[Report of the Medical Officer of Health for Southall-Norwood].

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THE

SOUTHALL-NORWOOD URBAN DISTRICT COUNCIL

Annual Report

OF THE

Medical Officer of Health.

JANUARY, 1905.

Southall-Norwood Urban District Council.

1904.

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Annual Report

OF THE

Medical Officer of Health,

FOR 1904.

To the Members of the Southall-Norwood Urban District Council.

GENTLEMEN,

I have the honour to present for your consideration my Fourteenth Annual Report on the Vital and Sanitary condition of your District. For convenience of reference the Report is divided into Sections, which deal respectively with Vital Statistics, Infectious Diseases, and General Sanitary circumstances. The large increase in population which has taken place during the last three or four years, must have had some uufavourable influence on the rates of mortality and sickness; not perhaps so much from the greater 'density' of population, but from the tendency to aggregation in particular streets and houses, since it is rather the average number of persons per house than the number per acre which influences the Vital Statistics.

The Bye-laws relating to houses let in lodgings in force in the District are a great preventative against overcrowding, since they ensure that the domestic and sanitary circumstances in a house which may not be legally overcrowded are satisfactory. The Sanitary Inspector has done much good work in this direction, by house to house inspection.

The Death-rate for the year, 12·3 per 1,000, is a very low one for a working class population. It is 0·1 above that for the past two years, but approximately 1 per 1,000 less than the average for the past thirteen years; which is a remarkable circumstance considering the change in character which the District has undergone during that period from rural to urban.

The Statistics are considered more fully on Pages 12—14 of the Report. The Death-rate from Notifiable Sickness is a very low one, 0·3 per 1,000, which is 0·5 per 1,000 less than the rate for 1903; and this, in spite of the fact that we had a considerable outbreak of Scarlet Fever during the year.

With regard to General Sanitary circumstances, constant supervision is exercised over slaughter houses, dairies, milk shops, and bakehouses; that is to say, over the food supply generally of the District.

The Disposal of Refuse is efficiently carried out, both as regards sewerage, house refuse and the scavenging and cleansing of the streets.

The means provided for the isolation of Infectious Disease and disinfection are all that can be desired, and before very long it is expected that a Destructor will be provided: sites having been recently purchased for that purpose.

Your obedient Servant,

J. D. WINDLE.

SECTION I.

Sanitary Area.

The Urban District of Southall-Norwood is situated on the main road from London to Oxford, 9¼ miles from the Marble Arch, 5½ miles south-east of Uxbridge, and 4 miles north-west of Brentford —the County Town.

The area of the District is 2,575 statute acres; 2,525 acres of land, and 50 acres of water.

The soil is gravel, with occasional outcrops of brick earth.

The length of the District from North to South is 2 miles 4 furlongs 86 yards, and the breadth from Bull's Bridge to the Sewage Disposal Works 3 miles 0 furlongs 203 yards, the narrowest parts being at the extreme northern end of the District, which is 2 furlongs 210 yards.

The highest point above Trinity high water mark is on the Southall Station Bridge, which is 115·5 feet, and the lowest point at the Sewage Disposal Works, which is 21·5 feet above such level.

The total length of public roads now under the jurisdiction of the Council is about 13 miles. The mileage of private roads is about 5 miles.

Wards.

For administrative purposes the District is divided into East and West Wards.

The dividing line of the Wards is the centre of the road outside Waxlow Farm entrance, down North Road to Uxbridge Road, thence to the "Three Horseshoes" Beer-house, down South Road, over Station Bridge and on by St. John's Church, along Western Road, by "Halfway House" Beer-house, and on until opposite the "Prince of Wales," where the imaginary line leaves the road, going to rear of the two cottages opposite, and again joining the road immediately after passing over Canal Bridge to Watersplash. The left hand being East Ward and the right hand the West Ward.

Public Open Spaces.

	Acres.
Norwood Green	8
Recreation Ground (Southall Green)	11

Estimated Population for Middle of Year 1904, 15,737.

In estimating the population for the statistical purposes of this Report, I have, as in previous years, entirely excluded from the estimate the inmates of the London County Asylum (Norwood), since the Institution "is of a kind that its population cannot rightly be regarded as belonging to the residential population of the District or County." The Inmates of the St. Marylebone Schools are included in the estimate.

To arrive at an accurate estimate of the population of your District is a matter of considerable difficulty, as the increase due to immigration has been abnormal since the last Census, and thus the usual method of estimation which is based on the average yearly increase in population during the inter-census period is not applicable.

Thus, at the Census 1901, the population exclusive of Institutions was 9,953. The average yearly increase during the inter-census period was 450, therefore 9,953+3 (450)=11,303: to this must be added a fourth of the average yearly increase, *i.e.*, 112=11,415, which would be the population estimated on the usual method. This calculation can be checked by the following formula:—

$$\frac{\text{Registered births in the year, } \times 1{,}000}{\text{Average birth rate for previous 10 years}} = \frac{578{,}000}{34{\cdot}6} = 16{,}705$$

I consider the first estimate of 11,303 too low, and the second 16,705 too high, and I believe a more accurate estimate can be made by taking into account the number of inhabited houses in the District as shown by the Rate Book, and multiplying that figure by the probable average number of inmates in each. Taking this latter as 5 (the Census Return for 1901, however, gave 6·91 as the average number of inmates in each house), we get 3,328 × 5=16,640+(412 inmates of St. Marylebone Schools)=17,052 as the population at the end of December, 1904, which may be taken as approximately correct; but for the purpose of calculating the various sickness and mortality rates, the basis is the estimated population at the middle of the year, since this represents the average number of persons living in that year.

In June, 1904, the houses in rating were as follows :—

	Total.	East Ward.	West Ward.
Houses	3,065	1,405	1,660

Multiplying these figures by 5, the probable average number of inmates in each house, we get the following :—

	Total.	East Ward.	West Ward.
Population	15,325	7,025	8,300
St. Marylebone Schools..	412	—	412
Totals	15,737	7,025	8,712

	Census 1891.	Census 1901.	West.	East.	Estimated 1903.			Estimated 1904.		
						West.	East.		West.	East.
Southall-Norwood	5188	9953	5337	4516	13832	7195	6225	15325	8300	7025
St. Marylebone Schools	335	—	412	—	—	412	—	—	412	—
London County Asylum	2037	—	—	2835	—	—	2835	—	—	2855
Total	7560	13,200			17,079			18,592		

SECTION II.

Vital Statistics.

Births and Birth Rate—Whole District.

The total number of Births registered during the year was 578; Males 286, females 292. The Birth-rate is 36·7 per 1,000.

Distributed in Wards the Births and rates are as follows:

33·1 per 1,000 West Ward.		41·1 per 1,000 East Ward.	
Males.	Females.	Males.	Females.
140	149	146	143
289		289	
578			

Still Births, *not registered*, total for year 24.

Year.	Births.	Rate.	Population.
1891	208	40·9	5188
1892	193	37·2	5188
1893	189	34·6	5456
1894	184	31·9	5756
1895	188	28·1	6684
1896	207	28·8	7184
1897	254	32·1	7910
1898	258	30·2	8531
1899	325	34·8	9311
1900	353	31·4	11199
1901	360	34·3	10477
1902	465	36·6	12680
1903	476	34·4	13832

The natural increase of population, that is, the number of births over deaths, is 383, compared with 307 in 1903.

Deaths and Death Rates.

Whole District.

The total number of Deaths registered, at all ages, and from all causes, during the year, was 195. This number includes the deaths of persons dying in the Workhouse and Isolation Hospital, and various London Hospitals, from your District (13), and of strangers dying within the district but not belonging thereto.

The Death-rate for the whole District, calculated on the estimated population at the middle of 1904 is 12·3 per 1,000, which is equivalent to one death registered for every 80·7 persons of the population.

Causes of, and Ages at, Death during the Year 1904.

Causes of Death.	Deaths in or Belonging to whole District at Subjoined Ages.							Deaths in or Belonging to Localities (at all Ages).				Total Deaths in Public Institutions in the District.		
	All Ages.	Under 1	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	West.	East.	Workhouse.	London Hospital.	Hanwell Asylum	S. Marylebone Schools.	Sanatorium.
Measles	8	1	7	—	—	—	—	3	5	—	—	—	—	—
Scarlet Fever	3	—	1	2	—	—	—	2	1	—	—	—	—	3
Whooping-cough	6	2	4	—	—	—	—	3	3	—	—	—	—	—
Diphtheria and membranous croup	2	—	1	1	—	—	—	1	1	—	—	—	—	2
Epidemic Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	12	11	1	—	—	—	—	8	4	—	—	—	—	—
Enteritis	14	12	—	—	—	2	—	8	6	—	—	1	—	—
Puerperal fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	1	—	—	—	—	—	1	1	—	—	—	—	—	—
Other septic diseases	5	—	—	1	1	3	—	2	—	—	3	8	—	—
Phthisis	12	—	—	—	2	9	1	5	6	1	—	26	—	—
Other tubercular diseases	4	1	—	3	—	—	—	3	1	—	—	2	—	—
Cancer, malignant disease	4	—	—	—	—	3	1	1	3	—	—	7	—	—
Bronchitis	10	3	2	—	—	1	4	4	5	1	—	10	—	—
Pneumonia	22	9	5	1	—	6	1	7	15	—	—	11	—	—
Alcoholism / Cirrhosis of Liver	1	—	—	—	—	1	—	—	1	—	—	—	—	—
Venereal diseases	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Premature birth	20	20	—	—	—	—	—	11	7	2	—	—	—	—
Heart diseases	15	—	—	1	1	6	7	8	6	1	—	15	—	—
Accidents	4	—	2	—	—	1	—	3	1	—	—	—	—	—
Suicides	—	—	—	—	1	—	—	—	—	—	—	—	—	—
All other causes	52	26	4	2	1	5	14	20	27	4	1	120	—	—
All causes	195	85	27	11	6	37	29	90	92	9	4	203	—	5

The following Table is for comparison with previous Years.

Year.	Population estimated to Middle of each Year Excluding Hanwell Asylum.	Births.		Total Deaths Registered in the District.				Deaths of Residents in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 Year of Age.		At all Ages.				
		Number.	Rate.	Number.	Rate per 1,000 Births registered	Number.	Rate.		Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11
1891.	5188	208	40·9	15	72·1	64	12·3	—	64	12·3
1892.	5188	193	37·2	27	139·8	89	17·1	1	90	17·3
1893.	5456	189	34·6	14	74	70	12·8	—	70	12·8
1894.	5756	184	31·9	27	146·7	75	13·0	2	77	13·3
1895.	6684	188	28·1	26	139·5	86	12·8	7	93	13·9
1896.	7184	207	28·8	31	149·7	86	11·8	5	91	12·6
1897.	7913	254	32·1	28	110·2	90	11·3	16	106	13·3
1898.	8531	258	30·2	32	112·3	98	11·4	23	121	14·1
1899.	9311	325	34·8	51	156·1	123	13·2	13	136	14·6
1900.	11,199	353	31·4	44	124·6	147	13·2	19	166	14·8
1901.	10,479	360	34·3	65	180·5	165	15·7	3	168	16·0
Averages for Years 1891-1901.	7,535	256·3	31·3	32·8	129·7	97·6	13·1	8·1	107·5	14·1
1902.	12,680	465	36·6	62	133·3	156	12·2	5	156	12·2
1903.	13,832	476	34·4	64	134·4	169	12·2	18	169	12·2
1904.	15,737	578	36·7	85	147·0	195	12·3	13	195	12·3

Deaths and Death Rates distributed into Wards.

