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Borough of Middleton.

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# ANNUAL REPORT

ON THE

## HEALTH OF THE BOROUGH

FOR THE

YEAR ENDING DECEMBER 31st, 1921,


BY

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

MEDICAL OFFICER OF HEALTH  
SCHOOL MEDICAL OFFICER

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# Health Committee.

The Mayor.

Councillor Wilde (Chairman).

Councillor T. J. Hilton (Vice-Chairman).

Alderman Hilton

Councillor Hollingworth

Alderman Kent

Councillor Mellalieu

Councillor Graham

Councillor Taylor

Councillor F. Hilton

## Staff.

Medical Officer of Health and School Medical Officer :

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

Sanitary Inspector :

C. H. NORTON, A.S.R.I.

Assistant Sanitary Inspector :— None.

Health Visitors and School Nurses :

Nurse L. Green, Trained Nurse.

Nurse N. Boardman, Trained Nurse.

Nurse S. J. Jones, Trained Nurse, C.M.B.

Clerks :

Miss P. M. Phillips, M.O.H. and S.M.O.'s Office.

Miss E. M. Howarth, " " "

Mr. J. Hall, Sanitary Inspector's Office.

Consultant Tuberculosis Officer :

J. L. STEWART, M.A., M.B., D.P.H.

Tuberculosis Nurse : Nurse Tweedy.

} County.

Veterinary Inspector and Surgeon (part time) :

G. H. LOCKE, M.R.C.V.S.

To the Chairman and Members of the Health Committee.

Gentlemen,

I have the honour to present the Annual Report on the Health of the Borough, for the year 1921, in accordance with the instructions laid down by the Ministry of Health in Circular 269.

It is proposed therein that "Survey Annual Reports" of a full and detailed character will normally be required at intervals of not more than five years, and in the other years "Ordinary Reports," giving as minimum requirements the details indicated in the above circular, will be submitted. The Report for 1921 is to be regarded as an "Ordinary Report."

The Birth Rate during the year was 19·4, being a decrease of 3·2 on the previous year, and 1·2 for the previous ten years.

The Death Rate shows an increase of 1 on the previous year, being 13·3 for the year, but 1·5 less than the previous ten years.

In calculating the Death Rate, 67 "inward transfers" are included.

There is a decrease in the Infant Mortality Rate of 12 on the previous year, and 27 on the previous decade.

The Phthisis Rate and Epidemic Diseases Rate also show decreases.

During the latter part of the year an epidemic of Scarlet Fever has been prevalent, but the cases were fortunately mild in character.

The Sanitary improvements carried out during the year included the development of new sewers and drains and the conversion of pail closets to fresh water W.C.'s



The number of new houses in course of erection during the year was 68.

The Sanitary requirements of the District embrace :—

- 1.—More house accommodation. Reference has been made in Section 9 of the serious conditions prevailing owing to house shortage.
- 2.—The deficiency in bath accommodation, both in public baths and in private houses where baths exist only to 13·98 per cent.
- 3.—The paving of back yards in connection with old property, and the substitution of large common ash pits by ashbins.
- 4.—Improvement in the condition of the slaughter-houses and cowsheds.

A stricter application of existing Adopted Acts, Bye-laws, Orders and Regulations is advocated.

The multiplicity in the duties of the Sanitary Inspector calls for assistance to enable a progressive policy being carried out.

Progress has been made in the Maternity and Child Welfare Work during the year. The Health Visitors' duties have been onerous owing to the following up of Infectious Cases and Contacts falling upon them, and appreciation is due to them for the manner in which these duties have been carried out.

I desire to acknowledge the helpful and willing support received from all officials, and to thank the Health Committee for the courtesy and encouragement shown me at all times.

I have the honour to be, Gentlemen, &c.,

S. T. BEGGS,

May, 1922.

Medical Officer of Health.

## 1. Summary.—General Statistics.

Latitude— 53° 33 feet. 00 inches.

Longitude— 2° 11 feet. 50 inches.

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

Rainfall—38·39 inches.

Area—(Acres) 4,775.

### Wards :—

North	...	...	...	1840
Central	...	...	...	140
South	...	...	...	683
East	...	...	...	500
Parkfield	...	...	...	409
West	...	...	...	1203

### Open Spaces :—

Jubilee Park	...	...	3 acres.
Brassey Recreation Ground	5	„	
Limetrees Area	...	...	2 „

Population (1921) 28,910.

Density of population per acre, 6·05.

Number of Inhabited Houses, 7,111.

Number of Families or Separate Occupiers, 7,006.

Rateable Value ... .. £179,172 15s. 0d.

Sum represented by a penny rate £700 (Estimated).

### Poor Law Relief.

No. of persons relieved	...	264
Amount expended	...	£803 1s. 8d.



## 2.—Extracts from Vital Statistics for the year.

No. of Births (1921)	...	Legitimate	537	
		Illegitimate	26	
No. of Deaths (1921)	...	...	386	
Birth Rate (1921)	...	...	19·4	
Death Rate (1921)	...	...	13·3	
Maternity Deaths	...	...	6	From Sepsis, 1
				„ other
				causes, 5
Maternity Death Rate	...	...	0·21	
Infantile Deaths (under 1 year)	...		44	Legitimate, 41
				Illegitimate, 3
Infantile Death Rate	...	...	78	
Deaths from Measles	...	...	Nil.	
„ „ Whooping Cough				
		(all ages)	5	
„ „ Diarrhœa (under 2 yrs.)			9	
Diarrhœa Death Rate	...	...	0·31	
Diseases				
Epidemic Death Rate	...	...	0·69	
Phthisis Death Rate	...	...	0·79	
Cancer Death Rate	...	...	1·2	
Increase in 1921 on previous year				Decrease in 1921 on previous year
1 in Death Rate.				3·2 in Birth Rate
				0·38 in Phthisis Rate
				12 in Infant Mortality Rate
				Decrease in 1921 on 10 years' average
				1·2 in Birth Rate
				1·5 in Death Rate
				0·34 in Phthisis Rate
				27 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, 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 7th April, 1920, and confirmed by the Secretary of State on the 28th July, 1920.

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

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



## 2—Vital Statistics.

### POPULATION.

*The Census of 1921* was unavoidably postponed from the 24th April until the 19th June. Although the latter date avoided the recognised programme of industrial holidays, still, owing to the abnormal weather, some holiday movement was already in progress at that date.

An adjustment to cover the holiday movement was therefore necessary, and was made accordingly by means of the best date available in the preparation of the estimated mid-yearly population.

The Registrar General's figures for the Borough, as published in the preliminary report on the Census of 1921, were :—

Persons	...	...	28,309
Males	...	...	13,260
Females...	...	...	15,049

The Mid-yearly Estimated population of the Borough was 28,910.

*Marriages.*—The number of marriages in 1921 was 255.

*Births.*—The births during the year numbered 563 ; 275 males and 288 females. There were 26 illegitimate births ; 13 males and 13 females.

As compared with 1920, there is a decrease of 91 births.

The Birth Rate for the year was 19·4, as compared with 22·6 in 1920, a decrease of 3·2 and 1·2 on the previous decade.

The Mean Birth Rate for 10 years 1911-1920 was 18·2.

The rate for 1921 equals that of 1914, being 19·8 in that year.

Table 1 gives the rates for the past 10 years, and the previous 2 decennial periods.

*Deaths*—The number of deaths are those registered during the calendar year, and are corrected for inward and outward transfers.

There were a total of 386 deaths, 180 males and 206 females. 67 of the total were inward transfers, and 137 were old persons of 65 and over.

The classification of some deaths have been modified by the Registrar General, in the light of fuller information obtained from the certifying practitioner in response to special inquiries. The list of the causes of death shown in Table 2 is that adopted by the Registrar General for the purpose of this report, and differs from the list previously in use.

*The Death rate* for the year was 13·3 shewing an increase of 1·0 on the previous year, and a decrease 1·5 on the previous decade.

The rates for the past ten years are given in Table 1.

*Epidemic Diseases*.—The Epidemic death-rate was 0·69, as compared with 1·0 of the previous year.

*Phthisis*.—The Phthisis death rate also shews a decrease, being 0·79, as compared with 1·17 in 1920.

*Respiratory Diseases*—Respiratory Diseases accounted for 66 deaths, giving a mortality rate of 2·28.

*Deaths from Cancer and Malignant Disease* numbered 36.

The rate per 1,000 was 1·2, the same as last year.

*Age and sex incidence*, and ward distribution are given in Table 3.

*Inquests*.—There were 25 inquests, and 3 inquiries by the Coroner. Five of the inquests were held outside the Borough on the deaths of persons resident in the Borough.

Three inquests, not included in the above, were held in the Borough, on the deaths of persons resident in other localities.

The causes of deaths were as follows:—

Natural Causes	...	...	15
Accident	...	...	9
Suicide	...	...	3
Found drowned	..	...	1 (unknown baby)

The ages of the individuals who were the subject of inquest or inquiry were:—

Ages.	Inquest.	Inquiry.
Under 1 year ...	4	1
1—5 years ...	3	—
5—15 years ...	1	—
15—25 years ...	1	—
25—45 years ...	1	—
45—65 years ...	8	—
65 years and over	7	2

*Deaths under 1 year* numbered 44; of these 26 occurred under one month.

The causes and age *distribution*, and seasonal incidence, are given in the following tables:



Causes.	Under		Ages - Months.									Total
	1	2	3	4	5	6	7	8	9	10	11	
Atelectasis ...	2	—	—	—	—	—	—	—	—	—	2	
Premature Birth ...	11	—	—	—	—	—	—	—	—	—	11	
Spina bifida ...	1	—	—	—	—	—	—	—	—	—	1	
Inanition ...	1	—	—	—	—	—	—	—	—	—	1	
Injury at birth ...	1	—	—	—	—	—	—	—	—	—	1	
Congenital Pyloric Stenosis ...	—	1	—	—	—	—	—	—	—	—	1	
Marasmus ..	1	—	—	—	1	—	—	—	—	—	2	
Convulsions ...	2	—	—	—	—	—	—	—	—	—	2	
Whooping Cough ...	—	—	—	—	—	—	1	—	—	—	2	
Diarrhoea and Enteritis ...	5	2	1	—	—	—	—	—	—	1	8	
Diphtheria ...	—	—	—	—	—	—	—	1	—	—	1	
Asphyxia Pallida ...	1	—	—	—	—	—	—	—	—	—	1	
Respiratory diseases ...	—	2	2	—	2	—	—	—	—	1	7	
T.B. Peritonitis ...	—	—	—	—	—	—	—	—	1	—	1	
Nephritis ...	—	—	—	—	—	—	—	—	—	—	1	
Scalds...	—	—	—	—	—	1	—	—	—	—	1	
Suffocation ...	1	—	—	—	—	—	—	—	—	—	1	
Total ...	* 26	4	4	—	3	1	1	1	1	1	2	44

\* Plus one unknown baby found drowned ...

Total ... 45

39 registered in Borough, and 6 transferred deaths.



Sex.	Wards.												Total
	North	Central	South	East	Parkfield	East	...	...	...	...	...	...	
Males .....	4	...	3	...	5	...	4	...	6	...	3	...	25
Females ...	1	...	4	...	4	...	4	...	3	...	4	...	20
Total...	5	...	7	...	9	...	8	...	9	...	7	...	44

	Months.												Total
	Under 1	1	2	3	4	5	6	7	8	9	10	11	
Jan. ...	4	—	—	—	—	1	—	—	—	—	—	—	5
Feb. ...	1	2	—	—	—	—	—	—	—	—	—	1	4
Mar. ...	3	—	1	—	—	1	—	—	1	—	1	—	7
April	—	—	—	—	—	—	—	—	—	—	—	—	—
May...	7	—	1	—	—	—	—	1	—	1	—	—	10
June...	2	—	—	—	—	—	—	—	—	—	—	—	2
July ...	3	—	—	—	—	—	—	—	—	—	—	—	3
Aug.	—	1	1	—	—	—	1	—	—	—	—	1	4
Sept.	2	1	—	—	—	—	—	—	—	—	—	—	3
Oct.	1	—	—	—	—	1	—	—	—	—	—	—	2
Nov.	1	—	—	—	—	—	—	—	—	—	—	—	1
Dec.	3	—	1	—	—	—	—	—	—	—	—	—	4
Total	27	4	4	—	—	3	1	1	1	1	1	2	45

The deaths under 1 month are as follows :—

Under 1	Weeks				Total.
	1-2	2-3	3-4		
20	4	1	2		27

Deaths in *Illegitimate* Infants, 3. Causes. Premature Birth, Asphyxia Pallida, and Found Dead (accidently suffocated.)

