining into the Wince Brook has been connected to the Main Sewer.

Conversion of Pail Closets

15 pail closets were converted to fresh water closets.

W.C.'s have been provided at the Don Mill.

PUBLIC BATHS.

The total number of bathers using the baths during the year was 28,962 ; males 22,128 ; females 6,834.

A scheme for improving the Sanitary accommodation of the Public Baths was prepared during the year.

Plans for the New Public Baths in Suffield Street were drawn up. The present baths are insufficient. The swimming bath is not in use during winter months.

The change of water in the swimming baths is made on alternate days or according to the number of bathers using the bath. A constant overflow is provided during the warm weather.

Special attention to the condition of water in swimming baths is necessary.

The importance of purification is evident from the following facts :—

1. Swimming Baths become polluted by excretion from the skin, nose and throat, saliva, bladder and bowels of those using the baths.

2. These excretions contain bacterial organisms which may spread disease.

3. Scum floating on the surface and slime deposited at the bottom and sides of the bath are due to bacterial impurity suspended in solid matter.

4. Diseases such as conjunctivitis and otitis have been traced to bathing in polluted baths.

5. The water in warm weather when swimming baths are most used becomes quickly polluted, and after a few days the water is equal to dilute sewage.

6. The temperature of the water in swimming baths favours bacterial growth.

Different methods are available for purification of water in swimming baths :—

1. Frequent changing of water.
2. The use of continuous aeration and filtration plants.
3. Disinfection.

Most of these are costly methods. One of the most efficient and inexpensive methods is purification by chlorine. This has been

applied as hypochlorite of magnesia in the proportion of one part of free chlorine to 2 million parts of water.

Prepared by electrolysis it has been found to cost about a half-penny per gallon.

Water in public baths when so treated, remains clean, free from scum and slime, and of fresh odour. It is not necessary to change the water oftener than once in seven days under this treatment.

FACTORY AND WORKSHOPS.

Industrial hygiene generally in Factories is supervised by the Factory Inspector,

Conditions outside the factory are related to the Sanitary Authority.

The following matters were referred by the Factory Inspector during the year:—

1. Water closet at 36a, Townley Street, factory—not completely enclosed and not ventilated.
2. Flour Chamber, Middleton & Tonge Industrial Society, requiring limewashing.
3. No ventilation of sanitary conveniences with outside air, at Messrs. Aspell Bros.
4. No partition to conveniences for men and women at Messrs. Barratt & Co. (Men only employed at present).
5. Pail closets at Messrs. Chadwick and Smith—conversion under consideration.
6. Sanitary convenience at Messrs. Bamford & Sons not ventilated with outside air.

7. No separate sanitary conveniences for sexes at Messrs. Smithies, 7, Lodge Street.

8. Inside walls, Electricity station, recommended treatment as prescribed under paragraph 1 of the Act, pointed out the walls here are buff brick and do not require treatment.

9. Pail closets at Messrs. M. Fletcher & Son, conversion under consideration.

10. Suitability of water supply at Land's End Works—certified satisfactory.

11. 6 Sanitary Conveniences for 200 females at Messrs. Tonge Vale Spinning Co.—additional accommodation being provided.

12. No Sanitary Convenience on premises at Premier Grass Tape Co.—being remedied.

CHIEF OCCUPATIONS IN THE BOROUGH.

The following group of occupations are carried out in the area (Census 1921).

Occupation.	Males	Females
Agricultural	235	24
Mining and quarrying	26	—
Chemical processes (paints, oil, &c.) ...	77	4
Metal Workers	710	9
Electricians, etc.	88	5
Skins and Leathers	37	31
Textile Workers (Mills, etc.)	3,672	3,891
Textile goods and dress	105	158
Foods, drinks, and Tobacco	151	266
Wood and Furniture	295	9
Paper (Printers, &c.)	61	20
Builders, etc.	333	—

Occupation.			Males.	Females.
Painters and Decorators	...	...	81	2
Other Materials (Rubber, etc.)	...	...	101	48
Gas, Water and Electricity	...	...	36	1
Transport	...	...	569	26
Commercial, Finance, Insurance	...	...	698	249
Public Administration	...	...	123	15
Professional Occupations	...	...	142	185
Personal Service	...	...	193	404
Clerks, etc.	...	...	371	193
Warehousemen	...	...	525	155
Stationery Engine Drivers etc....	...	...	156	—
Undefined (Labourers, etc.)	...	...	965	20

Black Smoke Pollution of the Atmosphere.

During the year all Works owners were circularized re methods of preventing black smoke, and the Education Committee established a class for stokers with the owners' co-operation which was well attended.

Ventilation of Cinemas.

Following on a detailed report by the Borough Surveyor and Medical Officer of Health additional inlet ventilators have been installed at the Empire Cinema.

Overcrowding.

Investigation into the state of overcrowding was dealt with during the year. Special reports made on individual cases were considered by your Committee

Sanitary Department,
Corporation Street,
Middleton.

Sanitary Inspector's Annual Report

For the Year 1923.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have much pleasure in presenting for your consideration my twenty-eighth Annual Report.

There has been a decrease in the number of infectious disease reported and it is to be hoped this will continue.

Places where food is prepared have been visited and with one exception have been found to be satisfactory, and food of good quality.

The milk supply remains good, but there should not be any milk which contains dirt of any description. Milk producers should exercise every care and give a milk supply which is clean and up to the standard in every respect.

The Sanitation of the Borough for an old town is good. Fortunately there are no slums, but there are a few inhabitants who would very soon create them if permitted.

I beg to acknowledge the assistance rendered by Alfred Booth, who has carried out onerous and dangerous duties and those of Nightsoil Foreman in a very satisfactory manner.

I also beg to tender my sincere thanks to the Chairman and Vice-Chairman of the various Committees for their support.

I remain,

Yours faithfully,

CHARLES HY. NORTON,

Sanitary Inspector.

SUMMARY OF WORK DONE.

Formal Notices under Public Health Act, 1875, served	...	17
" " complied with	...	14
Preliminary Notices	1875 ...	296
" " complied with	...	257
No. of Nuisances found	...	446
Preliminary Notices, Housing and Town Planning Act	...	24
Formal Notices, re Black Smoke	...	5
Smoke Observations	...	73
Summonses, re Black Smoke	...	5
Samples of Food taken for analysis	...	105
Samples for Bacteriological examination	...	24
Diseased, unsound, or unwholesome food seized	(lbs.)	725
Canal Boats inspected	...	6
Cases of infectious disease reported	...	118
Patients removed to Hospital for isolation	...	68
Rooms disinfected for notifiable infectious diseases	...	436
" Phthisis...	...	154
Schools Disinfected	...	31
Articles of bedding, clothing, &c., disinfected	...	868
Visits—Housing and Town Planning Act	...	88
" To cases of infectious disease...	...	376
" To common lodging houses	...	244
" To slaughter houses	...	621
" To dairies and cowsheds	...	104

„	To workshops ...	...	...	...	...	113
„	To factories ...	...	...	...	...	25

PARTICULARS OF NUISANCES.

Nuisances.	Found	Abated	Unabated
Choked Waste W.C. ...	58	57	1
„ W.C. ...	1	1	
„ Drain ...	39	36	3
„ Downspout ...	8	10	1
Insufficient Ventilation W.C....	1	1	
Insufficient Flush to W.C. ...	2	2	
No Closet door ...	3	3	
No separate closet accommodation ...	1	1	
Broken pedestal ...	1	1	
Dirty Closet ...	1	1	
Ashpits without doors ...	10	10	
No Ashpit accommodation ...	6	6	3
Insufficient Ashpit accommodation ...	22	17	6
Foul Ashpit ...	20	18	2
No Ashbin ...	3		3
Wood Tubs ...	3	4	
Foul Drain ...	1		1
Untrapped Drain ...	1		1
No downspout... ...	2	1	1
Damp Walls ...	5	4	1
Dangerous yard wall ...	1		1
Unpaved yard... ...	1	1	
Dirty back yard ...	1	1	
Dirty house ...	2	2	
Smoky house ...	1	1	
Dangerous ceiling ...	2	2	
Insufficient Water Supply ...	1		1
Insufficient Ventilation ..	1	1	
Unwashed flour Store ...	1	1	

Accummulation of refuse	...	...	3	3	
" manure	...	...	5	5	
" water	...	...	1	1	
Broken Window Cords	...	..	5	3	3
Defective Ashbins	...	...	62	65	2
" Back yard	...	...	7	5	2
" Sanitary can	...	...	4	4	
" W.C. Cistern	...	...	10	8	2
" Flush pipe	...	...	5	2	3
" Tipper	...	...	8	4	4
" Closet seat	...	...	1		1
" Closet floor	...	...	1	1	
" Closet wall	...	...	1	1	
" Closet door	...	...	2	2	
" Closet roof	...	...	4	3	2
" Roof	...	...	22	18	4
" Eaves gutter	...	...	13	9	4
" Downspout	...	...	29	19	10
" Waste pipe	...	...	13	12	1
" Channels	...	...	3	3	
" Gully trap	...	...	1		1
" Grid	...	...	2		2
" Ceiling	...	...	3	3	1
" Window frames	...	...	8	6	2
" Stair tread	...	...	2	2	
" Door easing	...	...	2	1	1
" Back door	...	...	1	1	
" Floor	...	...	10	7	3
" Plaster	...	...	13	10	3
" Cellar floor	...	...	1		1
" Fire range	...	...	1	2	
" Lead flashings	...	...	1		1
" Boiler Grate	...	...	1	1	
" Wash boiler	...	..	2	1	1
Totals	...		426	384	79

296 Preliminary Notices have been served in respect of the foregoing nuisances and 257 were complied with.

17 persons were reported to the Committee and in each case Formal Notices were ordered to be served. 14 Formal Notices were complied with. In no case was Police Court proceedings taken. A number of the nuisances abated are in compliance with notices served during the latter part of the year 1922.

Choked waste water closets continue to give a large amount of trouble, due to the negligence of tenants.

Choked and defective downspouts and eaves gutters have resulted in rainwater running down the walls and causing them to be damp. These defects should be remedied.

A number of foul brick ashpits have been abolished and galvanized iron bins substituted.

A few tenants have dirty houses but generally they clean the house when notified by this Department.

INFECTIOUS DISEASE.

118 cases of infectious disease have been reported, being 148 fewer cases than were reported during the previous year.

There were 97 cases of scarlet fever, 11 of diptheria, 5 of enteric fever, and 5 of erysipelas, of which 57 scarlet fever cases, 7 diptheria cases and 4 enteric fever cases were removed by this Department to Marland Hospital for isolation.

There has been a reduction in the number of cases of scarlet fever, diptheria, and erysipelas, but an increase of 5 cases of enteric fever.

The whole of the above cases of infectious disease have been dealt with by this Department.