East Ward.						
All Ages.	Under 1 year.	1-5	5-15	15-25	25-65	Over 65
98	43	15	2	3	19	16

The Rate per 1,000 of estimated Population is 13·9 as compared with 11·4 for 1903.

West Ward.						
All Ages.	Under 1 year.	1-5	5-15	15-25	25-65	Over 65
97	42	11	10	3	16	15

The Rate per 1,000 of estimated Population is 11·1 as compared with 12·8 for 1903.

Zymotic Death Rates.

Deaths from Notifiable Diseases.		
Total.	West Ward.	East Ward.
6	4	2

Deaths from Zymotic Diseases, not Notifiable.		
Total.	West Ward.	East Ward.
40	22	18

The Death-rate *from the Scheduled Notifiable Diseases*, viz:— Small Pox, Scarlatina, Diphtheria, Membranous Croup, Typhus, Typhoid, Puerperal Fever and Erysipelas, is 0·3 per 1,000 persons living.

In the West Ward the rate is 0·4, and in the East Ward 0·2, as compared with 0·9 and 0·8 per 1,000 for 1903.

1893	...	...	...	...	1·4 per 1,000
1894	...	...	...	...	1·3 ,, ,,
1895	...	...	...	...	0·3 ,, ,,
1896	...	...	...	...	0·9 ,, ,,
1897	...	...	...	...	1·5 ,, ,,
1898	...	...	...	...	1·7 ,, ,,
1899	...	...	...	...	1·1 ,, ,,
1900	...	...	...	..	1·3 ,, ,,
1901	...	..	...	...	0·1 ,, ,,
1902	...	...	...	...	0·3 ,, ,,
1903	...	...	...	...	0·8 ,, ,,

Average Rate, 0·9 per 1,000

The Death-rate, *Zymotic Diseases not Notifiable*, viz:—Measles, Whooping Cough and Diarrhœa is 2·5 per 1,000 persons living.

In the West Ward 2·5 and in the East Ward 2·5 per 1,000 as compared with 1·3 and 1·4 respectively for 1903.

1893	...	...	...	...	1·5 per 1,000
1894	...	...	...	...	1·1 ,, ,,
1895	...	...	...	...	1·0 ,, ,,
1896	...	...	...	...	2·0 ,, ,,
1897	...	...	...	...	1·6 ,, ,,
1898	...	...	...	...	1·4 ,, ,,
1899	...	...	...	...	2·5 ,, ,,
1900	...	...	...	...	2·2 ,, ,,
1901	...	...	...	...	2·9 ,, ,,
1902	...	...	...	...	1·9 ,, ,,
1903	...	...	...	...	1·3 ,, ,,

Average Rate, 1·7 per 1,000.

The total rate from all Zymotic Diseases is 2·6 per 1,000

In the West Ward 2.9 and in the East Ward 2·8 per 1,000, as compared with 2·2 per 1,000 for each ward in 1903.

1893	...	...	...	...	2·9 per 1,000
1894	...	...	...	...	2·4 ,, ,,
1895	...	...	...	...	1·3 ,, ,,
1896	...	...	...	...	2·9 ,, ,,
1897	...	...	...	...	3·1 ,, ,,
1898	...	...	...	...	3·1 ,, ,,
1899	...	...	...	...	3·6 ,, ,,
1900	...	...	...	...	3·5 ,, ,,
1901	...	...	...	...	3·0 ,, ,,
1902	...	...	...	...	2·2 ,, ,,
1903	...	...	...	...	2·2 ,, ,,

Average Rate, 2·7 per 1,000.

Infant Mortality.

The Deaths of children under 1 year of age is equivalent to 147·0 per 1,000 children born and registered.

In the East Ward there were 43 deaths, giving a rate of 148·7; and in the West Ward 42 deaths at a rate of 145·2.

	East Ward.	West Ward.	Whole District.
Population	7025	8712	15·737
Births	289	289	578
Birth Rate	41·1	33·1	36·7
Deaths under 1 year	43	42	85
Rate per 1,000 children born and registered ...	148·7	145·2	147·0
Total Death Rate ...	13·9	11·1	12·3

For 1903 the figures were as follows:—

	East Ward.	West Ward.	Whole District.
Population	6225	7607	13·832
Births	196	280	476
Birth Rate	31·4	36·8	34·4
Deaths under 1 year	28	36	64
Rate per 1,000 children born and registered ...	148·8	138·5	134·4
Total Death Rate ...	11·4	12·8	12·2

Year.	Deaths under 1 year.	Births.	Birth rate per 1,000 living.	Infant Mortality Rate.
1892	27	193	37·2	139·8
1893	14	189	34·6	74·0
1894	27	184	31·9	146·7
1895	26	188	28·1	139·5
1896	31	207	28·1	149·7
1897	28	254	32·1	110·2
1898	32	258	30·2	112·3
1899	51	325	34·8	156·1
1900	44	353	31·4	124·6
1901	65	360	34·3	180·5
1902	62	465	36·6	133·3
1903	64	476	34·4	134·4

We are now in a position to enquire how far the various rates above given are reliable tests of the health and sanitary circumstances of the district. The popular criterion is a comparison of the total local rate with that of neighbouring districts, but such comparison is open to error, unless the constitution of the population as regards age and sex is taken into account.

Thus the death-rate of children under 5 years of age, and of persons over 55 years is higher than the death-rate for all ages, whilst the death-rate at ages 5—55 years is lower than the general rate; hence if in a population there is an excess of persons between these latter ages the mortality would be very low when compared with a more mixed population, or with one in which there was a proportionately greater number of children under 5, and of persons over 55.

We are thus in a position to see the influence of the birth-rate upon the death-rate. The exceptionally high birth-rate for the past year might reasonably be expected to have increased the death-rate, since it causes an immediate increase in the population whose relative mortality is highest, and this has, no doubt, been the case to a certain extent.

On the other hand, the birth-rate in the district has been unusually high for a considerable number of years past, and in this way the population has come to possess an unusual proportion of children from the age of 5 onwards, whose rate of mortality is now low. Generally speaking, high birth-rates should cause lowered death-rates and conversely low birth-rates a high death-rate. When insanitary conditions are in evidence, a high birth-rate usually means a high death-rate.

If thus we find one district or part of a district with a low birth-rate and a low death-rate, or a high birth-rate or low death rate, whilst another has a high birth-rate and a high death-rate, the conclusion is that in the former the sanitary surroundings, occupations, or social conditions are more favourable to life, than those of the latter.

In this connection, the Table at page 11 is of interest for the comparison of the rates prevailing in the East and West Wards of the district. The fact, that in your district there has been a sustained high birth-rate and low death-rate for a number of years past, as shown by the Table at Page 8 is a highly satisfactory circumstance, indicating as it does, good sanitary conditions generally. The sustained low rate of 12.2—12.3 for the past three years, is no doubt, also to some extent, due to the immigration into the district during that period of large numbers of young adults, whose death-rate is low.

I regret that accurate data are not available to work out the death-rate at different age periods per 1,000 living at these ages; as such a calculation affords the most valuable statistical evidence of sanitary conditions.

The data, however, for the calculation of the rate of infantile mortality are precise. The total rate for the district 147 per 1,000 children born and registered. This is an appallingly high rate of infant mortality, higher indeed than that which prevails in the large towns of England and Wales, as the following table shows :—

	Deaths under one year per 1,000 births.	
	1902.	1903.
England and Wales.....	133	132
76 'Great Towns'....	145	144
103 Smaller Towns.	133	135
The County of Middlesex.....	125	113

In considering these figures, it is to be remembered that there is no source of error from over estimation of population and so forth, they are based on the actual number of births and deaths registered during the year. It is a very pertinent question how it happens that the infantile mortality still maintains this excessively high rate in our district, whilst the general death rate, and death-rate from preventible diseases has markedly declined *pari passu* with the better Sanitary conditions, which have prevailed during recent years, and what concerns the Council more particularly is, how far Municipal Sanitation may be responsible.

I have considered this question somewhat fully in previous reports, and it is not necessary to recapitulate at any length the arguments used to show that the general Sanitary conditions of the district are in no way responsible.

I venture to think that the principal cause lies in the domestic and personal circumstances of particular families, for, so far as Municipal Sanitation is concerned, there is no difference between the families that rear all, or nearly all their children, and others in which the mortality is excessive. In this connection the registered causes of death furnish some evidence. The total number of deaths was 85, 20 of these were the result of premature birth and congenital defects ; a consideration of the causes of which would entail many social and personal problems. Diseases the result of improper food and method of feeding, which arise from the inexperience and neglect of mothers claim the chief place. Over one half of the total deaths were due to causes dependent upon digestive diseases which are almost invariably the result of improper methods of artificial feeding. 23 deaths were directly attributed to Gastro-Enteritis, &c., and 22 to Marasmus, Atrophy, want of breast milk, &c. The recorded causes of death of the remaining 22 were Measles, Whooping Cough, Tuberculosis, Bronchitis and Pneumonia.

The remedy in a great measure is a matter of education. The teaching of hygiene in the Public Elementary Schools will do much in the future to diminish the rate of Infantile Mortality by instructing the future mothers on the care, management and feeding of infants.

On reference to page 10, it will be seen that the death-rate from Zymotic Diseases is tabulated so as to show the rate from those which are notifiable, as well as non-notifiable Diseases. I have adopted this method because the conclusion to be drawn from the total rate from all Zymotic diseases may give rise to a wrong inference, since it includes Diarrhœa, Measles, and Whooping Cough; diseases which are not dependent upon Sanitary Conditions, nor preventible under existing Legislation to any great extent by the Sanitary Authority.

For instance, the total Zymotic death-rate for the year is 3·1 per 1,000, which is an increase, of nearly 1 per 1,000 as compared with 1903, and 0·3 above the average rate for the previous 11 years; but this has not the significance it appears to have, since the increase is seen to be entirely due to Non-notifiable Zymotic Diseases, for which Whooping Cough, Measles, and Diarrhœa were chiefly responsible.

The death-rate from the Scheduled Notifiable Diseases is less than half that for 1903, and 0·6 below the average years given in the table. How far many of the diseases included in this group are dependent upon sanitary conditions is not definitely known, except with regard to enteric fever, the rate of mortality from which is held to be a test *par excellence* of sanitary conditions.

During the year there were no deaths recorded from this disease, and only one during the past eleven years. The conclusion I arrived at from a consideration of the vital statistics is that the Sanitary condition of the district is of a high standard, so high, indeed, that it annuls the adverse influence on the total mortality rate, due to excessive infant deaths. Were it possible to bring this latter rate within normal limits, the influence on the total rate would be such as to render it lower than that of most districts of similar character and population.

SECTION III.

Notifiable Diseases.

The number of cases of Infectious Disease reported under the Infectious Diseases Notification Act during the year was 206. Six of the cases occurred in the London County Asylum, Norwood, and seventeen in the St. Marylebone Schools, so that the number occuring amongst members of our population proper was 183, which is an increase of 66 as compared with 1903.