*Deaths from Diarrhœa* (under 2 years) occurred in 9 cases, giving a Diarrhœa Rate of 0·31.

Whooping Cough accounted for 5 deaths.

Under 1 year	1-2	2-3	3-4
2	2	—	1

Sex—Males, 2 ; Females, 3.

Ward distribution of Births and Deaths under 1 year :—

Ward	No. of Births.	No. of Deaths.	Death rate per 1000 births.
North.....	84	4	47
Central ....	73	7	95
South.....	110	9	81
East .....	118	8	67
Parkfield ...	94	9	95
West .....	61	7	114
Total ...	540	44	

### LONGEVITY.

Of the total deaths, 137 were those of persons 65\* years and over. There were 46 who were between 65 and 70, 66 between 70 and 80, 23 between 80 and 90, and 2 over 90 years of age. Of the above 20 died outside the Borough.

Age.	Males.			Wards.				Total
	North	Central	South	East	Parkfield	West		
65—70 ...	4	2	3	3	7	1		20
70—80 ...	—	5	8	6	6	5		30
80—90 ...	1	1	1	—	2	1		6
90 & over	1	—	—	—	—	—		1

Total ...	6	8	12	9	15	7		57
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Ages.	Females.			Wards.				Total
	North	Central	South	East	Parkfield	West		
65—70 ...	2	5	4	8	4	2		*26
70—80 ...	7	4	6	6	5	8		36
80—90 ...	4	4	2	2	3	2		17
90 & over	—	—	—	—	1	—		1

Total...	13	13	12	16	13	12		*80
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\* Including 1 with no address.

TABLE 1.

The vital statistics for the two decennial periods 1891-1900 and 1901-1910, compared with the last eleven years, are given below :—

Period.	Per 1,000 of Population.			Enteric Fever		Diphtheria & Mem branous Croup		Rate of Infant Deaths per 1000 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
1901-1910	23.5	16.6	1.39	1.35	62	11	165	44
Year 1911	23.0	16.6	2.96	1.10	3	—	6	1
" 1912	21.4	15.1	1.02	1.30	5	1	3	—
" 1913	20.9	12.9	0.70	0.73	5	1	8	—
" 1914	19.8	14.6	1.98	1.21	43	9	20	4
" 1915	17.5	16.1	0.93	1.47	9	1	31	6
" 1916	15.8	14.2	0.81	1.18	3	1	46	6
" 1917	14.5	15.3	0.90	1.29	4	2	39	5
" 1918	13.0	17.2	0.86	1.17	3	2	22	—
" 1919	14.0	14.0	0.54	0.68	1	—	35	2
" 1920	22.6	12.3	1.00	1.17	1	—	41	5
" 1921	19.4	13.3	.69	0.79	8	—	17	1

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



TABLE 2.—DEATHS.

Causes of Death in Middleton Borough, 1921.

Civilians only.					Males	Females
Scarlet Fever...	...	...	...	...	4	1
Whooping Cough	...	...	...	...	2	3
Diphtheria	...	...	...	...	—	1
Influenza	...	...	...	...	1	2
Encephalitis lethargica	...	...	...	...	—	1
Tuberculosis of Respiratory System	...	...	...	...	8	15
Other Tuberculosis Diseases...	...	...	...	...	5	7
Cancer, Malignant Disease	...	...	...	...	17	19
Diabetes	...	...	...	...	1	3
Cerebral Hemorrhage, etc.	...	...	...	...	14	14
Heart Disease	...	...	...	...	29	31
Arterio-sclerosis	...	...	...	...	6	5
Bronchitis	...	...	...	...	19	19
Pneumonia (all forms)	...	...	...	...	14	14
Other Respiratory Diseases...	...	...	...	...	—	1
Ulcer of Stomach or Duo-denum	...	...	...	...	1	—
Diarrhoea, etc. (under 2 years)	...	...	...	...	6	3
Appendicitis and Typhilitis	...	...	...	...	2	1
Cirrhosis of Liver	...	...	...	...	1	1
Acute and Chronic Nephritis	...	...	...	...	4	9
Puerperal Sepsis	...	...	...	...	—	1
Other Accidents and Diseases of Pregnancy and Parturition	...	...	...	...	—	5
Congenital Debility and Malformation, Premature Birth	...	...	...	...	8	8
Suicide	...	...	...	...	1	2
Other Deaths from Violence	...	...	...	...	6	4
Other Defined Diseases	...	...	...	...	26	36
Causes Ill-defined or Unknown	...	...	...	...	5	—

Total, all causes—Males 180. Females 206



* Sex	Wards.									
	North		Central		South		East		Parkfield	West
Males .....	20	...	29	...	35	...	33	...	41	21
Females .....	27	...	31	...	41	...	35	...	41	30
Total ...	47	...	60	...	76	...	68	...	82	51

\* Plus one female, no address.

The age incidence was as follows :—

Under							
1 year	1-2	2-5	5-15	15-25	25-45	45-65	65 & over
45	13	14	12	17	43	104	137

One male transfer not included.



TABLE 4.—BIRTH RATE, DEATH RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1921.

(Provisional figures. Populations as enumerated in 1921 have been used for the purposes of this Table. 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 Total Population.	Annual Death Rate per 1,000 Population								Rate per 1,000 Births	Percentage of Total Deaths.				
		All Causes	Enteric Fever	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence.		Total Death under 1 year	Deaths in Public Institutions	Certified Causes of Death	Un-identified Causes of Death	
England & Wales ...	22.4	12.1	0.02	0.06	0.03	0.12	0.12	0.23	0.44	15.5	83	25.5	92.5	6.4	1.1
96 great towns including London (1911) Census Populations exceeding 50,000	22.3	12.3	0.01	0.08	0.04	0.13	0.15	0.23	0.40	19.3	87	33.2	92.5	6.8	0.7
148 Smaller towns 1911 Census Populations 20,000—	22.7	11.3	0.01	0.05	0.03	0.11	0.11	0.26	0.35	15.6	84	17.7	93.5	5.1	1.4
London ...	22.3	12.4	0.01	0.05	0.06	0.12	0.25	0.23	0.42	21.3	80	49.2	91.6	8.2	0.2
<b>Middleton 194</b>		<b>13.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.17</b>	<b>0.17</b>	<b>0.03</b>	<b>0.103</b>	<b>0.44</b>	<b>15.8</b>	<b>78</b>	<b>16.6</b>	<b>93.5</b>	<b>6.5</b>	<b>0.0</b>



### 3—Infectious Diseases.

508 cases were notified during the year. 71 cases died. 200 cases were removed to hospital. The deaths in hospital were 8.

#### Age incidence :—

Under	1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65
	23	13	14	16	31	202	86	34	36	33	17
65 and over—3.											

#### Sex incidence .—

Males	Females
235	273

#### Ward distribution :—

North	Central	South	East	Parkfield	West
92	90	70	87	119	50

#### Infectious Disease Summary :—

Disease	Total Cases notified	Cases admitted to Hospital	Total Deaths
Diphtheria ... ..	17	5	1
Scarlet Fever ... ..	256	160	5
Enteric Fever (including Paratyphoid)	8	7	—
Puerperal Fever... ..	2	1	1
Pneumonia ... ..	63	—	28
Other Diseases generally notifiable :—			
Measles ; Encephalitis lethargica ;			
Malaria ; Erysipelas ... ..	25	—	1
Other diseases notified locally, Chicken-			
pox ... ..	85	—	—
Tuberculosis :—(a) Pulmonary ... ..	21	25	23
(b) Non-pulmonary ... ..	26	2	12
Ophthalmia Neonatorum ... ..	5	—	—
Total ... ..	508	200	71

## SMALLPOX.

No cases of Smallpox occurred during the year.

125 Vaccinations were carried out during the year by the Public Vaccinator.

The Vaccination Officer has favoured me with the subjoined return for Middleton Sub district :—

RETURN respecting the *Vaccination of Children* whose Births have been Registered in the *Middleton Sub-District*.

Period covered by Return.	No of Births Re-turned in 'Birth List Sheets'	Suc-cess-fully Vac-cinated	No. in res-pect of whom Stat-utory De-clarations of Conscien-tious Objec-tion have been received	Dead, un-vac-cinated	Left the Dis-trict, or not to be found	No. notd accounte for in previous columns at date of this Return
From 1st Jan. 1919, to 31st Dec., 1919, inclusive...	393	135	234	19	4	1
From 1st Jan. 1920, to 31st Dec., 1920, inclusive.....	640	173	422	34	5	6

This return shows that in infants, only 29·81 per cent. were successfully vaccinated (1919-1920).

Inspection of School children during 1921, showed that only 33·97 per cent. of the cases examined had been vaccinated.

In respect of the relation of Vaccination to the incidence of Smallpox in the recent epidemic in this borough, the County



Medical Officer in his Special Report came to the following conclusions :—

“ That Vaccination exercised a marked preventive influence, and vaccination performed within seven years was an absolute preventive of the disease.

In infected households the disease spread with almost absolute certainty to the unvaccinated persons, the only exception being a child aged one year living with six cases of concealed smallpox.

That in this type of smallpox very mild cases frequently occurred in unvaccinated persons.

That in this mild type of smallpox vaccination can be successfully performed up to and including the second day of the rash in some of the cases. A successful vaccination in the case of a rash of seven days' standing would negative a diagnosis of smallpox.”

### DIPHTHERIA.

17 cases were notified, with 1 death. 5 cases were removed to Hospital, 12 of the 17 affected school children.

Month	No. No.		Ward					
	of	sent to	cases	Hospital	North	Central	South	East Parkfield West
January ...	2	...	...	1	...	...	1	...
February...	2	1	...	...	1	...	1	...
March .....	1	...	...	...	...	1	...	...
April .....	...	...	...	...	...	...	...	...
May .....	1	...	...	...	...	...	1	...
June .....	2	...	...	...	1	1	...	...
July ...	...	...	...	...	...	...	...	...
August ...	1	...	...	...	...	1	...	...
September..	3	1	1	...	...	...	1	1
October ...	2	2	...	1	...	...	...	1
November..	1	1	1	...	...	...	...	...
December..	2	...	...	...	1	...	1	...



### ERYSIPELAS.

8 cases were notified No deaths occurred.

Month	No. of cases	No. sent to Hospital	Ward					
			North	Central	South	East	Parkfield	West
January ...	...	...	...	...	...	...	...	...
February...	3	...	1	...	...	1	...	1
March.....	...	...	...	...	...	...	...	...
April .....	...	...	...	...	...	...	...	...
May.....	1	...	...	1	...	...	...	...
November..	2	...	...	1	...	...	1	...
December..	2	...	2	...	...	...	...	...

### SCARLET FEVER.

Scarlet Fever occurred in epidemic form, beginning in July, and continuing to the end of the year. The greatest incidence was in November.

The total number notified amounted to 256. Of these 160 were removed to Hospital. 5 in all died, 3 in hospital. The age incidence was greatest between 5 and 10, and secondly between 10 and 15.

The type was, as a rule mild in character, and many cases were atypical.

The clinical signs were sore throat, slight temperature, headache, sometimes sickness and rash. Missed cases, owing to the mildness of the attack were not uncommon.

