[Report of the Medical Officer of Health for Walthamstow].

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Walthamstow Urban District Council.

REPORT

BY

THE MEDICAL OFFICER OF HEALTH

ON THE

SANITARY CONDITIONS AND VITAL STATISTICS

FOR THE YEAR 1920.

Walthamstow:

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TO THE CHAIRMAN AND MEMBERS

OF THE

Walthamstow Urban District Council.

Ladies and Gentlemen,

I beg to present to you my Annual Report for 1920.

It is the twenty-third submitted by me and its formation is based on the Memorandum issued by the Ministry of Health in February last. Much of the general information again asked for by the Ministry was given in the Report for 1919, and with little variation is reproduced.

The first Report printed for the District was issued in 1889, and consisted of six pages of written matter and five made up of Tables of Deaths and Mortality rates.

That of the Inspector of Nuisances addressed to the Medical Officer of Health occupied three pages.

There were four earlier Annual Summaries, mainly Tables of Mortality and Sickness, on two sheets of foolscap.

In 1889 the population was estimated at 44,000; in 1920 the estimate is 132,912.

In 1898 I inherited a "Register for Infectious Diseases," the only official record then kept by the Medical Officer of Health.

In those days defective drains with their emanations, and similar nuisances, occupied the main activities of those employed in the work of Public Health. We have moved considerably from that position!

To-day, although the house and its surroundings play a large part in the general well-being of the community, a truer conception of Public Health and the means for its attainment and maintenance obtains, and we rightly devote the greatest attention to the individual personally and collectively.

In 1905 the first woman Health Visitor was appointed, and in 1909 Medical Inspection of School Children was undertaken.

There are now ten ladies fully occupied with the supervision of the health of our child-bearing women, our babies and our school children.

Were these three important elements of the community efficiently supervised, in doing so four times this number of ladies could find ample employment.

The social make-up of our people appears not to lend itself to voluntary work for a Public Authority, and financial and other difficulties have militated against the fruition of the scheme for increasing the Public Health Staff and for Maternity and Child Welfare work agreed to by the Council in 1919.

The Report for the year 1920 may be looked on as generally satisfactory.

A considerable number of deaths were attributed to Influenza, although at no period was the disease present in an epidemic form as in 1918.

The epidemic prevalence of Scarlet Fever in London and the Metropolitan Area, towards the end of the first half of the year, showed its influence in this District in September, and although a considerable number of our people failed with the disease only one death was attributed to it.

Subsequent to recovery I saw every person notified, and I am satisfied that the disease has left little permanent ill effects on any of the sufferers. To this extent the Public Health of the District suffered little in consequence.

An accurate estimation of the population, though necessary, is just now not possible with the material at my disposal, and the figures given by the Registrar-General, 132,912, can only be approximately correct.

Our civil population is, I venture to think, likely to be nearer 135,000 than 132,912. The latter figure will show a death-rate greater than what is true, but correct when compared with other Towns, whose populations are estimated by the Registrar-General on a like basis.

Our Birth-rate which steadily fell from 24·76 in 1913 to 17·2 in 1919, is now at the higher level, and our natural increase of population, *i.e.*, excess of births over deaths, is greater than in any year since 1910. Our lessened death-rate of children under one year of age accounts for this.

Though greater by 7·5 per 1,000 than in 1919, our birth-rate is less than that of the Country as a whole, and that of the 96 Great Towns, but the difference is not very marked.

The difference in the birth-rates of the constituent parts of the District are seen on page 20. Hoe Street holds an unenviable position; it has the lowest birth-rate and the highest Infantile Mortality rate. This is referred to later.

Our Death-rate was 9·7 per 1,000 compared with 12·4 for the Country as a whole and London; 12·5 for the Great Towns; and 11·3 for the 148 Smaller Towns. It is slightly less than that of 1919, which was one of the lowest on record. The total recorded deaths for the year were 20 more than in 1919. Fifteen of these were due to Congenital Debility and premature births, and the variations in number due to other causes of death, call for no comment. As usual, Heart Disease, Cancer, and Diseases of the Lungs account for nearly half the total deaths, but there is a noticeable change in the age period of the mortality from the first two diseases. Fewer have died in the age group 25 to 65, showing that degenerative changes leading to death have been somewhat postponed and a larger span of mid-life usefulness was enjoyed by our people.

The Zymotic Death-rate, or that resulting from deaths caused by Diphtheria, Erysipelas, Scarlatina, Typhoid Fever and Diarrhœa, Measles, and Whooping Cough, was ·45 compared with ·59 in 1919, ·80 in 1918; 1·58 in 1911 and 2·82 in 1901.

Deaths from all these diseases are theoretically preventable, but little credit can be taken for the low combined rate recorded, which is mainly due this year to absence of Measles in an epidemic form.

There was only one death from Typhoid and one from Scarlet Fever. The death-rate of both is neglible, that of the latter was one-sixth that of England and Wales and the Great Towns.

Our mortality from Diphtheria in 1920 was less than in 1919; less than that for the Country as a whole; a little more than half that of London, and similar to that prevailing in the 148 Smaller Towns.

Compared with our neighbours we had five deaths per 100 attacked, against Leyton's 7·7, and Tottenham's 7·2.

Our Infantile Mortality Rate was the lowest on record. It was 20 less per 1,000 than that of England and Wales and the 148 Smaller Towns, and 25 less than that of the 96 Great Towns.

The marked diminution in this rate, which has been steadily declining during recent years, is a matter for congratulation to the Council and an encouragement to the Child Welfare Workers.

It is now an accepted doctrine that a small Infantile Mortality rate connotes healthy babyhood, which is the forerunner of a virile race.

On page 21 will be seen that of the Districts around London, Hornsey and Ilford only show a smaller Infantile Mortality rate than here.

The low birth-rates of these Districts and the better economic conditions enjoyed by their peoples compared with ours, account largely for this.

These factors cannot be a full explanation, in view of the birth-rates and Infantile Mortality rates given on page 20 for the constituent parts of our own District. Judged by the Mortality rates as a whole, Walthamstow, from the view of health and longevity, can legitimately claim to be a desirable residential suburb of London.

The following Tabular Statement issued by the Registrar-General will serve to confirm the preceding remarks and to compare our Public Health status with that of the Country as a whole and the groups of Towns known as "Great" and "Smaller."

Birth-rate, Death-rate, and Analysis of Mortality during the Year 1920.

(Provisional figures. Provisional populations estimated to the middle of 1920 have been used for the purposes of this Table. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns.)

	Birth-rate per 1,000 Total Population.	Annual Death-rate per 1,000 Population.									Rate per 1,000 Births		Percentage of Total Deaths.			
		All Causes.	Enteric Fever.	Small-Pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.	Diarrhœa and Enteritis (under 2 years).	Total Deaths under 1 year.	Deaths in Public Institutions.	Certified Causes of Death.	Inquest Cases.	Uncertified Causes of Death.
England and Wales	25·4	12·4	0·01	0·00	0·19	0·04	0·11	0·15	0·28	0·48	8·3	80	24·3	92·2	6·6	1·2
96 Great Towns, including Lond. (Census Populations exceeding 50,000).	26·2	12·5	0·01	0·00	0·22	0·04	0·14	0·16	0·31	0·43	10·4	85	31·3	92·2	7·1	0·7
148 Smaller Towns (Census Populations 20,000—50,000).	24·9	11·3	0·02	0·00	0·19	0·03	0·10	0·14	0·27	0·38	7·8	80	16·5	93·2	5·3	1·5
London	26·5	12·4	0·01	0·00	0·22	0·05	0·17	0·22	0·30	0·47	9·5	75	46·8	91·2	8·6	0·2
Walthamstow	24·7	9·7	0·00	0·00	0·03	0·00	0·07	0·14	0·35	0·19	5·4	59·9	37·0	99·5	5·4	0·5

Comparing the Statement with that given for 1919, all our Mortality rates are less, and in our favour, when compared with the Country as a whole or any of the grouping of the Towns.

A larger number of our deaths has occurred in Public Institutions, as elsewhere, compared with 1919, and though the number of inquests was large, the number of uncertified deaths, which heretofore was nil, now shows some increase. Obviously the cause of every death should be investigated, if not certified by a Medical Practitioner.

Our Infant Mortality figure, there is no possible error in this, is extremely good as compared with those for the Country or the Towns.

Our general death-rate is in marked contrast with those given, and is most favourable. The so-called Zymotic or Infectious Diseases, capable of control and prevention, largely influenced this.

Although during 1920 we had an increase of 351 cases of Scarlet Fever compared with 1919, we had only one death from the disease.

From the returns of the Registrar-General our case death-rate for Scarlet Fever was ·1 per 100 attacked. Of the Districts mentioned on page 39, East Ham only had such a favourable rate, Leyton and Willesden had proportionately eleven times our death-rate, and Edmonton and Tottenham thirteen times.

Our case death-rate from Diphtheria (5·2) was likewise less than any of the other Districts, East Ham (3·7) and Croydon (4·5) excepted. All the others were over 7·0 except Willesden which was 6·1.

Our Infectious Sickness Rate, based on the proportion of cases notified to total population, was 8·4 per 1,000 compared with 6·4 in 1919. This is considerably greater than the average for the previous ten years and is accounted for by our increased incidence of Scarlet Fever. As already noted there was only one death from this disease.

In the estimating of this rate, the only diseases counted are those usually notified prior to 1914.

Up to that date, excluding Small Pox, the diseases for which Hospital provision was made here were Scarlet Fever and Diphtheria, as they were assumed to be of most importance, but within recent years Scarlet Fever, while capable of creating a public scare, has but a neglible mortality.

Whether the large amount of public money spent on the isolation and treatment of cases of this disease is justified, I cannot say, but that some adjustment of view in regard to it is necessary I feel quite sure.

During the first four months of the year we had an average of 23 cases a month, and during the next four, 40. Up to this point every case could be dealt with by isolation and treatment in Hospital, but

when the average number for the next three months was 103, our arrangements for dealing with the Disease on the usual lines was totally inadequate.

The main cause of the unusual bound in September was the school holidays and the consequent absence of intelligent supervision by the teachers of our school children.

This is no new experience here, and I have more than once referred to it.

I trust the record of work carried out, as given in the general body of the Report, will serve to show that the natural advantages enjoyed by the District from its proximity to Epping Forest are not lessened by the failure of any of your Staff to make the fullest use of their opportunities to serve your Authority and the Public.

The report headed School Medical Service, page 71, has been compiled by Dr. Harding, who with Dr. Hall is responsible mainly for the routine work of School Medical Inspections and that of the Clinics.

I beg to remain,

Ladies and Gentlemen,

Your obedient Servant,

J. J. CLARKE.

STATISTICAL AND OTHER INFORMATION.

	1920.	1919.
Total Area of District	As in 1919 ...	4343 acres.
Area of land upon which houses are erected...	„ ...	1442½ „
Population—1901 Census	95,131	
„ 1911 Census	124,580	
„ „ per acre	93	
„ 1920 Estimated (Registrar-General for Births) ...	132,912	133,008
„ „ Do. for Deaths) ...	132,771 ...	127,684
No. of separate occupiers, 1911 Census ...	26,399	
No. of persons per "occupation" ...	4·7	
No. of houses (including shops, inns, etc., inhabited 20,202, uninhabited 1,197) ...	21,397	
No. of flats (inhabited 2,673, empty 276)	2,945	

No. of unoccupied premises as given by the Overseers :—

	Shops.	Houses.	Tenements.	Total.
May, 1915 ...	137 ...	271 ...	78 ...	486
May, 1914 ...	128 ...	294 ...	125 ...	547

1916, 1917, 1918, 1919 and 1920 not enumerated.

Births registered within area	3,141 ...	2,301
„ „ without area	145 ...	83
Birth-rate per 1,000 of the population ...	24·7 ...	17·2
Deaths registered within area, excluding non-residents	813 ...	869
Deaths registered without area	479 ...	404
Death-rate	9·7 ...	9·9
Death-rate corrected for age and sex ...	10·3 ...	10·5
Deaths of Infants under 1 year of age ...	197 ...	160
Infantile Mortality Rate	59·9 ...	69·5
Zymotic Death-rate	0·45 ...	0·59
Infectious Sickness Rate	8·4 ...	6·4
Rateable Value	£505,182 ...	£499,750
„ „ 1901	£328,756	
General District Rate, 1920	8s. 2d. ...	5s. 10d.
„ „ „ 1901	3s. 7d.	
Total Poor Rate, 1920	13s. 10d. ...	8s. 6d.
„ „ 1901	4s. 10d.	
Education Rate, 1920	4s. 6½d. ...	2s. 6¾d.
„ „ 1901	1s. 9½d.	

WARDS.—*Acreage, Population, Density, 1914; Birth and Death Rates, 1920.*

WARDS.	Acreage.	Area actually built upon.	Number of Separate occupiers, Census, 1911.	Census Population, 1911.	Houses built, 1911-14.	Number of Separate Occupations, Mid-Year, 1914.	Mid-Year, 1914, Population.	Density of Area built upon, 1914.	Birth-Rate, 1920.	Death-Rate, 1920.	Height in feet of Ordnance Datum.
Cols. (1).	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
St. James Street ...	488	186	4905	25140	35	5078	26405	142	25·0	10·5	18 to 54
High Street	672	174	4402	20491	2	4604	21178	121	24·9	8·8	23 to 60
Hoe Street	359	317	5532	24221	22	5792	25396	80	20·0	10·5	52 to 145
Wood Street	515	238½	3590	17386	28	3761	18800	79	23·7	10·5	75 to 176
Hale End	1328	299	3443	16137	402	3989	18349	61	21·5	8·6	46 to 230
Higham Hill	981	228	4527	21205	523	5219	24007	105	25·0	8·2	25 to 80
Whole District ...	4343	1442½	26399	124580	1012	28443	134135	93	24·7	9·7	—

In column 3, the area is arrived at by excluding Reservoirs, Railways, Schools, Sewage Farm, Recreation Grounds, Cemetery, etc. The number of separate occupations is arrived at by adding to Columns 4 and 6 the proportionate increased number of houses now occupied as compared with 1911.