39 cases of chickenpox have been visited, and the parents advised to have the house, bedding, etc., thoroughly cleansed, which has been carried out in each case.

DISINFECTION.

868 articles of bedding, clothing, etc., have been disinfected in the Steam disinfector. In no case has any article been damaged in the process, nor has any case of infectious disease been traced to any article which has passed through the disinfector.

REMOVAL OF HOUSE REFUSE AND NIGHTSOIL.

The following is a Statement of the quantity and cost of the removal of house refuse and nightsoil during the year 1923, also the quantity and cost for the previous year.

	1923	1922	
	loads	loads	loads
No. of loads of house refuse removed...	4822	4852	30 decrease
No. of loads removed by motors ...	2772	2387	385 increase
„ by horses ...	2050	2465	415 decrease
„ to destructor ...	4178	4520	342 decrease
„ to tips ...	644	332	312 increase

REMOVAL OF NIGHTSOIL

	1923	1922	
Number of pails emptied ...	24,400	23,608	792 increase
„ loads pail refuse...	624	676	52 decrease
Cost of removing pail refuse	£281 5s.	£330 5s.	£49 decrease
Cost per pail	2 $\frac{3}{4}$ d.	3 $\frac{1}{2}$ d.	$\frac{3}{4}$ d. decrease
Cost per load	9/-	9/9 $\frac{3}{4}$	9 $\frac{3}{4}$ d decrease

There has been a small decrease in the number of loads of house refuse removed, probably due to fewer vehicles being used during the summer months when less refuse is made.

More refuse has been removed by the motors, and less by horses. This is due to the motors being as far as possible kept fully engaged all the year whilst the horse vehicles are reduced when there is less refuse to be removed during the summer months. The motors are engaged mostly on the longer journeys and horse vehicles on the shorter ones, but motors are often used for short journeys, especially in summer.

Two Ford motors and two horse vehicles are used for the removal of house refuse, and one horse vehicle is engaged on two half-days each week, but the number is less during summer time.

The Ford motors do very useful work, but owing to their frailty are very costly to keep in repair. During the year under review they cost £182 for repairs, which amounts to about one shilling per ton of refuse removed, making a total cost of eight shillings and tenpence halfpenny per ton.

The motors have been working over four years, and in calculating the cost, depreciation of 33 $\frac{1}{3}$ per cent. is allowed, and £12 per year for rent of garage.

The number of vehicles engaged on this work is the same as when the work was taken over by this department twenty years ago. At that time two of the outlying districts were let to contractors ; now the whole of the Borough is cleansed by the Corporation, and since that time over seven hundred new houses have been erected.

Owing to shorter hours worked, two additional men have been engaged to assist in loading the vehicles. The erection of new houses in the Borough will add to the work of house refuse removal, and in order to avoid any great increase in cost of removal at the present time, it might be advisable to consider the purchase of two motors stronger than the present machines, and with greater capacity

The quantity of refuse per house is too high and might be greatly reduced if householders would burn as far as possible all vegetable refuse, and sift the cinders which could be burned and would save coal.

During the year leaflets have been distributed and an advertisement has been fixed in the tram cars asking inhabitants to burn as much refuse as possible, but I doubt if any good has been done. The attention of several householders has been drawn to the large quantity of cinders amongst the refuse in their ashpits. Some have replied that they hadn't time to bother with sifting ashes, and others that they paid rates to have the refuse removed.

There has been a large increase in the amount of refuse taken to the tip, as the destructor could not deal with all the refuse collected during the winter months. As more houses are erected the extra refuse will have to be taken to the tip or dealt with in some other manner.

The pail refuse is collected and given to farmers to be used as manure for the land.

The increase in the number of pails emptied is largely due to the fact that the pails in the Slattocks district which are emptied by contract, were inadvertently omitted from the previous year's report.

REMOVAL OF CLINKERS.

1490 loads of clinkers weighing 2541 tons have been carted from the destructor to Hilton Fold Lane and other places where new roads are being made.

The total cost of removing clinkers is £275 5s. 0d., and the cost per ton 2/2.

SALE OF DESTRUCTOR SCRAP.

25 tons 9 cwts. 3 qrs. of baled scrap tins have been sold for £56 17s. 0d. and a quantity of scrap iron, bottles, etc., for £1 2s. 6d.

There was a quantity of baled scrap tins in hand at the end of the year.

FOOD AND DRUGS ACTS.

105 samples of food were submitted to the Public Analyst, and 3 samples of milk on arrival were not in a condition to be analysed.

The samples submitted were :—Milk 64, Cocoa 3, Magarine 6, Ground Ginger 6, Butter 4, Lard 5, Chocolate 1, Cheese 4, Cream 2, Sugar 1, Pepper 1, Coffee 3, Sausage 2, Tinned pears 3.

One sample of milk was reported to be slightly watered, and three samples contained 2·2 and 2·5 parts by volume per 100,000 of cowdung.

All samples other than milk were taken informally, and one sample of tinned pears contained $\frac{3}{4}$ of a grain of tin per lb.

One sample of potted cream contained .4 per cent of boric acid, and was not suitable for infants or invalids, and one sample of sausage contained .36 per cent of boric acid, which is not more than usual

The remaining samples were reported to be genuine.

It is to be regretted that any milk producer should be so careless or indifferent as to allow filth or dirt of any description to get into such an important article of food.

A quantity of milk is now supplied in glass bottles, and is sold as sterilized milk. One bottle of this milk was handed to me by the purchaser, and the milk smelled very rancid. The Public Analysis reported that in his opinion the smell was due to butyric and other fermentations, which would occur after imperfect sterilisation in the closed bottle. Apart from this, the milk was of good quality.

No legal proceedings were taken for offences under the Food and Drugs Acts, but the vendors of the milk that was slightly watered, contained cowdung, and the unwholesome bottled milk, were cautioned to be more careful in future.

RIVERS.

The condition of the rivers flowing through the Borough is very much improved, but is still far from satisfactory. Wince Brook is better than it has been for many years, but is still much polluted and at times very offensive. The pollution takes place outside this Borough, and something ought to be done to protect the inhabitants living on the banks of this stream from the nuisance.

The River Irk and Whit Brook are somewhat variable, sometimes being quite clear and satisfactory; at other times quite black and foul.

CONTAGIOUS DISEASES (ANIMALS) ACTS.

This Borough has been free from contagious disease amongst animals. Owing to the prevalence of foot and mouth disease movement of cattle has been restricted without licence, and 175 licences have been issued by me.

HOUSING AND TOWN PLANNING ACTS.

24 notices have been served respecting defects in houses, as follows :—

Defects.				Defective Abated Unabated		
Defective washing boilers	...	...	...	4	2	2
„ side boiler	...	...	...	1	1	
„ ceilings	...	...	...	5	5	
„ bedroom floors	...	...	...	7	7	
„ fire range	...	...	...	2	2	
„ stairs	...	...	...	3	3	
„ plaster	...	...	...	2	2	
„ closet floor	...	...	...	1	1	
Broken window cords	...	...	...	12	12	
				37	35	2

The great majority of defects in dwelling houses are dealt with under the Public Health Act, 1875, and other Acts.

There is considerable overcrowding of houses in the Borough which is getting worse.

BACTERIOLOGICAL EXAMINATIONS.

Twenty samples of milk, one of mussels, one of cockles, and one cow's liver have been submitted for bacteriological examination.

All the samples of milk were reported free from tubercle bacilli, the mussels and cockles were free from disease.

The portion of cow's liver was reported to be unsound, but the remainder had been destroyed before the result of the examination was received.

SLAUGHTER-HOUSES.

There are ten slaughter houses in the Borough and 621 visits have been paid to them. With one exception the places were kept clean and were satisfactory. In one instance the place was unsatisfactory but the owner carried out my requirements.

COMMON LODGING HOUSES.

244 visits have been paid to the Common Lodging Houses, which were found to be clean, free from overcrowding, and infectious disease.

FACTORY AND WORKSHOPS' ACTS.

113 visits have been paid to workshops, and 25 visits to factories. All were found to be in a satisfactory condition.

SHOPS' ACTS.

No infringements had been detected by this Department.

CANAL BOATS ACTS AND REGULATIONS.

Six canal boats have been inspected. In each case, the certificate was produced, and the boats were properly marked. The cabins were registered for twenty-two persons, and occupied by ten men and two women. The cabins were clean, and free from overcrowding, and infectious disease.

DAIRIES, COWSHEDS, AND MILKSHOPS.

104 visits have been paid to dairies and cowsheds which were found to be kept clean. There has been an improvement in

the ventilation of cowsheds, but there is still room for further improvement. The drainage is generally discharged into an open cesspool and might be improved. The lighting of the shippens is, in the majority of cases, very fair, and in a few instances, could be very much improved.

There is an improvement in the cleanliness of the cattle, and many farmers wipe the cow's udders before beginning to milk.

If the cattle are to be kept healthy and the milk supply clean and free from disease, it is essential that the cowsheds should be kept in a sanitary condition, and the cattle clean.

DISEASED MEAT.

720 lbs. of diseased meat has been seized and destroyed.

There were two seizures, but in both instances the owners reported the cases, so no further proceedings were necessary. Both carcasses were examined by the Medical Officer of Health and myself. One of the animals suffered from generalised tuberculosis, so the whole carcass was destroyed, but in the other case the disease was only slight, so only part of the carcass was destroyed.

SMOKE OBSERVATIONS.

73 smoke observations have been taken during the year, and the total amount of black smoke emitted during the observations was 2 hours 54 minutes 5 seconds. The average time black smoke was emitted was 2 minutes 20 seconds.

The limit of five minutes in the aggregate emission of black smoke per thirty minutes observation, has been exceeded on thirteen occasions.

Five firms have been summoned for emitting black smoke in excess of the limit allowed ; four firms were fined ten shillings each, and in one case an order was made to abate the nuisance and prohibiting its recurrence with twelve shillings and sixpence costs. In one case no further action was taken.

The limit allowed by the Corporation is a generous one, and ought not to be exceeded.

One firm after being reported, made alterations to the plant and reduced the emission of black smoke considerably, but there is still room for further improvement.

Another firm introduced mechanical stokers and this has had good effect in reducing the amount of black smoke emitted from their chimney.

During the year classes for boiler firemen were formed and were well attended to teach firemen how to fire without making black smoke, and to get the most heat out of the coal consumed.

This is a very useful idea but will not be effective unless the boilers are not over loaded, the draught and coal are good, and the stoker is careful in firing.

The pollution of the atmosphere by coal smoke has been before the public for a great number of years, but very little has been done to keep this nuisance within reasonable limits. The administration of the act is left to Local Authorities, many of whom do not appear to enforce the provisions of the Act to the extent they might, and until there is uniformity in administration, very little, if any, improvement will be brought about.