A sore throat, headache, and malaise passed by with a few days absence from school, without medical attention, with the result that these cases were found at the later stage desquamating.

Scarlet Fever was prevalent in surrounding Boroughs before this area became affected.

The onset coincided with the closing of the schools for the summer holidays.

The difficulties contended with were due to the mildness of the cases, the overcrowded condition in many of the houses, and the laxity of parents in carrying out instructions with regard to contacts.

The steps taken in regard to the schools are dealt with in the School Medical Officer's Report.

Propaganda has been employed through the local press, by pamphlets, and on the cinema screen.

Contacts have been isolated as far as possible, and followed up by the Health Visitors.

Disinfection of houses and schools has been carried out.

There was no evidence to show that the spread of infection was due to the milk supply. Contact in the home and school was the usual cause.

There were 4 return cases.

#### *Home Conditions.*

No. of bedrooms.		Per cent of cases.		
1	2	3	4	5
75 per cent	68.66 per cent.	25.3	3.0	2.24

---

No. of occupants.				Per cent of cases.		
2	3	4	5	6	7	8
75 p.c.	14.18 p.c.	20.15 p.c.	20.9 p.c.	16.42 p.c.	7.46 p.c.	8.21 p.c.
	9	10	11	12		
	5.23 p.c.	3.73 p.c.	1.49 p.c.	1.49 p.c.		

Distribution.								
Month	No. of cases	No. sent to Hospital	Ward					
			North	Central	South	East	Parkfield	West
January ...	4	...	...	1	...	1	...	2
February ..	7	2	1	1	...	1	2	2
March .....	1	1	...	...	1	...	...	...
April .....	4	2	...	...	...	1	2	1
May .....	4	1	...	...	...	...	4	..
June .....	5	5	...	...	2	...	3	...
July .....	8	2	1	2	2	3	...	...
August ...	45	24	11	12	2	11	8	1
September	18	14	4	...	4	2	8	...
October...	51	38	14	11	...	2	14	10
November	58	40	20	7	7	2	19	3
December	51	31	9	9	3	5	11	14

### TYPHOID FEVER.

Eight cases of the above disease were notified during the year. The age and sex distribution was as follows :—

Sex.	Age—Years.			
	5-10	10-15	15-25	25-45
Males .....	1	...	1	...
Females .....	..	...	...	...

The following are the number of bedrooms and occupants in each case :—

Three bedrooms	Two bedrooms	No. of occupants.					
1	7	3	4	5	6	7	10
		1	2	...	1	3	1

The sanitary condition was as follows :—



Case No.	W.C. or other.	Yard.	Drains.
1	W.C.	Open.	...
2	W.C.	Flagged.	Trapped.
3	W.W.C.	"	"
4	"	"	"
5	"	"	"
6	"	"	"
7	"	"	"
8	"	"	"

One case occurred in North Ward, one in South, and six in East. Two of the cases attended St. Gabriel's School, and one St. Leonard's School.

#### Distribution.

Month	No. of cases	No. sent to Hospital	Ward.					
			North	Central	South	East	Parkfield	West
January ...	...	...	...	...	...	...	...	...
February ...	...	...	...	...	...	...	...	...
March .....	...	...	...	...	...	...	...	...
April .....	...	...	...	...	...	...	...	...
May .....	1	1	...	...	1	...	...	...
June .....	...	...	...	...	...	...	...	...
July .....	...	...	...	...	...	...	...	...
August.....	3	2	...	...	...	3	...	...
September...	2	2	1	...	...	1	...	...
October .....	2	2	...	...	...	2	...	...
November ..	...	...	...	...	...	...	...	...
December....	...	...	...	...	...	...	...	...

The first case was traced to infection contracted outside the borough, and the remainder were probably due to contact with a subsequent case which was not diagnosed, and died at home. 7 cases were removed to Hospital.

The drains in the block of houses where the outbreak occurred were found defective.

Bacteriological investigation was carried out in 19 blood specimens, 6 of which gave a positive Widal reaction. Specimens of house flies examined and smears of faeces from the Waste W.C.'s proved negative.

#### PUERPERAL FEVER.

2 cases were notified. 1 case was removed to hospital and died eleven days after confinement.

Month	No. of Cases	No. sent to Hospital	Ward				
			North	Central	South	East	West
Jan...	1	...	...	...	...	...	1
Sep. .	1	1	...	...	1	...	...

No. cases of cerebro-spinal meningitis, nor Poliomyelitis occurred.

#### OPHTHALMIA NEONATORUM.

5 cases were notified. No impairment of Vision resulted in any of the cases.

Month	No. of Cases	No. sent to Hospital	Ward				
			North	Central	South	East	West
Jan....	1	...	...	...	...	...	1
Feb. .	1	...	...	...	...	...	1
July .	1	...	...	...	1	...	...
Oct. ..	2	...	1	...	1	...	...

#### MALARIA.

One case notified, occurred in a discharged soldier.

Month	No. of cases	No. sent to Hospital	Ward.				
			North	Central	South	East	West
March	1	...	1	...	...	...	...

There were *no* cases of Trench Fever nor Dysentery.



### ENCEPHALITIS LETHARGICA.

One case was notified in January and died 2 days after notification.

The patient was a girl of 14. The clinical signs were loss of power in legs, drowsiness, semi-coma, incontinence of urine and delirium.

The source of infection was obscure.

Month	No. sent to					Ward.			
	No.	Hospital	North	Central	South	East	Parkfield	West	
January	1	...	...	...	...	1	...	...	...

### PNEUMONIA.

Acute Primary and Acute Influenzal Pneumonia was notified in 63 cases. There were 28 deaths. No cases were removed to hospital.

Age Incidence											
Under	1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	65 & over
	7	5	1	...	...	5	5	5	7	17	8 3

### Seasonal and Ward Distribution.

Month	No. sent to					Ward			
	No.	Hospital	North	Central	South	East	Parkfield	West	
January	1	...	...	...	...	1	...	...	
February	4	...	...	1	1	...	2	...	
March	8	...	2	2	1	...	2	1	
April	8	...	...	2	3	2	1	...	
May	4	...	1	...	1	1	1	...	
June	3	...	...	...	3	...	...	...	
July	6	...	...	...	1	2	3	...	
August	3	...	...	1	...	1	1	...	
September	6	...	...	1	3	1	...	1	
October	5	...	1	...	3	...	1	...	
November	9	...	...	3	2	3	1	...	
December	6	...	...	1	1	2	1	1	



## MEASLES.

15 cases were notified. No deaths occurred.

Month	No. of cases	No. sent to Hospital	Ward					
			North	Central	South	East	Parkfield	West
January ...	1	...	...	...	...	...	1	...
February ...	3	...	...	...	1	...	2	...
April .....	1	...	...	...	...	...	...	1
May .....	1	...	1	...	...	...	...	...
June ...	1	...	1	...	...	...	...	...
July .....	2	...	1	1	...	...	...	...
August .....	5	...	...	1	4	...	...	...
October ....	1	...	...	...	1	...	...	...

## CHICKENPOX.

Chickenpox has been notifiable during the year. A total of 85 cases occurred. It reached its maximum incidence in May.

The greatest age incidence was between 5 and 10.

Month	No. of cases	No. sent to Hospital	Ward					
			North	Central	South	East	Parkfield	West
January ...	4	...	...	...	...	...	4	...
February ...	5	...	...	1	3	...	...	1
March .....	11	...	3	5	1	1	1	...
April .....	13	...	1	7	2	1	2	...
May .....	33	...	7	8	...	12	4	2
June .....	11	...	...	...	...	9	2	...
July .....	1	...	...	...	...	1	...	...
November ...	1	...	...	1	...	...	...	...
December ..	6	...	1	...	...	4	1	...

## TUBERCULOSIS.

All cases of tuberculosis are now notifiable, and it is of the greatest importance to the patient and to the Community, that notification should be made *at the earliest possible time*. Notification in the borough during the year has been fairly satisfactory.

Tuberculosis is caused by the tubercle bacillus. The germ is conveyed in the sputum in the form of cough spray, and in the form of dried expectoration from a person suffering from tubercle of the respiratory system, and by tubercular milk.

The children of parents who have had tuberculosis are specially susceptible.

The pre-disposing causes are all conditions undermining the general health, unhygienic conditions, overcrowding, foul and dusty air, dampness, want of sunlight, insufficient food, poverty, alcoholism.

The *housing conditions* of tubercular persons living in the borough is of the greatest importance.

My analysis of reports includes the period 1919-1921, and gives the following findings :—

Through house—96·61 per cent. Pail Closets—10·17 per cent.

W.C.'s—44·92 per cent.

	Number	1	2	3	4	
p.c. of Living Rooms	63·56 p.c.	37·44 p.c.	·85 p.c.	..		
p.c. of Bed-rooms	·85 p.c.	68·64 p.c.	30·51 p.c.	1·69 p.c.		
Occupants.	Number, and percentage of each.					
	1	2	3	4	5	6
1·69 p.c.	10·17 p.c.	23·73 p.c.	18·64 p.c.	16·93 p.c.	8·47 p.c.	
7	8	9	10	11	12	
6·78 p.c.	9·32 p.c.	3·39 p.c.	·85	·85	·85	



Lighting not sufficient—5.08 per cent.

Ventilation not satisfactory—20.3 p.c.

No separate bedroom—66.11 per cent.

No. separate bed—50 per cent.

Number of others in bedroom—	1	2	3	4
	39.83 p.c.	14.41 p.c.	4.23 p.c.	3.39 p.c.

Contacts. Number—

1	2	3	4	5	6
10.17 p.c.	22.88 p.c.	18.64 p.c.	12.71 p.c.	10.17 p.c.	6.78 p.c.
7	8	9	10	11	
7.62 p.c.	3.39 p.c.	.85 p.c.	.85	.85	

Nuisances found, 39.83 per cent.

Better housing of tubercular cases is an urgent need, both from the stand-point of prevention and of cure.

It must be remembered that tuberculosis is a preventable disease. The satisfactory housing of these cases is the first step necessary and calls for immediate action.

Forty-seven first notifications of all forms of Tuberculosis have been received during the year.

#### *Sex Distribution.*

	Males.	Females.
Pulmonary.....	12	9
Other Forms .....	11	15

#### *Ages Affected—Years.*

	Under 1	1-5	5-15	15-25	25-45	45-65
Lungs.....	—	—	2	3	12	4
Other Forms...	1	6	7	6	3	3

#### *Wards.*

	North	Central	South	East	Parkfield	West
Lungs.....	1	5	6	3	4	2
Other Forms	4	3	4	5	8	2



## TUBERCULOSIS LUNGS.

Month	No. of cases	Ward					
		North	Central	South	East	Parkfield	West
January .....	3	...	2	...	1	...	...
February .....	3	...	1	...	...	1	1
March .....	1	...	1	...	...	...	...
April .....	2	...	...	2	...	...	...
May .....	2	...	...	1	1	...	.
June .....	1	...	...	1	...	...	...
July .....	5	...	1	1	...	2	1
August .....	1	...	...	...	...	1	...
September .....	2	1	...	1	...	...	...
October .....	1	...	...	...	1	...	...
November .....	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...

## OTHER FORMS, T.B.

Month	No. of cases	Ward					
		North	Central	South	East	Parkfield	West
January .....	2	1	...	...	1	...	...
February.....	1	1	...	...	...	...	...
March .....	1	...	...	...	1	...	...
April .....	3	1	1	...	1	...	...
May .....	5	...	...	1	1	2	1
June .....	...	...	...	...	...	...	...
July .....	6	...	1	1	1	3	...
August .....	3	...	...	1	..	1	1
September..	1	...	...	...	...	1	...
October .....	...	...	...	...	...	...	...
November .....	2	...	1	1	...	...	...
December.....	2	1	...	...	...	1	...

All the notified cases were brought to the notice of the Consultant Tuberculosis Officer for the district, and were visited under his direction.