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

The Urban District of Walthamstow has an area of 4,343 acres, and lies between the River Lea on the west and Epping Forest on the east, extending from Leyton on its south to Chingford on the north.

The area built upon is approximately 1,422½ acres, and the land as yet undeveloped is 1,689 acres; the remainder is made up as follows, in acres:—

Schools 52½, Reservoirs 361, Railways 110, Allotments 58, Epping Forest 401, Marsh Land 100, Municipal Depôts 4½, Cemetery 12, Open Spaces 25, River Ching 25, London Playing Fields 38½, Xylonite Factory 41, London General Omnibus Works 9 and the Sewage Farm 238.

The District is divided into six Wards for administrative purposes; they vary in altitude from 18 feet above ordnance datum in the St. James Street Ward, to 230 feet in the Hale End Ward.

The subsoil is mainly gravel, the London clay showing itself in various parts of the surface, more particularly in the Wood Street and the Northern Wards.

There are two small streams within the District—the Ching and the Dagenham Brook, and the River Lea flows past the western boundary.

The Ching, a small brook, enters the District at Highams Park in the northern area, and winds its course through Hale End and Chapel End to the River Lea.

The Dagenham Brook, rising within the District, is the outlet for our drainage, and having received the effluent of the Sewage Farm, situated in the western or St. James Street Ward, winds its course through the neighbouring parish of Leyton and joins the River Lea at Temple Mills, near Stratford.

Neither stream, at any point, is used for domestic purposes, nor likely to be a source of pollution to potable waters.

The whole District has a duplicate system of sewers, and practically every house water-closet accommodation.

The sewage is received into precipitating tanks, treated with lime and alum, the solids removed, and the effluent subsequently passed over the Farm before finally passing out of the District.

In addition to the Sewage Farm, which is about 238 acres in extent, there are large filter beds of clinker for dealing with storm-water.

The character of the population is probably similar, but its age distribution has considerably altered as compared with 1911.

In that year the majority of our workpeople, as now, were engaged in the City, but since then large and increasing numbers of skilled and technical workers have migrated to the District and find employment in the factories that have recently sprung up, or were in existence but greatly enlarged during the war period.

The District is becoming a large manufacturing centre, but no offensive trades are carried on or other work that could be considered dangerous or injurious to the Health of those engaged.

In 1911, 1,614 persons were employed in the manufacture of Electrical Apparatus and in Cycle and Motor Vehicles; to-day we have in these and allied industries over 5,659 workers (Males 4,740, Females 919.)

The other principal industries employing large numbers of workers are :—

Mica and Celluloid Goods, 1,114 (Males 378, Females 736).

Tailoring, Blouse and Shirt making, 1,689 (Males 116, Females 1,573).

Brush making, 242 (Males 111, Females 131).

Rubber and Fibre Stopper making, 328 (Males 197, Females 131).

Scientific Instruments and Photographic Appliances, 1,367 (Males 709, Females 658).

Laundries and Dyers employ 125; Printers, 99; Furriers, 44; Pattern Card makers, 159; Pickle making, 136; and Brewery and Mineral Waters, 66. There are small numbers engaged in Piano making, Leather, Cork and Fancy Goods.

Within the last few years the manufacture of metal toys and tools has been started and employs about 80 persons (Males 53, Females 25).

In 1911, over 3,000 men and 750 women were employed as commercial clerks (in the City presumably); 5,114 in "conveyance of men, goods and messages"; 4,902 in the building and allied trades; 1,140 as painters or decorators; 1,263 as cabinet makers and upholsterers, and 3,000 in allied work thereto.

According to the last Census, less than 10 per cent. of the householders employed a domestic servant, and if a census were now taken probably a smaller percentage of this class would be registered.

In the interval, 1914-20, the age distribution of our people under 15 years has completely altered.

From survey made by the Education Committee in 1919 it was found that our child population under 5 years of age was 9,782

compared with 15,488 in Census year; that of the age group 5–10 years 13,704 against 29,999; and that between 10 and 15 years 14,208 compared with 14,377.

Of the six Wards into which the District is divided, the housing and general conditions favourable to health are most general in Hoe Street and Hale End Wards. The 1,680 acres of undeveloped land lie in Higham Hill and Hale End Wards, or the northern portion of the District.

All the other Wards are practically built over, and contain a good deal of poorly built and badly kept property. The houses—more particularly near St. James Street and Wood Street Railway Stations—are largely occupied by persons of the casual labour type, who possess no house pride and are satisfied to live in mean streets, in houses made squalid by the occupants and by want of attention on the part of the landlords.

HOSPITALS AND POOR-LAW RELIEF.

CHILDREN'S AND GENERAL HOSPITAL.

This institution is situated in the Hoe Street Ward, and contains fifty beds. It provides for the free admission and treatment of persons residing in Wanstead and Leyton as well as in Walthamstow, that is, for a population of over 270,000.

The Public Health Authority subsidises two beds for the treatment of Typhoid patients, and these have sufficed so far. During the year only two patients were admitted and these were subsequently found to be suffering from other diseases.

There is no resident Medical Officer, and the Staff—an honorary one—consists entirely of busy general practitioners resident in the areas served.

There is attached to the Hospital an Out-patient Department, which is open for a few hours daily. This building is modern and was specially erected for the purpose.

Of the 573 indoor patients treated during the year, the Hospital Report does not disclose how many of these were Walthamstow residents, but presumably most of the 4,655 outdoor patients were.

The attendances made by the out-patients—Medical, 1,759; Surgical, 2,896—averaged less than 4 each, and the number of patients daily attending was 15.

The number of patients indoor and outdoor were greater than in 1919.

"Judged by the number of out-patients the Hospital is not much resorted to by the people of Walthamstow, nor can the Institution claim to serve adequately the needs of this District.

There is a considerable amount of good surgical and medical work carried on within the Hospital, but the method of selecting the Staff, the want of an adequate Staff to the Out-patient Department, and the absence of a resident Medical Officer, all militate against its usefulness, and are the cause of its failure to inspire that confidence in the public which is so readily given to the West Ham, Tottenham and London General Hospitals.

It fails to be the centre which focuses all the best medical and surgical work of the District.

The Governing Body are gentlemen of good standing, who take a great interest in the Hospital, and run it on economical lines and jealously guard its voluntary character, but the march of modern ideas demands a readjustment.

Combination of the Public Health Authority with the Governors and supporters of the Hospital might make the place a real centre for carrying out the best work in medicine and surgery, combined with the work now undertaken by the Council for Maternity and Child Welfare, and by the Education Authority on behalf of children up to fourteen years of age.

At present there exists no co-ordination in the work carried out at the Hospital and that of the Dispensary, the Child Welfare Centres nor the School Clinics." (Annual Report, 1919).

WALTHAMSTOW DISPENSARY.

This Institution is situated in Hoe Street, in the centre of the District, and, in addition to the usual medical work, the Staff now undertake, on behalf of the subscribers and Education Committee, the surgical treatment of Enlarged Tonsils and Adenoids, and that of Ringworm by X-rays. School children suffering from Discharging Ears are also treated at the Dispensary.

All the operative work undertaken for the Education Committee has been carried out satisfactorily.

One member of the Staff attends for a few hours daily, and the Dispensary is very popular with the mothers of our school children, and has a good reputation among the public.

There are no beds attached to the Institution, and the arrangement of the premises with its accommodation for Doctors, Patients and Nurses is poor and inadequate and militates against its usefulness.

According to the 1920 Annual Report, 1,318 patients, making 4,039 attendances, were treated during the year, an increase of 186 patients and 576 attendances as compared with 1919.

All patients need to have a letter of recommendation, and each pays fourpence per week, to cover the cost of physic, while under treatment.

There is no working agreement, as far as I know, between the Dispensary and the Hospital.

THE ESSEX COTTAGE NURSING ASSOCIATION.

According to the last printed report the staff consists of a Sister-in-Charge, who is a qualified and experienced nurse-midwife, holding a certificate for massage and electrical treatment, assisted by five others who also hold certificates for nursing and midwifery.

The work carried out is mainly the attendance of poor women during confinement and the lying-in period, and nursing the sick poor at their homes.

Under the heading of general nursing 19,108 visits were made in 1919-20 to patients, averaging 74 a month.

Lying-in women, numbering 377, were attended by the Midwives, and of these 89 had also the services of a doctor.

In addition to this work, a number of soldiers and others had massage treatment, necessitating 364 home visits and over 6,890 attendances at the Association's home.

The work carried out by the Nurses is invariably well done and all the rules of the Midwives' Board are strictly observed.

The Association has been carrying on its work here for the past 16 years, and its inception was mainly the outcome of local effort.

"As far as I can judge, the parent Association looks upon the Branch as a training centre for Midwives required for the Country Districts in Essex, but there should be no difficulty in coming to some arrangement by which the Staff and the premises could be taken over by the Public Health Authority, and made the nucleus for the midwifery and other needed nursing work of the District. In this way in conjunction with the Public Health and School Staff, provision could be made for home nursing in time of epidemics, such as Influenza and Measles."

POOR LAW RELIEF.

I am indebted to the Clerk to the West Ham Guardians for the following information :—

The average number of Walthamstow residents during the year in the Institutions named were—

Central Home	178
Whipps Cross Hospital	104
Sick Homes	78
Children Homes	85
Margate Convalescent Home	10
Asylums	257

There were no available figures with regard to those in receipt of out-door relief, nor was the cost of all relief in respect of inhabitants available.

VITAL STATISTICS.

POPULATION.

In 1911 the enumerated population was 124,580. Since that time the natural increase or excess of births over deaths was 14,143. These figures added would give a present day population of 138,723, or 6,000 in excess of the Registrar-General's estimate.

The Registrar-General gives for 1920 two estimates, one for birth rate—132,912, including in this "all the elements of the population contributing to the birth and marriage rates," and one for death-rates—132,771, which excludes all non-civilian males, whether serving at home or abroad.

Were the sectional enumerations during the war period and subsequently for Military, Parliamentary, and Educational purposes made in conjunction with the Public Health Authority, they might have been of great value, but they were undertaken for limited purposes only, which serve no Public Health aims, and we must await the returns of the Census about to be taken for accurate figures; and in the meantime, the Birth, Death, and other rates for the District as a whole and for the Wards must be accepted as provisional.

Without accurate data, any conclusions drawn may be very erroneous.

Vital Statistics of Whole District during 1920 and previous Years.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.						Under 1 year of age.		At all ages.	
			Number.	Rate.	Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Number.	Rate per 1000 Nett Births.	Number.	Rate.
1911	125334	3107	3182	25·36	1018	8·1	33	471	340	108·30	1456	11·70
1912	128480	3104	3150	24·40	876	6·8	22	413	243	77·10	1267	9·80
1913	131636	3210	3261	24·77	943	7·1	17	408	256	78·47	1334	10·13
1914	131980	3072	3134	23·74	946	7·1	21	503	243	77·50	1428	10·70
1915	131718	2826	2867	21·70	1091	8·2	20	502	267	93·10	1573	11·90
1916	131718	2779	2854	20·50	925	7·2	39	490	196	69·30	1376	10·70
1917	126140	2167	2228	16·70	867	7·2	29	492	152	70·00	1330	11·10
1918	119307	1980	2034	15·90	1299	10·8	31	524	166	81·10	1792	1·57
1919	127684	2218	2301	17·20	869	6·9	35	439	160	69·50	1273	9·90
1920	132771	3142	3286	24·70	834	6·2	20	479	198	59·90	1293	9·70

Area of District in acres, 4,343
(Exclusive of area covered by water) 3,806.
Total population at all ages 124,580. } Census 1911

Number of inhabited houses 20,683.
Do. do. separate flats 2,673.
Do. separate occupiers 26,399.
Average number of persons per house 4·7.

132,912 population assumed for determining Birth-rate
132,771 „ „ „ Death-rate } Registrar-General's instructions. (1920).

BIRTHS AND BIRTH-RATES.

The number of births registered within the District during the year was 3,141—males, 1,593 ; females, 1,548.

The total births as given by the Registrar-General were 3,286, showing that 145 were born and registered without the area.

Of the total births, 99 were illegitimate as compared with 86 in 1919, and 70 in 1914. In other words 2·2 per cent. of the children born in 1914 were illegitimate compared with 3·7 in 1919, and 3 per cent. in 1920, a proportion much less than one might expect, and no indication of the depravity we hear so much of.

The birth-rate for the year was 24·7 per 1,000 of the civil population, estimated by the Registrar-General at 132,912.

This rate is an improvement on the two previous years, but less by ·7 than that of the Country as a whole and by 1·5 than that of the 96 Great Towns.

The 148 Smaller Towns had only ·2 greater rate than Walthamstow.

The following table (page 20) shows the births distributed in Wards, with birth-rates for 1919 and 1920, on populations estimated in 1914.

The total populations of the Wards for 1914 is in excess of that assumed for the District by the Registrar-General for 1920, but there is no reason to assume that any great changes have occurred in the Wards. At any rate, the figures, though not accurate, are the same as used in previous reports, and to this extent will serve for conclusions to be drawn as to the relative improvement or otherwise noticed from year to year in the constituent parts of the area.

Births distributed in Wards—with populations (1914), and Birth-rates for 1919 and 1920.