The nuisance covers a wide area, and the Authorities who try to keep the nuisance within reasonable limits benefit not only themselves, but also surrounding districts.

During the year 1923 a Bill was introduced in the House of Lords to amend the law relating to smoke abatement, and under this Bill, the penalties would have been largely increased. Under certain conditions, County Councils would have been empowered to administer the law in defaulting districts. The latter provision would undoubtedly have met with great opposition from Local Authorities concerned, especially from those who had done least to deal with the nuisance.

I consider that the smoke nuisance can be greatly reduced, and that black smoke should not be emitted for more than four minutes in the aggregate in one hour's observation.

During the year I have seen several sketches of apparatus for reducing black smoke, but as they were the old idea in different forms, of admitting air at the bridge wall, I could not recommend them. When the smoke passes over the bridge and enters the flues, it is bound to pass up the chimney and create a nuisance. If steam raising plant is properly constructed to carry out the work required, and carefully attended, very little black smoke should be made. Should it be deemed necessary to instal any apparatus, mechanical stokers might help in reducing the amount of black smoke emitted.

Many of our local Mill Managers, Engineers and Firemen, have interested themselves in this question, and it is to be hoped that offenders will, in the near future, reduce this nuisance to reasonable limits.

HOUSING.

Particulars of dwellings and rooms occupied by private families in the Borough (Census 1921.)

Undivided private houses	6,581	Rooms.....	29,200
Shops	389	Rooms	1,984
Others	10	Rooms.....	43

Private families and rooms occupied.

Private families	6,894
Population in private families	28,044
Rooms occupied	30,709

No. of families in dwellings of—

1—3 rooms	4—5 rooms	6—8 rooms	9 or more rooms
558	5,484	790	62

(' Rooms ' implies living rooms and bedrooms)

Number of families occupying :—

ROOMS.

	1	2	3	4	5	6—7	8—9	10 & over
Rooms	5	45	514	4058	1432	694	114	32
Families	11	118	1969	15611	6365	3294	533	152
No. of persons	0.1	0.7	7.5	58.8	20.7	10	1.7	0.5
Per Cent. of families								

Average number of rooms per number of persons in family :—

	1	2	3	4	5	6	7	8	9	10	11	12
Number in Family ...												
Number of rooms per person	4.14	2.15	1.45	1.11	0.92	0.77	0.66	0.60	0.54	0.50	0.47	0.46

Average number of rooms per person . 1.10.

BUILDING.

Number of houses built during 1923	21
" " 1922	61

Increase 82.

Estimated population 1923	28,870
Census population 1921	28,290

Increase 580.

The Borough Surveyor points out that for the period 1900—1914 an average of 95 houses were built per annum, whereas during the period 1915—1923 the average number of houses built per annum amounted to only 20, making a deficiency of 75 houses per annum or 675 during the last 9 years. To that must be added the number of houses which will be considered unfit for human habitation under normal conditions.

No. of new houses erected during the year :—

(a) Total	...	...	...	...	...	21
(b) With State assistance under the Housing Acts of 1919 or 1923 :—						
(i) By the Local Authority	...	...	...	...	...	none
(ii) By other bodies or persons	...	...	...	...	...	none

No. of houses in course of erection under the Council's Building Scheme	none
--	-----	-----	-----	-----	-----	------

Financial assistance for purposes of increasing housing accommodation :

Have any advances been made during 1923 :—

(a) By Loans	...	No.	No. Nil.	Amount of Loans—	None.
(b) By Subsidy	...	38.	No. 38	Amount of Subsidies—	£3,800.
(Promised assistance)—none paid.					

Unfit Dwelling-houses :—

INSPECTION.

- | | | |
|-----|---|------|
| (1) | Total No. of dwelling-houses inspected for housing defects (under Public or Housing Acts)... | 320 |
| (2) | No. of houses which were inspected under the Housing (Inspection of District) Regulations, 1910 | None |
| | Have the particulars of these inspections been fully recorded as specified in the Regulations? | |
| (3) | No. of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation | None |
| (4) | No. of dwelling-houses (exclusive of those referred to under (3)) found not to be in all respects reasonably fit for human habitation | None |

Remedy of Defects without service of Formal Notice :—

No. of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	257
--	-----

Action under Statutory Powers :—

A—Proceedings under Section 28 of the Housing, Town Planning Act, 1910 :—

- | | | |
|-----|---|----|
| (1) | No. of dwelling-houses in respect of which notices were served requiring repairs... | 24 |
| (2) | No. of dwelling-houses which were rendered fit :— | |
| (a) | By Owners | 24 |

(b) By Local Authority in default of Owners	None
--	-----	-----	-----	-----	------

(3) No. of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by Owners of intention to close	None
--	-----	-----	-----	-----	------

B—Proceedings under the Public Health Acts.

(1) No. of houses in respect of which notices were served requiring defects to be remedied	296
--	-----	-----	-----	-----	-----

(2) No. of dwelling-houses in which defects were remedied :—					
---	--	--	--	--	--

(a) By Owners	257
---------------	-----	-----	-----	-----	-----

(b) By Local Authority in default of owners	None
--	-----	-----	-----	-----	------

C—Proceedings under Section 17 and 18 of the Housing, Town Planning, etc., Act, 1919 :—

(1) No. of representations made with a view to the making of Closing Orders	...	None
--	-----	------

(2) No. of dwelling-houses in respect of which Closing Orders were made	...	None
--	-----	------

(3) No. of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	None
--	-----	-----	-----	-----	-----	------

(4) No. of dwelling-houses in respect of which Demolition Orders were made	...	None
---	-----	------

(5) No. of dwelling-houses demolished in pursuance of Demolition Orders	...	None
--	-----	------

D—No. of houses demolished voluntarily by owners, or converted to workshops, etc. None.

OVERCROWDING.

During the year 229 houses were reported overcrowded, the total number of bedrooms of which were 471, and the number of occupants 1,886.

RELATION OF OVERCROWDING TO INFECTION.

Infectious Disease.				Overcrowding.
Scarlet Fever	...	...	...	30·92 per cent
Tuberculosis	...	...	...	30·55 „
Pneumonia	...	...	...	29·03 „
Chickenpox	...	...	...	32·35 „
Measles	...	...	...	27·27 „
Others	...	...	...	50 „

Relation of overcrowding to Maternity Cases ... 20·24 per cent.

CONDITION OF FITNESS.

The following conditions are laid down as the requirements of a healthy dwelling. (National Housing Manual). The house should be :—

- (1) Free from serious dampness.
- (2) Satisfactorily lighted and ventilated.
- (3) Properly drained and provided with adequate sanitary conveniences and with a sink and suitable arrangements for disposing of slop water.
- (4) In good general repair.
- (5) Provided with good water supply.
- (6) Adequate washing accommodation.
- (7) Adequate facilities for preparing and cooking food.
- (8) A well ventilated store for food.

Dampness should be considered serious if progressive or if arising from the want of a damp proof course or from porous walls.

Every house should, where practicable, have separate closet accommodation.

The area included in the Borough of Middleton being partly rural, offers many good sites for building. The 'Alkrington Garden Village' on the Manchester side is elevated and healthy and shows signs of attracting the attention it deserves.

REPORT ON MATERNITY AND CHILD WELFARE FOR YEAR 1923.

(a) GENERAL SURVEY.

The work during the year has been extended and this has entailed the holding of the Welfare Centre two half-days per week, instead of one as formerly.

Provision of Cod Liver Oil and Virol has been made at cost price, in suitable cases.

A Cookery Class for mothers has been inaugurated during the year to which Miss Howson has voluntarily given her services.

A supply of wool and flannel has been stocked, and garments are made by mothers and school children from models.

Two outfits for confinements have been in use, and one perambulator obtained during the year is lent out to mothers. More of these are required.

A class in Mothercraft for senior girls has been instituted during the year. The result of the teaching under the care of the Health Visitors has been satisfactory.

During Health Week, Baby Week was held. There was a large attendance of mothers and babies. Prizes were provided and special lectures and demonstrations given.

TEACHING OF THE MOTHER is made a prominent feature of the clinic, but voluntary help is required to allow the Health Visitors to devote more time to this duty.

The system of teaching at the clinic has been devolved after due consideration of several methods, and the following have been found to give the best results and to be best adapted to the mothers :—

(a) Individual advice is given on points arising in each case such as feeding, clothing, fresh air, etc.

(b) Collective teaching is based on the 'Question and Answer' method. A few prepared questions and answers are written on the blackboard. The Health Visitor takes these items and evolves a Health Talk on each.

(c) Practical demonstrations are given on the preparation of the feeding bottle, sterilizing the hands, storing milk under hygienic methods, ventilation, dressing baby, making cot, use of disinfectants, etc.

(d) Practical demonstrations on the preparation of articles of diet for children are given.

(e) Model garments are exhibited and material supplied to the mothers and school children attending the Mothercraft Class, for the purpose of making the necessary articles.

(f) Wall posters are exhibited exemplifying the principles of Hygiene.

(g) Samples of Artificial foods, disinfectants and vermicides are exhibited.

(h) Competitions in Mothercraft are held and Certificates awarded.

The clinic is not adopted for ante-natal work. General hygienic advice, testing of urine, supply of glaxo and outfits to expectant mothers are available.

A re-arrangement of the conditions under which maternity benefit should be available under the National Health Insurance Service so that expectant mothers would be required to notify at an early date would lead to good results.

Ante natal supervision is of great importance, not only from the point of view of the mother's health and safety, but also that of the child. Complications to which the mother is liable during the expectant period and before confinement are not known early enough with the result that mother and child suffer. Maternal mortality in England and Wales is excessive and does not compare with the better rates found in other countries such as Germany, Holland, Norway and Sweden, and it has not decreased in proportion to the General Death Rate.

Better Ante-Natal Supervision is required.

(1) To control the health of the expectant mother and prevent avoidable complications.

2. To control and improve environment, sanitary conditions, domestic cleanliness, overcrowding, supply of milk.

3. To allow for due preparation. As much care is required in a confinement as for a Surgical Operation.

These requirements are related to both the Family Practitioner and the Health Authority.

The causes of deaths in infants under one month are largely related to the need of ante-natal supervision. 42 per cent. of the infantile deaths occurring during the year were under one month and most of these were due to causes which were preventable had ante-natal supervision been exercised from an early period in pregnancy.

BREAST FEEDING.

Difficulty is encountered in getting mothers to CONTINUE breast feeding for the complete period.

In some cases there is not the WILL on the part of the mother.

Domestic cares and economic worries are prejudicial to breast feeding. The want of proper nourishment of the mother has a deterrent effect. Wrong management leading to unsatisfactory results often drives the mother to the feeding bottle.

Every endeavour is made to encourage the mother to keep to breast feeding and when seen early enough this can usually be accomplished.

The supply of glaxo at the clinic is not encouraged except as an adjunct to improve the mother's milk.