The *result of treatment* in Sanatoria as received from the Chief Tuberculosis Officer for the County is as follows :—

Improved	Worse	Same	Diagnosis not confirmed	Died	Transferred Fever Hospital
74·28 p.c.	2·86 p.c.	14·28 p.c.	2·86 p.c.	5·71 p.c.	2·86 p.c.

#### Working Capacity.

Slight.	Nil.	Full.	Not stated.
51·43 p.c.	22·85 p.c.	5·71 p.c.	17·14 p.c.

#### Sputum.

Not stated.	Positive.	Negative.
17·14 p.c.	34·28 p.c.	47·57 p.c.

25·91 per cent. left against Medical Advice.

### REPORT OF TUBERCULOSIS OFFICER FOR THE YEAR 1921.

During the year 1921, forty-nine notifications of patients suffering from Tuberculosis were received. Of these, twenty-one were notified as suffering from Tuberculosis of the lungs, and twenty-eight from Tuberculosis in other parts of the body.

Of the twenty-one pulmonary cases, seventeen were found to have tubercle bacilli in the sputum. Four has no sputum for examination.

The twenty-eight cases suffering from non-pulmonary Tuberculosis are classified as follows, according to the localisation of the disease :—



Meninges ... ..	7
Skin ... ..	5
Peritoneum ... ..	3
Mesenteric Glands ..	1
Cervical Glands ..	6
Superficial abscess ...	1
Spine ... ..	1
Hip ... ..	1
Ankle joint ... ..	1
Elbow joint ... ..	1
Ulna ... ..	1

Seven of the notified lung cases with positive sputum died during 1921. The period that elapsed after notification before death was respectively 3 weeks, 6 weeks, 2 months,  $4\frac{1}{2}$  months, 5 months,  $5\frac{1}{2}$  months.

Six of the cases of tuberculous meningitis died, one on the day of notification, one on the day previous to notification, three within a week of notification, and one within two weeks of notification.

One of the cases of meningitis occurred in a house where a sister of the patient was suffering from Pulmonary Tuberculosis. Another case of meningitis occurred where the patient was visited by an aunt who was suffering from Pulmonary Tuberculosis.

Two cases of Abdominal Tuberculosis died during the year, one on the date of notification.

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

Forty-three defects in regard to the houses were notified, and of these thirty-seven 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. Sixty-eight such cases were known to be living in the Borough during the whole or part of 1921. Of these, twenty-three died or left the Borough during the year, and forty-five were living in the Borough at the end of 1921, as compared with fifty-eight at the end of 1920.

The condition as to isolation at home of these positive cases during 1921 was as follows :—

Isolation in shelter	...	...	...	...	2
Separate bedroom	...	...	...	...	33
Separate bed only	...	...	...	...	20
Unable to have separate bed	...	...	...	...	13

Twenty-five of the sixty-eight open cases were in Hospital or Sanatorium during part of the year.

During the year, seventy-seven new patients were sent to the Dispensary by their doctors for diagnosis and arrangements for treatment. Of these, twenty-five were contacts of previously reported cases.

There were 619 re-attendances of old cases at the Dispensary, and the Nurses paid 891 domiciliary visits during the year.

Eighty-six specimens of sputum, etc., from Middleton were examined at Ashton Laboratory during the year. Of these, twenty-three were positive, and sixty-three negative.

During the twelve months, fifty patients were discharged from institutions, as follows :—

From Sanatoria	...	...	...	18
Pulmonary Hospitals for advanced cases	...	...	...	13

Bury Observation Hospital for Children ...	5
General Hospitals for treatment of non- Pulmonary tuberculosis ... ..	13
Sanatorium for treatment of non-pulmonary diseases in children ... ..	1

The results on discharge were as follows :—

Diseases arrested ... ..	3
Disease Quiescent ... ..	5
Improved ... ..	24
Relieved ... ..	5
Stationery ... ..	8
Worse ... ..	1
Died in Institution ... ..	2
Diagnosis not confirmed... ..	2

J. L. STEWART,

Consultant Tuberculosis Officer.

#### VENEREAL DISEASES.

The Public Health (Venereal Diseases) Regulations, (1916), is administered by the County Medical Officer of Health.

The Scheme in operation in the County provides for :—

- (1) Any medical practitioner practising in this area to obtain, at the cost of the County Council, a scientific report on any material which the medical practitioner may submit from a patient suspected to be suffering from venereal disease.
- (2) The treatment at and in hospitals or other institutions of persons suffering from venereal diseases.
- (3) Supplying medical practitioners with salvarsan, or its approved substitutes, for the treatment and prevention of venereal diseases.



- (4) Supplying gratuitously the necessary outfit for collecting material for examination from persons suspected to be suffering from venereal disease, and a scientific report upon the material submitted.

*Laboratory Examination.*

The Laboratory available for such examinations is The University of Manchester, Pathological Department.

*Treatment Centres.*

No Treatment Centre has been established in the Borough.

The following are the nearest centres :—

1. Oldham Royal Infirmary.
2. Rochdale Infirmary.
3. Manchester Royal Infirmary.
4. Manchester, St. Mary's Hospitals (Whitworth Street West Branch).

No information is received in this department of persons suffering from venereal diseases, in the Borough, from the Treatment Centres nor General Practitioners.

This confidential information would be most important to the District Medical Officer of Health.

#### **4.—Causes of Sickness.**

The causes of sickness noteworthy in the District during the year were :—

- (a) *Scarlet Fever* which assumed an epidemic form in July, and continued to the end of the year.

The greatest incidence was in November.



Generally the cases were of a mild type, and in many the signs atypical. The clinical signs were, sudden onset, headache, vomiting, sore throat and rash, followed in second week by peeling, but all of these signs were not always present. A sore throat with subsequent peeling being of not an unusual occurrence. Missed cases occurred, and were no doubt the cause of infection.

(b) *Influenza* was general, late in the end quarter of the year. It assumed the type, although of a milder form of the epidemic in 1918. The clinical signs were headache, sore throat, cough, general malaise, temperature and pains in back and limbs. The complication was chiefly respiratory, and a number of Influenzal Pneumonias occurred. The age incidence was greatest under 30.

(c) *Chicken-pox* occurred in mild epidemic form in the first six months of the year.

(d) *Tuberculosis* was notified in 47 cases,

(e) *Malignant Disease* accounted for 36 deaths during the year. No information is received of the number of cases living in the borough.

Hygienic habits, attending to the beginnings of disease before pathological conditions develop, and early diagnosis are important factors in dealing with this problem.

Cancer is one of the chief causes of death.

Notification is required, and investigation of each case would serve to focus public attention on the importance of early treatment and the necessity for prevention.

*Cancer* is a growth consisting of glandular tissue of a degenerative type. It grows quickly, permeates into surrounding tissues and has a tendency to form secondary growths in other parts of the body.

*Causes of Cancer.*

Sir James Paget stated that all forms of Cancer were local manifestations of certain *specific morbid states of the blood*.

Recent views of the cause of cancer, put forward, have been various, e.g. :—

It is stated that there is an inherent *inhibitory influence* acting on the cell growth, and on its removal, such as by the action of X-rays, inhibition is destroyed and cell proliferation takes place.

*Irritation* has been considered a cause, either in the form of a parasite, or a local chemical or mechanical irritant such as tar, a ragged tooth, etc.

Again research has shown that *cholesterin* is a constituent of normal tissue cells, but that in cancer it is deficient or absent. Treatment in supplying this constituent has given good results.

Sir Arthbutnot Lane considers *Auto-intoxication* from intestinal stasis, is the cause of cancer.

*Chronic septic conditions* again are credited with setting up, by damaging normal tissues, a favourable nidus for the growth of the germs of cancer.

Research work on animals shows that the malignant change takes place in the cells of the tissue and not in the body fluids, that the tendency varies in different individuals, and is hereditary, that young are not more resistant than the old.

Cancer is on the increase. It has been pointed out that, in Cancer-free races, their system of dieting prevents intestinal stasis, dyspepsia, gastric and duodenal ulcers and colitis.



In its early stages cancer is painless, and the *best chance* of cure is its early treatment.

If public opinion can be roused to the *necessity* of dealing with the beginnings of disease, and taking medical advice more to prevent disease, a great step forward will be gained in the cancer problem.

A periodical medical inspection is advisable to detect the beginnings of disease.

### GENERAL DISEASES.

(f) It is estimated that over 60 per cent. of insured persons received medical treatment during the year, and that the most common complaints are from diseases of the respiratory and digestive systems.

The Medical Officer of Health receives no returns from the National Health Insurance authorities, nor reports from the general practitioners in his area of the occurrence of disease and disability with the exception of notifiable diseases.

A periodic report from the National Health Insurance authorities on the state of sickness or invalidity, would be of great importance to a M.O.H., in the matter of prevention.

(g) No information on the state of Venereal Disease in the Borough is received from the Venereal Disease Clinics.

### PREVENTION OF DISEASE.

(a) *Sufficiency of Bath Accommodation.*

Bath accommodation is one of the urgent hygienic necessities of the Borough.



(1) The Corporation baths consist of :—

- 1 Plunge Bath (20 yards by 10 yards)
- 4 Private Baths.
- 1 Vapour Bath.
- 1 Spray Bath, with 21 Cabins.

There is accommodation for an average of 200 bathers per day. The following gives the attendance during the year :—

Year.	Total.	Males.	Females.
1921	31,755	23,632	8,123

School children not included in the above table.

Total number of school children attending baths : 1,168.

A second Public Bath is required.

(2) *Baths in Houses.*

There is a deficiency of bathing arrangements in four-roomed dwelling-houses.

One of the minimum requirements of every house should be the provision of a bath.

There are only 994 houses in the Borough provided with baths out of a total of 7,111. This is a very serious deficiency.

It is unnecessary here to go into the hygiene of baths, but this should be emphasised, that by providing better facilities for keeping the skin of the body clean and free from effete products, the risk of contracting contagious diseases would be lessened and the general health improved.

A hot bath should be available at least once a week. Spray baths are required in the schools. Provision of baths sufficient for each inhabitant of the Borough is a *sine qua non* of hygienic living.

(b) *Public Interest in the Prevention of Sickness.*

On the importance of educating public opinion on health matters I quote the following:—

† “Sanitary *instruction* is even more essential than Sanitary legislation, for if in these matters, the public knows what it wants sooner or later the legislation will follow ; but the best laws in a country like this are waste paper, if they are not appreciated and understood.”

\* “Particularly valuable is such a campaign as that represented by National Health Week. Again, it seems impossible to exaggerate the significance of the newspaper press as an educational health agency.”

Health Week was held in the Borough from the 9th to the 15th of October. The following programme was carried out:—

(a) Baby Show was held at the Maternity and Child Welfare Centre.

(b) School children received special lectures in the schools.

(c) Lantern slides dealing with health matters were exhibited in the cinemas during the week.

(d) Special articles appeared in the local press under “Health Notes.”

(e) References were made in churches and sunday-schools.

By the courtesy of the editor of the local press, I have been enabled to bring before the public matters dealing with the prevention of disease.

† Speeches and addresses of Lord Derby, 1894, Volume 1, page 176.

\* Sir George Newman, K.C.B., in “Public opinion on Preventive Medicine 1920.”



These have appeared weekly in the form of "Health Notes," and the subjects dealt with have covered a wide range including Hygiene and Sanitation, Maternity and Child Welfare, Infectious Diseases, Tubercular and Venereal Diseases, Food, Alcohol, The Welfare of the School Child, and others.

I advocate that this matter might, with advantage be further developed by the formation of a Propoganda Committee.

(c) *Housing* in relation to Disease has been dealt with in Section 9.

(d) *The effects of polluted soil* in unpaved backyards and passages is considered under the same Section.

(e) *The contamination of food* by flies and dust is avoidable and is referred to under Food Supplies.

(f) *The prevention of disease in school children* has been reviewed in the School Medical Report.