	St. James Street.		High Street.		Hoe Street.		Wood Street.		Hale End.		Higham Hill.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1st quarter	92	104	68	84	69	69	70	73	68	44	103	83	470	457
2nd quarter	82	82	65	58	67	63	63	51	47	43	81	57	405	354
3rd quarter	82	88	64	83	71	71	55	48	55	52	73	78	400	420
4th quarter	58	69	64	48	50	49	45	42	43	45	58	64	318	317
	314	343	261	273	257	252	233	214	213	184	315	282	1593	1548
Totals	657		534		509		447		397		597		3141	
Number of Births as given by R.G.	—		—		—		—		—		—		1669	1617
													3286	
Population (assumed, 1914) ...	26400		21500		25400		18800		18400		24000		134500	
Birth-rate 1920	25·0		24·9		20·0		23·7		21·5		25·0		24·7	
Birth-rate 1919	17·2		19·1		15·4		15·0		15·6		16·2		17·2	
Infantile Mortality Rate 1919 ...	92·3		53·8		63·6		88·6		55·5		77·1		69·5	
Infantile Mortality Rate 1920 ...	62·4		67·4		86·4		73·8		35·3		47·0		59·9	

The birth-rate for the various Wards for Census years 1901 and 1911, and for 1919 and 1920 were as follows :—

	St. James Street.	High Street.	Hoe Street.	Wood Street.	Hale End.	Higham Hill.	Whole District.
1901	33·0	35·7	28·0	28·4	39·8		33·1
1911	26·4	26·9	20·0	23·5	27·0		25·3
1919	17·2	19·1	15·0	15·0	15·6	16·2	17·2
1920	**25·0**	**24·9**	**20·0**	**23·7**	**21·5**	**25·0**	**24·7**

The decline in the birth-rate for the Whole District in 1920 was a little over 25 per cent. as compared with 1901, but slightly less than in 1911, and compared with 1919 there was an improvement of 23 per cent.

DEATHS AND DEATH-RATES.

WHOLE DISTRICT.

During the year 834 deaths—males, 429; females, 405—were registered within the District. Twenty of these—males, 7; females, 13—were of non-residents and are now excluded.

The deaths of those dying without the District, namely 179 in West Ham Infirmary, 70 in the Workhouse, 53 in Forest Gate Sick Homes, 24 in Lunatic Asylums, 14 in the London Hospital, and 139 elsewhere, are now added, making a total of 1,293—males, 673; females, 620.

The total deaths given by the Registrar-General for the year of 52 weeks ending on January 1st, 1921, is 1,305, or 12 more than I account for. This difference makes no appreciable alteration in our death-rate given as 9·7 per 1,000.

All deaths registered within the District, except six, were certified by the Coroner or a registered Medical Practitioner, and the death-rate is reckoned on a population of 132,771, that is, by exclusion of all non-civilian males whether serving at home or abroad.

The death-rate for England and Wales was 12·4; that of the 96 Great Towns 12·5; that of the 148 Smaller Towns 11·3, and for London 12·4.

The birth, death, and infantile mortality rates of certain districts of the outer zone of London compared with Walthamstow, are as follows:—

District.	Population.	Birth-rate.	Death-rate.	Deaths of Children under one year to 1,000 Births.
West Ham ...	299,440	33·0	12·7	72
Willesden ...	167,328	25·2	9·8	65
Tottenham ...	146,970	25·5	9·7	64
Hornsey ...	98,107	16·1	9·1	57
Leyton ...	128,832	22·8	9·9	69
Croydon ...	191,580	23·0	10·8	62
East Ham ...	150,207	23·0	9·6	65
Ilford	82,693	19·9	8·9	56
Edmonton ...	73,529	27·9	9·5	62
Walthamstow	**132,771**	**23·9**	**9·6**	**62**

The preceeding figures are those given by the Registrar-General in his Annual Summary. The figure 62 as the Walthamstow Infantile Mortality rate is based on 199 deaths in children under one year. The total births were given as 3,286, and if these figures are correct our Infantile Mortality rate would be 60·5 and not 62. From the data at my disposal the correct figure is 59·9.

ACCORDING TO WARDS.

The number of deaths and their distribution into Wards is as ascertained, but the populations assigned to the Wards are those of 1914:—

	St. James Street.	High Street.	Hoe Street.	Wood Street.	Hale End.	Higham Hill.
Population	26,400	21,500	25,400	18,800	18,400	24,000
Deaths	277	191	268	199	160	198
Death-rate (1920) ...	10·50	8·8	10·5	10·50	8·6	8·2
„ (1914) ...	12·30	11·1	11·0	11·40	9·2	8·2
„ (1901) ...	15·13	12·8	11·5	12·05	15·27	

The causes of death for the Whole District and for the Wards are given in the Table following page 22.

The highest death-rates are those in the St. James Street, Hoe Street and Wood Street Wards, and the lowest that in Higham Hill. The mortality figures are an improvement on those of the pre-war period, those of St. James Street and High Street Wards being very marked.

Taking the death-rates as a standard, the inhabitants of the St. James Street and Wood Street Wards have greater prospects of longevity than the residents of Rural England.

Higham Hill and Hale End Wards are largely semi-rural and on rising ground, and this counts for a good deal, whereas the St. James Street area in the main is only about 20 feet above ordnance datum and is practically built over.

Added to this a very large number of its people are migrants from the poorer London areas and content to live in tenements or mean houses.

A large proportion are occupied in casual or poor paid labour or employed in the various London markets or docks, places which do not tend to habits of sobriety or thrift. Added to this, there is in this Ward a larger proportion than in the others of "first comers" who have grown old and can no longer earn their own living. This may account for the number whose deaths are attributed to Old Age and Cancer.

The inhabitants of Hoe Street Ward, economically, are perhaps the most favoured in the District, yet the death-rate of the Ward is equal to that of St. James Street and 22 per cent. greater than Higham Hill.

One associates longevity with favourable social conditions and deaths from Old Age, Cancer, and Diseases of the Heart and Blood Vessels are the main factors, as one might expect, in the mortality of this Ward.

Causes of and Ages at Death during the year 1920.

No.	Causes of Death.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the district. All Ages	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.	Wards. St. James Street	High Street	Hoe Street	Wood Street	Hale End.	Higham Hill.
	1	2	3	4	5	6	7	8	9	10	11						
No.	All causes { Certified	1287	196	27	24	55	82	175	333	395	14						
	All causes { Uncertified	6	2	—	—	1	—	1	2	—	—						
1	Enteric Fever	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
2	Small-Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	Measles	5	—	4	1	—	—	—	—	—	—	—	1	—	2	1	1
4	Scarlet Fever	1	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
5	Whooping Cough	10	5	3	—	2	—	—	—	—	—	—	—	—	6	2	2
6	Diphtheria and Croup	19	—	2	5	11	1	—	—	—	—	5	2	2	6	1	3
7	Influenza	47	—	—	1	1	6	14	16	9	—	13	5	8	11	2	8
8	Erysipelas	4	—	—	—	—	1	—	2	1	—	—	—	—	1	3	—
9	Phthisis (Pulmonary Tuberculosis) ...	102	1	1	2	5	21	40	28	4	2	23	18	16	10	11	24
10	Tuberculous Meningitis	12	1	1	4	2	3	1	—	—	1	4	1	3	1	1	2
11	Other Tuberculous Diseases	13	2	—	—	2	—	5	4	—	—	3	4	3	2	—	1
12	Cancer, malignant disease	125	—	—	—	1	—	9	68	47	1	28	17	26	12	20	22
13	Rheumatic Fever	10	—	—	—	3	1	4	2	—	—	2	1	3	2	1	1
14	Meningitis	4	—	1	—	2	—	—	1	—	—	2	—	—	—	1	1
14a	Cerebro-spinal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Organic Heart Disease...	122	—	1	—	5	11	15	41	49	—	25	21	30	12	13	21
16	Bronchitis	128	25	2	1	2	—	5	36	57	—	25	24	28	16	17	18
17	Pneumonia (all forms)	109	20	8	4	4	9	21	25	18	1	23	18	20	17	13	18
18	Other Diseases of Respiratory Organs ...	12	—	—	2	1	—	—	7	2	—	—	2	2	3	3	2
19	Diarrhœa and Enteritis	24	18	3	—	—	1	—	2	—	1	5	8	2	5	1	3
20	Appendicitis and Typhlitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	Cirrhosis of Liver	1	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
21a	Alcoholism	3	—	—	—	—	—	2	1	—	—	—	1	1	—	1	—
22	Nephritis and Bright's Disease	34	—	—	—	—	2	7	17	8	1	6	1	5	6	10	6
23	Puerperal Fever...	4	—	—	—	—	—	4	—	—	—	1	—	—	2	1	—
24	Other Accidents and Diseases of Pregnancy and Parturition	7	—	—	—	—	1	6	—	—	—	2	—	4	—	—	1
25	Congenital Debility and Malformation, including Premature Birth	88	88	—	—	—	—	—	—	—	—	16	16	25	14	6	11
26	Violent Deaths, excluding Suicide	20	—	—	—	2	5	5	2	6	3	7	—	5	3	3	2
27	Suicide	14	—	—	—	—	1	5	6	2	1	1	2	2	2	5	2
	Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tetanus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Syphilis	5	4	—	—	—	—	1	—	—	—	1	—	—	1	—	3
	Old Age	107	—	—	—	—	—	—	—	107	—	31	12	23	17	11	13
	Overlaying	2	2	—	—	—	—	—	—	—	—	—	1	—	—	—	1
	Chicken Pox—Toxæmia	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
28	Other Defined Diseases	257	30	1	4	13	18	32	76	83	3	53	32	59	48	33	32
29	Diseases ill-defined or unknown	2	1	—	—	—	—	—	—	1	—	—	2	—	—	—	—
	Totals	1293	198	27	24	56	82	176	335	395	14	277	191	268	199	160	198

Another factor in the higher death-rate in Hoe Street, referred to later, is the large number of its children who died in their first year of life.

INQUESTS.

During the year 96 inquests were held in the District concerning the deaths of residents.

The ages at death and the causes assigned were as follows :—

Under 1 yr.	2-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	65 yrs. and upwards.
15	—	6	10	19	20	26

Under One Year.—Prematurity, Malformation and failure to inflate Lungs, 6 ; Want of Attention at Birth, 3 ; Suffocation while in bed with parents, 2 ; Convulsions, 1 ; Intussusception of Bowel, 1 ; Malnutrition, 1 ; Syncope from Chloroform Anæsthesia, 1.

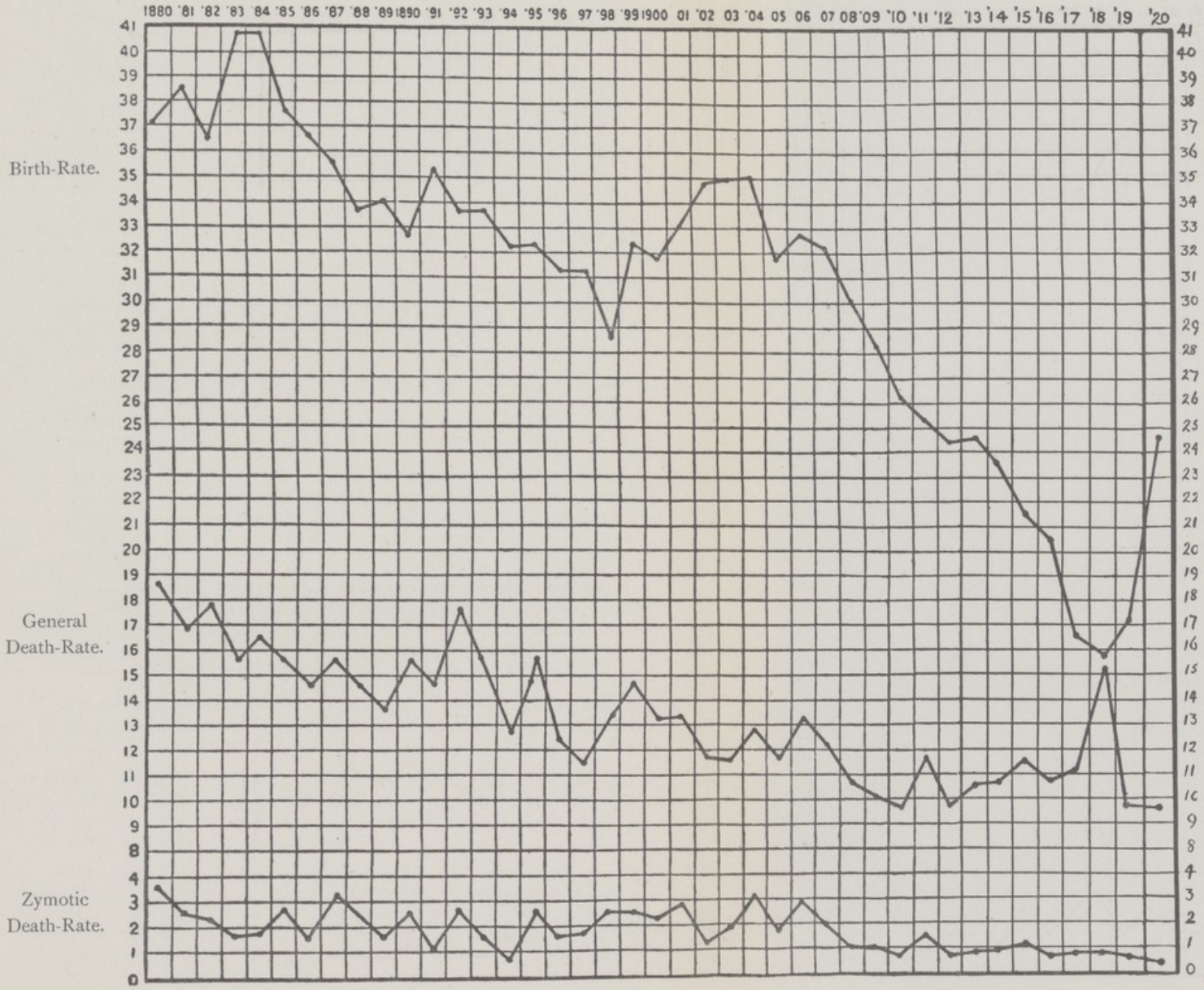
Over One Year.—Valvular Disease and Dilatation of Heart, 12 ; Fatty Heart, 4 ; Rupture of Heart, 2 ; Fibrous Degeneration, 1 ; Ulcerative Endocarditis, 1 ; Atheroma and Rupture of Arteries, 4 ; Cerebral Hæmorrhage, 5; Tuberculosis, 2 ; Diphtheria, 1; Senile Decay, 3; Suffocation due to Epilepsy, 2 ; Violent Death, due to accident, 15 ; Suicides by Gas Inhalation, 5 ; by Belladona and Lysol, 2 ; other means, 8 ; Bronchitis and Pneumonia, 4 ; Meningitis Traumatic, 1 ; Alcohol Poisoning and Injury, 1 ; Syncope due to Hæmorrhage, 1 ; Cerebral Anæmia, 1 ; Accidental Drowning, 1 ; Septic Pneumonia following induced abortion, 2 ; and following Operation, 2 ; Septic Congestion of Lungs, 2 ; Syncope due to Syphilis, 1 ; Septic Poisoning from retained Placenta, 1 ; Apoplexy from Brights Disease, 1.