It is found where the mother is placed on glaxo there is no question of the good effect it has on the breast secretion.

WEANING is a matter on which most mothers require instruction. Instruction is given by pamphlets.

ARTIFICIAL FEEDING.

The capacity of the mother to breast feed is in some cases wanting. Mothers are too apt to take advice from friends to give up breast feeding.

The preparation for the artificial feed is given in the following advice :—

“CARE IN FEEDING BABY.

1. INVARIABLY WASH THE HANDS with soap and water and use a nail brush and clean under the nails EACH TIME BEFORE preparing baby's food.

2. Always BOIL the bottle and teat DAILY and prepare each feed freshly.

3. In Breast Feeding clean the nipples BEFORE AND AFTER each feed with plain boiled water, and keep the nipples COVERED with a clean handkerchief or piece of cloth.

4. NEVER wipe out baby's mouth with a piece of cloth, nor place a dummy in its mouth.

Neglect of these instructions may bring about Diarrhœa, Vomiting, Indigestion, Wind, Colic and Wasting."

THE USE OF PURGATIVES by the mother needs careful inquiry into as indiscretion in their selection is detrimental to breast feeding and the health of the infant.

In DELAYED DENTITION the value of thyroid extract has been further noted.

(b) NOTIFICATION OF BIRTHS.

Under the Notification of Births Act, 1907, there were notified during the year 424 births, and 7 were not notified.

Boys, 211. Girls, 195. Still-births, 25.

Notified by Doctors	...	...	...	...	149
Notified by Midwives	...	...	...	...	270
Notified by Parents	...	...	...	...	5
Not notified	...	...	...	...	7

Failure to notify occurred through the parents not being conversant with the provisions of the Act. One from being sent to another authority, and several to misunderstanding between the parent and midwife. The Notification of Births Act was brought to the notice of those concerned, but no legal steps taken on a satisfactory explanation being received.

CONDITIONS AT BIRTH.

Per Cent.			Per Cent.		
Full Time	...	90	Legitimate	...	98·05
Premature	...	3·9	Illegitimate	...	1·95
Still-births	...	6·1			

(1) FULL-TIME BABIES.

Wards.

North	...	16·26 per cent.	East	...	16·26 per cent.
Central	...	18·70 „	Parkfield	...	17·62 „
South	...	19·78 „	West	...	11·38 „
Doctor in attendance at birth	...	...	...	...	15·72 per cent.
Midwife in attendance at birth	...	...	...	...	45·53 „
Both in attendance at birth	...	...	...	...	38·48 „
No attendance at birth	...	...	...	...	0·27 „

Weight at Birth.

5—6 lbs.	...	3·23 per cent.	8—9 lbs.	...	27·59 per cent.
6—7 lbs.	...	10·40 „	9—10 lbs.	...	16·85 „
7—8 lbs.	...	32·62 „	Over 10 lbs.	...	9·31 „

Breast fed at birth	...	...	82·15 per cent.
Bottle fed at birth	...	...	7·08 „
Partly breast and bottle fed	...	...	10·77 „

Age of Mother,

Age of Father.

Under 20	...	1·85 per cent.	Under 20	...	1·32 per cent.
20—30	...	53·71 „	20—30	...	43·38 „
30—40	...	35·8 „	30—40	...	43·05 „
Over 40	...	8·64 „	Over 40	...	12·25 „

Home conditions.

Overcrowding	...	...	31.16 per cent.
House defects found	..	14.90	„
Nuisances reported...	...	4.34	„
Surroundings bad	...	10.84	„

(2) PREMATURE BABIES

North	..	12.5 per cent.	East	...	6.25 per cent.
South	...	43.75	Parkfield	...	37.5

Doctor in attendance at birth	...	...	37.5 per cent.
Midwife in attendance at birth	...	...	25
Both Dr. and Midwife in attendance at birth	...	37.5	„

Weight at Birth.

3—4 lbs.	...	18.18 per cent.	6—7 lbs.	...	36.36 per cent.
4—5 lbs.	...	18.18	7—8 lbs.	...	18.18
5—6 lbs.	...	9.10			„

Breast fed at birth	...	...	83.33 per cent.
Bottle fed at birth	...	...	16.67

Age of Mother.

Under 20	...	7.14 per cent.
20—30	..	42.86
30—40	...	50.00
Over 40	...	0.00

Age of Father.

Under 20	...	0.00 per cent.
20—30	...	46.15
30—40	...	53.85
Over 40	...	0.00

Home Conditions.

Overcrowding	...	...	25 per cent.
House defects found	...	18.75	per cent.

(3) STILL-BIRTHS.

North	...	12 per cent.	East	...	24 per cent.
Central	...	4	Parkfield	...	20
South	...	12	West	...	28

Number 25 Males 61.54 per cent. Females 38.46 per cent.

Age of Mother.			Age of Father.		
20—30	...	35 per cent.	20—30	...	27·78 per cent.
30—40	...	40 „	30—40	...	38·89 „
Over 40	...	25 „	Over 40	...	33·33 „

Health of Mother.

Stated to be good in 75 per cent. of the cases.

Stated to be bad in 25 per cent. of the cases.

Number of Pregnancies.

1 in 44 per cent. of the cases.	4 in 12 per cent. of the cases.
2 in 8 per cent. of the cases.	5 in 8 per cent. of the cases.
3 in 16 per cent. of the cases.	Over 6 in 8 per cent. of the cases

Miscarriages in 8 per cent. of the cases.

Previous still-births in 4 per cent. of the cases.

Previous children dying under one year in 12 per cent. of cases

(c) INFANTILE MORTALITY.

23 Full-time, and 8 Premature babies died during the year, and of these one was illegitimate.

CONDITIONS AT BIRTH.

Weight in pounds.

3—4	...	11·11 per cent.	8—9	...	11·11 per cent
4—5	...	11·11 „	9—10	...	5·56 „
6—7	...	16·67 „	10—11	...	11·11 „
7—8	...	33·33 „			

Breast fed ... 60 per cent.

Bottle fed ... 28 „

Partly Breast and Bottle ... 12 „

Age of Mother.		Age of Father.	
20—30 years	...37·93 per cent.	20—30 years	29·63 per cent.
30—40 „	...51·72 „	30—40 years	..48·14 „
Over 40 years	.. 10·35 „	Over 40 years	...22 23 „

Home Conditions.

Overcrowding	...	...	48.39 per cent.
House defects found	...	...	25.81 „
Surroundings bad	...	...	12.9 „

Prevalent Cause of Death—Bronchitis and Pneumonia.

2 infants died outside the Borough (inward transfers).

(c) MATERNITY AND CHILD WELFARE CENTRE.

Attendance at Centre.

The number of new cases attending the centre during the year was 223. The total attendances of all cases amounted to 3,745.

Attendances by Wards.

North	Central	South	East	Parkfield	West
506	597	534	732	989	387

Conditions found on Medical Examination.

No defects were found in 40.32 per cent. of the cases.

One defect occurred in 28.71 per cent. of the cases.

More than one defect in 20.97 per cent. of the cases.

The defects included the following :—

Nutrition	...	14.83 per cent.	Eye	...	7.09 per cent.
Gastro Intestinal	7.41	„	Ear	...	4.83 „
Respiratory	9.03	„	Skin	...	11.9 „
Nose and Throat	10.96	„	Infective & Gen.	16.77	„
Nervous	...	32 „			

Home Visitation.

The number of first visits made during the year by the Health Visitors was 432. Re-visits of Infants under 12 months 1,105. Visits to Infants 1 to 5 years 1,309. Total visits 2,846.

Home Conditions.

Overcrowding was found in 30·24 per cent. of the cases.

House defects were found in 14·15 per cent. of the cases.

Nuisances were found in 3·90 per cent. of the cases.

Surroundings bad were found in 9·76 per cent. of the cases.

Supply of Milk to Mothers and Children.

The scale of income of the family, regulating the supply of milk, is :—

Number in Family	Scale of Income per head of family after deducting rent.		
	Supply of milk free of cost.	Supply of milk at quarter cost.	Supply of milk at half cost.
2	12/6 per week	13/- per week	13/6 per week
3	10/- „	10/6 „	11/- „
4	8/6 „	9/- „	9/6 „
5	7/6 „	8/- „	8/6 „
6	7 - „	7/6 „	8/- „

The number of cases supplied during the year amounted to 100, as compared with 97 the previous year.

The economic conditions were as follows :—

Average weekly Income			Number in Family.						Expectant Mother	Number of Children.					
under £1	£1 to £2	over £2	2	3	4	5	6	over 6		i	2	3	4	5	6 over 6
14	56	30	6	18	22	16	15	23	2	19	25	17	15	9	4

89

Rent.			Average Rate per head.		
under 5/-	5/- to 10/-	over 10/-	under 5/-	5/- to 10/-	10/- to 12/6
17	80	3	42	57	1

749 packets of free glaxo were included in the above.

17 Expectant mothers applied for free milk.

The period of time for which free milk was issued was :—

One month	36 per cent.	Three months.....	17 per cent.
Two months	15 „	Over three months ..	32 „

The total cost of free milk and glaxo for the financial year (1922-1923) was £87 9s. 5d. as compared with £105 8s. 8d. for the previous year.

The cases are carefully enquired into, and no abuse of free milk has been reported.

Maternity, Ante-natal and Post-natal work.

19 Expectant Mothers attended the Centre during the year.

Visitation to expectant mothers by the Health Visitors was carried out in 32 cases, and 42 re-visits were made.

The mother's health after confinement is reported upon in each case. 432 reports were made by the Health Visitors.

(d) HOSPITAL ARRANGEMENTS FOR MOTHERS AND INFANTS.

Hospital arrangements for mothers and infants are made with St. Mary's Hospital, Manchester. During the year 32 in-patients and 40 out-patients were treated.

The Municipal Authority subscribe £10 10s. 0d. annually to the Hospital, and voluntary subscriptions are made in the borough towards the hospital.

No Day Nursery exists in the Borough. Arrangements for the care of infants over nine months, and young children up to three years where mothers are engaged in work are usually made with relatives or friends.

(e) MIDWIFERY SERVICE.

Seven certified midwives are in practice in the borough. 256 cases were attended by them as midwife and 79 as nurse. 60 cases were attended by unqualified women under a Doctor. Certain of the Doctors decline to accept the service of the unqualified attendant.

A conference was held during the year with the Medical Practitioners and the following resolution was passed, a copy of which was forwarded to the County Medical Officer :—

“That in every possible manner the employment of unqualified persons acting in the capacity of Midwives be discouraged and that the Medical Officer of Health be requested to approach the County Medical Officer of Health with a view to securing the services of another midwife.”

CONDITIONS OF CONFINEMENT.

Conditions of confinement in overcrowded houses and where the economic conditions are poor are not satisfactory.