The increase was entirely due to Scarlet Fever.

The certificates related to the following diseases :—

Diseases.	Total for District.	East Ward.	West Ward.	London County Asylum.	St. Marylebone Schools.
Scarlet Fever	145	43	102	—	11
Diphtheria	17	9	8	—	—
Membranous Croup ...	2	2	—	—	—
Enteric Fever	4	1	3	—	5
Puerperal Fever	—	—	—	—	—
Erysipelas	15	7	8	6	1
Small Pox	—	—	—	—	—
Totals	183	62	121	6	17

In the tables and comments which follow, cases occurring in Institutions in the district are not included.

The following Table shows the number of Infectious Diseases notified, the Infectious Sickness Rate, and the mean for the previous ten years.

Years.	Population.	Scarlet Fever.	Small Pox.	Diphtheria.	Croup.	Typhoid Fever.	Erysipelas.	Puerperal Fever.	Totals.	Infectious Sickness Rate, per 1000 Population.
1894	5756	45	3	5	10	—	18	—	81	14·0
1895	6684	23	4	2	5	1	20	—	55	0·8
1896	7184	56	4	2	2	2	7	1	74	1·0
1897	7913	39	—	88	—	15	10	—	152	19·2
1898	8531	31	—	80	—	7	15	—	133	15·5
1899	9311	60	—	110	1	2	13	—	186	19·9
1900	11199	47	—	39	5	4	10	—	105	9·3
1901	10477	56	2	8	3	3	12	—	84	7·8
1902	12680	65	2	17	3	2	21	—	110	8·0
1903	13832	80	—	16	2	9	20	2	129	9·3
Mean.	9456·7	50·2	1·5	36·7	3·1	4·5	14·6	0·3	110·9	10·4
1904	15737	145	—	17	2	4	15	—	183	11·8

The following Table is to show the number of Cases notified each month during the year 1904.

1904. Notifications.		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Deaths.
Small Pox..... ...	Under 5 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Over ,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever....	Under 5 years	—	3	8	7	2	6	5	4	2	4	3	4	48	1
	Over ,,	—	8	13	7	9	18	16	6	7	10	2	1	97	2
Diphtheria	Under 5 years	1	—	—	—	—	—	2	—	—	—	—	1	4	1
	Over ,,	1	1	—	1	—	—	4	1	1	1	1	2	13	1
Membranous Croup	Under 5 years	—	1	—	—	1	—	—	—	—	—	—	—	2	—
	Over ,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever....	Under 5 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Over ,,	—	—	1	1	—	—	—	—	—	—	2	—	4	—
Puerperal Fever....	23 to 46 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas.....	Under 5 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Over ,,	—	—	1	1	2	2	—	—	3	—	4	2	15	1

The Distribution of the above Cases into East and West Wards is shown in the following Table.

Wards.	Estimated Population.	Small Pox.	Scarlet Fever.	Diphtheria.	Croup.	Erysipelas.	Typhoid.	Puerperal.	Totals.	Increase or Decrease on last year.
East.....	7025	—	43	9	2	7	1	—	62	— 18
West	8712	—	102	8	—	8	3	—	121	+ 72

Compared with Table for 1903.

East.....	6225	—	51	6	—	15	6	2	80	—
West.....	7607	—	29	10	2	5	3	—	49	—

The Distribution of the Cases, North and South of the Railway, &c., is as follows:

	North.	South.	Hayes Bridge.	Norwood.	London County Asylum.	Schools.	White Street.	North Hyde.
Scarlet Fever.....	22	113	—	—	—	1	4	6
Diphtheria.....	6	8	—	2	—	—	—	1
Membranous Croup.....	—	2	—	—	—	—	—	—
Enteric.....	3	—	—	—	—	5	—	1
Erysipelas	8	7	—	—	6	1	—	—
Puerperal Fever.....	—	—	—	—	—	—	—	—

The following Table shows the Ages of the Cases notified, and the number removed to Hospital from each locality.

Notifiable Disease.	Cases notified in whole District including Institutions.							Total Cases notified in each Locality.				No. of Cases removed to Hospital from each Locality.			
	At All Ages.	At Ages—Years.						1	2	3	4	1	2	3	4
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards	West.	East.	Asylum.	St. M'bone Schools.	West.	East.	Asylum.	St. M'bone Schools.
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	17	—	4	11	1	1	—	8	9	—	—	8 (*a*)	9	—	—
Membranous Croup	2	—	2	—	—	—	—	—	2	—	—	—	—	—	—
Erysipelas	22	—	—	3	2	16	1	7	8	6	1	—	—	—	—
Scarlet Fever	156	2	49	99	6	—	—	102	43	—	11	93	41	—	11 (*b*)
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	9	—	—	5	3	1	—	3	1	—	5	2 (*d*)	1 (*d*)	—	5 (*c*)
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	206	2	55	118	12	18	1	120	63	6	17	103	51	—	16

(*a*) Two Cases Removed to Hillingdon Hospital.
(*b*) Two Cases Removed to Metropolitan Asylum Board Hospitals.
(*c*) Two Cases Removed to Metropolitan Asylum Board Hospitals.
(*d*) Two Cases Removed to General Hospitals (London).

Scarlet Fever.

The number of cases notified was 145, as compared with 80 for 1903; of these 64 were males and 81 females, with the exception of 11 all were removed to the Isolation Hospital, where 3 proved fatal. The cases occurred at the following ages :—

Ages.

Under 1 year	1—5	5—15	15—25	25—65
2	46	91	6	—

Cases were notified every month, with the exception of January, as follows :—

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
—	11	21	14	11	24	21	10	9	14	5	5

The notified cases for the months of 1903 were :—

Jan.	Feb.	Mar	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
10	4	9	7	2	4	7	10	9	8	5	5

Incidence of Scarlet Fever per 1,000 of Population.

1892	1893	1894	1895	1896	1897
5·6	13·8	7·8	3·4	7·7	4·8

7·1

Average incidence per 1,000 for years 1892—1897.

1898	1899	1900	8901	1902	1903
3·6	6·4	4·1	5·3	5·1	5·7

5·2

Average incidence per 1,000 for years 1898—1903.

The rate for the year is 9·2 per 1,000, the highest recorded for the past twelve years, except in 1893, when the rate was 13·8 per 1,000.

For the purpose of considering the comparative distribution of the cases in the District, the area may be divided into quadrants by the Railway which passes through from East to West, dividing the District fairly equally into North and South parts, each of which is sub-divided into East and West portions by South Road, King Street and Norwood Road, passing from North to South.

Of the total number of cases, 26 occurred on the North, and 119 South of the Railway. It is a remarkable fact in connection with the latter cases, that 110 occurred in the western part of the South side of the District: that is, following an imaginary line from the Railway Station along King Street down Norwood Road, all the cases except 9 (4, Kingston Road; 4, Hammond Road, and 1, Havelock Road) occurred in streets and houses on the right hand side of that line—*i.e.*, in the South-west quarter of the District.

This distribution is shown in the following table; the distribution for the past three years is also given for the purposes of comparison.

STEAMFIELD ESTATE.

	1901.	1902.	1903.	1904.
Dudley Road.....	5	5	—	10
Gladstone Road	1	—	—	1
Queen's Road	10	3	2	6
Clarence Street.....	—	—	1	17
Spencer Street..	3	—	—	4
Hartington Road.. ...	—	2	1	10
Sussex Road.....	—	3	—	—
Totals	19	13	4	48

Streets between Featherstone Road and Western Road inclusive.

(And the Part of North Hyde, East of the Common).

	1901.	1902.	1903.	1904.
North Hyde	—	—	—	1
Featherstone Road....	2	2	1	4
Featherstone Terrace.	—	—	2	9
St. John's Road.....	—	—	—	5
Waltham Road.....	—	—	—	2
Elmfield Road	—	—	—	3
Western Road.....	2	3	1	6
Totals.....	4	5	4	30

Streets between Western Road and Adelaide Estate

(Including West side of King Street and North Hyde Common).

	1901.	1902.	1903.	1904.
North Hyde Common	1	—	2	5
King Street	—	—	2	2
Dagmar Road.....	—	2	3	1
Pluckington Place.....	1	—	4	1
Florence Road.....	—	—	—	—
Totals..... ...	2	2	11	9

ADELAIDE ESTATE and adjoining Streets.

	1901.	1902.	1903.	1904.
Regina Road	1	2	14	11
Adelaide Road.....	—	—	2	8
Clifton Road.....	—	—	—	2
Gordon Road.....	—	—	4	1
Inverness Road.....	—	—	—	—
Talbot Road.....	—	—	—	—
Lea Road	—	—	2	—
Beverley Road.....	—	—	—	1
Endsleigh Road	—	—	1	—
Totals	1	2	23	23

Streets East of King Street.

(Including Norwood Road and Norwood Green)

	1901.	1902.	1903.	1904.
Woodland Place.....	—	—	—	—
Kingston Road.....	1	—	2	4
Osterley Park and adjoining Roads	—	—	—	—
Havelock Road.....	—	—	—	1
East side King Street..	1	1	—	—
Hammond Road.....	5	3	3	4
Norwood Road.....	1	3	—	—
Hammond Road E....	—	—	—	—
Rectory Road	—	1	—	—
Norwood Green.....	2	—	14	—
Top Locks	1	—	—	—
Totals.....	11	8	19	9

	1901.	1902.	1903.	1904.
TOTALS	37	30	61	119

On the North side of the Railway, all the cases, with two exceptions, occurred in houses on the West side of South Road, *i e.*—in the North-West Quadrant.

North Side of the District.

(Divided by the Railway).

	1901.	1902.	1903.	1904.
White Street.....	5	4	1	4

Streets on the Hambro' Estate and vicinity.

	1901.	1902.	1903.	1904.
Beaconsfield Road....	—	—	—	9
Oswald Road.....	—	—	2	1
Abbott's Road	—	—	—	2
Hambro' Road..... ..	—	1	—	1
Grange Road.....	—	—	1	—
Randolph Road.....	1	1	2	3
The Crescent.....	—	—	1	2
Totals	1	2	6	18

	1901.	1902.	1903.	1904.
South Road.....	—	4	1	—
Avenue Road.....	—	1	—	—
Hamilton Road... . ..	—	9	1	—
High Street.....	—	3	2	1
Lady Margaret Road.	—	—	—	1
North Road.....	2	3	1	—
Shrubbery Road.....	—	4	3	—
Victoria Terrace.....	—	—	1	—
Grove Cottages.....	—	—	1	—
Grove Terrace	—	—	4	—
Durdans Cottages....	—	3	2	—
Mount Pleasant.....	2	1	1	—
Waxlow Farm....	—	—	1	—
Mill Farm.....	—	—	1	—
Beachcroft Avenue....	—	—	—	1
King's Parade..	—	—	—	1
otals	4	28	19	4

	1901.	1902.	1903.	1904.
TOTALS	10	34	26	26

This peculiar distribution of the cases clearly points to direct infection from person to person, as being the most probable cause of infection. Had infection spread by means of the atmosphere, water or milk supplies, the distribution of cases must have been more general throughout the district. Enquiries into the origin of infection in the various cases and groups of cases, have almost invariably pointed to contact, directly or indirectly, as the most probable means by which the disease spread. This contact between infected and non-infected children taking place in school, in play grounds, in the streets, and also from house to house, as will be illustrated in the summaries of cases given below. It is generally recognised that personal infection is the chief meams by which Scarlet Fever spreads; such being the case, it is clear that if we knew of all cases of Scarlet Fever as they occurred, by isolating all those attacked and thoroughly disinfecting the surroundings occupied by the patient a centre for infection ceases to exist, and whenever the disease appeared, it should be a comparatively easy matter to limit its spread, and eventually stamp it out.