## **5.—Nursing Arrangements, Hospitals and other Institutions available for the District.**

### **(1) NURSING ARRANGEMENTS.**

(a) *Professional Nursing* in the home is provided for by the Middleton District Nursing Association, which is affiliated to the Queen Victoria Jubilee Institute.

The Staff, at present, consists of one District Nurse, who is available for general nursing. The appointment of a second nurse is under consideration.

During the year, 116 cases of sickness have been attended, and an average of 300 to 400 visits per month made. The nurse acts under the instructions of the general practitioners. No provision is made by the Association for the nursing of Infectious Cases, and Midwifery and Monthly Nursing are not undertaken.



## (2) MIDWIVES.

(b) There are 8 Certified Midwives in the Borough, and 7 in practice. This number is not sufficient. A number of "handy women," "follow" the doctors. How far these persons gain support, to the exclusion of the qualified midwives, is a matter requiring consideration.

I have been informed by the Certified Midwives that the abuse of abortifacients and soothing drugs for babies is prevalent in the district, but I have been unable to obtain direct evidence in this matter.

Co-operation exists between the Midwives and Health Visitors.

Cases of confinement occur where preparation beforehand is not satisfactory, and where necessities are not obtained, and proper provision made, owing to financial circumstances.

The bounty received from the National Insurance Scheme is not in all cases used to the best advantage.

In such cases, power enabling the Medical Officer of Health to supply the necessary equipment and provision, and making this a charge on the bounty received, would be beneficial to the mother.

Voluntary notification of pregnancy would lead to good results in the mother and child.

A Maternity Home for the District is required.

## (3) CLINIC AND TREATMENT CENTRES.

*Maternity and Child Welfare.*

There were 568 births during the year. Of these 259 were notified by Doctors, 294 by Midwives, 9 by parents, and 6 not notified.

Of this number 266 were boys, and 273 girls ; in addition 29 were still-born.

The births for the last eleven years are as follows :—

Year	Births	Infant Mortality	Year	Births	Infant Mortality
1911	645	181 ...	1917	414	113
1912	607	116 ...	1918	372	80
1913	599	98 ...	1919	407	76
1914	571	126 ...	1920	654	90
1915	505	93 ...	1921	563	78
1916	467	79			

Work carried out during the year.

*Attendance at Centre.*—There were 323 first attendances at the Centre, and 4,619 re-attendances.

*Home Visiting by Health Visitors.*—The total number of visits paid by the Health Visitors amounted to 3,057, and included 534 first visits, 1,299 re-visits, and 1,224 visits to children between 1 and 5 years of age.

*A Baby Show* was held during Health Week. There were 70 entries. The examinations and tests were carried out by two lady doctors, who kindly volunteered their services.

The ages and average weights of the cases examined were :—

Ages in months.

2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 10-11 11-12 12-13 13-14 15 16

Average weight in pounds.

12 12 16 16 19 17 19 21 22 22 26 25 25



The ages and average weights of babies attending the Clinic were :—

Ages in Months	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12
Averages in Pounds.	11	11½	12½	14½	15	16½	16½	19	19	19
Ages in Months	12-13	13-14	14-15	15-16						
Averages in Pounds.	19	22½	23½	22½						

*Method of Feeding of Infants during the first month.*

Totally breast fed :—79·78 per cent.

„ bottle fed :—14·13 per cent.

Partially breast and bottle fed :—6·9 per cent.

*Defects found in Infants attending the Clinic.*

Otitis Media	Congenital Syphilis
Earache	Atrophy
Anaemia	Malnutrition
Hernia Umbilical Inguinal	Tubercular Peritonitis
Duodenal Stenosis	Abscess
Irregular Feeding	Enlarged Glands
Constipation	Talipes
Diarrhoea	Delayed Walking
Tenesmus	Bronchitis
Colitis	Dermatitis (ac)
Phosphates in urine	Eczema
Gastritis	Seborrhoea
Tongue-tie	Ulceration Umbilicus
Contact typhoid (vomiting)	Scabies
Thrush	Herpes
Conjunctivitis	Ringworm
Ophthalmia	Phymosis
Strabismus	Hydrocele
Obstruction Lachrymal duct	Balanitis
Blepharitis	Laryngitis
Rickets	Fits

Principal causes of deaths in Infants :—

Prematurity.  
Conditions at birth.  
Diarrhoea.

*Free Milk and Glaxo, supplied in 1921.*

No. of cases.	Free.	Half Cost	Quarter Cost.
70	70	—	—

*Period.*

2 weeks.	1 months.	2 months.	3 months.	Over.	Total.
8	24	15	6	17	70

The total cost of Free Milk and Glaxo amounted to £68 6s. 0d. for the financial year (1920-21).

The scale of income adopted for the supply of milk under cost price is as follows :—

Scale of income per head of family after  
deducting rent.

Number in Family	Supply of milk free of cost	Supply of milk at quarter of 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/- „

There were 223 free packets of Glaxo supplied during 1921.

*Notification of Births.*

A scheme is in force by which all cases are card-indexed on the Birth Enquiry Cards. The first visit of the Health Visitor takes place so that she can consult with the Midwife before the latter ceases attending.



*Home conditions* are fully inquired into, and instructions given in accordance with the following pamphlet, a copy of which is left at the house :—

“The importance of system and attention to hygiene in the rearing of babies is universally recognised.

No woman is a perfect “born mother,” hence the necessity for instruction.

1. Fresh air and Sunshine are necessary.—Sunshine gives radiant energy which penetrates the body and stimulates the vital processes.

The baby should be in the open-air as much as possible.

Pure, cold air is invigorating, and prevents the catching of colds.

Warm, stuffy air is poisonous and devitalises and induces colds.

The air of a room should be kept pure by proper ventilation.

Ventilation means the constant changing of the air of the room by a current of air.

One precaution to be taken is to keep baby out of direct draught.

The air should be kept fresh at night in the bedroom.

2. Feeding.—Regularity of feeding at proper intervals is of prime importance. Breast feeding is the best, safest, and cheapest. Feed according to the clock by a time table, by which is meant that each feeding should be the same time each day and at the same interval, e.g., 6 a.m., 9 a.m., 12 noon, 3 p.m., 6.m., 9 p.m. Night

feeding is not necessary ; the healthy baby sleeps during the night. During the day-time sleep should not interfere with the time of feeding ; wake the baby for its feed if necessary. No feeding should be given between these intervals, but there is no objection to giving pure water, which has been boiled. Water is good for the baby.

3. Clothing should be non-irritating light, loose, warm, and porous, and should allow of free movements of the arms and legs, and expansion of chest and abdomen. No constricting tapes should be used nor tight binders.

4. Bathing should be daily, temperature of water 98° to 100° F., water pure, if not, boil before-hand, and allow to cool down. Bath and dress rapidly, don't dandle, dry thoroughly ; cosy corner, draught screen, two warm towels and warm clothing have ready before starting to give bath.

5. Exercise is necessary and implies : (a) sensory stimulation of the vital organs and skin ; this is brought about by pure fresh flowing air day and night and keeping baby out in the sunshine and cool air as much as possible, bathing, good nursing, careful handling, changing position in cot, and massage. Don't allow baby to lie in cot without changing its position. (b) Muscular exercise ; this is taken by kicking the legs, waving the arms, sucking and crying. The baby should have free unhampered use of its limbs several times each day and full expansion of the lungs when crying which should not be interfered with by tight tapes and binders.

6. Warmth : The Baby's skin is more extensive in proportion to its size than the adults, and will cool quicker. Therefore heat should be retained by warm, porous loose clothing. The feet should be kept warm and covered. Overclothing is unnecessary, and is harmful. Cold air is the best if baby is properly clad. Wool is the best material for retaining heat.



7. Regularity in habits is of the utmost importance in feeding, exercise, sleep, action of bowels ; go according to the timetable in all things.

8. Sleep : Abundance of sleep is needed. A baby at first sleeps 9-10ths of its time ; at six months old  $\frac{2}{3}$  of the time is passed in sleep. Regularity in all habits induces sleep. Sleeplessness may be caused by improper feeding, wet napkins, being too cold or overheating, bad ventilation in room, thirst, irritation of the skin, etc.

9. Guard against the use of the comforter or dummy ; it is unnecessary and is a danger to health. Its constant use leads to deformity of the jaws, teeth and palate, and to adenoids, also, the dummy is infected with germs which may poison the system.

Don't give teething powders or soothing powders nor any drugs except under the direction of a doctor.

Don't resort to patent foods where breast feeding can be carried out. No substitute is so satisfactory as nature's method.

10. Weight : Have your baby weighed regularly. Increase in weight is an index that the baby is thriving. There is a normal weight which a healthy baby should attain for its age.

11. A healthy baby requires a healthy home. The home conditions are of the greatest importance. The house should be scrupulously clean from top to bottom and free from dust, dirt, vermin, and flies. The air inside the house should be as pure as the air outside and there should be no stuffy smell from deficient ventilation. A current of air passing in through the open tops of windows and out by the kitchen fire place will maintain this and for that reason it is a good plan to keep a fire banked up in the kitchen during the night with the room doors open.

The house should be dry and all sanitary arrangements in good order. Any defect should be reported to the Sanitary Authority at once.

The same applies to the surroundings of the house especially the back yard, ash pits, water closet, and drains."

*Home Conditions.*— Analysis of the Birth Enquiry Cards reveals the following home conditions :—

Back-to-back (house), .97 per cent. Through, 99.03 per cent.

Repairs : Good, 85.43 per cent. Bad : 11.65 per cent.

Clean : 93.2 per cent. Dirty : 5.82 per cent. W.C., 56.31 per cent.

Other : 41.74 per cent. Food Stores : Good, 72.91 per cent. Bad 26.21 per cent.

Ventilation : Good, 97.08 per cent. Bad, 2.91 per cent.

Lighting : Good, 90.29 per cent. Bad, 4.85 per cent.

Living Rooms : 1—2.91 per cent. 2—88.35 per cent.  
3—6.8 per cent.

Bedrooms : 2—77.67 per cent. 3—19.42 per cent.  
4—97 per cent.

Bath, 2.91 per cent. Damp, 15.53 per cent.

*Number of Occupants.*—

3.	4.	5.	6.	7.	8.
17.48 p.c.	22.33 p.c.	20.39 p.c.	15.53 p.c.	9.71 p.c.	5.83 p.c.
9.	10.	12.			
3.88 p.c.	.97 p.c.	.97 p.c.			

## MATERNITY AND CHILD WELFARE CENTRE.

One centre serves the borough, situated in the School Clinic at Durnford Street.

*Staff.*—Two Health Visitors are on duty at each Clinic. Two Red Cross Nurses attend as Voluntary helpers.



*Routine.*—The following scheme was put in force during the year :—

*Object of Centre.*—To advise mothers in the maintenance and improvement of their health, before and after confinement, and that of their children under 5 years of age.

### CHILD WELFARE.

(1) *Home Visiting*, has for its purpose the keeping in touch with the child from the date of birth to the age of 5. The success of the Clinic depends on the organized home visiting.

The number of visits will depend on the circumstances of the case, condition of the child, mother, and of the home. The less satisfactory the conditions, the more visiting is required.

From 8 to 12 visits are required during the first 12 months but the mother should be encouraged to bring the baby to the centre.

Subsequent visits should be made every quarter, up to the age of two, and half-yearly up to the age of five.

(2) During the first year, the report will be based on the Birth Enquiry Card.

(3) During the second year, enquiry in addition should be made into :—

- (a) Age at which the child begins to stand and walk.
- (b) Number of teeth.
- (c) Feeding.
- (d) Illnesses, if any.
- (e) General condition and development, weight.
- (f) Mothering, good or bad.
- (g) Clothing.
- (h) Home conditions.

4. *During the third year.*

- (a) How Walking.
- (b) Symptoms of rickets, if any.
- (c) Number of teeth.
- (d) Feeding.
- (e) Illnesses.
- (f) General condition and development.
- (g) Condition of home.