The extent of overcrowding amounted to 30·24 per cent.

A MATERNITY HOME of three beds is required in the Borough.

MATERNAL DEATHS.

The number of women dying in or in consequence of childbirth was 1 as compared with 4 the previous year.

(1) From Septic causes.....Nil.

(2) From other causes1 due to Eclampsia.

OPHTHALMIA NEONATORUM.

2 cases were notified as compared with 6 the previous year. Vision was impaired in one case.

PUERPERAL FEVER.

No case of Puerperal Fever occurred during the year.

(f) ESTIMATES AND EXPENDITURE.

The net expenditure in Maternity and Child Welfare during the financial year 1922-23 was £291 18s. 9d.

HEALTH VISITORS' REPORT.

The following summary of work carried out during the year embraces duties in connection with Maternity and Child Welfare, Infectious Diseases and Sanitary conditions. In addition to these duties the three Health Visitors act also as School Nurses.

432 reports on Birth Enquiries were made during the year giving details of infant, mother and home conditions in each case.

1,537 visits to homes in respect of infants under 12 months were made and 1,309 visits to children between 1 and 5 years of age.

Investigations into infant deaths and still-births were made in 55 cases.

116 sick infants were visited and 74 Expectant Mothers. Post-natal visits numbered 457.

Reports on economic conditions were made in 100 cases.

Overcrowding was reported in 124 homes and Sanitary Defects in 58 cases, under Maternity and Child Welfare, and 91 Infectious Diseases were investigated in children up to 5.

3,745 infants and children under 5 years of age were attended and weighed at the Welfare Centre, and 40 health talks to mothers and senior school girls were given.

INFECTIOUS DISEASES.

410 cases were investigated and 975 visits to the homes were made. These included :—

Disease	Number
Diphtheria and Membranous Croup	11
Erysipelas	5
Scarlet Fever	97
Enteric Fever	5
Poliomyelitis... ..	1
Ophthalmia Neonatorum	2
Acute Primary and Acute Influenzal Pneumonia...	93
Measles	11
Chickenpox	105
Contacts	80

SANITARY DEFECTS AND OVERCROWDING were noted in the work under the Maternity and Child Welfare, Infectious Diseases and School Work, and included reports of 424 cases of overcrowding.

Sanitary defects were reported including defects in connection with :—

House	179	Yards and Passages	11
Closets	27	Animals	11
Ashpits	28	Accumulations	6
Drains	22	Effluvia	11
Waste Pipes	8	Fish Shop... ..	1

The duties in connection with the School Medical Service are dealt with under that Report.



BOROUGH OF MIDDLETON

REPORT

ON THE

Medical Inspection of School Children

FOR THE

For the Year Ending Dec. 31st, 1923,

BY

S. THOS. BEGGS, M.D., B.S., D.P.H.,

MEDICAL OFFICER OF HEALTH,
SCHOOL MEDICAL OFFICER.

1. THE STAFF OF THE SCHOOL MEDICAL SERVICE AND OTHER PROVISIONS, consist of one School Medical Officer, one Ophthalmic Surgeon (part time), three School Nurses (part time), and two lady clerks (part time).

Hospital provision is made for operative treatment of Tonsils and Adenoids, and X-ray treatment for Ringworm. Tubercular cases are referred to the T.B. Dispensary in the Borough.

There is no provision for Dental treatment.

2. CO-ORDINATION BETWEEN THE SCHOOL MEDICAL AND OTHER HEALTH SERVICES is complete.

The Medical Officer combines the duties of School Medical Officer and Medical Officer of Health, and the School Nurses also act as Health Visitors in their respective areas. The child is thus under supervision by the same staff from the date of birth until leaving school.

The Child Welfare Centre during the year has kept a record of Debilitated School Children under school age. Where it has been found necessary Glaxo and Cod Liver Oil have been provided at cost price, or free of charge in necessitous cases.

3. THE HYGIENE OF THE SCHOOLS has received particular attention during the year. An inspection of the school building forms a necessary part of medical inspection. Full details under this heading have been given in previous reports. A daily disinfection of floors and desks, of classrooms, cloakrooms, and lavatories continues to be carried out by the school cleaners.

Too much attention cannot be given to the keeping of school premises free from dust and dirt. Dust and dirt gain access on the clogs and shoes, from the air in the form of

particles of soot, and dust, and from the clothing of the children, also from the exhalations of the body.

The latter consists of dry organic secretions from the skin, nose, mouth, etc., together with cast hairs, woollen and cotton fibres.

Dusmo is used by the cleaners and I advocate this being moistened with disinfectant solution. Floor washing is done during holiday times only.

Greater attention has been given to ventilation by the teachers, but the "close smell" in some class-rooms, especially where there is not cross ventilation, and the room congested, calls for stricter supervision. The prevalence of Nasal Catarrh in school children largely results from this condition of classroom, and it is an established fact that Nasal Catarrh is often the forerunner of infectious disease.

A case of infectious disease occurring in such a classroom will spread quickly amongst the other children. Moreover children in such an atmosphere become easily fatigued, mentally and physically.

"The 'close smell' so familiar in the schoolroom is due partly to the subtile organic impurities of the air breathed out by the children, and partly to the decomposition of organic dirt on the children's bodies or in the room. Such decomposition is normally caused by microbes. Hence, to cleanse a schoolroom properly, it is necessary to destroy the germ-life as well as to remove the visible dirt. This is why periodic disinfection is advisable, even when no known infectious disease has been present."

Much attention has been given to personal hygiene during the year. This, as I pointed out last year is an essential part of good education.

Frequent cleanliness examinations of the children by the School Nurses have been carried out during the year with good results.

A recognised time allotted for the teaching of Hygiene is urgently required. The teaching of "Habit" hygiene would undoubtedly tend to lower the incidence of disease, increase the general health of the school and thereby act beneficially on the attendance and education of the scholars.

Pamphlets, as issued by the Board of Education (Syllabus of General Hygiene and Syllabus of teaching in Mothercraft and Infant Welfare) were issued to the teachers.

A class in Mothercraft was formed for senior girls at the Welfare Centre. The results obtained were excellent and much credit is due to the Health Visitors for the success of the class.

A booklet entitled "Simple Suggestions as a means to Health, Economy and Efficiency" was distributed to the school children during the year.

A considerable number of improvements and repairs have been effected during the year.

These have included internal painting at Bowlee, Thornham, Tonge, and St. Gabriel's; new boilers at Rhodes Infants and St. Peter's; asphaltting playgrounds at Durnford Street, Elm Street; repairing roofs at Elm Street.

Other repairs have included pointing, external painting, windows made to open, minor joinery repairs and general overhauling. Proposed alteration in class rooms and new cloak-room at St. Peter's is under consideration.

Proposals to install a bath at the clinic for treatment purposes were made but not carried out.

Ambulance boxes in charge at the schools have been inspected during the year.

4. The purposes of MEDICAL INSPECTION are to adjudge the general health of the child, to note defects and beginnings of disease so that treatment or prevention can be applied, to ascertain conditions which are communicable to other children and to bring to the teachers' notice any factors which demand modification in the education of the child.

Medical Inspection during the year included Entrants, Intermediates, Leavers, Special Inspections and Re-inspections.

Routine inspections take place at fixed age groups, i.e., at 5, 8, and 12 years.

A "Special" inspection is a Medical Inspection of a child specially selected or referred for such inspection at any age.

A "Re-inspection" implies the re-inspection of a child who, as the result of routine or special inspection, is referred for re-examination for the same defect. These inspections take place either at the Schools or at the Clinic.

Table I. gives the return of Medical Inspections during the year.

The total number of medical inspections during the year amounted to 3,599. There were also 1,070 inspections for Dental Defects.

The Board of Education Schedule has been followed during the year and full records kept.

The early ascertainment of Crippling Defects receives special attention in the pre-school child under the Welfare Centre Scheme.

At the medical inspections in the schools the beginnings of disease likely to lead to crippling are referred for medical treatment and kept under observation.

No disturbance of school arrangements as the result of medical inspection has been noticeable.

5. THE FINDINGS OF MEDICAL INSPECTION are embodied in Table 2.

In "Routine" inspections 1,761 defects were noted, and in "special" inspections 375 defects.

In Table 2 B, is shown the number of individual children (no child is counted more than once even when found to be suffering from more than one defect) found at Routine Medical Inspection to require treatment for defects other than Uncleanliness and Dental conditions.

The percentage of all individual children so found to require treatment was 56.8 per cent.

During the year the results of medical inspection of the individual schools were reported to your Committee.

Table A gives the combined detailed results for all schools inspected during the year.

The state of clothing and footgear found unsatisfactory in 4.29 per cent. is largely a matter of economic conditions. The general cleanliness of the children apart from the undermentioned is satisfactory. Although there was 23.63 per cent. of uncleanliness, still the degree is not so marked. The improvement is largely due to the splendid work done during the year by the School Nurses who made 8,691 examinations of children for uncleanliness and verminous conditions. The state of overcrowding in the homes and economic conditions render the work more difficult.

The state of nutrition of the children varies but on the average is fairly good. A large number of children are under the average weight for their ages. Mal-nutrition is not so much a case of under feeding, as one of improper feeding and want of assimilation. No case is recorded as mal-nutrition unless shewing an underweight of 10 lbs. or more, combined with other signs of under-nourishment.

The number of cases due to economic conditions alone are few.

Skin diseases were not excessive but on the other hand they are largely preventable.

In Eye defects, defective vision is the most prevalent and calls for the special attention of the teachers in the care of childrens' eyesight in school.

Ear defects are largely the result of Infectious diseases and defects of the nose and throat; nasal catarrh, post nasal catarrh and enlarged tonsils are the prevalent defects under Nose and Throat and are largely preventable by the observance of nose and throat hygiene.

Under Dental Diseases, 572 cases were noted as requiring treatment. No arrangement exists for this service. The condition of teeth has a very important bearing on the child's health.

Dental diseases are largely preventable and much depends on the hygienic education of the child and of the care taken by the mother in keeping the teeth and gums in a healthy condition.

Defects related to the Heart and Lungs, of the nervous system, due to tuberculosis and deformities were not prevalent.

Other matters noted were—

(a) Insufficient Sleep, which has an important bearing on the child's growth, nutrition and education. Few children appear

to get 12 hours sleep. Moreover the circumstances in the bedroom, where children sleep two or more in one bed, are not conducive to health.

(b) In Home conditions, the extent of overcrowding is serious and the want of sufficient air space during sleep is detrimental to the child's health and education.

(c) Few children are taught the proper method of mastication: faulty habits such as drinking at meals, excessive tea drinking, not resting after meals, not cleansing the teeth after meals are the rule. More care in the selection of economical and nutritious foods is required in the homes.