The provisions of the Infectious Diseases Notification Act are framed with this object in view, but as I have previously pointed out, 'Notified' Scarlet Fever is by no means an index of the prevalence of the disease, since cases are often so mild in character, and the symptons of such an anomalous nature, that it cannot be always recognised even by doctors, until peeling of the hands and feet takes place; which sometimes does not commence until 3 or 4 weeks after the first days of the illness.

It is only to be expected therefore that parents overlook the nature of these slight cases. It is the occurrence of these overlooked cases which explains the apparent inadequacy of isolation in preventing the spread of the disease, and the impossibility of tracing the sequence of persons through which infection has passed, from one notified case to another. How numerous these 'overlooked' cases have been, will be apparent from the following brief summary of the groups of cases.

(1) No case of Scarlet Fever was notified in the district from December 8th, 1903, to February 9th, 1904, from which date to March 13th, twelve certificates were received.

Eleven of these cases occurred in houses on the South side of the district, Steamfield Estate, Dudley Road, Gladstone Road, Queen's Road and Clarence Street, and one on the North side. There seemed little doubt that in the first five of these cases notified between February 9th and 19th, that the Featherstone Road Infants and Featherstone Road Boys' Schools were concerned, and light was thrown on this, as one of the scholars was subsequently found in school in the peeling stage of the disease, which from appearances and history, was of about a month's duration.

The remaining seven cases occurred in three houses in Clarence Street. The first of these was taken to a doctor for a certificate to excuse attendance at school, as he was thought to have measles. The nature of the illness was recognised, the doctor visited the house and found another child there suffering from Scarlet Fever. Nine days afterwards other cases occurred in the same house, and in the interval in adjoining houses also.

(2) In April, I reported on twenty-seven cases which were notified between February 18th and April 8th, an epitome of which is:—"As regards the manner in which the disease has continued to spread, I think there is no doubt that direct infection from person to person through the medium of overlooked cases has been the cause; both at school, in the playgrounds, in the streets, and also from house to house.

"That the schools have been operative—particularly Featherstone Road Infant School—is shown by the fact that one child on March 28th was found in Featherstone Road Infant School, in the peeling stage of the disease; and enquiries elicited the fact that his illness dated from March 14th, and he had continued in attendance at school all the time, and must have been responsible for the infection of many of the cases notified during the previous fourteen days.

"Infection from house to house has also been a means of spread. This is illustrated by the cases occurring in Featherstone Terrace. The first occurred March 14th at No. 15, another five days later at No. 13; next were two cases on April 4th and 6th at No. 17, and two cases have been notified to-day from No. 16. The disease has skipped one house—No. 14—and a peculiar circumstance is, that this house was infected last year.

"There can be no doubt that there are mild cases going about which have escaped observation."

(3) The six cases which occurred between April 8th and May 6th, evidence pointed to their being a sequence of the cases previously reported upon, four of them occurring in houses in which cases had been recently notified.

(4) In the cases notified from May to June, there was a suspicion that a particular milk supply was concerned in its spread.

Out of twelve consecutive notifications—two only being in one house—four milk vendors supplied the families.

A supplied eight families; B, C, and D each one.

The suspicion arose very early in these cases, and on investigating the matter I found the state of affairs as regards cleanliness of milk cans and utensils very unsatisfactory at A's milk shop. In this connection I would direct your attention to Page 26 in my Annual Report for 1903, as to the risks of infection from dirty milk cans.

It was ascertained that A and B obtained their milk from the same farm, which is situated outside your district.

The further investigation of this matter therefore appeared to me to be a question in which the County Medical Officer of Health was concerned. I therefore communicated with Dr. Young, who carried out a most painstaking and exhaustive enquiry into the whole circumstances. To him I tender my best thanks for much valuable advice and assistance.

It is unnecessary here to give the details of the enquiry which Dr. Young pursued; the conclusion reached was, that the milk from the farm in question was in no way responsible. Further light was thrown on the matter in the investigation of subsequent cases in a most roundabout way.

A child living on the Hamborough Estate (North side), was notified with Scarlet Fever on June 10th. On making the usual enquiries the only probable source of contact was at a small private school she attended in a neighbouring street; this clue was followed up by visiting the school, one of the children there was found to be desquamating from Scarlet Fever. She had been back to school four days after an absence of three weeks I learned that her brother was ill a short time before she was, and that he was a scholar at Featherstone Road Boys' School (South side). A messenger was at once sent to the Medical Officer to the School Board to examine this boy in school. He was found to be desquamating. At their home, I found another child, three years old, peeling from Scarlet Fever; from the history the disease had been in this house for at least a month. The milk supply to this family was derived from A, which he delivered in small cans. Here then was a most probable explanation of the infection of A's milk supply through infected cans, early in May. These cases were directly responsible for several others in the same street, which were discovered by the notification to us of a case of Scarlet Fever, the patient being a domestic servant in Ealing, whose home adjoined the house in which these cases occured. In this house I found two cases of Scarlet Fever, and from this house in turn three other cases arose in an adjoining house through direct contact.

About this time also another unrecognised 'centre' was found in Kingston Road; through enquiries made respecting a case notified from a house in the same street. This unrecognised case had been in attendance at school for a fortnight, subsequent to the first days of her illness.

During July, quite a number of children were found in the Elementary Schools peeling, six in Dudley Road Girls' School, and one in Featherstone Road Boys' School.

Another centre for infection was discovered through the notification of a case the first week in August. This patient had been doing daily work at a small general shop close by, and I there found a girl twelve years old peeling profusely from Scarlet Fever, the commencement of her illness dating from the middle of July.

Again during August, September and October, a considerable number of cases in the late stage of the disease were notified, as discovered in school, or as the result of enquiries. Two of these cases contracted Scarlet Fever in a mild form when away for the holidays, one in Southampton and one at Weston-Super-Mare.

The prevalence of Measles during summer was undoubtedly a contributing cause in the spread of Scarlet Fever.

Several instances came under notice in which cases of Scarlet Fever had been nursed up at home under the impression that they were cases of measles—medical advice not being sought.

With these numerous unrecognised centres of infection the difficulty experienced in eradicating the disease will be appreciated. The remarkable circumstance is that only 145 cases were notified; one would reasonably expect a much larger number of cases in our population of over 15,000, containing as it does an unusual number of children at a susceptible age. In accounting for this low incidence, allowance must be made for the fact that the notified cases by no means constituted the whole number of those attacked. What this figure was cannot be ascertained, but all the circumstances go to show that it must have been very much higher than was apparent. There are other influences as well, especially age, closeness of contact, previous attack, and so forth, which renders Scarlet Fever less liable to transmission than Measles and Whooping Cough for example. Allowing for these minimising influences, however, it must be conceded that the preventative measures adopted by the authorities concerned were instrumental in limiting the outbreak to a certain area; and thus preventing an epidemic.

In this connection it is impossible to speak too highly of the benefits which accrued from the systematic examination of the children in the elementary schools.

The great value of this measure was in the discovery of unreported cases, and I think there can be no question that had it not been carried out we should have had an extensive outbreak on the north side of the District.

Diphtheria and Membranous Croup.

Nineteen cases of Diphtheria and Membranous Croup were notified, as compared with 18 for 1903. Of these, 10 were males and 9 females.

Table of Ages.

1—5 years.	5—15 years.	15—40 years.	40—45 years
6	11	1	1

The distribution was as follows :—

	1904.		1903.	
	Cases.	Houses.	Cases.	Houses.
North of Railway... ...	6	6	6	4
South of Railway... ..	13	12	12	11

Cases were notified in the following months : –

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
2	2	—	1	1	—	6	1	1	1	1	3

Incidence of Diphtheria per 1,000 of Population.

1892	1893	1894	1895	1896	1897
1·5	3·2	2·6	0·4	0·5	11·1

3·2

Average incidence per 1,000 for years 1892—1897.

1898	1899	1900	1901	1902	1903
9·3	11·7	3·9	1·0	1·3	1·1

4·7

Average incidence per 1,000 per years 1898—1903.

The incidence of Diphtheria for the year is 1·2 per 1,000, which is a low one compared with previous years considering the great increase in population.

The cases divide themselves into three groups, which occurred successively on the South side, North side, and again the South side.

The first group on the South side was six cases, 3 Membranous Croup and 3 Diphtheria. These cases occurred between January and May. From May up to July 4th, no case was notified in the district. The second group, 5 Diphtheria occurred on the North side, between July 4th and 20th. There was no further case notified on the North side until December 28th. The third group of 7 cases occurred on the South side, between July 29th and December 13th. There has been no evidence whatever to show that these groups were related to each other, and it has not been possible to trace infection in the individual cases of the various groups from person to person. (1) From October, 1903, the district was free from Notified Diphtheria until January 5th, 1904, on which date two of the cases in the first group occurred in one house in Clarence Street. On these cases I

reported as follows :—"They are both, I am given to understand, of very severe character, and there is nothing very definite to show how they originated; but the sanitary condition of the premises in which they occurred is far from satisfactory, and I fear that if the disease gets a footing in this block of cottages we shall experience great difficulty in stamping it out. The back premises of all these houses are very insanitary, there is no paving in the back yards, which are in a sodden condition and present exactly those conditions which would harbour infection very tenaciously.

The premises themselves are far from clean, and I am of opinion that notice should be served to thoroughly cleanse and disinfect all the premises, for which purpose every room should be scraped, fumigated and lime-washed. The soil of the back yards should be deeply dug, disinfected and cemented, and this course I should advise with regard to the rest of the cottages in this group, and others which are in a similar condition in the same street." Proceedings were ultimately taken under the Housing of the Working Classes Act, and a closing order obtained. Since then there has been no recurrence of Diphtheria in Clarence Street.

(2) The second group of five cases occurred in separate houses on the Hambro Estate. Four cases occurred between the 4th and 11th of July. All these obtained their milk from the same Vendor. The fifth case occurred on July 20th, and in this instance condensed milk only was used.

All the cases in this group were of a severe character, and it was feared that we might have to deal with a considerable outbreak of the disease. As the result of measures taken, which it is not expedient to particularise here, the outbreak was nipped in the bud, and no further case was notified on the North side, with the exception of one at the end of December. (3) The third group of seven cases occured on the South side between July 29th and December 13th. Two were cases of Membranous Croup, and of the five cases of Diphtheria, one patient was a visitor to the district, and had symptons of the disease when he arrived here; a second case was of a doubtful character, the bacterial test proving negative, and as regards the remaining three, occuring September 24th, October 16th and December 6th respectively, the only factor in common was then that they were scholars at the same school.

As in Scarlet Fever, one of the principal factors concerned in the spread of Diphtheria is the presence of mild unrecognised cases which do not come under medical observation at all, and so escape isolation. There is not, however, the same difficulty in the diagnosis of mild Diphtheria as in Scarlet Fever. By means of the Bacterial test it is possible to prove the presence or absence of Diphtheria in a given case. The Council afford facilities for this test to be carried out free of charge to the Medical practitioners in the District.