(5) *During the fourth year.* Same as above.

The observations of each visit will be noted on the Birth and Continuation Enquiry Cards during the five years period.

### THE CLINIC.

The object of the attendance at the Clinic, is to give hygienic and medical advice.

*Procedure.*

Name and address etc., are entered on the weighing cards, and Consultation Sheet in the waiting room. The child is then brought into the weighing room and weighed. For this purpose the baby should be undressed. After noting weight, particulars are taken on the Consultation Sheet, and any points arising in the case, requiring advice, are dealt with.

All new cases will be brought before the Medical Officer, on the first attendance, and subsequently as directed. In any case, babies under 6 months should attend the Clinic weekly or fortnightly and be reviewed by the M.O. once monthly.

Babies of 6 months, to one year, to come once a month, or oftener, if required. Children from 1 to 2 years attend once three monthly, and from 2 to 5, once in 6 months. The object of the Consultation is to maintain the health of the healthy child, and to advise when hygienic and medical treatment is required in others.



Teaching should be *individual*, and *collective*, and should take the form of health talks and practical demonstrations.

Babies who are not brought regularly to the Clinic, and as directed, should be followed up.

#### *Sale of Glaxo.*

The Ministry of Health's direction is, that Glaxo should be supplied at or below the usual retail price *only* to mothers who cannot afford to pay the ordinary retail price. Precautions should be taken that breast feeding is not interfered with, or replaced by the sale of Glaxo, in the case of breast feeding.

Weight Cards to be given to the mothers in each case, and to be produced at each attendance.

#### *Voluntary Helpers.*

The nature of the assistance which can be rendered by the Voluntary Helpers, will be determined by the M.O., and they will act under the supervision of the Health Visitors.

### MATERNITY WORK.

Expectant mothers will be advised in matters relating to their health, and the advice should be largely educational and preventive. It is essential to work in sympathy with the Midwife.

The instructions laid down in the Ministry of Health's pamphlet should be followed.

All matters requiring attention will be noted in the Office Register, and brought to the notice of the M O.

The Hygienic and Sanitary condition of the house is of *first importance*, and any defect will be noted in all cases.

*Day Nursery.*

No Day Nursery exists in the Borough.

*School Clinic.*

The work carried out at the School Clinic, has been dealt with in the School Medical Officer's Report.

*Tuberculosis.*

A Tuberculosis Dispensary is situated in Manchester Old Road. The Clinic is held once weekly, and is administered by the County Medical Officer.

The Dispensary Staff consists of one Tuberculosis Officer, and one Nurse.

*Venereal Diseases Clinic.*

No Venereal Disease Clinic exists in the Borough.

## HOSPITAL PROVISION.

*Hospitals subsidised.*

<i>Hospital.</i>	<i>Subsidised by</i>	<i>Number of cases.</i>
<i>Tuberculosis.</i>	County Council	25
<i>Maternity.</i>		
St. Mary's Hospital, Manchester.	Local Authority	42 In patients 18 Out patients
<i>Children.</i>		
Children's Hospital, Gartside Street, Manchester.	Local Authority	19
Manchester & Salford Skin Hospital.	Local Authority	2
<i>Fever.</i>		
Joint Marland Hospital.	Local Authority	171
<i>Smallpox.</i>		
Chadderton, Royton, and Crompton Joint Hospital.	Local Authority	Nil.



*Not subsidised.*

The Voluntary hospitals for Manchester and Oldham, are available for the District.

Hospital accommodation has been sufficient.

There is no institutional provision for Unmarried mothers, illegitimate infants, and hopeless children in the Borough.

A Scheme is on foot for the provision of a Cottage Hospital. Funds are available, but the Committee of the Middleton Cottage Hospital and Nursing Association is at present unfortunately unable to proceed with the scheme owing to the impossibility of finding a building suitable for conversion to a Cottage Hospital.

It is proposed to provide accommodation for male and female in-patients, and a dressing room for surgical out-patients.

I suggest that 2 beds should be allotted to Maternity Cases. |

### AMBULANCE FACILITIES.

(a) *For Infectious cases.*

One motor ambulance, and one horse ambulance are available.

The motor ambulance was in use during the year. The cases dealt with were:—

Scarlet Fever	...	163
Diphtheria	...	3
Enteric Fever	...	7

(b) *For Non-Infectious and Accident cases.*

A separate motor ambulance serves for general cases.

During 1921, the following cases were dealt with:—

Accidents	...	...	43.
Operation cases and others	...	...	192.

166 cases were conveyed to Manchester Hospitals, 58 to Oldham Hospitals, and 11 to other places.

## 6—Laboratory Work.

### (a) *Bacteriological.*

Public Health Laboratory, Manchester.

#### *Diphtheria.*

Specimens examined ... ..	36.
Specimens found positive .. ..	7.

#### *Typhoid Fever.*

Total Specimens examined (blood) ...	19.
Total Specimens found positive... ..	6.

#### *Tuberculosis.*

Total Specimens examined... ..	90.
No. of Specimens found negative ...	67.
" " " " positive ...	23.

#### *Bovine Tuberculosis Milk.*

Total Specimens examined... ..	12.
Total Specimens found negative ...	12.

#### *Others. Various Investigations.*

No of Specimens examined ... ..	15.
Total Specimens examined ... ..	185.

### (b) *Water Analysis. (Middleton & Heywood Water Board).*

	Grains per Gallon.
Free and Saline Ammonia .....	0.0042
Albuminoid Ammonia .....	0.008
Nitric Nitrogen.....	0.070
Oxygen absorbed from an acid solution of Permanganate of Potash acting for four hours at 60 degrees F.....	0.011



Combined Chlorine .....	0.87
Alkalinity expresses as Calcium Carbonate (Ca. CO. 3) .....	0.56
Total Solids on evaporation .....	0.51
Total Hardness.....	3.00 (Clarke Soap Test)

(c) *Food and Drug Samples taken by County Constabulary.*

<i>Description of Sample.</i>	<i>Number.</i>
Milk ... ..	39
Cornflour ... ..	3
Cheese ... ..	1
Butter ... ..	2
Margarine ... ..	1
Lard ... ..	1
Baking Powder... ..	1
Custard Powder ... ..	1
Gregory Powder ... ..	2
Total	<hr/> 51 <hr/>

Proceedings were instituted in 3 cases, but each case was dismissed.

*Food and Drug Samples taken by Local Authority.*

<i>Description of Sample.</i>	<i>Number.</i>
Milk ... ..	49
Cordials ... ..	1
Coffee ... ..	12
Butter ... ..	7
Cheese ... ..	1
Lard ... ..	6
Margarine ... ..	3
Total	<hr/> 79 <hr/>

*Milk Samples found defective.*

- 1 Poor (Fat 2·95 per cent.).
- 2 Contained 2·5 parts by volume per 100,000 cowdung.
- 3 Poor (Fat 2·95 per cent.).
- 4 2 parts per 100,000 cowdung.
- 5 2 parts per 100,000 cowdung.

Warning notices sent ; no proceedings taken.

## **7—Sanitary Administration.**

### **SANITARY CIRCUMSTANCES.**

*Water Supply.*

*The Source* is upland, and is derived from the Naden, Cheesden, and Ashworth Moors.

The Hebers Service reservoir has an area of 34 acres, and a capacity of 1,650,000 gallons.

The daily consumption is 33 gallons per head.

The whole drainage area has been purchased by the Heywood and Middleton Water Board, and particular care has been taken to avoid any possibility of contamination.

The following extensions took place during the year :—

3 inches diameter C.I. Pipe, length 280 yards, extension.  
3 inches diameter C.I. Pipe, length 63 yards, New Main. 3 inches diameter C.I. Pipe, 95 yards, New Main. 3 inches diameter C.I. Pipe, 104 yards, New Main.

*Sewage and Drainage.*

*System.*—The Sewerage System of the Borough is fairly modern, and in good condition. The Main Outfall Sewer passes along the valley of the River Irk, and the various main intercepting sewers follow the valley of the Wince Brook, The Whit Brook, etc.



Wherever possible the surface water is carried by separate sewers into the nearest streams.

*Disposal.*—The Middleton main outfall sewer is connected to the Manchester sewerage system, and the sewage treated by the Corporation of Manchester, by agreement.

A scheme for a temporary sewage disposal works at Alkrington has been prepared during the past year, and submitted to the Ministry. The matter is in abeyance for the time being pending the preparation of an alternative system for carrying a new sewer from Rhodes to Alkrington, along the Middleton-Manchester boundary.

*Sewer Cleansing.*—The routine work of cleansing, repairing, etc., the whole of the sewers, manholes, and gullies within the Borough has been carried out as usual during the past twelve months, and a regular system of sewer flushing is in operation under the Surveyor's Department.

*Sewerage Developments during the past year.*—The Borough Surveyor informs me that the following work was carried out during the year :—

(1) “A new 15 inch sewer from Wince Brook to Lancashire Fold Farm, on line of proposed Townley Street Extension, 350 Lin. Yards.

(2) Old leaky butt-joined sewer in Old Hall Street taken up and replaced by a new 12 inch sewer at a greater depth, so as to effectively drain all cellars. 160 Lin. Yards.

(3) A new 9 inch extension sewer, Manchester New Road, from Mount Road, to a point opposite the middle of Alkrington Green.

(4) A new 12 inch sewer from Little Green to Dale Road for Boarshaw Housing Scheme 130 Lin. Yards.

(5) A new 12 inch Surface Water Sewer from River Irk at Hilton Fold Lane to Dale Road, 200 Lin Yards.

(6) A new 12 inch sewer in Clough Road. 164 Lin. Yards.

(7) A new 9 inch Surface Water Sewer in Clough Road. 430 Lin. Yards.

(8) A new 9 inch foul sewer with 6 inch surface water extension sewer in Kenyon Lane, for the Tonge Housing Scheme. 125 Lin. Yards.

*Areas of Township without proper Drainage System.*

The outlying villages of Birch, Bowlee, and Rhodes Green.

*Rivers and Stream.*

The following actions were taken during the year to prevent pollution :—

*Greengate St. storm overflow.*—The section within the Borough has been carefully supervised and kept in order by the Surveyor's Department.

Five houses in Oswald Street, Two shops in Manchester Old Road, and Two shops in Manchester New Road, were found to be draining directly into the River Irk, and have been connected up to the sewers.

The Sanitary Inspector reports that the condition of the rivers flowing through the Borough are still a long way from being satisfactory. The River Wince is still the worst offender as the pollution appears to be constant. The Rivers Irk and Whit are very variable, being at times quite clear and at other times black and foul.



*Scavenging.*

Scavenging implies the storage, removal, and disposal of—

- |                          |                                        |
|--------------------------|----------------------------------------|
| (a) House refuse.        | (b) Refuse from traders and factories. |
| (c) Stables and cowsheds | (d) Streets.                           |

*The accumulation of refuse.*

The accumulation of refuse is a danger to health, on account of the refuse being a suitable medium for the growth of the germs of infection, and as a breeding ground for flies, gnats and rats, which act as carriers of the disease-producing germs.

The number of flies found in summer months is an index of the Scavenging efficiency of a town.

The ova of a fly when deposited on refuse, develop through the various stages into adults in a week. One female fly is capable of producing 120 in a fortnight. To prevent the breeding of flies it is necessary to deal with their breeding places.

*Ashpit Accommodation.*

According to the Sanitary Inspector's Records there are in the Borough:—

		No.	
Fixed Ashpits	...	1647	43·41 per cent.
Portable Bins...	...	1577	41·56 „ „
Wall Bins	... ..	570	15·02 „ „

A number of the fixed ashpits are common to several houses and are objectionable, and should be replaced by ashbins.