6. INFECTIOUS DISEASES as affecting school children during the year were less prevalent. There was a total of 147 as compared with 310 in 1922. The schools most affected were Durnford Street and Parish C. of E. The most prevalent diseases were Scarlet Fever and Chickenpox. The month of the year shewing greatest incidence was March. The age period most affected was from 5 to 7 years. Details are given in Table C.

No schools were closed during the year. 118 contacts were temporarily excluded. The action taken to detect and prevent the spread of Infectious diseases has been the same as previously reported.

7. The importance of FOLLOWING UP cannot be emphasized too much from a medical and educational point of view. In this area the duty falls upon the School Nurses and the School Attendance Officer. The School Nurses deal with (a) the defects found on medical inspection; (b) cases dealt with at the clinic; (c) cases on the absentee lists due to sickness; (d) contacts of Infectious diseases. The following figures show the number of visits and inspections made by the Nurses. Visits to schools, 403; Infectious

cases, First visits, 434 : Re-visits, 542 ; Mentally Defective and Epileptic cases visited, 10 ; Absentees, 2,321 ; Defect Lists, 1,537 ; Number of Houses investigated, 109.

The School Attendance Officer deals with cases reported to the Education Authority such as non-compliance in obtaining glasses, cases absent after being passed fit for school and special cases referred by me. Cases requiring School Meals and those coming on the Clog Fund are also followed up.

Cases of neglect are referred to the N.S.P.C.C.

The work of the School Nurse in this respect has been instrumental in getting instructions and treatment of the Medical Officer carried out in large numbers of cases and with the School Attendance Officer in getting children back to school earlier.

Home conditions are noted and adverse circumstances such as overcrowding, neglect, improper feeding, insufficient sleep, etc., which bear on the educational efficiency of the child are investigated.

The following up of contacts in the case of school children are also undertaken by the school Nurses.

Every assistance has been given by the teachers.

(8) In MEDICAL TREATMENT the methods employed or available are—

(a) The School Clinic which is open six days per week with one School Nurse and S.M.O. in attendance. The cases dealt with are Minor Ailments, Skin Diseases, External Eye Diseases and Nose, Throat and Ear conditions.

(b) Tonsils and adenoids for operation are referred to the Children's Hospital, Pendlebury, under contract of £1 10s. 0d. per case.

(c) Tubercular cases are referred to the T.B. Dispensary in the Borough.

(d) Ringworm for X-ray treatment is referred to the Skin Hospital, Manchester, under contract at £2 2s. 0d. per case.

(e) Crippling defects and orthopædic cases are referred to either the Crippled Children's Help Society, to the practitioner, or the Manchester Hospitals, as suitable.

(f) Refraction for Defective Vision is carried out at the clinic by the Ophthalmic Surgeon, once a week.

(g) Dental Defects are referred to the parents who are advised to make their own arrangements with Dentists or with the Dental Hospital, Manchester.

The treatment carried out as the result of Medical Inspection is given in Table 4. This included 782 cases at the clinic ; 35 at the Childrens' Hospital for Tonsil and Adenoid operations ; 15 at the T.B. Dispensary ; 25 by the Crippled Childrens' Help Society ; 1 for X-ray treatment at the Skin Hospital ; and 8 at General Hospitals.

In addition to treatment resulting from medical inspection, children are referred to the school clinic by parents, teachers and nurses.

It is necessary here to state the functions of a School Clinic. First, it acts as a *treatment centre* for such cases only as are not ordinarily dealt with by the private practitioner. All other cases requiring ordinary medical treatment and care are referred to the family doctor from the clinic. Second, it acts as an *advisory centre* (a) on the child's health ; (b) on the prevention of disease ; (c) on fitness or otherwise for school attendance ; (d) for certification under the Employment of Children's Act. Third, it acts as an *investigation centre* on conditions affecting or relating to the education of the child from a hygienic and physiological point of view. Fourth, it acts as an *administrative centre* and record office where statistics are kept and analysed.

The work of the clinic is given in Table B. A total of 10,199 attendances were made. 3,087 treatments were carried out; medical inspection of contacts of Infectious Diseases were made in 155 cases; 49 children were medically examined for Employment Certificates; several hundred parents were interviewed and advised; Mental conditions were investigated in 12 cases. The effects of Thyroid administration were enquired into. 286 cases of uncleanness were dealt with.

During the year proposals were put forward regarding payment for treatment in special cases.

9. On OPEN AIR EDUCATION I reported during the year the advantage to be gained by holding as many classes as possible in the open air and the Head Teachers were instructed to carry out the recommendation as far as possible.

Owing to local atmospheric conditions open air classes are largely confined to summer time.

Classes in the public parks and open spaces are organised.

Having regard to the state of overcrowding in the homes and the congested condition in the schools too much emphasis cannot be given to this subject, not only on account of the beneficial effect on health, but also on the education of the child.

10. The object of PHYSICAL TRAINING in schools is to maintain and produce health of body and mind in the school child.

Properly carried out the physical effects are a stimulation to growth and development and the prevention of defects and debility.

Corrective exercises are very important and have for their purpose the remedying of a defect or incorrect action of the body e.g., breathing exercises are for the purpose of correcting

mouth breathing and developing the chest. Trunk exercises are used for the correction of round shoulders, flat chests and spinal curvature due to faulty posture; heel-raising exercises for flat foot; neck exercises for hanging head and so on.

Corrective exercises are noted on the Defect Sheets on Medical Inspection to be carried out at the schools.

The mental effect is educational. Better discipline, self-control, concentration and co-operation are conduced. The moral effects are evidenced in improved habits.

Due regard must be given to physiological and hygienic conditions in carrying out physical training; first must be noted whether the child is healthy or defective physically or mentally, if properly nourished or suffering from mal-nutrition, if properly clothed, if the home environment is such as to allow the child sufficient sleep, rest, fresh air and personal cleanliness.

All these conditions are noted on the Defect Sheets given to the teachers after medical inspection.

One point which needs attention in school is the correction of faulty positions in sitting or standing. These refer to the attitudes adopted by the child when at school work.

Constant supervision and attention to these faults are necessary to gain the full results from physical training.

It is a pleasing feature to record the success of the Middleton Elementary Schools Athletic Association. The support given by the teachers, the Education Committee and the town's cricket and football clubs has placed the Association in a sound position.

11. The PROVISION OF MEALS is made in the form of milk up to one third of a pint, with bread and margarine or jam, which is provided during school hours under the administration of the Underfed School Children Sub-committee.

The economic condition of the family is investigated in each case selected by the School Nurse.

The number of individual children fed during 1923 was 76, and the total number of meals supplied was 13,164.

The feeding is given five days per week, but not during holidays.

The provision of milk is for the purpose of improving the nutrition of such children as require it, so as to fit them for education.

There is no question that children in industrial districts get too little milk at home. This is not in all cases an economic question. There is a great deal of unsuitable feeding in the homes; food stuffs of low nutritional value are used in preference to more valuable foods.

As Professor Sims Woodhead has said, at least one third of the money spent in provisions is wasted.

Education is required in the selection of proper foods—foods which have body building and tissue repairing properties.

The Cookery Class at Durnford Street School is a very important educational centre.

Under the Education (Provision of Meals) Act, 1906, Local Authorities are empowered to charge parents where the cases are not necessitous. A more extensive supply of milk might with advantage be considered on those terms.

The curtailment of the grant by the Board of Education does not appear to have had much effect in this area.

12. There is no provision for BATHS at the Schools. The children make use of the Public Baths voluntarily at a reduced cost.

Apart from the hygienic value of baths for school children, swimming, which is included in the Syllabus of Physical training, is a healthful and invigorating form of exercise and as the ability to swim is of practical value, it is suggested that the Elementary Schools Athletic Association might with advantage add this to their programme under the Committee's Scheme.

13. The importance of the CO-OPERATION and interest OF PARENTS in medical inspection is recognised. Their attendance at Medical Inspection varies in the different schools. Parents are notified by the teachers the time of medical inspection. Home duties, work, etc., necessarily interfere in cases. Parents are notified of the defects found and advised as to management or treatment.

For all schools the attendance of parents during the year was 45.79 per cent.

14. It is found that the greater the CO-OPERATION and interest taken by THE TEACHERS in medical inspection, the more effective inspection becomes. The aim of medical inspection being to maintain and improve the health of the school child, physically and mentally, it is obvious the higher the health standard of the school, the better are the educational results.

The teachers are supplied with lists giving all Defects found on medical inspection, and invited to co-operate with the nurses in having the instructions as to management and treatment carried out by the parents.

To gain the full benefits from medical inspection it is necessary that the direction of the Medical Officer as effecting school children in school, such as wearing glasses, corrective exercises, etc., should be observed.

The number of defects notified to the teachers during the year was 1,900.

15. CO-OPERATION OF THE SCHOOL ATTENDANCE OFFICER has been helpful and effective, and is referred to throughout the report.

16. CO-OPERATION OF VOLUNTARY BODIES during the year has been as follows :—

(a) The Middleton Poor Children's Aid Society was the means of sending 39 children to the Convalescent Home at Lytham during the summer months for a period of three weeks each.

(b) 6 children were referred to the N.S.P.C.C.

(c) 25 children have been dealt with by the Crippled Children's Help Society: 5 for operation; 6 for Surgical aid; 4 were admitted to the Marple Home; 3 to the Convalescent Farm in Derbyshire; spinal carriages were supplied in 6 cases and a bath chair in 1 case.

The Children's Visitor for Nursed-out children has co-operated during the year.

The Scattered Homes, under the Oldham Union has had under supervision twelve children during the year. The Home is well managed.

17. The Number of BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN will be found in Table 3,

Part 5 of the Education Act deals with these cases.

The defect in each case is ascertained by the Medical Officer.

It is necessary to keep in view the definition of each defect as given in the Act—

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

(b) A "Deaf" child is a child who is too deaf to be taught in a class of hearing children in an elementary school.

(c) "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 instructions 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 5 of the Act may be provided for defective children.

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

A large number of Retarded children reported upon last year (see page 32 et seq., School Medical Report, 1922) are not included in this table.

Under the "Partially Blind" in the table, three cases are at school. The defect in each case is corrected by glasses as far as possible. One case is an albino with nystagmus and is unfit for near work.

Of the two cases unfit for school, one has been recommended a Special School, has one eye enucleated with corneal opacities of the other eye. The second case is blind in the right eye and is mentally deficient

Eleven cases come under the category of "partially deaf": one due to otitis, one has had mastoid operation, one is due to nerve deafness, four to Tonsils and Adenoids, two of which have had operation, and four from other nose and throat conditions.

Of the "Feeble-minded" children, 8 are attending school. The average natural age of the group is 9 years 6 months, and the average mental age 4 years 6 months. Most of the cases show late development in teething, walking and speech; unsatisfactory home conditions are evident; there is a history either of atrophy, malnutrition, rickets, tubercle or syphilis, and the physical defects in each case are multiple.