Typhoid or Enteric Fever.

Apart from cases occurring in the St. Marylebone Schools there were four cases of this disease notified during the year, as compared with six for 1903. There is no importance attaching to these cases from a Public Health point of view, as they were all due to causes outside our jurisdiction. The first case was one of Typhoid Pneumonia; in the second case the patient came home with symptoms of the illness from a holiday in Lincolnshire. The third case occurred in a caravan at North Hyde; and the fourth, I am given to understand, was the result of influenza.

The cases were removed—with one exception—to the West London Hospital, and our thanks are due to the Authorities of that Institution for taking the cases in. The remarkably low incidence of Typhoid Fever in the district which has continued for many years past, is a highly satisfactory circumstance.

Erysipelas.

The only other notifiable disease during the year was Erysipelas All the cases were of a sporadic nature, and do not call for any remarks.

NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles and Whooping Cough.

During the year there was a very extensive prevalence of Measles which first appeared on the South side of the District, about the middle of June, and the cases were limited to that area up to September, when the disease appeared on the North side and continued very prevalent up to the end of November. As the disease is not a notifiable one, there are no means of ascertaining the number of cases which occurred, but I venture to think it is the most extensive outbreak we have experienced for many years past, a circumstance which is explained by the large number of children in our population of a susceptible age. Moreover, since the disease is highly infectious before its symptoms are characteristic, it is extremely difficult to control its spread; to this end, isolation is all important. In a large number of cases medical advice is not sought; unfortunately, many parents look upon Measles as a trivial and inevitable illness, and do not even confine them to the house whilst suffering from the disease, and thus the infection becomes widely disseminated. It is probable that in the near future, that Measles will be definitely included in the category of "dangerous infectious diseases," and so give local authorities power to take proceedings under the Public Health Act against parents who wilfully expose their children when

suffering from the disease. These remarks apply equally to Whooping Cough, of which complaint there were a large number of cases. A reference to the mortality table will show that Measles and Whooping Cough together, caused 14 deaths; whereas Scarlet Fever, Diphtheria and all other Notifiable diseases, caused only 6 deaths. As I have already remarked, Measles was in some measure responsible for the spread of Scarlet Fever. Both diseases were prevalent concurrently, and several instances come under notice, in which children suffering from Scarlet Fever had been "nursed up" at home, no doctor being called in, under the belief that the illness was Measles.

Phthisis or Consumption.

The number of deaths from Consumption shows a steady increase year by year pari passu with the increase in population. The disease is a type of "preventible" diseases, and it requires but very simple precautions to prevent its spreading from person to person. Essentially prevention rests with the patient himself, *and if the expectoration of a consumptive person be destroyed or disinfected he need have no fear that he is spreading infection.* The misery of the consumptive patient in the later stages of the disease, when treated at home, under bad environment, and without proper nursing is indescribable and the danger of infection of those in his vicinity very great. Formerly, it was believed that consumption was an incurable disease, but now it is well recognised that under suitable treatment—especially in the earlier stages—the lungs often become healed. The treatment is carried out in special Sanatoriums, which are now established throughout the country, and those which are maintained by the combination of local authorities are an inestimable boon, since many of the sufferers are neither paupers nor persons able to pay the fees demanded by private institutions. I venture to urge upon the Council the desirability of joining the scheme for the proposed Sanatorium for Middlesex, for you would then have the satisfaction of knowing that not only the best means were being taken to prevent the disease, but of giving a fresh lease of life to many of the wage earners of the families of the poor, and if not this, at least, the alleviation of suffering, care and comfort, which would otherwise be unobtainable.

SECTION IV.

(a) Isolation Accommodation.

(1) Accommodation is provided at the Isolation Hospital for cases of Diphtheria and Scarlet Fever only. The Pavilion Block, which is used for Scarlet Fever, consists of two large general wards and an emergency ward, with a nurse's duty room and kitchen situated between the large wards. Additional accommodation is provided by a Berthon Circular Hospital at the rear of the Pavilion Block, which is of very great service for convalescent patients.

(2) There is no hospital for Small Pox in the district. The Council is under an agreement with the Authorities of the South Mimms Hospital for the reception of cases from this district.

It is probable in the near future, that the question of providing accommodation for cases of Enteric Fever will arise, since most of the general hospitals now decline to take these cases in, and it is essentially a disease which requires hospital treatment, both from a curative and preventative point of view, unless the patient's domestic circumstances are exceptionally favourable.

(3) *Ambulance Arrangements.*

The Ambulance is of the latest Brougham pattern, containing a stretcher bed, which takes out at the back, seat for the nurse, &c. The vehicle is kept at the Hospital and horsed by contract.

The Inspector has charge of the arrangements and superintends the removal of patients. One of the nurses from the Hospital goes with the Ambulance for every case, provided with requisites for any emergency which may arise during the journey.

(b) Methods of Disinfection.

(1) In nearly all cases the work of disinfection is done at the cost of the Council, under the supervision of the Sanitary Inspector.

As to Rooms : The procedure adopted in disinfecting rooms is as follows :—In all cases the room occupied by the patient is sealed and fumigated with sulphur dioxide gas, cylinders of compressed gas being used. In cases which have been treated at home, and in others kept at home for some days before removal to the Hospital, the fumigation is followed by scraping and stripping of all paper from the walls. This is not done, as a rule, when the patient is removed to Hospital within a day or so of the commencement of the illness. In all cases, again, the walls, floor, and ceiling are thoroughly brushed over, and the wood work and fixtures washed

with a solution of chloride of lime. Where possible, the room is not occupied for a week, windows in the meantime being kept widely open.

(2) *As to Articles of Clothing*: The clothing, bedding, curtains and other infected articles capable of removal, are taken to be disinfected in the Thresh's apparatus at the Hospital. Two covered hand trucks, one for infected and one for disinfected articles, are used as the means of transport.

ISOLATION HOSPITAL.

There were 149 patients admitted during the year, of these 134 were sent in as Scarlet Fever and 15 as Diphtheria.

The following Table gives the numbers admitted, discharged, and under treatment during each month.

	Number admitted.		Number discharged.		Deaths.	Number in Hospital.
	Scarlet Fever.	Diphtheria.	Scarlet Fever.	Diphtheria.		
January....	—	—	—	—	—	—
February..	10	1	—	—	—	11
March	19	—	2	1	—	30
April	10	1	11	—	—	38
May	10	1	26	1	—	38
June	24	—	4	—	2 Scarlet Fever.	35
July	20	6	20	1	1 Diphtheria	55
August.....	9	1	18	3	—	22
September	9	1	12	2	—	18
October ..	13	1	14	1	—	17
November	5	1	11	2	—	10
December.	5	2	4	1	1 Scarlet Fever, 1 Diphtheria	12
Totals...	134	15	122	12	5	Average number in Hospital for each month=26

There were five fatal cases during the year. Of these, three were Scarlet Fever and two Diphtheria.

This gives a mortality of Scarlet Fever of 2·0 per cent. of notified cases. The rate for England and Wales being 3·4 per cent. of notified cases. The rate of mortality of cases treated in the hospital is 2·2 per cent., as compared with an average rate at all ages of 5·3 per cent. for the Hospitals of the Metropolitan Asylums Board.

The mortality rate of the cases of Diphtheria was 13·3 per cent. as compared with 24·7 per cent. at all ages in the Hospitals of the Metropolitan Asylums Board.

The majority of the cases of Diphtheria were of severe character; one patient was moribund on admission, and the operation of tracheotomy was performed in three cases, one of which proved fatal from extension of the disease 36 hours after operation.

One patient developed post-diphtheritic paralysis, and one had serious cardiac collapse during convalescence. There was no "return" case of Diphtheria. This is due to the fact that it can be determined with a high degree of certainty by means of Bacteriology when a patient is free from infection. No case is discharged from the hospital until three consecutive negative reports are obtained from swabs taken from the nose and throat at intervals during the last 10 or 14 days' stay of the patient in hospital.

Among the Scarlet Fever patients there were 4 who suffered from Acute Nephritis; 6 from Bronchitis and Pneumonia; 4 from Abscesses which required operation; 12 from Arthritis; 25 from Otorrhœa (8 on admission) and 18 from Rhinorrhœa (3 on admission).

During the summer months the average stay in Hospital of the Scarlet Fever patients was considerably prolonged through an outbreak of Measles and Chicken Pox. Both complaints were introduced into the wards by patients incubating with the diseases on admission. Three of the patients had Chicken Pox and 14 Measles. Many of these latter cases were of a severe and anxious character, being complicated by Bronchitis and Pneumonia.

There have been 5 probable "return" cases of Scarlet Fever from three houses. In this disease there are no means of proving that a patient is free from infection. The accepted rules for regarding a patient as free from infection, are:—(1) Isolation for a period of six weeks (this has been maintained in all cases of Scarlet Fever); (2) Freedom from desquamation; (3) Absence of Rhinorrhœa, Otorrhœa, or other infective sequelœ. I made careful investigation into the supposed infecting cases (3 in number), having examined them myself for discharge, and also at home after the occurence of a second case. There is no doubt whatever, that the patients were discharged from Hospital perfectly free from any desquamation; without any discharge from ears, nose, or throat, and their stay in Hospital conceded the average. When I saw them at home I found that all patients had discharge from the nose.

It is well recognised that this condition may ensue as a result of

taking cold, and that it may take on an infectious character for some time after complete recovery from Scarlet Fever. Its occurence cannot be foreseen or prevented.

Expenditure.

Taking roughly the items of expenditure at the Sanatorium for the year, £481 was paid for salaries and wages; £361 for provisions; £155 for fuel, lighting, and cleaning; £50 for dispensary, medical, and surgical sundries; £43 for rates and taxes; and £114 establishment charges; (repayment of loans and interest £827, and capital charges, £433).

The total amount expended on isolation appears large, but I think it will be conceded that expenditure on administration shows careful management, and I unhesitatingly say the ratepayers have had excellent value for their money, apart from the benefits derived by the patients of skilled nursing in Hospital.

149 cases were treated in the Sanatorium during the year, and exclusive of loans and capital charges, this works out approximately at £8 per patient, which is an exceedingly low rate. In many hospitals the amount is as high as £20 per patient, reckoned on the same basis. In estimating the cost of maintenance in the proposed Hospital in 1897, when the population was 7913, and basing my estimate on the assumption that the number of cases in a year would rarely exceed 60, I put down the probable administrative expenses at £520; during the past year the population was more than double that in 1897, and owing to the outbreak of scarlet fever, we had nearly three times the number of patients estimated for, and the total administrative expenditure was only £1,204. Comparing the estimated with the actual expenditure the figures are:—Estimated £8 13s. per patient; actual expenditure £8 per patient, and it must be remembered that the increased number of patients necessitated a larger nursing and administrative staff than was originally contemplated. Special nurses had to be engaged at the times of greatest pressure, and a third staff nurse was temporarily appointed for six months.

I venture to say that the public appreciate the benefits of the Hospital. We find that parents are not only willing, but anxious to send their children there for treatment.

The very few cases treated at home have been so from exceptional circumstances, the patients being infants, only children and doubtful cases.