Section 80 of the Corporation Act, 1910, dealing with this matter is as follows:—

*'The Regulation Dustbins.*

The Corporation may by notice in writing require the owner or occupier of any dwelling-house to provide galvanised iron or enamelled iron dustbins for the convenient removal of house refuse, and such dust-bins shall be of such size and construction as may be approved by the Corporation, and any owner or occupier who fails within fourteen days after notice given to him to comply with the requirements of the Corporation shall be liable to a penalty not exceeding twenty shillings, and to a daily penalty not exceeding five shillings. Provided that this section shall not authorise the Corporation to require the provision of a dust-bin thereunder in any case in which a dustbin or ashpit in use at the passing of this Act *is of suitable size and in proper condition.*"

The more unsatisfactory the receptacle the more frequent removal is required. No accumulation should remain over one week.

More efficient scavenging is required in warm than in cold weather.

No soiling of backyard passages, or street should be permitted on the removal of refuse.

Disposal is by destructor and tip.

*Removal of Nightsoil and Ashes.*

The Sanitary Inspector reports that twenty-three thousand, one hundred and ninety-two sanitary pails have been emptied and the number of loads were six hundred and twenty-four.

The cost per pail was 2·875d., per load 8/10, the total cost being £275 16s. 0d.

The pails are emptied once per week and the contents disposed of to farmers to be used for manure



Five thousand three hundred and thirty-seven loads of house refuse, weighing six thousand eight hundred and twenty tons, five hundredweights and three quarters, has been collected and disposed of at the destructor and tip.

Four thousand four hundred and seventy four loads, weighing five thousand, seven hundred and seventy five tons, three hundredweights and three quarters of the refuse collected has been delivered and dealt with at the destructor. The remaining loads of refuse had to be taken to the tip as the destructor could not deal with all the refuse collected.

The amount of refuse collected per house is 1 ton, 0 cwts.,  $3\frac{1}{3}$  qrs.

The total cost of removing house refuse is £3081 4s. 8d. The cost of the refuse removed by motors is £1474 0s. 6d., being 8/7 per ton. The cost of the refuse removed by horses is £1607 4s. 2d., being 10/1 $\frac{1}{2}$ d per ton. The cost per house is 9/-.

The cost of dealing with the refuse after delivery at the destructor was £846 12s. 5d., which is 2/9 $\frac{2}{3}$ d. per ton.

The large amount of refuse per house that has been collected, denotes to a large extent a considerable amount of waste, and if householders would only sift the fine ash from the cinders and deposit the ash in the ashpits, they could burn the cinders on the house fires, and they would benefit themselves and reduce the quantity and cost of collection by the Corporation.

The collection and burning of house refuse is very costly, and the only return possible is the small amount received for the salvaged material.

*Closet Accommodation.*

The number of Fresh Water Closets is	2,256	35 86	per cent.
The number of Waste Water Closets is	3,640	57·85	„ „
The number of Pail Closets is	... 396	6·29	„ „

*Conversions during the year.*

6 Pail Closets to Fresh Water W.C.'s

The corporation contribute 50 per cent. cost of actual conversion in the case of dwelling-houses possessing one closet only.

*New Property* is provided with Fresh Water W.C.'s

*Canal Boats Acts.*

Four inspections took place during the year. No infringements of the Acts were found.

*Bakehouses.*

Bakehouses are in a satisfactory condition. None are underground.

*Slaughter-houses.*

The following conditions should apply to all Slaughter-houses :—

1. "The premises should not be within 100 feet of any dwelling house, and the site should be such as to admit of free ventilation by direct communication with the external air on two sides at least of the slaughter-house.

2. Lairs for cattle in connection with the slaughter-house should not be within 100 feet of a dwelling-house.

3. The slaughter-house should not in any part be below the surface of the ground.



4. The approach to the slaughter-house should not be on an incline of more than 1 in four, and should not be through any dwelling-house or shop.

5. No room or loft should be constructed over the slaughter-house.

6. The slaughter-house should be provided with an adequate tank or other proper receptacle for water, so placed that the bottom shall not be less than six feet above the level of the floor of the slaughter-house.

7. The slaughter-house shall be provided with means of thorough ventilation.

8. The slaughter-house should be well paved with asphalt or concrete, and laid with proper slope and channel towards a gully, which should be properly trapped and covered with a grating, the bars of which should not be more than three-eighths of an inch apart. Provision for the effectual drainage of the slaughter-house should also be made.

9. The surface of the walls in the interior of the slaughter-house should be covered with hard, smooth, impervious material to a sufficient height.

10. No water-closet, privy, or cesspool, should be constructed within the slaughter-house. There should be no direct communication between the slaughter-house and any stable, water-closet, privy, or cesspool.

11. Every lair for cattle in connection with the slaughter-house should be properly paved, drained and ventilated."

No habitable room should be constructed over the lair.

The actual conditions of the Slaughter-houses in the Borough are :—

Number, 10. Registered, 7. Licensed, 3.

*Distance from Dwelling House.*

100 yds.	20 yds.	10 yds.	5 yds.	In back-yards.
1	1	4	2	2

*Ventilation.*

Through.	Not through.
7	3

*Unsatisfactory Lairs* in 5 cases.

*Drainage of Slaughter-house.*

Gully inside	Gully outside.
4	6

*Rooms above Slaughter-house.*

Yes.	No.
2	8

*W.C., etc.*

Adjacent.	Not adjacent.
4	6

*Lighting.*

Good.	Bad.
5	5

*Floor.*

Concrete.	Flagged.
2	8

*Walls.*

Cement or tiles.	Brick Limewashed.
1	9

*Limewashing.*

4 times yearly.	3 yearly.	2 yearly.
2	4	4



*Water Supply.*

Tap.	None
8	2

*Offal removed in :—*

24 hours.	1 week.
1	9

Only one slaughter-house conforms to the conditions as above stated.

The Sanitary Inspector states that four hundred and thirty-eight visits have been paid to the ten slaughter-houses which were found to be kept clean, and the meat free from disease and satisfactory.

One butcher was fined £1 for slaughtering pigs in an out-house which was not a licensed *slaughter-house*.

*Lodging Houses.*

There are five Registered Lodging Houses, situated in Parkfield Ward.

The condition of the bedding is of poor quality, and in some cases insufficient. No bathing arrangements exist, and there is a tendency for the bedding to become verminous.

A stricter observance of the bye-laws is required. A copy of the bye-laws should be placarded in each house, and the maximum number of the occupants allowed to each sleeping room should be indicated on the door.

A periodical disinfection of all bedding is required.

The Sanitary Inspector reports that "one hundred and ninty-six visits have been paid to the common Lodging Houses which were fonnd to be clean and free from overcrowding and infectious disease."

### *Schools*

*The Sanitary Condition of the Schools* have been fully dealt with in the Annual Schools' Report.

### *Dairies, Cowsheds, and Milkshops.*

The Regulations made by L.A. under the Dairies, Cowsheds and Milkshops' Order came into force on the 1st June, 1890, and the amending Order of 1886, on the 1st May, 1894.

These were revoked by the Regulations made on 1st February, 1911, and which came into force on the 1st April, 1911.

A more stringent application of the Regulations is desirable.

The amount of air space required for each cow is 400 cubic feet, for old cowsheds before the Regulations came into force, and 800 cubic feet for new cowsheds.

The regulation number of cows that can be allotted to each cowshed should be indicated on the door of each cowshed, and a copy of the bye-laws posted up.

Veterinary inspections are carried out by a Veterinary Surgeon as required.

The necessity for improved conditions in the personal cleanliness of the Milkers, of the cows, etc., is referred to under Milk supply.

The Sanitary Inspector reports "that sixty-eight visits have been paid to the cowsheds and dairies situated in the borough. They were kept clean but the ventilation and drainage still require improvement.



There is still the same reluctance on the part of farmers to allow fresh air to enter the shippens whilst the cows are in occupation during the winter months. In some instances every opening is stuffed with hay or straw to prevent cold air entering the building. Many of the buildings in which cattle are housed are very old and are dark and require alteration in this direction as well as drainage and ventilation. If cattle are to be kept in good health it is necessary that they should be housed under hygienic conditions.

The improvement in the cleanliness of cattle is still maintained and greater care is exercised by cowkeepers in this direction."

#### *Contagious Diseases (Animals) Acts.*

The Sanitary Inspector reports that "the Borough has been almost free from disease under the above Acts, only one animal, a horse suffering from parasitic mange, having been reported. The horse was isolated until reported free from disease, when the harness, stable, etc., were disinfected and the horse allowed to return to work."

#### *Smoke Abatement.*

There are approximately 50 chimneys in the Borough. The standard emission period is 5 in 30.

Observations are taken at irregular intervals. The chimneys selected most frequently are those likely to be a nuisance. From 10 per cent. to 20 per cent. are found to exceed the 5 minute limit.

The industries most often affected are Dye, Cotton, and Print Works.

Much improvement in the quantity of smoke emitted, both from industries and domestic houses is possible by giving more attention to intelligent stoking.

*Time Limit.*

Time limit in surrounding areas :—

Manchester ...	2	minutes	in 30	
Oldham... ..	2	„	in 30	(one boiler working).
	3	„	in 30	(2 boilers working).
	4	„	in 30	(3 or more boilers working).
Bury ... ..	2	„	in 30	(1, 2, and 3 boilers working).
	3	„	in 30	(4 or more boilers working).

Mr. J. C. Dawes informs me that in fixing a time limit for black smoke emission, it is important that careful consideration should be given to the nature and requirements of local industries, more particularly to those requiring irregular steam supplies or those having special smoke processes.

To this end local knowledge seems necessary before a reasonable emission period, that is, a workable period, can be fixed.

He found no enthusiasm for graduated scales.

The Sanitary Inspector states that "Only six smoke observations have been taken during the year. This was owing to the fact that many of the mills and works were working short time, and to the strike in the coal trade which caused manufacturers to use any kind of coal they could get for steam raising, so that manufacturers when working, were doing so under great difficulties.

The total amount of black smoke emitted was thirty-eight minutes and forty seconds, moderate smoke for one hour forty-two minutes and twenty seconds, and for thirty-nine minutes no smoke was emitted.

The average time black smoke was emitted per observation of thirty minutes duration each was six minutes and twenty-six seconds.



The limit of five minutes emission of black smoke per half hour allowed by the Corporation has been exceeded on three occasions, and each of the offenders were summoned to appear before the Magistrates at the Police Court, when one firm was fined fifteen shillings and the other two cases were dismissed. The reason the two cases were dismissed was owing to the representatives of the firm pleading that their economisers were out of order, and that they were working under difficulties at the time the observations were taken.

The question of coal smoke has received much consideration of late and the Departmental Committee of the Ministry of Health have now issued their first report on this question, and have made suggestions for its abatement. Amongst the suggestions made are two which will probably meet with much opposition, the transfer of the duties from Non-County Boroughs and Urban and Rural Sanitary Authorities to County Councils and the Councils of County Boroughs, and the increase of penalties upon offenders. Should these suggestions be adopted there would be a more general and uniform administration of the Act. Increasing the penalties by Act of Parliament will not have the slightest effect in reducing the output of black smoke if the indifference in administering the Act is permitted to continue as at present. The way this part of the duties has been carried out or rather not carried out has operated most unfairly, for whilst one district has done its best to keep the smoke within reasonable limits, it may suffer from the smoke of another district where no action is taken, hence the necessity for some central authority for administering this portion of the Public Health Act."

## FOOD SUPPLIES.

### *Meat.*

There are 27 butchers' shops in the Borough. Slaughtering is done partly on the premises, partly on the farms, and in the Public Abattoirs in Manchester.

No certificate of health of the animal is called for before slaughtering, nor is there any provision to debar a sick animal being slaughtered.

It is possible for a carcase, or part of a carcase to escape inspection before sale.

Unsatisfactory meat may lead to tuberculosis, poisoning and malnutrition.

All meat sold in the borough should pass through an inspection room before being offered for sale. A Public Abbatoir is desirable. A certificate from a veterinary inspector should be produced before slaughtering takes place to show that the beast is in good health.