The following table (page 24) gives the number of births and deaths, their rates, the Zymotic Death-rate, Infantile Mortality-rate, and natural increase of population for the past 30 years, and the average in five-yearly periods. The rates for 1920 are based on similar data to preceding years :—

Zymotic Death-rate, Infantile Mortality-rate, etc.

Year.	Births.	Deaths.	B. Rate.	D. Rate.	Zymotic D. R.	Infantile Mortality Rate.	Natural Increase of Population.
1891	1756	694	37·3	14·7	1·9	120·0	1062
1892	1717	915	34·75	18·0	3·9	145·6	802
1893	1809	809	34·78	15·55	2·43	133·2	1000
1894	1813	717	32·0	12·6	1·8	129·6	1096
1895	2021	965	33·2	15·8	3·5	153·3	1056
Average for 5 years. 1891-95	**1823**	**820**	**34·4**	**15·33**	**2·7**	**136·3**	**1003**
1896	2101	817	32·3	12·5	2·4	127·5	1284
1897	2246	832	32·08	11·88	2·8	132·0	1414
1898	2294	1034	29·8	13·4	3·67	169·5	1260
1899	2835	1282	34·14	15·44	2·94	170·0	1553
1900	3037	1254	33·37	13·78	2·8	158·7	1783
Average for 5 years 1896-00	**2502**	**1043**	**32·33**	**13·4**	**2·92**	**151·5**	**1458**
1901	3210	1296	33·1	13·35	2·82	147·6	1914
1902	3426	1154	34·82	11·73	1·3	115·0	2272
1903	3535	1178	34·97	11·65	1·9	113·7	2357
1904	3649	1330	35·14	12·81	3·1	135·9	2319
1905	3389	1249	31·76	11·71	1·8	104·4	2140
Average for 5 years 1901-05	**3341**	**1241**	**33·94**	**12·25**	**2·18**	**123·3**	**2200**
1906	3594	1447	32·79	13·20	2·9	129·7	2147
1907	3629	1376	32·23	12·22	2·0	104·7	2253
1908	3482	1258	30·10	10·87	1·0	100·8	2224
1909	3369	1205	28·35	10·14	1·0	83·4	2164
1910	3197	1186	26·18	9·71	0·8	88·5	2011
Average for 5 years. 1906-10.	**3454**	**1294**	**29·93**	**11·22**	**1·5**	**101·4**	**2159**
1911	3182	1456	25·36	11·70	1·58	108·4	1726
1912	3150	1267	24·40	9·80	0·87	78·9	1883
1913	3261	1334	24·76	10·13	0·84	79·5	1926
1914	3134	1428	23·24	10·50	0·98	77·5	1706
1915	2826	1573	21·7	11·9	1·06	93·1	1253
Average for 5 years. 1911-15.	**3110**	**1411**	**23·89**	**10·8**	**1·06**	**87·4**	**1698**
1916	2854	1376	20·5	10·7	0·72	69·3	1478
1917	2228	1330	16·7	11·1	0·75	70·0	898
1918	2034	1792	15·9	15·7	0·79	81·1	252
1919	2215	1273	17·2	9·9	0·61	69·5	1028
1920	3286	1293	24·7	9·7	0·45	59·9	1993
Average for 5 years. 1916-20.	**2523**	**1413**	**19·0**	**11·4**	**0·66**	**69·9**	**1130**

Chart showing the Birth-, Death- and Zymotic Death-Rates for the years 1880 to 1920.



INFANTILE MORTALITY.

During the year 198 deaths of children under 1 year of age were registered as against 160 in 1919, 166 in 1918, 152 in 1917, 196 in 1916, 267 in 1915, 243 in 1914, 256 in 1913, 243 in 1912 and 340 in 1911.

The rate, based on infant deaths, or the proportion which deaths under one year bears to 1,000 births, in 1920 was 59·9 compared with 69·5 in 1919, 81·1 in 1918, and an average of 87·4; 101·4; 123·3 and 151·5 for the five-yearly periods from 1896 to 1915.

Previous to 1901, when the birth-rate was 33 or over, the infant death-rate was 145; between 1901 and 1910 the birth-rate fell from 34 to 30, and the death-rate declined to 101.

Since 1910 to 1918 the birth-rate has declined steadily, with a corresponding decrease in deaths. In 1919 the birth-rate increased considerably over that of 1918, and we had the smallest Infantile Mortality rate then on record.

In 1920 the birth-rate was 7·5 per 1,000 greater than in 1919, and the Infantile Mortality rate the lowest on record. We had thus an increased birth-rate and a proportionately decreased mortality which we have not experienced heretofore.

And this is all to the good, for it is well recognised that conditions favourable to child-life in the first year give a chance of living to the weak, render the strong more vigorous and healthy, and less prone to fall victims later to the complaints which seem inseparable from growing children.

It may be assumed that the work carried out in recent years by the Child Welfare Centres and by the Health Visitors has contributed largely to the recorded lessened mortality, and we shall be directly able to fully appreciate the true value of this work when medical inspection of the children born in 1914 onwards takes place at the Schools.

If a real improvement has been effected, the results should be shown under the headings of Height, Weight, Nutrition, the Presence of Good Teeth, and the Absence of General Defects.

From the Infant Mortality Table following page 26, it will be seen that of the 198 deaths under 1 year of age, 63, or one-third of the total, died within the first week, and 105, or more than half the deaths, occurred within the first year of life.

How many of the children might be saved under ideal conditions it is difficult to estimate. Of the 63, 52 had no chance of survival after birth, as their deaths were due to ante-natal conditions, and though it is quite easy to assume what are the best conditions under which pregnant women should live, it does not follow that women living under such will bear viable children.

This is the experience of every medical man.

There are some more subtle influences at work than good food—fresh air, and absence of fatigue, overwork and worry.

Under the headings of Injury at Birth, Atelectasis, Prematurity and Debility, 88 children died within the first year of life, the majority of these within the first three months.

It is a strange contrast that of 509 children born in Hoe Street Ward, 27 of them failed to live as compared with 15 of the 657 born in St. James Street Ward. In Hale End, on the contrary, only 3 children in every 200 born failed to live as compared with 10 in Hoe Street and less than 4 in Higham Hill.

The very large number of premature births in the Hoe Street as compared with the other Wards is very noticeable.

The Table on page 20 shows that the birth-rate in this Ward is only 20 as compared with 25 in St. James Street, and the inference may be drawn that limitation of family is practised among the well-to-do rather than by the poor.

The tendency has been noticed for years. It is not good for the race and leads to its deterioration.

Its explanation is, I think, largely the outcome of selfishness, and the unwillingness of the present-day women to accept the worries and drudgeries inseparable from large families.

SENILE MORTALITY.

Of the total deaths recorded in the District, 395, or 30 per cent. of them, were of persons aged 65 and upwards, compared with a previous average of 24.

Of the 395 seniles, 118 were over 75 years of age, 20 over 85, and nine over 90 at the time of death.

A much larger number of residents reached extreme old age in Hoe Street and Hale End Wards compared with the others; St. James Street and High Street had fewest.

Apart from Old Age, the chief causes of death in the latest stages of life were Diseases of the Respiratory System, Heart Disease and Cancer.

The figures relating to the Wards were as follows :—

In St. James St. Ward, 13 were 75 yrs. or over ; of these, 4 were 85 yrs. or over.

„ High Street	„	11	„	„	„	„	3	„	„	„
„ Hoe Street	„	37	„	„	„	„	10	„	„	„
„ Wood Street	„	20	„	„	„	„	3	„	„	„
„ Hale End	„	22	„	„	„	„	4	„	„	„
„ Higham Hill	„	15	„	„	„	„	5	„	„	„

INFANT MORTALITY.—SUMMARY, 1920.

Nett Deaths from stated causes at various Ages under 1 year of age.

Cause of Death.	Under 1 Week	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Mths.	3 Months and under 6 Mths.	6 Months and under 9 Mths.	9 Months and under 12 Mths.	Total Deaths under One Year.	Wards. St. James Street.	High Street.	Hoe Street.	Wood Street.	Hale End.	Higham Hill.
All Causes { Certified	63	18	14	10	105	38	28	12	15	198						
All Causes { Uncertified	—	—	—	—	—	—	—	—	—	—						
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Small-Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken-Pox	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	1	1	2	1	5	—	—	—	3	1	1
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1
Abdominal Tuberculosis (*b*)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phthisis	—	—	—	—	—	—	—	1	1	2	—	—	—	1	—	1
Meningitis *(not Tuberculous)*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convulsions	4	3	1	1	9	3	1	—	1	14	3	3	3	1	2	2
Laryngitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	1	—	5	3	9	5	8	2	1	25	8	3	8	1	2	3
Pneumonia (all forms)	1	—	—	1	2	7	3	4	6	22	5	5	3	4	2	3
Diarrhœa	—	—	—	—	—	—	1	—	—	1	—	—	—	—	1	—
Enteritis	1	—	1	—	2	2	3	1	2	10	3	3	2	2	—	—
Gastritis	—	—	—	—	—	4	1	—	—	5	1	3	—	1	—	—
Syphilis	—	1	—	—	1	2	1	—	—	4	1	—	—	1	—	2
Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inattention at Birth, wilful neglect	3	—	—	—	3	—	—	—	—	3	—	1	—	2	—	—
Suffocation, overlying	1	—	—	—	1	1	—	—	—	2	—	1	—	—	—	1
Injury at Birth	4	—	—	—	4	—	—	—	—	4	—	1	2	1	—	—
Atelectasis	5	3	—	—	8	—	—	—	—	8	2	1	1	1	—	3
Congenital Malformations	4	2	—	—	6	1	2	—	1	10	—	2	2	2	2	2
Premature Birth	28	3	3	1	35	—	—	—	—	35	4	5	15	6	1	4
Atrophy, Debility and Marasmus	11	—	2	3	16	11	4	—	—	31	9	5	7	5	3	2
Other Causes	—	6	2	1	9	1	3	1	1	15	5	3	2	2	—	3
	63	18	14	10	105	38	28	12	15	198	41	36	46	33	14	28

Nett Births in the year { legitimate, 3,187. / illegitimate, 99.

Nett Deaths in the year of { legitimate infants, 172. / illegitimate infants, 26

ZYMOTIC MORTALITY.

Under this heading are the deaths from the "Seven Principal Epidemic Diseases," namely, Small-Pox, Erysipelas, Measles, Whooping Cough, Scarlet Fever, Diphtheria and Diarrhœa.

The rate, based on the total deaths, is ·45 per 1,000 of the population, as compared with ·59 in 1919, ·80 in 1918, ·75 in 1917, ·71 in 1916, 1·1 in 1915, ·98 in 1914, 1·58 in 1911, and 2·82 in 1901.

A considerably reduced mortality from Measles and Diarrhœal diseases accounts for this year's favourable rate.

Under all the headings of the Zymotic group, our mortality is less than that of the whole Country, or of the Great Towns. The mortality rate for Diphtheria in the 148 Smaller Towns was similar to Walthamstow.

The numbers of deaths from the Zymotic diseases since my appointment are as follows:—

	Small-Pox.	Scarlatina.	Diphtheria and Croup.	Typhoid.	Measles.	Whooping Cough.	Diarrhœa.	Zymotic Enteritis.	Total.
1898	0	3	46	9	39	24	162		283
1899	0	6	73	19	33	34	144		309
1900	0	5	78	6	3	54	110	27 (Gastro-Enteritis)	283
1901	0	13	38	12	43	26	131	10	274
1902	20	6	21	13	14	23	23	5	125
1903	0	6	17	19	52	34	28	37	193
1904	1	14	29	10	55	32	84	99	324
1905	0	17	28	8	35	31	52	26	197
1906	0	21	57	8	39	18	113	51	307
1907	0	22	36	5	22	76	56	15	232
1908	0	11	22	13	36	2	26	14	124
1909	0	11	17	2	30	46	7	10	123
1910	0	4	15	2	20	32	8	23	104
1911	0	5	30	3	32	19	130		219
1912	0	2	23	2	22	37	27		113
1913	0	2	21	2	21	18	47		111
1914	0	7	29	4	21	17	48		126
1915	0	7	12	1	54	31	46		151
1916	0	3	19	0	24	21	24		91
1917	0	2	24	4	24	11	25		90
1918	0	2	16	2	19	32	20		91
1919	0	2	20	1	9	5	41		78
1920	0	1	19	1	5	10	24		60

DEATHS FROM NOTIFIABLE INFECTIOUS DISEASES.

The importance of the deaths in this Group lies in the fact that they are largely preventable and to a great extent within the control of Public Health Administration.

The diseases referred to here are those given in previous reports. All those now made notifiable are given in the Table following page 30.

Encephalitis Lethargica, mistaken for Botulism in 1918, but now looked on as probably Influenza in protean forms, caused no deaths, as compared with 3 in 1919, and Poliomyelitis none.