The Committee have received many expressions of thanks for the care and kindness shown by the nurses towards patients during their stay in hospital. It gives me great pleasure to testify to the excellent work done by the Matron and Nurses; to their untiring devotion, care and kindness to the patients. They have had most arduous and exacting duties to perform, and for weeks together their hours for recreation have been cheerfully and ungrudgingly given up for work in the wards during times of pressure.

I have to thank Dr. McDonald for much valuable advice and assistance in cases of doubt and difficulty.

SECTION V.

GENERAL SANITARY CIRCUMSTANCES AND ADMINISTRATION.

(1.) Houses and Housing Accommodation.

Mr. Hanson, the Rate Collector, informs me that the number of houses in rating at the end of December, 1904, was 3,328, an increase of 644 during the year.

The rapid growth of the District is illustrated by the following table:—

Number of Inhabited Houses in District.

1891	Census Return	...	1,021	1898	Rate Book	...	1,634
1892	,, ,,	...	—	1899	,, ,,	...	1,790
1893	Rate Book	...	1,048	1900	,, ,,	...	2,045
1894	,, ,,	...	1,068	1901	Census Return	...	*1,911
1895	,, ,,	...	1,115	1902	Rate Book	...	2,536
1896	,, ,,	...	1,291	1903	,, ,,	...	2,684
1897	,, ,,	...	1,425	1904	,, ,,	...	3,328

Year.	Total.	West Ward.	East West.
1901	1,911	1,029	882
1902	2,536	1,338	1,198
1903	2,684	1,439	1,245
1904	3,328	1,810	1,518

* At the time of the Census a large number of houses (259) were unoccupied owing to depression of trade in the district.

Public Elementary Schools.

School.	Department.	Authorized Accommodation.	Average No. on Rolls during Month, Dec. 1904.	Average Attendance.	Per Centage of Average Attendance on No. on Rolls.
Featherstone Road....P.	Boys'	800	839	728	**86·7**
Featherstone Road....P.	Infants' ...	434	443	380·7	**85·9**
Southall..... ....P.	Mixed.. .	*58 / 311	412	336·5	**81·6**
Clifton Road.....P.	Girls'	400	347	280·8	**80·9**
Dudley Road.....P.	Girls'	400	454	359·8	**79·2**
Southall.....P.	Infants' ...	240	316	248	**78·4**
Clifton Road.....P.	Infants' ...	400	396	286·9	**72·4**
	Totals ...	**3,043**	**3,207**	**2,620·7**	**81·7**
Corresponding month of last year	... ...	*(2,617)*	*(2,803)*	*(2,406·6)*	*(85·8)*

Building operations are still being carried out on an extensive scale, especially in the West Ward, and the type of houses erected is better, both in construction and accommodation, than has hitherto been the case. The fact that all buildings in course of erection are constantly supervised by the Surveyor and Building Inspector has doubtless contributed to this end.

Plans Approved by the Council (1904).

Houses	329	Schools	1
Stables	12	Factories	1
Shops	24		

Plans for new streets of approximately 1 mile in length have also been passed, of which about ½ mile has been laid out.

Houses Certified for Occupation, 1904.

Houses	327	Public House ...	1
Shops	30	Factory	1

There is ample housing accommodation in the district for the working classes, and although the rents in some parts of the district are higher than the average working man can afford, they are within the means of the thrifty artizan. It was found, on inspection, that many of these higher rented cottages were occupied by two families. In such instances, the Council required the bye-laws respecting houses let in tenements to be complied with, with the result that most of the cases so dealt with have reverted to single tenants.

Overcrowding:—House to House Inspection.

The Sanitary Inspector has continued his work of systematic house to house inspection throughout the district, devoting his attention chiefly to the areas and streets in which there is reason to suspect overcrowding and insanitary conditions.

Twelve cases of overcrowding of dwelling houses came under observation and were dealt with by notice which was complied with in every case.

Common Lodging Houses.

There are no Common Lodging Houses in the District.

Houses Let in Lodgings.

There are eleven houses let in lodgings on the register, and three contraventions of the bye-laws in connection therewith, were dealt with during the year.

Proceedings before the Justices were taken during the year with respect to a group of cottages in Hammond Road, as a test case for the registration of these and similar houses. Each cottage was occupied by two families: having a common front entrance, the family living upstairs having access to the garden at the back by means of a staircase. The Council were of opinion that the premises constituted a house let in lodgings or tenements: the owner held that each family occupied a separate dwelling.

The decision of the Justices was in favour of the owner.

Housing of the Working Classes Act.

Proceedings under Part II of this Act were taken with regard to six houses in Clarence Street. A closing order was ultimately made by the Justices.

Movable Dwellings—Caravans.

Twenty-five movable dwellings came under observation during the year, and in eleven instances Nuisances required dealing with. A case of Enteric Fever was imported into the district in one of the Caravans.

Canal Boats—Used as Dwellings.

The Inspector has paid 46 visits to the Canal, inspected 100 boats and dealt with 6 cases infringing the regulations.

Water Supply.

The principal Water Supply of the district is that of the South West Suburban Water Company, whose reservoirs are at Egham.

In order to ensure a constant and sufficient supply to the district, this Company has a water tower on their premises at Southall with a capacity of about 300,000 gallons.

The Grand Junction Water Company supply a considerable number of houses at North Hyde and on the Adelaide Estate.

The Secretary to the South West Suburban Company has kindly furnished me with the following report of their Analyst, Dr. J. C. Thresh, Professor of Hygiene at the London Hospital Medical School, and Medical Officer of Health for the County of Essex.

PUBLIC HEALTH LABORATORIES,
LOND. HOSP. MED. COLL., LONDON, E.

January 23rd, 1905.

REPORT MADE JANUARY 23RD, 1905.

Sample taken at Egham, January 14th, 1905.

The chemical results shew that the water contains no excess of organic matter, and the bacteriological examination shews that the filtration has been efficient.

The water is well adapted for the purposes of a public supply.

JOHN C. THRESH.

Physical Examination.

Turbidity: None.

Colour: Green. Odour: Normal.

	Grains per Gallon.	Parts per 100,000.
Total Solid Matter dried at...		
Chlorine	1·5 ...	2·1
Equivalents to Chlorides (60% Cl.) ...	2·5 ...	3·57
Nitric Nitrogen	·22 ...	·31
Equivalents to Nitrates (17% N.) ...	1·32 ...	1·88
Nitrites	Absent.	
Hardness: Permanent—Temporary—Total	16·0	
Lead, Copper, Zinc, Iron	Absent.	
Free Ammonia	·0028 ...	·0040
Organic Ammonia	·0053 ...	·0075
Oxygen absorbed at in hours ..		

JOHN C. THRESH.

Bacteriological Examination.

Number of organisms per CC capable of growing on alkaline nutrient jelly at 20° C in 4 days, counted by aid of pocket lens	2 days	56
	4 ,,	88
Smallest quantity of water in which growth occurred with production of acid and gas in bile-salt glucose broth (1, 5, 10 or 20 CC)	Acid & Gas in 10 CC	
Nature of organisms found in this growth	An organism of Coli Group, but not the true B. Coli.	
Spores of the Bacillus enteritidis, Sporogones		
in 150 CC	Absent.	
,, 350 CC	,,	
,, 500 CC	,,	

JOHN C. THRESH.

The only houses in the District supplied from wells are one or two isolated groups of cottages in outlying parts. During the year two wells have been closed, the water being found to be contaminated on Analysis.

Disposal of Refuse.

(*a*). *Sewage Disposal.*

I am indebted to our Engineer, Mr. Reginald Brown, A.M.I.C.E., M.S.I., &c., for the following particulars as to the Disposal Works and Farm.

The Sewage enters the Disposal Works at two different points. What may be termed the high level outfall sewer takes the Sewage from the District proper. This enters the works by passing through a small chamber controlled by valves and thence into and through a receptacle in which is fixed one of Smith's Patent Revolving Wire Screens.

This screen consists of a water wheel—driven by the momemtum of the Sewage—which causes an endless band of wire net to revolve slowly, thus catching and lifting out all suspended matters beyond a certain size. A brush revolving in an opposite direction cleans the net as it passes and the solid matters are cleared to one side and removed by manual labour. The sewage then passes through a well, inside the liming house, and from thence through two valves into one or the other of two small detritus tanks covered with corrugated iron. These tanks have a total capacity of 24,000 gallons. At the centre of the length of these tanks scum boards are fixed, the bottom edges of which are at a distance of 24-ins. below the level, the upper edges being above the water level; the outlet end of the tanks have also scum boards projecting to a distance of 12-ins. below the water level, and the top edges of same, of course, being above the water level.

The Sewage passes under these boards and over a lip in a continuous stream into a carrier.

Four new Precipitation Tanks of 600,000 gallons capacity constructed during 1903, are now in full working with the necessary apparatus in connection therewith. The tanks are arranged so that they may be used on the intermittent or continuous principle.

The effluent from the Precipitation Tanks will then pass through about $\frac{3}{4}$ acres of first Contact Beds. The feature of the new Works is the ample provision made for the effectual aëration of the whole system.

The lower outfall takes the Sewage from one Institution only, viz., Hanwell Asylum, and discharges into two covered tanks, the combined capacity of which is about 57,000 gallons. The Sewage from these tanks is pumped up through a rising main and discharges into a well at the liming house before mentioned, and then passes through the same process as the District Sewage. The precipitated sludge passes into a sludge well near the low level tanks, and is pressed into cake form by means of a filter press.

The effluent is tested every day, with a view to ascertaining the efficiency of the process.

The whole of the machinery at the works is driven by gas engines, the gas being supplied from a Dowson gas generating plant.

(*b*). *Removal of House Refuse.*

During the year 2550 loads of refuse have been removed from the houses in the District; the system in vogue is a weekly collection, the refuse from each house, except where unavoidable, being removed once a week on specified days. The refuse of the house is stored in galvanized iron bins, which, when emptied, are dusted with carbolic powder. A great improvement is apparent in the specially constructed dust carts now in use by the Council over the old form of tip carts formerly supplied by the contractor.

The work is carried out by contract at a rate per day for horse, harness and man; the Council supplying the cart and dustmen. The District is divided into three Sub-Districts for the purposes of collecting, and reports are made daily to the Surveyor as to the progress of the work from each of these Sub-Districts. It is a pity that with such an efficient method for the removal of refuse, that the method of disposal is so primitive. Under his contract the contractor is bound to find his own shoot, and this with a rapidly growing district becomes more difficult every day; the consequence being that the refuse finds its way into the disused sand or gravel pits frequently situate at or near the rear of houses in course of erection, and although constant supervision is exercised to see that no nuisance is created by covering the refuse with earth or gas lime, the practice must be deprecated inasmuch as a subsoil composed of such material and especially where so short a distance from the house, cannot be conducive to the health of the inmates. Under these conditions a refuse destructor should be erected so as to dispose of the material collected in the most sanitary

manner. I am pleased to say that I trust this object will be attained at an early date as the Council are about purchasing sites for the erection of dust destructors.

Factory and Workshop Act, 1901.

Section 132 of the Factory and Workshop Act, 1901, which came into force on January 1st, 1902 requires that—"The Medical Officer of Health of every District Council, shall, in his Annual Report to them, report specifically on the administration of this Act in workshops and workplaces, and he shall send a copy of his Annual Report or so much of it as deals with this subject, to the Secretary of State."