Of the 4 not attending school, 2 are cripples due to Infantile paralysis, one is partially blind and one is rachetic and microcephalic.

The Epileptics include 2 severe not at school, and 7 not severe attend school.

Under "Physical Defects," of the 10 cases returned as non-infective Tuberculosis, are 6 pulmonary and 4 glandular. These cases have been under the observation of the Tuberculosis Officer for considerable periods ranging from 2 to 7 years.

The "active non-pulmonary cases" include one Hip Joint case in Marple Home, and one T.B. hip not at school. Those at school include T.B. spine, hip, ulna and skin.

Under the heading "Delicate" children one case not at school has chronic nephritis; pre T.B. 23, Anæmia 28, Malnutrition 10, Rheumatism 2, Heart 1, Nervous 1, are the cases at school.

"Crippled Children" include 2 cases not at school, one severe organic heart disease from Scarlet Fever and Rheumatism, and the other Spastic paraplegia.

Crippling from Tuberculosis 7, Infantile paralysis 8, Rheumatism 13, Congenital deformities 3, congenital heart 2, Rickets 4, Diphtheria 1, Scarlet 1, embrace the cases at school.

Better provision is required for those Defective children who are attending school.

Special classes in the schools or a school set apart for these cases is indicated. If the latter was provided all these cases in addition to backward and Dull children would be accommodated.

18. There are no NURSERY SCHOOLS in the Borough.

19. The Medical Inspection of the SECONDARY SCHOOL in the Borough is carried out by the County Medical Officer.

20. There are no day CONTINUATION SCHOOLS.

21. The conditions of EMPLOYMENT OF CHILDREN AND YOUNG PERSONS remain the same as detailed in last years Report.

There is co-operation with the Factory Surgeon and cases on leaving school have been notified to him during the year.

The findings of inspection as regards the physical conditions of employed children have been satisfactory. An improvement in physique has been noted in some of the cases. No ill effects have been noted.

The number of children examined during the year for employment was 49, and certificates were granted in 46 cases.

22. THE EFFECT OF THYROID ADMINISTRATION ON RETARDED AND MENTALLY DEFECTIVE CHILDREN.

An enquiry into the relationship of endocrine gland deficiency and the effect of organotherapy on the mental and physical state of the child that is retarded or mentally deficient is of great importance, and any facts deducted are worthy of record. The following is intended to be a preliminary report only.

In endocrine disturbance it has been found that more than one ductless gland is effected, for instance, in thyroid deficiency, anterior pituitary deficiency also exists. There is an inter-relation between the functions of the Ductless glands.

It is also found that degenerative changes progress rapidly in the glands so affected.

The chemistry of the thyroid gland shows that the colloid matter contained in the gland acini has a considerable amount of iodine. "Secretin" is stated to exercise a chemical control upon the system.

The pharmacology of the thyroid gland may be stated as causing an improved corpuscular condition of the blood. It acts as a vasodilator on the arteries.

In metabolism there is an increased absorption of oxygen and exhalation of carbonic acid ; there is also an increased excretion of urea, chlorides and phosphates in the urine, with a certain amount of diuresis. Its action is accumulative on the system. The hormones of the thyroid gland are stated to regulate growth and metabolism.

In thyroid deficiency there is a history of late development of the teeth, delayed walking and talking, delayed closure of the fontanelles, want of appetite, drowsiness, malaise, constipation, a feeling of chilliness and mentally the child is dull and backward. Cardiac weakness may also be apparent and the pulse small and often accelerated. Constipation may result in intestinal toxæmia which in its turn tends to inhibit the function of the thyroid gland, thus setting up a "vicious circle."

The cases selected for this preliminary statement are a sample which have been under observation on thyroid treatment from 5 months to 2 years, average $1\frac{1}{4}$ years. The dose given was 1 grain of the extract per day.

History of the cases.

(a) At Birth.—Ages of the parents.

Mother: 20—30 years in 50 per cent. of the cases.

30—40 „ 50 „

Father: 20—30 „ 40 „

30—40 „ 40 „

40—50 „ 20 „

Number of pregnancies.

1 in 33·33 per cent. of the cases. 6 in 16·67 per cent. of the cases.

2 in 16·67 „ „ 9 in 16·67 „ „

10 in 16·67 per cent. of the cases.

Gestation.

Full time in 83·33 per cent of the cases.

Premature in 16·67 per cent. of the cases.

Breast fed at birth in 50 per cent. of the cases.

Bottle fed at birth in 16·67 per cent. of the cases.

Partly breast and bottle fed in 33·33 per cent. of the cases.

(b) Home conditions.

Overcrowding in 50 per cent. of the cases.

Surroundings bad in 16·67 of the cases.

(c) Physical conditions.

Height and Weight.

Age group.	Sample.		Aver. standard normal child	
Years	Height	Weight	Height	Weight
7—10	97 cm.	37·87 lbs.	119·6 cm.	52·01 lbs.
10—14	129·08 cm.	60·66 lbs.	138 cm.	72·26 lbs.

Physical Defects.

Uncleanliness in 10 per cent. of the cases.

Decay of teeth in 10 „ „

Nose and throat defects in ... 70 „ „

Defective Vision in 20 „ „

Physical Defects.

Ear Defects in...	...	...	10 per cent. of the cases.
Defective speech	...	...	40 " "
Respiratory Diseases	...	...	10 " "
Nervous Defects	...	...	20 " "
Rickets	...	...	20 " "
Other Defects	...	...	10 " "

Previous Illnesses.

Measles in	...	...	80 per cent. of the cases.
Whooping Cough in	...	...	50 " "
Chickenpox	...	...	50 " "
Scarlet Fever	...	...	20 " "
Diphtheria	...	...	10 " "
Pneumonia	...	...	10 " "
Other Diseases	...	...	10 " "

(d) School History.

Memory defective in	...	...	60 per cent. of the cases
Response defective in	...	...	40 " "
Calculation defective	...	...	90 " "
Reading and writing defective	...	...	40 " "
Nervous traits	...	...	20 " "
Moral deficiency	...	...	10 " "

Class—Standard.

Up to standard in	...	...	10 per cent. of the cases.
2 standards below normal in	...	...	50 " "
3 standards below normal in	...	...	10 " "
4 standards below normal in	...	...	20 " "
5 standards below normal in	...	...	10 " "

(e) Mental age.

Natural age of sample groups.	Mental age of sample groups.
7—10 years.	3 years 8 months.
10—14 years.	6 years 9 months.

After treatment the following results have been noted :—

Physical Condition.		Height and Weight.		
Age Group.		Sample Group.		Normal children
years		Height.	Weight.	Height. Weight
7—10		118·16 cm.	52·58 lbs.	119·6 cm. 52·01 lbs
10—14		136·25 cm.	72·6 lbs.	138 cm. 72·26 lbs

The sample group has thus become practically normal in these respects.

Mental condition.

Natural age of sample group.	Mental age of group before treatment.	Mental age of group after treatment.
7—10 years	3 years 8 months	5 years 5 months
10—14 years	6 years 9 months	9 years 2 months

Opinions of the Teachers.

The teachers report a general progress. The gain has been principally in memory, response and reading. Calculation appears to be the factor least improved. In several cases no change is noted.

Satisfactory reports have been received from the Nurses and the parents have noticed improvement.

23. WORK OF THE STAFF during the year has been of a good standard. Instruction in the prevention of disease has been a prominent feature in the Nurses duties. Records have been well kept and the Statistical work in the office has been satisfactory.

TABLE A.

The findings of medical inspection were as follows :—

Defect.				Per Cent.
Clothing and	Clothing unsatisfactory	...	...	3·08
Footgear bad.	Footgear bad	...	...	1·71

Cleanliness.	Head nits	...	...	...	...	16.63
	Head dirty	...	...	...	...	.09
	Body dirty	...	..	...	...	.56
	Fleabitten	...	...	...	...	6.16
	Dirty feet	...	...	...	...	.18
Nutrition.	Malnutrition	...	...	...	...	11.03
Skin Diseases.	Impetigo	...	...	...	...	.65
	Other skin diseases	...	...	...	...	3.17
Eyes.	Blepharitis	...	...	...	...	2.8
	Other eye diseases	...	...	...	...	.84
	Defective vision	...	...	...	...	11.12
	Squint	...	...	...	...	.46
Ears.	Ear disease	...	...	...	...	2.05
	Defective hearing	...	...	...	...	1.21
Nose and Throat.	Enlarged tonsils	...	...	...	...	11.02
	Adenoids	...	...	...	...	1.41
	Tonsils and adenoids	...	...	...	...	.09
	Nose and throat (other conditions)	...	...	...	...	17.85
Glands	...	...	...	...	...	10.37
Defective Speech	...	...	...	...	...	1.21
Teeth.	Under four decayed	...	...	...	...	41.68
	Four and over decayed	...	...	...	...	17.47
	Dirty	...	...	...	...	1.02
	Septic	...	...	...	...	.93
Heart and Circulation						2.15
Anæmia						1.77
Lungs						.65
T.B. Non-pulmonary						.18
Nervous System						2.43

Deformities.	Rickets ...	...	...	...	...	37
	Deformities (other forms)	...	...	...	...	84
Other Defects and Diseases	...	...	...	...	...	5 51
Mental.	Retarded	...	...	...	...	2 43
Percentage of children with defects	...	...	...	...	...	82 71
Percentage of children without defects	...	...	...	...	...	17 29

Variation in the Schools. Defects.

	Per Cent.		Per Cent.
Durnford Street Seniors	76·19	Parish C. of E. Infants	78·46
Durnford Street Juniors	86·36	Thornham ...	83·33
Durnford Street Infants	80·85	Birch ...	91·22
Rhodes Council ...	82·31	Rhodes Infants ...	83·33
Parkfield (Mixed) ...	93·54	Parkfield Infants ...	92·59
Bowlee ...	76·47	St. Gabriel's... ...	91·51
Tonge Infants... ..	85·29	Tonge Mixed ...	86·27
Elm Street Mixed ...	69·76	Elm Street Infants...	82·81
St. Peter's ...	76·19		

Comparison of Boys and Girls.

	Per Cent.		Per Cent.
Boys ...	81·65	Girls... ..	83·81

TABLE B.

The following is a summary of the work carried out at the Clinic during the year :—

Defects.	No. of Individual children attending.	No. of attendances.
Pediculosis... ..	150	912
Fleabitten	10	50
Ringworm (Head) ...	15	272
Ringworm (Body)... ..	14	112
Scabies	13	151
Impetigo	41	218
Other Skin Diseases ...	10	57

Defects.	No. of Individual children attending.			No. of attendances.
External Eye Diseases	...	49	...	500
Vision	...	31	...	44
Hearing	...	1	...	1
Ear Discharge	...	19	...	411
Nose and Throat	...	24	...	146
Glands	...	6	...	47
Dental	...	2	...	2
Lungs	...	4	...	17
Minor Injuries	...	149	...	919
Other Defects and Diseases	...	69	...	364

Attendances for other Conditions.