Names of Diseases.	Whole District.					Wards, 1920.					
	Deaths, 1920.	Deaths, 1919.	Deaths, 1918.	Deaths, 1917.	Increase + Decrease −	St. James Street.	High Steeet.	Hoe Street.	Wood Street.	Hale End.	Higham Hill.
Small-Pox ...	—	—	—	—	—	—	—	—	—	—	—
Scarlatina ...	1	2	2	2	− 1	—	1	—	—	—	—
Diphtheria ...	19	20	16	24	− 1	5	2	2	6	1	3
Typhoid ...	1	1	2	4	—	1	—	—	—	—	—
Erysipelas ...	4	3	—	1	+ 1	—	—	—	1	3	—
Puerperal Fever	4	1	2	—	+ 3	1	—	—	2	1	—
Cholera ...	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis ...	—	1	1	1	− 1	—	—	—	—	—	—
Cerebro-Spinal Fever ...	—	—	—	—	—	—	—	—	—	—	—
Phthisis ...	102	111	165	149	− 9	23	18	16	10	11	24
Total ...	131	139	188	181	− 8	30	21	18	19	16	27

The deaths from the first six diseases on the list were in previous years as follows :—

1919, 27 ; 1918, 30 ; 1917, 33 ; 1916, 48 ; 1915, 67 ; 1914, 48 ; 1913, 31 ; 1912, 83 ; 1911, 48.

The lowest and highest in years back to 1899 were 24 in 1910, and 104 in 1899.

PREVALENCE OF, AND CONTROL OVER, ACUTE INFECTIOUS DISEASES.

During the year 1,507 cases of Infectious Diseases were notified.

Each house invaded was visited, and enquires were made as to the probable sources of infection.

All the Scarlet Fever and Diphtheria patients isolated at the Sanatorium were removed under the care of the Nurse, and the Typhoid patients were received into the local General Hospital, where two beds are at the disposal of your Authority. The cases of Acute Pneumonia went to the Hospital or Infirmary.

Cases of Erysipelas are seldom removed to Hospital except by the Poor-Law Authorities.

In many instances persons are notified as suffering from this disease, and when visited are surprised to learn that they are suffering from an illness necessitating a visit from the Public Health Authority.

Full instructions, verbally and in writing, as to the precautions to be taken against the spreading of infection, are given to the persons in charge of home-nursed cases. This is supplemented by revisits, to ensure that the instructions given are carried out.

When necessary or desirable, Medical Officers of other districts are notified of the possibility of infection spreading through other members of the family.

Children from infected homes and contacts are not permitted to attend the Day or Sunday Schools for varying periods. The Superintendents of the latter invariably co-operate in this exclusion.

It would be an advantage if compulsory powers were in force to prevent such children going to parties and cinemas and to maintain segregation in their own homes until the incubation period was passed.

At the beginning of each school term the Head Teachers are advised to examine the children for any signs of recent illness indicative of Scarlet Fever or Diphtheria, and to exclude all suspects until seen by me.

Records are kept to show the incidence of these and other diseases at each School, and, when necessary, particular class-rooms are visited, and children with suspicious symptoms are excluded. Disinfection of the cloak-rooms of the Elementary Schools is carried out, when such procedure is considered necessary or desirable.

The provisions as to work in infected dwellings are enforced in accordance with the Factory and Workshop Act, 1901.

Following removal or recovery, disinfection of premises was carried out by the Council's employees, and all infected clothing, bedding, etc., were treated by steam under pressure.

Cases of Infectious Disease notified during the Year 1920.

The following table shows the numbers and the Infectious Diseases notified for the whole District and for the Wards, and the number removed to Hospital:—

Notifiable Disease.	Cases Notified in Whole District.								Total Cases Notified in Each Locality.						Total Cases Removed to Hospital.
	All Ages	At Ages—Years.							St. James Street.	High Street.	Hoe Street.	Wood Street.	Hale End.	Higham Hill.	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards.							
Small Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Membranous Croup)	375	4	63	258	34	12	4	—	70	42	59	69	51	84	197
Erysipelas	68	—	—	9	9	25	18	7	13	19	11	9	7	9	12
Scarlet Fever	670	2	80	503	55	29	1	—	152	158	79	68	58	155	351
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	3	—	—	1	—	1	—	1	1	1	—	—	1	—	3
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	7	—	—	—	1	6	—	—	2	—	1	1	1	2	6
Cerebro-spinal Meningitis	2	—	1	—	1	—	—	—	—	—	—	—	1	1	2
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	37	37	—	—	—	—	—	—	9	8	4	3	3	10	3
Pulmonary Tuberculosis...	187	—	—	13	63	75	33	3	45	35	31	22	21	33	—
Other forms of Tuberculosis	65	—	5	30	21	6	3	—	19	10	8	11	10	7	—
Encephalitis Lethargica ...	3	—	1	—	1	—	1	—	1	1	—	—	1	—	3
Malaria (Imported) ...	9	—	—	—	2	7	—	—	2	1	—	1	2	3	—
Dysentery „	3	—	—	—	1	2	—	—	—	—	1	—	—	2	—
Pneumonia...	78	—	2	11	18	27	15	5	22	8	16	4	4	24	40
Totals	1507	43	152	825	206	190	75	16	336	283	210	188	160	330	614

Outfits for early Diphtheria, Phthisis and Typhoid diagnoses are kept at the Public Health Offices, and anti-diphtheritic serum may be obtained during the day at Lloyd Park, and at all hours from the Fire Stations.

The serum is supplied gratuitously to those unable to pay for its cost or administration, and during the year the local practitioners were supplied with 279 bottles for injection of poorer patients, and 30 injections for prophylactic or curative purposes were made by me or one of the School Doctors.

Arrangements have been made for the removal of Scarlet Fever and Diphtheria patients at any hour in case of urgency, and the medical practitioners have been given instructions as to the procedure to be adopted.

The Regulations issued for better control of infectious diseases among school children have been strictly carried out, and, in addition, no child who has suffered from Scarlatina or Diphtheria, home nursed or otherwise, is re-admitted to school until seen by me.

The practice of gratuitous distribution of disinfectants to ratepayers is still maintained although very considerably curtailed. When I first became Medical Officer of Health the yearly outlay under this heading was between one and two hundred pounds; probably now it does not exceed twenty. It should be discontinued; it costs money and is useless if not dangerous by giving a false sense of security to persons who still believe that Diphtheria, Typhoid, etc., are the results of bad smells from drains or foul sinks.

The disinfection by the Public Health Authority of rooms occupied by persons who contract Scarlet Fever or Diphtheria has very little more to recommend it.

These infections are personal, and nothing is really needed but free ventilation of the room and its thorough cleansing by the householder.

The bedding and clothing of the patient perhaps might be steam-cleansed, as it requires more courage than the ordinary official possesses to ignore entirely the practices of our grandparents and the prejudices of the public.

The weekly examination of contacts has tended largely to educate our people to a more correct view of the rôle played by disease carriers.

A further step in the direction indicated should not be difficult.

The following Table is of interest to show the estimated Population, number of cases of Infectious Diseases notified, with Infectious Sickness Rates since the Notification Act came into force. The estimated Populations are those of the Registrar-General :—

Estimated Population, Number of Infectious Diseases notifed, with "Infectious Sickness Rate," and the Mean for the Years under consideration.

Years.	Population.	Scarlet Fever.	Small Pox.	Diphtheria.	Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Erysipelas.	Puerperal Fever.	TOTALS.	Infectious Sickness Rate per 1000 Pop.
1890	46500	129	0	160	3	1	117	3	31	0	444	9·5
1891	47000	125	0	153	9	0	59	4	44	3	397	8·4
1892	49400	399	6	137	17	0	28	0	94	3	684	13·8
1893	52000	597	8	142	11	0	60	4	134	5	961	18·5
1894	57000	247	11	129	15	0	66	0	75	3	546	9·5
1895	61000	263	1	198	10	0	95	6	85	4	664	10·8
1896	65000	315	0	124	6	0	193	2	122	5	767	11·8
1897	70000	492	0	152	6	0	88	0	78	7	823	11·7
1898	77000	293	0	225	9	0	75	0	82	3	688	8·9
1899	83000	332	0	338	7	0	118	1	112	5	913	11·0
1900	91000	347	0	516	11	0	86	1	87	8	1056	11·6
1901	95131	608	3	322	11	0	73	0	111	10	1138	11·9
1902	97700	560	146	142	8	0	89	0	131	7	1083	11·1
1903	100400	292	2	147	5	0	88	0	117	6	657	6·5
1904	103200	527	49	179	13	0	56	0	143	10	975	9·4
1905	106000	756	0	254	4	0	50	0	122	2	1188	11·0
1906	108500	809	0	287	6	0	33	1	107	10	1253	11·5
1907	111500	815	0	251	6	0	21	0	105	3	1201	10·7
1908	114900	635	0	220	3	0	37	0	111	8	1014	8·8
1909	117800	506	0	183	0	0	13	0	112	0	814	6·9
1910	121280	232	0	138	0	0	27	0	99	3	499	4·1
1911	124597	387	0	289	0	0	23	0	114	4	815	6·5
1912	128480	287	0	233	0	0	13	1	79	10	623	4·8
1913	131636	450	0	247	0	0	12	0	80	10	799	6·0
1914	131980	399	0	318	0	0	16	0	97	2	833	6·3
1915	131718	320	0	199	0	0	11	0	72	3	605	4·5
1916	128146	344	0	412	0	0	5	0	71	4	836	6·5
1917	119307	187	0	382	0	0	13	0	39	2	623	5·2
1918	113973	124	0	239	0	0	4	0	38	2	407	3·5
1919	131718	319	0	425	0	0	4	0	74	6	828	6·4
1920	132771	670	0	375	0	0	3	0	68	7	1123	8·9

BACTERIOLOGICAL WORK.

The work carried out under this heading during the year was considerably in excess of that of 1919—4,103 examinations as compared with 2,442—and was mainly in connection with the detection of Diphtheria, which was very prevalent towards the end of that year.

Only a few specimens of blood for Typhoid diagnosis were sent in, and these were sent on to the County Laboratories, where greater facilities exist and fresh cultures of the bacillus are always kept.

		Result.	
		Pos.	Neg.
No. of Diphtheria swabs examined in 1920 ...	4,103 ...	955	3,148
No. of specimens of Sputum examined ...	11 ...	2	9
No. of specimens of hair examined for Ringworm	8 ...	3	5

The County Council now undertake the examination of sputa for all insured people, and have their Public Health Laboratories in London, where pathological work of all kinds is carried out for general practitioners without payment.

Notwithstanding this provision, local medical practitioners sent in 682 swabs, and as your Authority supplies the doctors with outfits, our Laboratory serves their needs, and is found by them more convenient in some ways than that provided by the County Council.

Pending further developments and the reorganisation of the Public Health Service we shall continue to do as heretofore.

The swabs included 2,052 suspected cases of Diphtheria; of these, 385 were positive, *i.e.*, with Diphtheria bacilli present.

Contacts numbering 524 were examined and 106 were found to have Diphtheria germs present. From old standing cases, apparently quite well, 1,527 swabs were taken and of these 464 were found for considerable periods still harbouring the specific bacillus.

SMALL POX.

No case of this disease has occurred here since 1904.

A number of notifications were received of contacts with the disease from Port Authorities and Medical Officers of Health in London and elsewhere.

These were visited and advised as to any possible illness supervening, and in a few instances the private medical man was also advised in confidence.

Our position at the present time, should Small Pox be brought into the District, is a serious one, as no permanent provision is yet made for the isolation and treatment of patients contracting the disease.

SCARLET FEVER.

Six hundred and seventy cases of this disease were notified during the year, and 50 per cent. of the sufferers were removed to the Isolation Hospital.

Universal prevalence of this disease in London and the neighbouring Districts was a marked feature of the year 1920, but our experience was that in no sense is Scarlet Fever a dangerous Infectious Disease—infectious, no doubt, but not dangerous.

During the past ten years the type of this disease here has become extremely mild and deaths from it are few.

In 1920 only one death occurred among the 670 contracting the disease.

Twenty years ago it was believed that by isolation in Hospitals, Scarlet Fever would be stamped out in time and huge sums have been spent in the provision and maintenance of beds for this purpose. No such claim is now made, and, as pointed out in my report for 1919, were it not for the complications often occurring in, and the bad sequelæ associated with even mild cases, hospital treatment would almost seem a luxury and uncalled for in the ordinary way.

The popular view of the disease, however, is quite different, and in February, 1921, owing to the large number of cases notified, I was called on to prepare a statement of the reasons and causes of this. The following is a summary :—

In 1890, the first year of compulsory notification, when any approximation to a real knowledge of the incidence of certain Diseases was possible, it was found that our infectious sickness rate per 1,000 of the population was 9·5.

This was followed by a rate of 13·8 and 18·5 in 1892 and 1893, succeeded by an average of 10·9 for the three following years.

In 1900 and 1901, Diphtheria was very prevalent here and in London, and, as invariably happens, the immediate succeeding years 1901 and 1902 were marked by excessive Scarlet Fever incidence.

The incident rate for Scarlet Fever in 1901 and 1902 was 6 per 1,000 of the population, 7 for 1905, 6 for 1907, falling to an average of 2·5 for the last 10 years.

During the first eight months of the year 1920, 257 cases of Scarlet Fever occurred, equal to an Infectious Sickness rate of 3 per 1,000 of the population, a figure similar to that prevailing for the previous ten years, and lower than that for the Country as a whole.

Following the summer holidays, when the children returned to school and came under Medical and other supervision, the notifications of Scarlet Fever rose from 46 in August to 102 in September, followed by 101 in October, 129 in November, 81 in December, and 70 in January, 1921.

Obviously what occurred during August was that a large number of children suffered from mild Scarlet Fever, were slightly ill for a few days, and then got about as usual, the parents failing to recognise that there was anything the matter worse than "a sick headache," a "headache and Nettle rash," a "bit of cold with sore throat."