The duties imposed by the Act relate to Factories, Workshops and Workplaces.

Factories.

Factories include (1) all places in which mechanical power is used in aid of the manufacturing processes; and (2) all places, whether mechanical power is used or not, in which the industries specified in Part I, of Schedules VI to the Act are carried on.

There are thirteen Factories on the Register.

In the case of Factories the Council is charged with the duty of seeing that every Factory in its District is provided with means of escape in case of fire.

Under Part III of the Public Health Acts Amendment Act 1890, which is in force in our District, it is incumbent on the Council to see that every Factory is provided with suitable and sufficient Sanitary conveniences, with proper separate accomodation for persons of each sex in accordance with the requirements of Section 22. The Sanitary accommodation of all Factories in the District has been enquired into, and I am satisfied that the requirements of this Section are complied with.

Increased Sanitary conveniences have been provided in the case of the Factory mentioned in my last Report.

Apart from this provision, the Factory Inspector of the district is responsible for the sanitary condition of the factories, and he "will, on finding in a factory or workshop, any act, neglect, or default in relation to a drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter which is punishable or remediable under the Public Health Acts, but not under the Factory Act, give notice to the Council of such Act, etc.; and it will then be the duty of the Council to make enquiry into the matter, take such action as may seem proper, and inform the Inspector of the proceedings taken."

A communication was received from the Factory Inspector for the district, that certain premises at Mount Pleasant were occupied and in use as a Factory, and that proper sanitary accomodation was not provided. The premises in question had only recently been built, and a certificate as to their fitness for occupation had not been granted. Notice was served, and the premises have since been closed.

Workshops and Workplaces.

Workshops are defined in the Act, but not workplaces, but the term is used in the several Public Health Acts, and in a case under Sec. 38 of the Public Health (London) Act, 1891, where the phrase "Factory, Workshop, and Workplace" occurs, it was held that the word "Workplace" is not to be limited to places where something is being manufactured or made, but includes any "place where work is done permanently, and where people assemble together to do work permanently of some kind or other." It is therefore a word of wider signification than the word "workshop." In the case in question a stable and stable yard where men were employed as cab cleaners and horse keepers was held to be a workplace. Similarly the Secretary of State has been advised that the kitchens and restaurants, &c., though they are not workshops, come within the meaning of the term "workplace." The Register of workshops and workplaces has been compiled from enquiries made by the Officers of the Council.

The premises registered are :—

Workshops and Workplaces	25
Retail Bakehouses	12
Laundries	5
	42

The duties imposed with regard to these premises are classified under four heads.

The Council is responsible for the Sanitary condition of Workshops and Workplaces in the District:—(1) the Sanitary condition of Workshops and Workplaces generally; (2) provisions of means of escape from fire in Workshops; (3) special sanitary regulations for Bakehouses; (4) Home Work.

(1.) The requirements of the Act in regard to the Sanitary condition of Workshops and Workplaces which it is the duty of the District Council to enforce are as follows :—

(a) *Cleanliness* (Sec. 2).—Every *Workshop and Workplace* must be kept in a cleanly state and free from effluvia, and if not so kept may be dealt with by the Council as a nuisance under Sec. 91 of the Public Health Act, 1875.

(b) *Air Spaces* (Secs 2, 3).—*Workshops and Workplaces* must not be overcrowded while work is carried on so as to be dangerous or injurious to the health of the persons employed, and a Workshop or Workplace which is overcrowded may be dealt with as a nuisance under Sec. 91 of the Public Health Act. A *Workshop* is deemed to be overcrowded unless in each room at least 250 cubic feet of air space (or during overtime 400) are allowed for each person employed in the room, and the Act requires a notice to be affixed in the Workshop specifying the number of persons who may be employed in each room of the workshop.

(c) *Ventilation* (Secs. 2, 7).—Every *Workshop and Workplace* must be ventilated in such a manner as to render harmless as far as practicable any gases, vapours, dust or other impurities generated in the course of the work that are a nuisance or injurious to health. Any Workshop or Workplace not so ventilated may be dealt with as a nuisance under Sec. 91 of the Public Health Act.

(d) *Drainage of Floors* (Sec. 8). –Every *Workshop or part of a Workshop* in which any process is carried on which renders the floors liable to be wet to such an extent that the wet is capable of being removed by drainage, adequate means shall be provided for draining off the wet. A Workshop not so drained may be dealt with as a nuisance under Sec. 91 of the Public Health Act. This provision, however, does not apply to Workshops, in which men only are employed.

(e) *Sanitary Accommodation.*—The requirements for Workshops are the same as those for Factories.

The chief Workshop industries in the District are carpenters, joiners, plumbers, boot repairing, tailors, dressmakers and laundries.

Systematic inspections of the Workshops in the District have been made with a view to ascertaining if the requirements of the Act are complied with, and we found that to be the case; speaking generally the sanitary conditions of all these premises are satisfactory.

Bake-houses.

All Bake-houses within the District are Workshops within the meaning of the Act, since no mechanical power is used in the process carried on. The general regulations of the Act, and the special sanitary regulations for bake-houses contained in the Act are practically the same as your Bye-laws which have been in force in the District some years. All the Bake-houses have been inspected quarterly, and their condition was found to be satisfactory.

Home Work (Sections 107—115).

Under these Sections power is given to District Councils of controlling the conditions under which certain classes of work are done in the homes of the workers, which aim at the prevention of home work being carried on in dwellings which are injurious or dangerous to the health of the workers themselves, *e.g.*, through overcrowding, want of ventilation, or other insanitary conditions, or in premises where there is dangerous infectious disease.

(*a*) *Home Work in Unhealthy Dwellings.*

No instance came under notice requiring action.

(*b*) *Home Work in Infected Dwellings.*

Under this section in an emergency the power may be exercised by any two or more members of the Council acting on the advice of the Medical Officer of Health.

No case of infectious illness came under notice.

(5.) *Outworker's Lists.*—In order that the Council may be kept fully informed as to the places in its District in which home work is being done, occupiers of factories, workshops, or any place from which work is given out, and contractors employed by such occupiers are required, in regard to such classes of work as may be fixed by the Secretary of State, to keep lists showing the names and addresses of all persons employed by them, either as workmen or as contractors outside such factory, workshop or place, and the place where they are employed, and to send to the Council twice a year (viz., on or before the 1st February and the 1st August) copies of such lists. The form in which the lists are to be kept is prescribed by the Secretary of State in his Home Work Order of the 11th December, 1901. Forms may be obtained from the Government printers.

In the event of any occupier failing to keep or to send such lists, he will be liable to a fine of £2 for the first offence, and to a fine of £5 for a second or subsequent offence. Proceedings to recover the fine may be taken by the Council.

It will be the duty of the Council to have the lists so sent to them examined, and if the place of employment of any outworker included in the list is in another District, to furnish his name and place of employment to the Council of that District.

The list required to be kept by the occupier or contractor will be open to inspection by any duly authorised officer of the Council; and the copies sent to the Council, and any particulars furnished to it by another Council will be open to inspection by any of the Inspectors of Factories and Workshops.

During the year several names were received of persons doing home work at Southall for employers in London, and the premises have been inspected and registered.

Slaughter Houses.

I have inspected all the premises used as Slaughter Houses in the District. Speaking generally, their condition was found to be as satisfactory as could be expected, considering that with one exception they are all premises which have been adapted to their present use.

The Butchers' Shops have also been periodically visited by the Inspector, with a view to seeing that adequate means were taken for storing and disposing of refuse.

Offensive Trades.

No offensive trades as scheduled in the Public Health Act are carried on in the District.

Cow Sheds, Milk Shops and Dairies.

(*a*) Cow Sheds—All the premises on the Register have been inspected quarterly by the Sanitary Inspector, and once by myself during the year. Structurally there has been great improvement in the majority of these premises during the past few years, and several in the District are really very excellent in this respect. It is more particularly with regard to the regulations relating to general cleanliness in the cattle, utensils, and persons engaged in milking, that there is cause for complaint in some instances. I fail to see how the regulations can be enforced without taking legal action, and I should be reluctant ro recommend such a course at present, since the occupiers no doubt are guided to a great extent by the conditions prevailing in other districts. In the near future it is highly probable that uniform regulations throughout the country as to the sanitary condition of cow sheds, cleanliness of the cattle, of the milkers, and of all utensils used in the process will be enforced.

No disease could be attributed as the result of milk from any of the cowsheds in the District, and no case of infectious illness has come under notice in any person engaged in the business of cow keeping.

(*b*) Milk Shop and Dairies—All the milk shops in the District have been frequently inspected and visited for purposes of enquiry during the year. Generally speaking, the regulations are carried out in a very satisfactory manner, with one exception in which all were

ignored or contravened. So far as could be ascertained, there has been no case of infectious illness in any person employed in this work. The milk supply in two instances has been suspiciously related to certain cases of infectious illness.

Unsound Food.

No instance has come under notice of unsound food exposed for sale during the year.

Under the Food and Drugs Act, fifteen samples of milk and fifteen samples of butter have been taken. The Public Analyst found one of the samples adulterated, in which instance proceedings were taken and a conviction obtained.

Mortuary Accomodation.

In 1903 I reported as to the suitability of the present premises for the reception of bodies awaiting inquest, and for the purpose of making post-mortem examinations.

I concluded that the situation of the present building, which is in close proximity to the Curator's dwelling-house and immediately adjoining the Vicarage garden, renders it unsuitable for the reception of bodies in an advanced state of decomposition, and of those of persons dying from infectious diseases, as required by the Public Health Prevention Act. Moreover, I consider that the construction and accomodation provided in the building was not suitable for such cases, and that better provision for making post mortem examinations was desirable.

During the year the matter has been dealt with conjointly by the Burial Board and the Council; a site has been selected on the North side of the Cemetery in Havelock Road; and plans passed for the erection of a new building, which will provide accomodation for four bodies; and a special feature is the provision of a disinfecting tank, drained and ventilated for the reception of decomposed bodies, and those dying from infectious disease.

Hot and cold water is laid on, and provision made for the performance of post-mortems.

Burial Grounds.

The following Table gives particulars of the Burial Grounds in use in this District:—

	The Cemetery.	St. Johns.	Parish Church.
1.—The Situation of the Ground ...	Havelock Road, Southall Green	The Green, Southall.	
2.—Total Area	About 5 Acres	About ½ Acre.	
3.—Dates of first use of first entry in register	April 2nd, 1883	March 3rd, 1860. (Consecrated Jan. 23, 1860).	
4.—Total number of Burials to date	2207	1570.	
5.—No. of Vaults	None	None.	Norwood.
6.— ,, Brick Graves	Five	13.	
7.— ,, Earth—Private Graves ...	332	577.	—
8.—Length and Width of Grave Spaces	8-ft. × 4-ft. Brick Grave ...	Brick Grave, 8-ft. × 4-ft.	
	7-ft. × 3-ft. Earth ,, ...	Earth ,, 6-ft. 6-in. × 2-ft.6-in.	No particulars.
9.—Depth of uppermost coffin below level of ground	Four feet	Four feet.	
10.—Area of unused Ground ...	⅔-rds.	About 1-fifth. (See below).	
11.—Distance of nearest dwelling and whether partially or wholly surrounded by houses	20-ft. (partially)	Adjoining on North Side. North and West Sides.	