	No. of children.		No. of attendances.
Thyroid Treatment...	...	22	1,801
Cod Liver Oil	...	57	3,836
Contacts, Examinations, etc.	...	191	339
No. of examinations made by School Oculist:—			285.

TABLE C.

Occurrence of Infectious Diseases in Schools.

School.	Chicken- Scarlet Diphth- Pneu-						Total
	Measles.	pox.	Fever.	eria.	monia	Other.	
Durnford Street	—	23	7	2	2	—	34
Parish C. of E.	1	8	17	—	2	1	29
Thornham	1	—	2	—	—	—	3
Bowlee.....	1	—	1	—	—	—	2
Birch	—	—	1	—	—	—	1
Parkfield.....	—	6	2	—	1	1	10
Rhodes Council	—	—	3	—	—	—	3
Rhodes Infant...	—	4	1	—	1	—	6

Chicken- Scarlet Diphth- Pneu-

School.	Measles.	pox.	Fever.	eria.	monia	Other.	Total
Tonge	—	1	6	—	3	3	13
St. Peter's	—	4	4	—	—	1	9
St. Gabriel's ...	—	3	7	—	—	1	11
Elm Street	—	—	6	2	—	2	10
Other Schools...	—	12	3	1	—	—	16
Total	3	61	60	5	9	9	147

January.	February.	March.	April.	May.	June.	July.
17	21	29	12	8	7	13
August.	September.	October.	November.	December.	Total.	
9	3	10	7	11	147	

Ages affected.

5	6	7	8	9	10	11	12	13	14	Total.
29	40	24	12	13	10	8	8	2	1	147

Boys—67. Girls—80. Total—147.

TABLE 1.—RETURN OF MEDICAL INSPECTIONS.

A. ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections:—							Number.
Entrants	...	...	...	...	...	...	287
Intermediates	...	...	...	...	...	...	240
Leavers	...	...	...	...	...	...	428
Total	...	...	...	...	...	...	955
Number of other Routine Inspections							115

B. OTHER INSPECTIONS.

Number of Special Inspections	...	...	...	...	767
Number of Re-inspections	...	...	...	...	1,762
Total	...	...	...	...	2,529

TABLE 2.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1923.

Defect or Disease.		Routine Inspections.		Special Inspections.	
		No. of Defects.		No. of Defects.	
		Requir- ing treat- ment.	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment	Requir- ing treat- ment.	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment
	(1)	(2)	(3)	(4)	(5)
	Malnutrition	73	45	6	—
	Uncleanliness	185	33	56	—
Skin.	Ringworm :—				
	Scalp	1	—	9	—
	Body	—	—	5	—
	Scabies	7	—	6	—
	Impetigo	7	—	28	—
	Other Diseases (non- Tubercular)	26	—	31	—
Eye.	Blepharitis	30	—	12	—
	Conjunctivitis	3	—	14	—
	Keratitis	—	—	—	—
	Corneal Opacities...	—	—	—	—
	Defective Vision (excluding Squint)	101	18	15	—
	Squint	5	—	1	—
	Other conditions ...	6	—	4	—
Ear.	Defective Hearing	—	13	—	—
	Otitis Media.....	22	—	5	1
	Other Ear Diseases	—	—	—	—
Nose & Throat.	Enlarged Tonsils only	14	104	12	—
	Adenoids only	16	—	5	—
	Enlarged Tonsils & Adenoids	1	—	4	—
	Other conditions ...	132	59	20	—

TABLE 2.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1923.

Defect or Disease.	Routine Inspections.		Special Inspections.	
	No. of Defects.		No. of Defects.	
	Requir- ing treat- ment.	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment.	Requir- ing treat- ment.	Requiring to be kept under ob- servation, but <i>not</i> requiring treatment.
(1)	(2)	(3)	(4)	(5)
Enlarged Cervical Glands (non-Tuberculous)	—	111	1	—
Defective Speech	—	13	—	2
Teeth. Dental Diseases ...	561	—	11	—
Heart Heart Disease :—				
& Cir- Organic.....	—	16	—	1
culation. Functional	—	7	—	—
Anæmia	4	15	5	—
Lungs. Bronchitis.....	—	5	3	—
Other Non-Tuber- culous Diseases...	—	—	—	—
Pulmonary :—				
Definite.....	—	—	—	—
Suspected.....	—	2	1	—
Tuber- Non-Pulmonary :—				
culosis. Glands	—	—	2	—
Spine.....	—	1	—	—
Hip	—	—	1	—
Other Bones and Joints	—	—	1	—
Skin	—	1	—	—
Other Forms	—	—	—	—
Nerv- Epilepsy	—	—	1	—
ous Chorea.....	3	1	1	1
System. Other conditions...	—	22	—	—
Deform- Rickets	4	—	2	—
ities. Spinal Curvature	—	1	—	—
Other Forms	—	8	—	—
Other Defects and Diseases	28	57	99	9

TABLE 2.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES.)

Group		Number of Children Inspected		Found to require treatment	Percentage of children found to require treatment
(1)		(2)	(3)		(4)
Code Groups—					
Entrants	287	183		63 per cent.
Intermediates	240	154		64 „
Leavers	428	208		48 „
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Total (code groups)	955	545		57 „
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Other routine inspections	115	60		52 „

TABLE 3.—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

		Boys Girls Total		
Blind (including partially blind)	(1) Suitable for training in a School or Class for the totally blind	Attending Certified Schools or Classes for the Blind. Attending Public Elementary Schools. At other Institutions. At no School or Institution.		
	(2) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind. Attending Public Elementary Schools. At other Institutions. At no School or Institution		
			1	2
			...	3
			...	2

			Boys	Girls	Total
Deaf (including deaf and dumb & partially deaf)	(1) Suitable for training in a School or Class for the totally deaf or deaf and dumb	Attending Certified Schools or Classes for the Deaf Attending Public Elementary Schools At other Institutions At no School or Institution			
	(2) Suitable for training in a School or Class for the partially deaf	Attending Certified Schools or Classes for the Deaf Attending Public Elementary Schools At other Institutions At no School or Institution	6	5	11
	(1) Feeble-minded (cases not noti- fiable to the Local Control Authority)	Attending Certified Schools For Mentally Defective Children Attending Public Elementary Schools At other Institutions At no School or Institution	5	3	8
	(2) Notified to the Local Control Authority during the year	Feeble-minded Imbeciles Idiots			
Mentally Defective	(1) Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics In Institutions other than Certified Special Schools Attending Public Elementary Schools At no School or Institution	2	...	2

			Boys	Girls	Total
Epilep- tics.	(2) Suffering from epilepsy which is not severe	Attending Public Elementary Schools	5	2	7
		At no School or Institution			
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	(1) Infectious pulmonary and glandular tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board			
		At other Institutions			
		At no School or Institution			
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	(2) Non-infectious but active pulmonary and glandular tuberculosis	At Sanatoria or Sanatorium School approved by the Ministry of Health or the Board			
		At Certified Residential Open Air Schools			
		At Certified Day Open Air Schools			
		At Public Elementary Schools	6	4	10
		At other Institutions			
		At no School or Institution
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Physi- cally De- fective	(3) Delicate children (e.g. pre or latent tuberculosis, malnutrition, debility, anæmia, etc.)	At Certified Residential Open Air Schools			
		At Certified Day Open Air Schools			
		At Public Elementary Schools	45	19	64
		At other Institutions			
		At no School or Institution	1	...	1
<hr/>					

		Boys	Girls	Total
(4) Active non-pulmonary tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board			
	At Public Elementary Schools	1	4	5
	At other Institutions	...	1	1
	At no School or Institution	1	...	1
<hr/>				
(5) Crippled children (other than those with active tuberculosis disease), e g. children suffering from paralysis, &c., and including those with severe heart disease	At Certified Hospital Schools			
	At Certified Residential Cripple Schools			
	At Certified Day Cripple Schools			
	At Public Elementary Schools	22	17	39
	At other Institutions			
	At no School or Institution	2	...	2

TABLE 4. RETURN OF DEFECTS TREATED DURING
THE YEAR ENDED 31st DECEMBER, 1923.

TREATMENT TABLE.

Group 1. Minor Ailments

(Excluding Uncleanliness, for which see Group 5).

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
Skin :—			
Ringworm Scalp.....	15	—	15
Ringworm Body	14	—	14
Scabies	13	—	13
Impetigo	37	4	41
Other Skin Diseases	10	—	10
Minor Eye Defects (External and other, but excluding cases falling in Group 2).....	47	2	49
Minor Ear Defects	19	—	19
Miscellaneous (e.g. minor in- juries, bruises, sores, chilblains etc.	344	15	359
Total	499	21	520

TABLE 4.

Group 2. Defective Vision and Squint.

(Excluding Minor Eye Defects treated as Minor Ailments—Group 1)

Defects or Disease.	Number of defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioner or at hospital, apart from the Authority's Scheme.	Other-wise.	Total.
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint) (Operations for squint should be recorded separately in the body of the Report)	283	3	—	286
Other Defect or Disease of the eyes (excluding those recorded in Group 1).....	2	—	—	2
Total	285	3	—	288

Total number of children for whom spectacles were prescribed.

(a) Under the Authority's Scheme.....259

(b) Otherwise 3

Total number of children who obtained or received spectacles.

(a) Under the Authority's Scheme.....187

(b) Otherwise 3

Group 3. Treatment of Defects of Nose and Throat.

Number of Defects.				
Received Operative Treatment				
Under the Authority's Scheme in Clinic or Hospital.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.	Received other forms of Treatment.	Total number treated.
(1)	(2)	(3)	(4)	(5)
31	4	35	—	35

TABLE 4.

Group 4. Dental Defects.

(1) Number of Children who were :—

(a) Inspected by the Medical Officer :—

	Aged	4	.....	4
		5	.....	166
		6	.....	78
		7	.....	39
		8	.....	240
		9	.....	88
Routine Age Groups		10	.....	13
		11	.....	14
		12	.....	200
		13	.....	209
		14	.....	19
				—
Total.....				1,070
				—

(b) Found to require treatment.....561.

Group 5. Uncleanliness and verminous conditions.

- (1) Average number of visits per school made during the year by the School Nurses, 10.
- (2) Total number of examinations of children in the Schools by School Nurses, 8,691.
- (3) Number of individual children found unclean, 581.
- (4) Number of children cleansed under arrangements made by the Local Education Authority, 286.
- (5) Number of cases in which legal proceedings were taken :—
 - (a) Under the Education Act, 1921.....
 - (b) Under School Attendance Byelaws.....