In one family a child had "Measles" and recovered, another had "Measles" and recovered in a few days; these were followed by two other children with severe Scarlet Fever.

I need not add that the so-called first Measles case was Scarlet Fever and accounted for the other three.

In October five cases occurred among some young factory hands who worked in the same room.

When the third case arose I visited the workroom, and with the co-operation of the owner and the Welfare workers of the factory, we found the original case, a girl, who, after being away for a few days with "Sore Throat" returned to work and infected the others.

I had a very large number of the girls under observation for some time owing to inflamed condition of Tonsils, but only one developed Scarlet Fever following the discovery of the original case.

Many writers on the subject of Scarlet Fever aver that these Sore Throats are symptomatic of the disease in a mild form and account for the continued prevalence of the disease, notwithstanding Isolation Hospital treatment and other precautionary measures.

From the figures given above it will be seen that only in the last four months of the year 1920 was there anything like unusual Scarlet Fever prevalence in the District, and some reasons for this I have given.

Let us see how we compare with other Districts, as shown from the returns issued weekly by the Ministry of Health and the quarterly returns of the Registrar-General.

The following table is compiled from these sources :—

SCARLET FEVER 1920.

Towns.	Population.	Total S.F. Cases for Year.	Total for Oct. to Dec.	Infectious Sickness-rate or No. of Cases per 1,000 of Population.	
				For Year.	For 4th Quarter.
London ...	4,358,309	22,720	10,277	5·0	10·0
Kensington	157,800	642	280	4·0	7·0
Fulham ...	152,500	932	424	6·0	11·0
Islington ...	323,000	1,306	553	4·0	7·0
Hackney ...	216,700	1,093	535	5·0	10·0
Croydon ...	184,000	643	200	3·5	4·4
Tottenham	141,000	596	175	4·3	5·0
West Ham	287,000	2,144	1,204	7·0	16·0
Leyton ...	123,000	443	260	4·0	8·5
Walthamstow	**132,771**	**670**	**311**	**5·0**	**9·4**

The districts and towns selected have per 1,000 of their populations considerably greater hospital accommodation for Scarlet Fever and Diphtheria cases than Walthamstow; Leyton is much in the same position as we are in this respect.

The reasons and causes for the amount of illness in these districts equally apply to Walthamstow—well-to-do Kensington and Fulham and London (as a whole) have a similar experience to ours.

It is obvious that, where primary known cases occurring in crowded homes cannot be at once removed to hospital or isolated within the home, spreading of the disease is *more likely* to occur, and this probably accounts for the large Infectious Sickness rate at West Ham, but according to the best known investigators, whilst the mortality-rate for Scarlet Fever may be greater among the poor, the incidence of the disease is no greater than among the well-to-do.

At the 1911 Census it was found that we had 1,265 overcrowded tenements among our 26,399 habitations, that is, about 1 in 20, or in other words 7·42 per cent. of the population were living two or more in a room. The existing accommodation must be worse now, and it can be readily realised that this factor, together with our limited Hospital accommodation, militates strongly against the best efforts to control the incidence of Scarlet Fever or Diphtheria.

I have shown that, taking the worst period September to December, our experience is no worse than that of the best administered District; that good or bad social conditions have little influence in its incidence or its spreading, and, as is well-known, this disease has prevailed for the past five months throughout London and Suburbs in an epidemic form; it follows that this District must inevitably be likewise affected.

On page 27 of my Annual Report for 1919, will be found the General Measures taken for the control of all Infectious Diseases. In addition to these the following measures are taken by me. All school children who are home contacts with Scarlet Fever or Diphtheria are seen by me and no one is allowed to return to School until I am satisfied that he or she is free from disease. In addition, every patient discharged from the Sanatorium is seen by me to ensure that he or she is quite free from Infection.

During the year a large number of cases presumed to be free from Infection were found to be still suffering from Scarlet Fever or Diphtheria, and were it not for the precautions mentioned our recognised favourable standard in Public Health administration would be impossible.

A few typical examples of the difficulty in controlling, much less eradicating Scarlet Fever in a populous District, may be of interest:—

> S.G., taken ill on 24th May, was taken to a doctor, who said (according to mother), the rash was due to ice cream poisoning. Child was seen by Medical Officer of Health on 7th June, and found to be suffering from Scarlet Fever.

A.W., sickened on the 11th October, and a doctor was called in. A brother was similarly ill three weeks previously but no doctor in attendance. A sister developed the disease on the 22nd November. These children were home nursed.

M.L., fell ill on 23rd October, a sister was attended five weeks previously for tonsilitis. When Marjorie was visited, the sister supposed to have tonsilitis was peeling on hands and feet—the sequelæ of Scarlet Fever.

E.M., was notified on the 22nd October. Three weeks previously the child had been ill but no doctor called, the boy returned to school and subsequently, owing to peeling on hands, was taken to a doctor who notified the case.

E.B., was notified on the 3rd September. A brother was found peeling on hands and had a history of illness a month previously; another brother suffered from a rash in the second week in August. The mother considered both children suffered from nettle rash and did not seek medical advice; George had also a similar rash. These three were either at work or school until E.B. was taken seriously ill and removed to Hospital. On visiting the home, subsequent to notification of E.B., the unrecognised cases were brought to light and the necessary precautions taken.

DIPHTHERIA AND MEMBRANOUS CROUP.

During the year 375 cases of this disease were notified—38 by the Medical Officer of Health.

The numbers are less by 50 than in 1919, and greater by that number than the average of the ten preceeding years.

Of the total, 325 were persons aged 15 years or under, 34 between 15 and 25 years, 12 between 25 and 45 years and the remaining four over those ages.

The months of greatest incidence were January (67) and March (43), and the minimum August (17) and December (20), the average monthly rate being 31.

In January the largest number of cases were brought to light by myself.

The attack-rate for the whole population was 2·82 per 1,000 as compared with 2·29 for the previous ten years, and the death-rate was ·14, which was also less than the average and less than that of London or the country as a whole.

Experience shows that the disease in its incidence and spread is due to causes very similar to those governing Scarlet Fever.

During the school holidays the children lose the valuable control exercised over them by the school teachers, and unless seriously ill are not seen by a doctor.

Slight cases are not recognised, and children so affected give the disease to their companions.

During the school sessions 600 children seen at the Clinic were excluded for varying periods owing to "Sore Throat," and many of these were subsequently found to be suffering from Diphtheria or Scarlet Fever.

As a fourth of the year is given up to school holidays, it may be presumed that in these intervals nearly 200 children suffering in a like way are the responsible agents for spreading these diseases, as shown in the invariable increase of notifications received upon the re-opening of the schools.

Following the first month of the year there was no unusual prevalence of Diphtheria at any period, but the aftermath of 1919 extended to the end of March.

The disease in 1919 and 1920 was characterised by a long persistence of the Diphtheria Bacillus in the throats and noses of the sufferers, and to enable the Hospital to cope with urgent cases a number of these children were taken to their homes and kept under constant observation and subjected to treatment till quite well.

Twenty-eight of these patients had Diphtheria Bacilli Vaccine for varying periods.

Some did remarkably well under it, as shown by the disappearence of the Diphtheria germ after the second dose; others cleared up from 2 to 12 weeks, after repeated doses; but upon two the treatment had no effect and they are still under observation, over a year having elapsed since first notified.

Nearly 53 per cent. of the sufferers were removed to the Isolation Hospital. The removals included the very bad cases and those unable to be isolated or properly treated in their own homes.

The numbers removed to Hospital were less than usual. The reasons for this were mainly the difficulty in procuring an adequate staff and thus getting the maximum result from the accommodation provided, added to the fewer number of patients admitted per bed, due to the long periods of infectivity of many of the patients admitted.

Twelve deaths occurred among the 197 cases treated in Hospital and 7 among the 178 treated at home.

The explanation of the comparative unfavourable mortality-rate of those treated in Hospital is seen on page 44 of the Hospital Report, and its explanation has already been given.

The discrepancy in the numbers of deaths given above and those on page 43 is due to the inclusion in the latter of deaths of patients from Loughton.

The following Table shows for London and certain large Metropolitan areas the number of cases of Scarlet Fever and Diphtheria notified in 1920 to the Ministry of Health, with the number of deaths as ascertained from the Registrar-General's returns and the case death-rate per 100 attacked :—

	No. notified.		Deaths.		Case rate per 100.	
	S. F.	Dip.	S.F.	Dip.	S. F.	Dip.
London	22,713	13,784	207	1009	·9	7·3
Croydon	642	555	6	25	·9	4·5
Willesden ...	706	700	8	43	1·1	6·1
Tottenham ...	596	500	8	36	1·3	7·2
Edmonton ...	346	304	5	23	1·4	7·5
West Ham ...	2,154	1,001	8	70	·4	7·0
East Ham ...	725	423	1	16	·1	3·7
Leyton	443	351	5	27	1·1	7·7
Walthamstow ...	**670**	**365**	**1**	**19**	**·1**	**5·2**

The following Table shows the estimated population, the number of cases of Diphtheria and Membranous Croup, the attack rate since 1890, and the death-rate since 1898.

Years.	Population.	Number of Diphtheria Cases.	Rate per 1,000.	Membranous Croup Cases.	Diphtheria and Croup Death-rate per 1,000 population.
1890	46500	129	2·50	3	—
1891	47000	153	3·22	9	—
1892	49400	137	2·77	17	—
1893	52000	142	2·73	11	—
1894	57000	129	2·26	15	—
1895	61000	198	3·24	10	—
1896	65000	124	1·90	6	—
1897	70000	152	2·17	6	—
1898	77000	225	2·90	9	·59
1899	83000	338	4·00	7	·88
1900	91000	516	5·60	11	·86
1901	95131	322	3·40	11	·40
1902	97700	142	1·50	8	·21
1903	100400	147	1·46	5	·16
1904	103200	177	1·70	13	·28
1905	106000	254	2·40	4	·26
1906	108500	287	2·70	6	·52
1907	111500	251	2·20	6	·32
1908	114900	220	1·90	3	·19
1909	117800	182	1·50	—	·14
1910	121280	138	1·10	—	·12
1911	124597	287	2·20	—	·23
1912	128480	233	1·80	—	·17
1913	131636	319	2·40	—	·15
1914	131980	318	2·40	—	·21
1915	131718	199	1·51	—	·09
1916	139425	412	2·95	—	·14
1917	132994	382	2·87	—	·20
1918	127701	239	1·87	—	·14
1919	133008	425	3·19	—	·14
1920	132771	375	2·82	—	·14

The following Table shows the drainage and other defects in houses from which cases of Infectious Diseases were notified, and will help to show their relationship.

Total Number Notified.	Disease.	No. of Houses Invaded.	No. with Defects.	No. showing Defects as to—		Dirty Condition of House.	Dirty or Uncov'rd Drinking Water Cisterns.	Defective Roofs, etc.	Defective Pavings, etc.	Dampness.	Percentage showing Defects in—		Dirty Condition of House.	Dirty or Uncov'rd Drinking Water Cisterns.	Defective Roofs, etc.	Defective Pavings, etc.	Dampness.
				Drains.	Traps, Fittings, etc.						Drains.	Sanitary Fittings, etc.					
670	Scarlet Fever ...	571	330	33	101	173	51	79	44	31	5·7	17·6	30·2	8·9	13·8	7·7	5·4
375	Diphtheria ...	325	196	44	42	103	13	46	20	17	13·5	12·9	31·6	4·0	14·1	6·1	5·2
4	Enteric Fever ...	4	3	1	3	1	—	—	—	—	—	—	—	—	—	—	—
68	Erysipelas ...	68	26	5	3	20	2	4	2	1	7·3	4·4	29·3	2·9	5·8	2·9	1·4
8	Puerperal Fever	8	5	—	—	4	—	1	—	—		—	—	—	—	—	—
1125	Totals	976	560	83	149	301	66	130	66	49	8·5	15·3	30·8	6·7	13·3	6·7	5·0

ISOLATION HOSPITAL.

This institution is situated in the Chingford Parish, and is about three miles from the centre of our District.

It provides for 85 beds on the 2,000 cubic feet basis, and is used mainly for the isolation and treatment of patients suffering from Scarlet Fever or Diphtheria.

Upon occasions, bad cases of Ophthalmia Neonatorum are removed—the mother accompanying the baby—and a few cases of Poliomyelitis and Encephalitis Lethargica, for whom Hospital treatment could not be obtained elsewhere, have been treated in the cubicle block.

The Staff consists of a Resident Medical Officer, Matron, twenty-seven Nurses, a Cook, Needlewoman, Storekeeper and seventeen Maids engaged in the administrative and hospital blocks.

The Hospital is self-contained, with producer and electrical plant for heating and lighting.

There are fifteen acres of land attached to the Hospital, five acres of which are enclosed by a 6ft. close-boarded fence.

About eight acres are under cultivation for the production of potatoes and vegetables used in the Hospital. A gardener and assistant are constantly employed, and in season additional hands are taken on.

In January, 1914, a pavilion of 14 beds for the treatment of Phthisical patients was opened. This is built on land adjoining, but separated from the enclosed grounds of the Hospital.

The Administrative Block is not sufficiently large for the Staff necessary when the Hospital is running at its maximum capacity, and the block known as the "Observation Ward" of four beds has been recently converted into eight cubicles and provides sleeping accommodation for eight members of the Staff. This much needed extra accommodation has been most helpful, although, by no means, can it be a substitute for the extensions prospected in 1914.

That further hospital accommodation will be demanded by the public in the near future is inevitable, considering the large number of houses now in course of erection and the changed view point of our people in the presence of infectious illness in the home.

Since the cost of building at present seems prohibitive and the upkeep of the existing Hospital is now £13,000 yearly, compared with £7,500 in 1914, it will be a matter of considerable difficulty to decide on what is the best course to take—to extend the existing buildings and provide for all cases, or give Hospital treatment to those only who are unable to be nursed in their own homes.