Memo.—The Ground unused is the front portion of Churchyard and are principally brick grave spaces.

Infant Life Protection Act.

There are no licensed premises under this Act in the district. No application was made during the year.

Contagious Diseases Animals' Act.

No outbreak reported during the year.

Adoptive Acts in Force in the District.

(1) Infectious Diseases (Notification) Act, 1889.
(2) Infectious Disease Prevention Act, 1890.
(3) Public Health Amendment Act, 1890.

The Bye-Laws of this Authority, recently revised, are based on the Model Bye-Laws of the Local Government Board, and relate to—

(1) Cleansing of Earth Privies, Ashpits and Cesspools.
(2) For the prevention of Nuisances arising from snow, filth, dust, ashes and rubbish, and for the prevention of the keeping of animals on any premises so as to be injurious to health.
(3) Relating to Common Lodging Houses.
(4) New Streets and Buildings.
(5) Slaughter Houses.
(6) With respect to Houses let in Lodgings, or occupied by members of more than one family, a register of which is now kept.
(7) Regulations as to Dairies, Cowsheds and Milk Shops.

Mr. H. T. Baxter, Sanitary Inspector has complied the following Summary of his work for 1904. It will be apparent that he has done a great amount of very useful work during the year, although much of his time has been occupied in superintending the removal of patients to the Hospital, and in the subsequent disinfection of their homes.

Summary of Sanitary Inspector's Work for the Year 1904.

NUISANCES REPORTED TO COUNCIL, 1904—

Blocked drains, &c.	52
Premises in bad state	29
Acc. Manure and refuse	19
Defective water supply to w.c.	18
Stables without proper receptacle for manure	16
Defective fresh air inlets	14
Defective w.c's.	14
Cesspools to be emptied	14
Overcrowding	12
Defective drains	12
Caravans without proper sanitary convenience	11
Defective pipe joints, sinks and gulleys	9

Defective roofs	8
Houses dirty and in bad repair	8
Houses or rooms very damp	7
Houses or rooms re-papered, etc., after infectious disease	7
Stables, sheds, &c. near house	4
Animals, &c., kept ,, ,, ...	4
Defective guttering...	3
Dirty walls, &c., in shops	2
Cisterns to be cleaned out and other nuisances	9
	271
OTHER NUISANCES DEALT WITH	98
LETTERS, NOTICES, &c.—	
Number sent out	345
PERIODICAL INSPECTIONS OF—	
Workshops and Workplaces	14
Laundries	5
Bakehouses...	12
Slaughter Houses	5
Cowsheds	7
Dairies and Milkshops	11
Houses let in Lodgings, registered	11
HOUSE TO HOUSE INSPECTION—	
Houses Inspected	176
,, Re-inspected	60
INFECTIOUS CASES—	
Removed to Hospitals	153
Rooms, etc., Fumigated	164
Rooms, etc., Stripped, etc.	7

Food and Drugs Act.

NO. OF SAMPLES SENT TO PUBLIC ANALYST—	
Milk ... ... 15 } ...	30
Butter ... ... 15 }	
NO. OF VENDORS AGAINST WHOM PROCEEDINGS WERE TAKEN...	1
CONVICTIONS	1

Petroleum Act.

No. of PETROLEUM STORES VISITED	7
NO. OF LICENCES GRANTED	7

Canal Boat Acts.

NO. OF VISITS TO CANAL SIDE FOR INSPECTING	46
NO OF BOATS INSPECTED	100
NO. OF BOATS WITH INFRINGEMENTS	6

TABLE I.

Vital Statistics of Whole District during 1904 and previous Years.

SOUTHALL-NORWOOD.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 Year of Age.		At all Ages.						
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	5	7	8	9	10	11	12	13
1894.	7793	184	31·9	27	146·7	200	25·6	123	123	2	77	9·8
1895.	8851	188	28·1	26	139·5	252	28·4	159	159	7	93	10·5
1896.	9351	207	28·8	31	149 7	257	27·4	166	166	5	91	9·7
1897.	10217	254	32·1	28	110·2	304	29·7	198	198	16	106	10·3
1898.	10871	258	30·2	32	112·3	360	33·1	239	239	23	121	11·1
1899.	11811	325	34·8	51	156·1	364	30·7	228	228	13	136	11·4
1900.	13813	353	31·4	44	124·6	396	28·6	230	230	19	166	12·0
1901.	13314	360	34·3	65	180·5	383	28·7	215	215	3	168	12·6
1902.	15515	465	36·6	62	133·3	362	23·7	212	212	5	156	10·0
1903.	16667	476	34·4	64	134·4	398	23·8	247	247	18	169	10·4
Averages for years 1894-1903.	11820·3	307·0	32·2	43·0	138·7	327·6	27·9	201·7	201·7	11·1	128·3	10·7
1904.	18592	578	36·7	85	147·0	385	20·5	203	203	13	195	10·4

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water), 2,525.

At Census of 1901.

Total population at all ages 13,200

Number of inhabitd houses 1,920

Average number of persons per house ... 6·8

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.
London County Asylum, Norwood (Middlesex)	Hillingdon Union Workhouse Infirmary Middlesex County Asylum (Wandsworth)	The Sanatorium, Southall St. Mary's Hospital (Paddington, W.)

TABLE II.

Vital Statistics of Separate Localities in 1904 and Previous Years.

SOUTHALL-NORWOOD.

Names of Localities.	1.—Southall-Norwood.				2.—East Ward.				3.—West Ward.				4.—Hanwell Asylum.			
Year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	*b.*	*c.*	*d.*	*a.*	*b.*	*c.*	*d.*	*a.*	*b.*	*c.*	*d.*	*a.*	*b.*	*c.*	*d.*
1894	5,756	184	77	27	Statistics not available, as whole Districts has been taken together.								2,037	—	123	—
1895	6,684	188	93	26									2,167	—	159	—
1896	7,184	207	91	31									2,167	—	166	—
1897	7,913	254	106	28									2,304	—	198	—
1898	8,531	258	121	32									2,340	—	239	—
1899	9,311	325	136	51									2,500	—	228	—
1900	11,199	353	166	44									2,614	—	230	—
1901	10,479	360	168	65									2,835	—	215	—
1902	12,680	465	156	62									2,835	—	212	—
1903	13,832	476	169	64	6225	196	71	29	7607	280	98	35	2,835	—	247	—
Averages of Years 1894 to 1903.	9356 9	307·0	128·3	43 0	—	—	—	—	—	—	—	—	2465·4	—	201·7	—
1904	15,737	578	195	85	7025	289	98	43	8712	289	97	42	2,855	—	203	—

TABLE III.

Cases of Infectious Disease notified during the Year 1904.

SOUTHALL-NORWOOD.

Notifiable Disease.	Cases notified in Whole District.							Total Cases notified in each Locality.				No. of Cases removed to Hospital from each Locality.			
	At all Ages.	At Ages—Years.						1 West Ward.	2 East Ward.	3 London County Asylum.	4 St. Marylebone Schools.	1 West Ward.	2 East Ward.	3 London County Asylum.	4 St. Marylebone Schools.
		Under 1	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards								
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	17	—	4	11	1	1	—	8	9	—	—	8	9	—	—
Membranous croup	2	—	2	—	—	—	—	—	2	—	—	—	—	—	—
Erysipelas	22	—	—	3	2	16	1	7	8	6	1	—	—	—	—
Scarlet fever	156	2	49	99	6	—	—	102	43	—	11	93	41	—	11
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric fever	9	—	—	5	3	1	—	3	1	—	5	2	1	—	5
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	206	2	55	118	12	18	1	120	63	6	17	103	51	—	16

Causes of, and Ages at, Death during the Year 1904.

Causes of Death.	Deaths in or Belonging to whole District at Subjoined Ages.							Deaths in or Belonging to Localities (at all Ages).				Total Deaths in Public Institutions in the District.		
	All Ages.	Under 1	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	West.	East.	Workhouse.	London Hospital.	Hanwell Asylum	S. Marylebone Schools.	Sanatorium.
Measles	8	1	7	—	—	—	—	3	5	—	—	—	—	—
Scarlet Fever	3	—	1	2	—	—	—	2	1	—	—	—	—	3
Whooping-cough	6	2	4	—	—	—	—	3	3	—	—	—	—	—
Diphtheria and membranous croup	2	—	1	1	—	—	—	1	1	—	—	—	—	2
Epidemic Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	12	11	1	—	—	—	—	8	4	—	—	—	—	—
Enteritis	14	12	—	—	—	2	—	8	6	—	—	1	—	—
Puerperal fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	1	—	—	—	—	—	1	1	—	—	—	—	—	—
Other septic diseases	5	—	—	1	1	3	—	2	—	—	3	8	—	—
Phthisis	12	—	—	—	2	9	1	5	6	1	—	26	—	—
Other tubercular diseases	4	1	—	3	—	—	—	3	1	—	—	2	—	—
Cancer, malignant disease	4	—	—	—	—	3	1	1	3	—	—	7	—	—
Bronchitis	10	3	2	—	—	1	4	4	5	1	—	10	—	—
Pneumonia	22	9	5	1	—	6	1	7	15	—	—	11	—	—
Alcoholism, Cirrhosis of Liver	1	—	—	—	—	1	—	—	1	—	—	—	—	—
Venereal diseases	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Premature birth	20	20	—	—	—	—	—	11	7	2	—	—	—	—
Heart diseases	15	—	—	1	1	6	7	8	6	1	—	15	—	—
Accidents	4	—	2	—	—	1	—	3	1	—	—	—	—	—
Suicides	—	—	—	—	1	—	—	—	—	—	—	—	—	—
All other causes	52	26	4	2	1	5	14	20	27	4	1	120	—	—
All causes	195	85	27	11	6	37	29	90	92	9	4	203	--	5

NOTES.

(*a*) In this Table all deaths of "Residents" occurring in public institutions, whether within or without the district, are *included* with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner *excluded* from columns 2-8 and 9-15 of this Table.

(*b*) *See* notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" taken into account for the purposes of these Tables. The "Localities" are the same as those in Tables II. and III.

(*c*) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (*a*), entered in the last column of this Table. The total number in this column should equal the figures for the year in column 9, Table I.

(*d*) The total deaths in the several "Localities" in columns 9-15 of this Table should equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of this Table should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.

(*e*) Under the heading of "Diarrhœa" are included deaths certified as from diarrhœa, alone or in combination with some other cause of ill-defined nature; and also deaths certified as from

Epidemic enteritis;
Zymotic enteritis;
Epidemic diarrhœa. Summer diarrhœa;
Dysentery and dysenteric diarrhœa;
Choleraic diarrhœa, cholera, cholera nostras
(in the absence of Asiatic cholera).

Under the heading of "Enteritis" are included those certified as from Gastro-enteritis, Muco-enteritis and Gastric catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well-defined disease are included under the latter.

Under the headings of "Cancer" and "Puerperal fever" are included all registered deaths from causes comprised within these general terms.

In recording the facts under the various headings of Tables I., II., III. and IV., attention has been given to the notes on the Tables.

J. D. WINDLE,
Medical Officer of Health.

Date—January, 1905.