### *Milk.*

The importance of a clean milk supply cannot be over-estimated, in view of the diseases liable to be conveyed in milk. Among these may be mentioned Tuberculosis, Enteric Fever, Summer Diarrhoea, Scarlet Fever, Diphtheria, Anthrax, Foot and Mouth Disease, and Food Poisoning.

Milk is liable to become contaminated by disease causing germs directly from the cow, from the hands of the milkers, and from dirty cans during transport in shops in and the homes.

Absolute cleanliness of the cows, of the milkers, of any person who handles milk, and of receptacles is of prime importance. An efficient sanitary condition of all cow sheds is necessary to this end.

Milk is an ideal medium for the growth of micro-organisms.

To obtain a higher standard of milk, the following conditions are required :—

1. All milch cows should pass the tuberculin test.



2. The udders should be free from disease.
3. There should be efficient grooming of the cows daily, and the teats cleaned before milking.
4. The milk should be filtered and cooled immediately after milking, and kept at a temperature not higher than 45° F. until disposed of.
5. It should be sold the same day.
6. All utensils should be sterilized, and cans and bottles sealed when filled for delivery.
7. The milkers should wear washable overalls, and have the hands scrubbed with a nail brush and soap and water, before milking.
8. They should be free from disease, and not be 'contacts' nor 'carriers' of disease.

In the home further contamination of milk often takes place. Milk is not always properly stored, nor kept cool and covered. A fly-proof food store in a cool place is a requirement in every house.

An improvement in the housing of cows, in the sanitary conditions and cleanliness of cow sheds is required.

In retail shops the milk should be kept in a water jacket in winter and an ice jacket in summer, be kept covered, and sold same day as received.

The milk supply is derived from the local farms.

#### *The Protection of Food from Contamination.*

The protection of food stuffs in shops from flies and dust is an important matter and should be enforced,

This applies also to the food on the Market Square, the surface of which should be impervious and be sprayed with disinfectant solution together with the adjoining streets during market hours.

The sale of food in small dwelling-houses, especially where the room is used as a living room, should be prohibited.

The lack of facilities for the fly-proof storage of food in four-roomed dwelling houses is a need which requires attention.

The handling of food by infected persons and persons suffering from, or being carriers of disease, is a potential means of spreading disease.

All persons engaged in bakehouses and in shops or factories where food is prepared should be certified free from disease, and free from exposure to or contact with communicable disease.

*The danger to health from food contaminated by flies.*

Flies breed in decaying and fermenting organic matter, horse manure, human faeces, pigs' dung, ashpits and house refuse, etc.

These matters contain disease-producing germs which are imbibed by flies and remain active until voided by the flies. Milk, sugar, jam, bread, cheese, meat, and fish have a powerful attraction for flies. The body and wings of the fly are not only fouled, but when feeding on any food intended for human consumption the habit of the fly is to void its liquid excrement containing active bacteria on the food.

Cholera, Typhoid Fever, Dysentery, and Summer Diarrhoea in Infants have been caused in this way.



*Diseased and Unwholesome Food.*

The Sanitary Inspector reports that "during the year one hundred and thirty-six pounds of unsound food has been seized and destroyed."

Date. 1921.	Seized or surrendered.	Description.	Cause.	Weight.
Jan. 15th	Seized.	Bacon.	Unsound & unwholesome	32 pounds
June 28th.	Surrendered.	Meat.	Unsound.	54 pounds
August 25th.	Surrendered.	Meat.	Unsound.	50 pounds

*Summary of the work of the Sanitary Department during the year:—*

Formal Notices under the Public Health Act, 1875.	...	19
Preliminary notices served	...	366
Preliminary notices complied with	...	304
Summons for not complying with Formal Notices	...	2
Nuisances found	...	552
Smoke observations	...	6
Summons re black smoke	...	3
Samples of food for analysis	...	79
Samples of milk for bacteriological examination	...	12
Diseased, unsound or unwholesome food seized	...	136 lbs.
Canal boats inspected	...	4
Cases of infectious disease reported	...	289
Patients removed to hospital	...	176
Rooms disinfected for notifiable diseases	...	1106
Rooms disinfected for phthisis	...	225
Schools disinfected	...	31

Number of articles of bedding, clothing, &c., disinfected	983
Visits to cases of infectious diseases ... ..	876
Visits to slaughter-houses ... ..	438
Visits to common lodging-houses ... ..	196
Visits to dairies and cowsheds ... ..	68
Visits to factories and workshops ... ..	47

## 1921.

*Nuisances, &c.*

	Number of Nuisances found.	Number abated.
Defective Ashpits and Accommodation	90	22
Ashbins provided ... ..	—	120
Dampness ... ..	16	6
Ventilation ... ..	12	8
Dirty dwelling-house and yard ...	2	2
Structural defects in dwelling-houses	197	80
Defective drains ... ..	56	48
Insufficient Water Supply} ... ..	6	3
Insufficient flush of Water ... ..	6	2
No Downspout .. ...	2	2
Dangerous Chimney and Walls ...	3	2
Accumulation of Manure, refuse, etc.	7	8
		(One from previous year)
Defective Closits ... ..	126	111
Sanitary Cans ... ..	29	14
	<hr/>	<hr/>
Total ...	552	428
	<hr/>	<hr/>



### 8. Public Health Staff.

The present personnel is given on page 4.

During the earlier part of the year, Dr. Milne acted as your temporary Medical Officer, in lieu of Dr. Ball, who resigned on the 31st January.

During the year the Health Visitors' duties were re-organized, and the district divided into equal areas, so that all duties could be carried out by each, to save over-lapping.

The co-ordination between the School Medical Service and the public health duties, has been referred to in the School Medical Report. The M.O.H. is also School Medical Officer, and the Health Visitors also act as School Nurses in their districts.

Owing to there being no Assistant Sanitary Inspector, the following-up of Infectious Cases and Contacts has fallen on the Health Visitors, which has thrown on them a heavy strain owing to the prevalence of Infectious diseases during the year.

The Sanitary Staff consists of one Sanitary Inspector. The Assistant Sanitary Inspector resigned on the 21st August, 1920, and no appointment of Assistant Sanitary Inspector has been made.

Owing to the multiplicity of duties devolving on the Sanitary Inspector, it is impossible for all these duties to be carried out by one inspector in the detail and to the extent required for an area and population of this borough.

The Offices of the Medical Officer of Health, and Sanitary Inspector are in separate buildings, and the distance between the two offices renders administration more difficult.

One half salary contribution is made by Exchequer grants in the case of the Medical Officer of Health and Sanitary Inspector and the Maternity and Child Welfare contribution is based on one whole-time and one half-time Health Visitor.

*Staff in comparison with other areas.*

District	Population.	No. of Sanitary Inspectors	Specially designated under Housing Acts
Chorley ... ..	32,853	2	No
Glossop ... ..	20,528	2	Yes
Farnworth ... ..	28,925	2	No
Worsley ... ..	13,929	2	No
Swinton and Pendlebury ...	30,924	5	Yes
Chadderton ...	29,380	2	No
<b>Middleton</b> ...	<b>28,910</b>	<b>1</b>	<b>No</b>

### 9.—Housing.

There are 7,111 inhabited houses in the Borough.

The number of houses erected during the year was 19, all by private enterprise.

The number of houses in course of erection :—

(a) Under Municipal Housing Scheme	... 28
(b) By private enterprise	... 40

*Unfit Dwelling-houses.*

No action in this respect has been taken during the year.

Action under *Statutory powers*, Section 28 of the Housing, and Town Planning Act, 1919, and Sections 17 and 18 of the Housing and Town Planning Act, 1909, has been in abeyance.



*Proceedings under the Public Health Acts*, have been taken :—

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	...	360
(2)	Number of dwelling-houses in which defects were remedied	... ..	320
	(a) By Owners	... ..	320
	(b) By Local Authority, in default of owners...		Nil

Under the *Municipal Scheme* the classes of houses approved are as follows :—

196. Class A3.	139. Class B3.	27. Class B4.
Non-Parlour Type	Parlour Type	Parlour Type
3 Bed Rooms	3 Bed Rooms	4 Bed Rooms

Distributed as follows :—

Boarshaw 118	...	105	...	15
Rhodes ... 36	...	16	..	6
Tonge ... 16	...	4	...	—
Middleton				
Junction 26	...	14	...	6

Applications for new houses during the year :—

Type A	...	...	124
Type B	...	...	19
Type C	...	...	4

### *House Shortage.*

Increased house accomodation is one of the urgent needs of the borough.

The housing conditions where Maternity, Scarlet Fever, and Tuberculosis occurred is referred to under those sections.

A further analysis of these figures gives the following results :—

	Occupants						
	6 or more	7 or more	8 or more	9 or more	10 or more	11 or more	12 or more
	p.c	p.c.	p.c	p.c.	p.c.	p.c.	p.c.
Maternity...	36·89	21·36	11·65	5·82	1·94	·97	·97
Scarlet Fever	44·03	27·61	20·15	11·94	6·71	2·98	1·49
Tuberculosis	30·51	22·03	15·25	5·93	2·54	1·69	·84

Taking these figures as an index of the general state, it would appear that 37·12 per cent. of the people are living in houses which are overcrowded.

#### *Relation to Disease.*

The evils of insufficient house accommodation are well stated in the following extract :—

“(a) There is *diminished personal cleanliness and physique* leading to debility, fatigue, unfitness, and reduced powers of resistance. The general deterioration in the health of the people is a worse feature of overcrowding even than the encouragement by it of infectious disease. It has the effect of reducing their stamina and thus producing consumption and diseases arising from general debility of the system whereby life is shortened.

(b) A second result of bad housing is that the *sickness rates* are relatively high, particularly for infectious, contagious, and respiratory diseases. Bad housing increases the incidence of all infectious, contagious and verminous conditions of respiratory disease, of anæmia, debility and constitutional maladies.

(c) Thirdly, the general *death rates* are higher and the expectation of life is lower. The evidence is overwhelming, and it comes from all parts of the world—the worse the people are housed the higher will be the death rate.”

x Report of the Royal Commission on the Housing of the Industrial population, 1917.



Infectious diseases, Epidemics, Diarrhoea, Respiratory disease and infantile mortality are closely related to the housing conditions. Overcrowding, a poor class of tenement, poverty and a low standard of life increases sickness rate and mortality.

The quality of house accommodation should be estimated on the following points :—

1. Number of houses per acre.
2. Width of street.
3. Height of buildings
4. Relation of houses to each other.
5. Condition of soil.
6. Water supply.
7. Draining and sewerage.
8. Paving.
9. Sanitary accommodation.
10. Arrangements for disposal of refuse and ashes.

The minimum requirements of every house should be :—

1. Water supply within the house, with bath, wash boiler and sink.
2. Fly-proof storage for food.
3. Adequate ventilation, lighting, cubic space, and dryness in every room.
4. Fresh water W C, and a paved back yard.

Education in hygienic living is needed, and stricter observance in the rules of health would do much to minimise the disadvantages of the present housing conditions.

*Unpaved back yards and passages in connection with old property:*

A number of these exist in the borough, and they must be considered prejudicial to the public health.

- (3) No. of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit ... .. Nil.
- (4) No. of dwelling-houses in respect of which Demolition Orders were made ... .. Nil.
- (5) No. of dwelling-houses demolished in pursuance of Demolition Orders ... .. Nil.
- D. No. of houses demolished voluntarily by owners, or converted into workshops, &c ... .. Nil.

### HOUSING AND TOWN PLANNING ACT.

The Sanitary Inspector states that:—

“Owing to the shortage of housing accommodation no action has been taken under the above Act. All repairs and alterations having been dealt with under the Public Health Acts.

Two houses which were condemned some years ago have had the necessary alterations made and are now satisfactory.

A number of houses which were reported upon some years ago are still occupied as we cannot proceed to remove the tenants until there is other accommodation provided for them.

Owing to the shortage of housing accommodation there is considerable overcrowding of houses in the Borough, but this cannot be dealt with for the same reason.”