The expenses incurred by those not removed to Hospital could be met by your authority.

In 1925 £11,000 of the original loan will be paid off; in 1926 a further £8,000, and in 1929 practically the whole buildings will be paid for.

By that date the conditions in the building trade will probably simulate those of pre-war times, or, at least, we shall have adjusted our views to the conditions prevailing. Within the next few years what is best will become easier to decide.

The County Council of Essex make a grant of £5 per bed yearly towards the upkeep of the Hospital, but the sum received is but a drop in the ocean of expenses incurred.

DISEASES ISOLATED.

Enteric Fever.—By an agreement entered into in March, 1912, with the Walthamstow General Hospital, the Council have two beds for the isolation and treatment of this disease.

Seven cases were notified during the year, and three of these were removed to Hospital so that the provision of beds made was ample.

Of the seven notified, four were withdrawn, the subsequent progress of the cases showing the primary conditions to be due to Tuberculosis of Bowels; Lobar Pneumonia, Ulcerative Endocarditis and Influenzal Pneumonia.

Diphtheria.—Twenty-eight beds nominally—at times extended to forty—are provided in two pavilions for this disease.

In addition, there are twelve beds in the Cubicle Block which, at times, are used for this purpose.

Owing to the prevalence of the disease in the later months of 1919, and the first months of the year 1920, the total accommodation provided was insufficient.

Scarlet Fever.—In normal times 38 beds—14 for acute and 24 for convalescent cases—are provided for this disease.

During the first six months of the year the accommodation was ample, the average monthly number of cases arising being 26. These rose to 50 in the next two months, followed by an average of 100 during September, October, November and December. By the end of the year our difficulties became very great.

A number of the cases admitted were found to have Diphtheria bacilli in the Throat and Nose, or both, and their stay in Hospital was in consequence prolonged, and the accommodation in the cubicles was totally insufficient to meet this emergency.

Overcrowding became inevitable and with it "Return cases" made their appearance.

In November our position was serious, and the Hospital Committee decided to take over "Brookfield" with accommodation for 22 beds.

The situation was thus eased and subsequently the epidemic began to subside here as elsewhere in London and its "Outer ring."

Whether one may use legitimately the *post hoc propter hoc* argument in this connection, I cannot say—but certainly the appropriate time for isolation hospital extension is not during an epidemic. Isolation Hospital accommodation should be provided on definite lines, remembering that no provision, unless on an extravagant scale, can meet the necessities of an epidemic such as we have experienced.

The Resident Medical Officer has supplied me with the following:—

SANATORIUM REPORT, 1920.

ADMISSIONS, DISCHARGES, DEATHS.

	Scarlet Fever.	Diphtheria.	Tuberculosis.	Other Diseases.	Total.
Remaining on Dec. 31st, 1919 ...	35	58	14	2	109
Admitted during 1920	392	220	62	—	674
Total	427	278	76	2	783
Discharged during 1920	338	231	62	—	631
Died during 1920	—	17	—	—	17
Remaining on Dec. 31st, 1920 ...	89	30	14	—	133

SEX AND AGES OF PATIENTS ADMITTED.

Disease.	Under 5 years.		From 5 to 10 years.		From 10 to 15 years.		15 years and upwards.		Total	
	M	F	M	F	M	F	M	F	M	F
Scarlet Fever... ...	24	25	76	108	42	59	22	36	164	228
Diphtheria	16	25	44	58	20	28	9	20	89	131
Total	40	50	120	166	62	87	31	56	253	359
	90		286		149		87		612	

DAILY AVERAGE.

The average number of Patients in Hospital during each Month was as follows :—

January	109	July	93
February	114	August	81
March	100	September	89
April	102	October	115
May	104	November	122
June	87	December	128

Diphtheria.—Two hundred and twenty cases were admitted during the year, compared with 273 in 1919, 180 in 1918, 263 in 1917, and 280 in 1916.

Of those admitted, twelve had urgent laryngeal symptoms, and four had tracheotomy performed. One of the cases died on admittance before an operation could be undertaken.

Of those operated on two recovered, one died shortly after operation, the other dying from Heart Failure two weeks subsequently.

The total deaths were seventeen, excluding the deaths mentioned, and the case mortality-rate was 7·2 per 100 for all admitted—excluding the cases of tracheotomy 6·3.

A number of those admitted had been ill for several days before a doctor was called in, and their chances of recovery by anti-toxin treatment was small. Added to this a good proportion of the patients had the disease in a severe form, as evidenced by the complications which followed.

Fourteen patients developed Otorrhœa, 19 had severe Cardiac trouble, 13 developed post Diphtheritic Paralysis, 5 Nephritis, 7 had concurrent affections, such as Bronchitis or Pneumonia, 4 had Whooping Cough and 14 Scarlatina. All the latter had typical Diphtheria bacilli present on admittance followed by rash within 24 to 48 hours and subsequent desquamation.

Scarlet Fever.—The number admitted was 228, compared with 205 in 1919, 100 in 1918, 136 in 1917, and 246 in 1916.

Invariably the cases admitted into Hospital are of a severer type than those nursed at home, but fortunately we had no deaths.

The type of the disease in 1920 was generally mild, more particularly in the later months of the year, when the disease was in epidemic form throughout London and its suburbs.

During that period a larger portion than usual of mixed infections were noticed, and some of the cases admitted presented considerable

difficulties in diagnosis owing to the absence of some or all of the symptoms usually associated with the disease. Some had slight Sore Throat and no rash, others marked rashes and little temperature and little else.

Some of these with few marked symptoms subsequently desquamated, but during their first week's stay, owing to the presence of Diphtheria bacilli in the throats, were a source of great anxiety, as the cubicle accommodation was so inadequate.

From a medical and administrative point of view the existing paucity of cubicles is a serious handicap, and exercises an adverse influence on the Hospital's usefulness.

With another cubicle pavilion added a greater number of patients— proportionately to beds— could be more satisfactorily dealt with and their stay in Hospital curtailed.

With the exception of a case of Measles with Broncho-Pneumonia all those admitted proved to be Scarlet Fever.

Nineteen of these patients had in addition definite Diphtheria, and their stay in Hospital was proportionately prolonged.

This class of patient slowly recovers and needs great care and watchfulness before discharge.

Some of the Otorrhœal and Heart cases were very slow in recovery and were some months before fit to return to their homes.

I submit this in view of their prolonged stay.

The most serious complications encountered were Otorrhœa (14), Heart trouble (6), Rheumatism (2), Nephritis (4), Glandular and Mastoid disease (4).

There was considerable overcrowding towards the end of the year which perhaps, though inevitable, was not conducive to the best results.

Under the circumstances the "Return Cases" were not numerous and the total numbered seven. A considerable amount of odium and dissatisfaction is attached to these, but until a definite standard is obtained by which one can absolutely judge of the absence of infectivity before discharge, one can only exercise caution and be guided by experience.

Length of stay in Hospital nor completion of desquamation has any influence in the prevention of "Return Cases," and the association of these with patients who suffered from a mixed infection is very curious.

The following particulars show the months in which they occurred, duration of illness, the interval between discharge and secondary case, and the number of susceptible children in the houses:—

Date of Discharge.	Duration of Illness.	Interval from Discharge to Secondary case.	No. of susceptible children in house under 15 years.	REMARKS.
21/4/20	11 wks. 2 days	9 days	2	Primary case Normal
24/4/20	6 wks. 3 days	10 days	3	" "
16/7/20	7 wks.	1 day	6	" "
25/8/20	6 wks. 1 day	6 days	2	" "
16/9/20	6 wks. 3 days	6 days	9	" "
8/11/20	6 wks. 2 days	8 days	5	Primary case found to have K.L.B. in nose
19/11/20	6 wks. 2 days	8 days	9	Primary case Normal

Staff.—One nurse suffered from Measles and a nurse and maid contracted Scarlet Fever. With these exceptions the general health of the Staff was very good.

MATERNITY AND CHILD WELFARE.

Council's Centre.—No further progress was made during the year in bringing to fruition the scheme outlined in last year's report and agreed to by the Council in 1919.

In March, 1920, the voluntary Child Welfare Society, owing to increase of work at the parent house "Brookscroft," in the Hoe Street Ward, relinquished their branch in High Street Ward, and the work was undertaken by the Council.

The Doctor in charge of the Ante-Natal Clinic, at the High Street premises, had been for some time superintending the Child Welfare work of the Voluntary Society—both being held on the same afternoon—and his services were continued by the Council.

The voluntary lady helpers, with one exception, associated with the parent society gradually withdrew from the work, and their places were taken by the three paid Health Visitors, assisted by six ladies, members of the Ladies' Guild Co-operative Movement. One of these ladies is a co-opted member of the Statutory Maternity and Child Welfare Committee.

Partly owing to the increased birth-rate, and partly to the greater facilities offered, the work has grown very considerably, and the premises are now totally inadequate and unsuitable.

They consist of a large hall at the rear of the Methodist Church in High Street, and a small room used for the consultations. The only means of communication between the two rooms is a small lobby, into which the outer door opens. The hall is difficult to ventilate in cold weather owing to draughts, and the lobby is badly situated, and unsuitable for taking the partially undressed children to the doctor's room, which is small and inconveniently situated.

There are 2,000 names on the register, and the following are the quarterly attendances of children during the past year :—

	New Cases.	Old Cases.
1st quarter	140 ...	567
2nd „	243 ...	848
3rd „	264 ...	1,152
4th „	174 ...	1,426
Total ...	821	3,993

For the year 1919 the totals were :—

New cases, 375. Old cases, 1,705.

Prior to June the Clinic was held on one afternoon weekly, but the attendances became so great in this month—96 new and 400 old cases—that a second afternoon was decided upon. This increased facility for consultation was appreciated by the mothers, as evidenced by the increased attendances of old cases, the ratio of these to new steadily rising during the last six months of the year. This increase of old cases may be more apparent than real in the last quarter, as November and December were cold months, and most of the days were unsuitable for very young babies to be taken to the Clinic.

Under existing conditions the work is very much hampered, and cannot expand as it might otherwise, and it is to be hoped that the Council will be shortly in a position to carry out their original scheme of 1919.

No drug treatment is given at the Clinic with the exception of grey powders, but accessory articles of food are sold at cost price, viz., cod liver oil, malt extract, Virol, Parrish's chemical food, and the dried milk—Glaxo.

No lectures or demonstrations are given owing to the unsuitability and lack of room in the existing premises, but it is felt that, with suitable buildings, these could be undertaken, and a very large number of mothers would gladly attend.

The Council is much indebted to the voluntary workers, and Dr. Harding speaks highly of and appreciates their services.

"Brookscroft" Voluntary Centre.—In 1914, "The Walthamstow Child Welfare Society" was founded by Dr. Elliott and has since worked in co-operation with the Public Health Authority.

During 1920 the scope of its work as originally contemplated has been much extended, and in April three "Observation Wards" containing 12 beds have been opened for the reception of little patients suffering from nutritional and allied disorders.

The beds are mainly for the children who attend the "Brookscroft" Welfare Centre but are also available for those attending High Street, at a charge of 30s. weekly, less the contributions paid by the parents. These latter are approximately what the parents can legitimately pay.

During the year five such patients were admitted and the cost incurred was £42 5s.

The total cases admitted to the end of the year were 24. The average stay of those suffering from Nutritional disorders was three months, and those with Gastric disturbance, six weeks. Of those treated, fifteen were discharged cured, five were much improved, and two died from congenital disease within five and two days after admission, the others doing well.

The paid staff employed consists of a Matron, Sister, and two Probationers; the Voluntary workers include a qualified Sister, five V.A.D.'s, with six assistants who have been trained under the medical director.

The general work of the Society, as appears from the Report for the year, was as follows:—

	1920.		1919.	
No. of children on Register ...	3,830		3,061	
	Old.	New.	Old.	New.
Infant consultations	7,971	769	8,082	653
Home Visits made by Nurses ...	2,543		4,456	
Massages	889		1,216	
Attendances at Lectures	3,853		4,091	
„ „ Needlework Classes	318		—	

Number of Mothers attending not recorded.

The Ante-Natal Clinic.—These Clinics have been held twice weekly during the past year, at "Brookscroft" and High Street, one afternoon each for the first six months of the year, and for the remaining six months both afternoons at the latter centre. This alteration was due to the paucity in numbers of expectant mothers attending "Brookscroft" on the days on which Infant Consultations were held, thus securing more privacy and the greater convenience to the doctor carrying out the work and with the hope that the mothers would more likely attend.

The total attendances at the two Clinics for the year were 82, comprising 56 new cases and 26 re-visits.

The following table gives details:—

New Cases.	"Brookscroft."	High Street.
January to June	36	7
July to December	—	13
	36	20

Of the 56 cases, there were only two suffering from serious conditions; one was a case of Diabetes, and the other was suffering from Renal disease. For the latter patient I secured admittance into St. Thomas' Hospital.

Health Visitors.—There are three ladies engaged in this work, two whole and one part time.

Within fourteen days' of birth, all children are visited unless a desire to the contrary is expressed by the parents.

During the year, 8,797 visits were made to the homes, and of these 5,140 were paid to children under, and 2,136 to children over one year of age.

Of the 3,141 children born within the area 2,940, or nearly 94 per cent., were visited. One visit was paid to 1,360 babies, two visits to 1,109, three to 347, four to 104, five to 15, and six to five others. Non-effective visits totalled 1,523—failing to see parent, 1,260; children dead, 108; parents and baby removed, 155.

Over 86 per cent. of the babies visited were breast-fed at first visit, 4·6 per cent. partly by breast and by hand, and 8·6 per cent. hand-fed from the start.

A number of mothers who started by breast-feeding resorted to artificial feeding later but the vast majority continued it.

The number of hand-fed babies was considerably less, and the number breast-fed more than in 1919—94 per cent. in 1920, as against 83 per cent. in 1919 for breast-fed, and 8·6 per cent. as against 10 per cent. for hand-fed.

Of the 254 hand-fed children, boat-shaped bottles were used for 231, and only one parent used the long tubed variety.

The condition of the babies was very good in 2,815 instances and bad in only 22.

Judged by methods of feeding and the cleanliness of the babies there is little doubt the work of the Health Visitors and the Welfare Centres is having an increasing influence for good on the mothers.

How seriously handicapped many of these are, may be judged by the fact that the parents of 748 of the children lived in half-houses and 574 had but one room to live in. Two-hundred and fifteen others occupied two rooms and 46 three rooms.

Of the total 3,141 births, only 1,157 parents occupied a whole house.

Midwives.—There are eleven women practising in the District in addition to those at the Walthamstow Branch of the Essex Nursing

Association. Usually five practising Midwives are in residence in addition to those under training.

With the exception of two, all the Midwives have been trained and hold the Certificate of the Midwives Board or its equivalent.

The untrained Midwives undertake very few cases except under the supervision of a doctor and their general conduct and practice were good.

An unregistered woman who "followed a doctor," discovered to have attended some cases on her own account, was warned and she ceased practising altogether.

All the Midwives have been regularly visited, and were found to comply generally with the directions issued by the Midwives Board.

No fault was to be found with their habits as to cleanliness; and their bags, registers and records were kept satisfactorily.

It is impossible to say if all comply strictly with their duties towards the patient, as laid down by the Board, and investigations made to this end are greatly resented by the Midwives.

One can only judge by results, and the number of ruptured perineums occurring in the practice of certain Midwives, would point to "hurrying up" methods.

The small number of septic cases goes to show that general cleanliness and care have been exercised by them.

Four Midwives were reported for failing to notify cases of Ophthalmia and for neglect in its precautionary and early treatment.

The Midwives were severely censured by the Midwives Board, warned and placed under probation for six months.

The disciplinary measures adopted were ample and the Midwives were subsequently reported on favourably by me.

Of the total births, 1,373 were attended by Midwives.

Puerperal Fever.—There were seven cases notified during the year.

Four of these had Doctors in attendance at confinement, and three, Midwives only.

Six of the seven were removed to Hospital and three recovered.

Four deaths were registered as due to Puerperal Fever, and seven others as due to "Accidents and Disease of Pregnancy and Parturition."

Investigations were made concerning each Puerperal ; no connection could be traced between one and another, and no Doctor or Midwife notified more than one case.

Ophthalmia Neonatorum.—Thirty-seven cases of this disease were notified as compared with 30 in 1919, 16 in 1918, 11 in 1917, 22 in 1916 and 1915, and 14 in 1914.

Two of the notifications came from Whipp's Cross Hospital, and one case found by the Health Visitor was the subject of a report to the County Medical Officer and the Midwives Board.

There is a small increase in the numbers notified as compared with previous years. This is due mainly to the early notifications by Midwives of conditions that heretofore would have been ignored. This is all to the good and in the children's interests, and ensures skilled treatment at the earliest possible moment when treatment is likely to have the best result.

Fifteen of the children had the disease in a well marked form and the average time of their treatment was eighteen days. Two were very bad for five and six weeks but the results were excellent—only one child had one eye slightly scarred. The treatment of all children was in the main carried out at the Public Health Office, under the general supervision of the Ophthalmic Surgeon, who saw weekly all the bad cases. The babies were taken twice daily to Lloyd Park for treatment, and the Nurses also visited twice a day the homes during the first week or two to ensure that my instructions were being carried out.

Encephalitis Lethargica.—Four cases of this disease were notified, two of them from a London hospital.

The latter got completely well ; the others died, the causes stated being Influenzal Pneumonia and Tubercular Meningitis.

Cerebro-Spinal Meningitis.—The two cases notified were removed to hospital and completely recovered.

Measles and Whooping Cough.—There were 5 deaths registered during the year from Measles and 10 from Whooping Cough.

In 1919 there were 9 and 5 ; in 1918, 19 and 32; in 1917, 24 and 11 ; in 1916, 24 and 21 ; in 1915, 54 and 31 ; and in 1914, 21 and 17.

The Public Health (Measles and German Measles) Regulations, 1915, Recission Order, 1919, came into operation on the 31st December, 1919, so no reliable information as to the true incidence of Measles in 1920 was available.

Up to the end of June many notifications were received from parents and doctors, which go to show that during these months 32 cases arose

in St. James Street Ward, 9 in High Street, 64 in Hoe Street, 55 in Wood Street, 143 in Hale End, and 96 in Higham Hill Ward.

From the returns supplied by the Head Teachers in accordance with the " Regulations as to Infectious Diseases in Schools," it appears that during the year 533 school children suffered from Measles and 334 from Whooping Cough.

From previous experience, about 40 per cent. only of sufferers are known to the teachers, so we may assume that in 1920 about 1,300 children suffered from Measles as against 2,031 in 1919.

Every child known to be suffering from Measles was visited once or oftener by the Health Visitors, and a leaflet of instructions as to isolation, general treatment and nursing was left with those in charge.

All the deaths attributed to Measles were children under 5 years of age, and 80 per cent. of the deaths from Whooping Cough were also in children under 5 years of age.

By referring to the deaths on page 21, and the Measles and Whooping Cough chart on page 53, it can be inferred that Measles is a very dangerous infectious disease among the poor, but not so where proper nursing and suitable treatment are carried out directly the child is attacked.

The Health Visitors do a useful work in the poorer homes by impressing on the mothers the necessity of safeguarding the very young children from exposure to either disease, but the belief that Measles and Whooping Cough are trivial ailments dies hard, and many mothers still act on the principle : once either complaint is introduced in the home it is just as well that all the children should suffer.

This view is entirely erroneous.

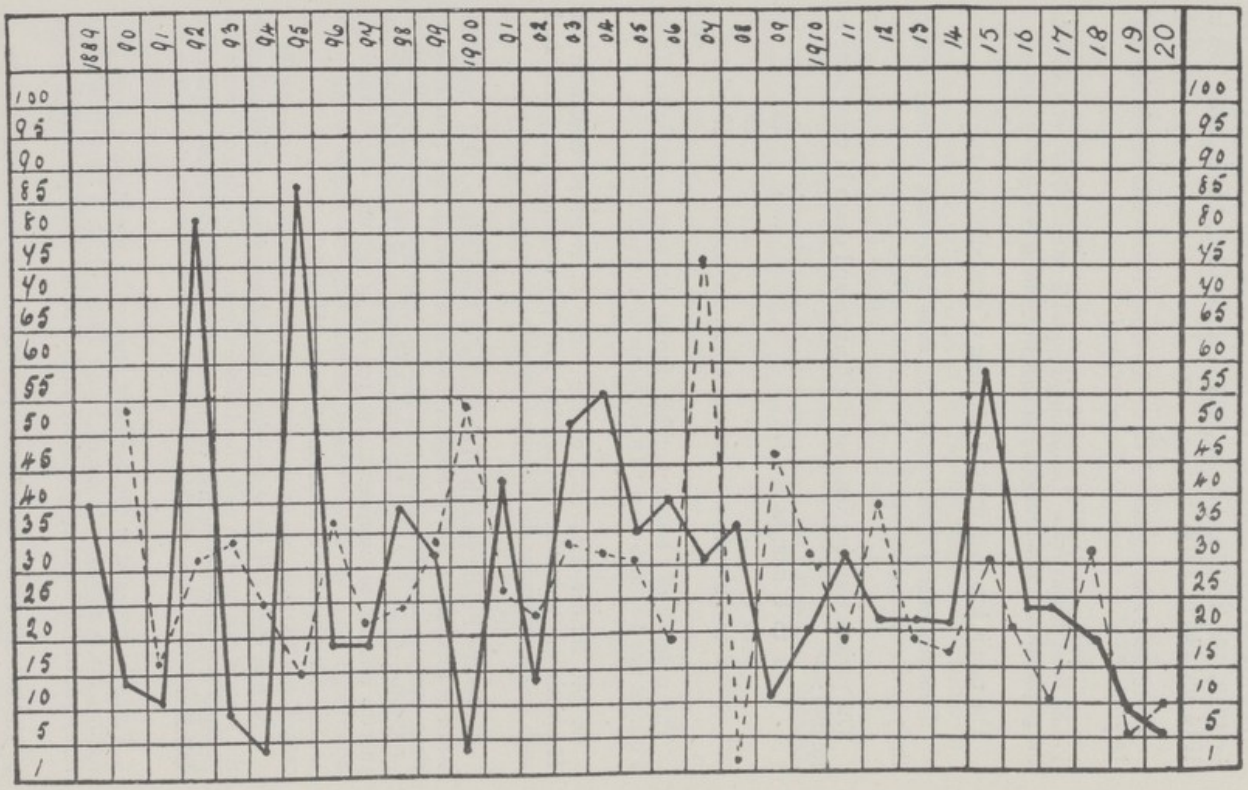
The incidence and fatality of these diseases rapidly vanish with age, and no child under five should be exposed to either infection.

The notification of Measles, by enabling the Health Visitors to visit and advise the poorest and less educated persons on this point, was a useful Public Health measure and should have been continued.

All the known sufferers from Whooping Cough were also visited, and the parents appropriately advised by the School Nurses.

The deaths from both diseases since 1889 are given on the Chart following :—

Deaths from Measles and Whooping Cough, 1889–1920.



Straight lines indicate Measles. Dotted lines indicate Whooping Cough.

PHTHISIS OR CONSUMPTION.

The deaths registered from this disease were 102, compared with 111 in 1919, 165 in 1918, 149 in 1917, 115 in 1916, 147 in 1915, 133 in 1914 and 119 in 1918.

There were also registered 12 deaths from Tubercular Meningitis and 13 from "Other Forms of Tuberculosis."

The total deaths from Tuberculosis equal a rate of 0·95 per 1,000 of the population, just about one-tenth of the total general death-rate.

The rate is less than in 1919 and that of preceding years.

Of the 102 deaths from Phthisis, 76 were of persons notified during the year in conformity with the Tuberculosis Regulations.

The periods elapsing between notification and death in these were as follows :—

1 to 3 months	...	...	...	22
3 to 6 „	...	...	...	15
6 to 12 „	...	...	...	39

The number of persons notified during the year as suffering from Phthisis was 187 and from "Other forms of Tuberculosis " 65.

Of the former 110, and of the latter 5, received treatment in Hospitals or Sanatoria. Altogether 149 persons from this area had such treatment under the County Council's Scheme.

Under the Public Health (Tuberculosis) Regulations, 1921, issued in April of this year, " Every Medical Officer of Health shall from time to time, but not less often than once in every quarter, revise the Register of Notifications. . . . by removing from such Register the entries therein relating to notifications in respect of persons who have to his knowledge died or have ceased permanently to reside within the District for which he is Medical Officer of Health."

The first part of these instructions have always been carried out, but the second can only be performed if the County Council co-operate by sending regularly the names of those who cease to reside within the District.

I was in hopes that the Sanitary Inspectors would have been able during the year to visit every house from which a notification was received, but unfortunately the pressure of other work prevented them.

There were at the end of the year 2,384 names on the Register of persons suffering from Tuberculosis in its various forms. Of these 812 are of the non-pulmonary type.

The cases are distributed as follows:—

St. James Street	562
High Street	385
Hoe Street	393
Wood Street	293
Hale End	301
Higham Hill	450

Following the receipt of a notification, every home is visited and a sanitary survey made.

The result of this, with a copy of the Notification Form, is sent to the Tuberculosis Officer, and with the exception of disinfection of the rooms following death or removal—when the latter is known—the care of the patient passes on to the County Council.

One of the results of this dual responsibility is shown by the number of names of persons still on the Register, who, there is reason to think, have long since left the District or died elsewhere.

The principal defects usually favouring the disease, as found in the homes inspected, were as follows:—

Overcrowding	2
Defective roofs, gutters, etc.	25
Dampness	28
Dirty premises	47
No defects	150

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water.—The whole District is served by the Metropolitan Water Board, and the supply is constant.

During the year 28 houses had the water supply reinstated or improved; 148 cisterns were cleansed and covered, and in four instances were abolished.

Since the adoption of the Public Health Acts (Amendment) Act of 1907, a considerable amount of improvement in this direction has taken place yearly.

No complaint has been made as to pollution of streams within the area, and the drainage and sewerage of the District has been referred to on page 12.

Scavenging and House Refuse Removal.—This work is carried out efficiently by the Council under the supervision of the Surveyor. No complaints have been received as to the general condition of cleanliness of our roads.

In view of the large and increasing Motor Traffic observed, considerably increased watering of the roadways in the summer months is very desirable to allay dust, and prevent the pollution of milk and the contamination of foods exposed for sale.

A weekly collection of house refuse is carried out over the whole District and disposed of at the Destructor.

All householders are supposed to be supplied by the landlords with dust-bins, in conformity with the Bye-Laws, but the provision is more honoured in the breach than in its observance. The necessary pressure to effect this is still lacking.

Sanitary Inspection of District.—The following indicates the nature and amount of work carried out during the year by the Sanitary Inspectors :—

No. of inspections made	6,425
No. of nuisances detected	2,260
No. of complaints received	1,847
Informal notices served	2,532
Complied with	1,870
Statutory notices served	46
Complied with	42

The number of complaints received as compared with previous years is very noticeable, and is an index to the conditions prevailing due to the neglect of the usual repairs neglected during the war period.

Premises and Occupations which can be controlled by Bye-Laws or Regulations.—These consist of 15 Slaughter-houses, 44 Bakeries, 12 Cowsheds, 81 Milkshops, 38 Fishfriers and Curers, and 12 Rag and Bone Dealers. There are Bye-Laws and Regulations in respect of these. There are no Common Lodging-houses, nor are regulations in respect of underground sleeping-rooms required.

Elementary Schools.—A systematic survey of all these was made. Owing to the conditions existing, 1914-18, the usual repairs and decorations were largely in abeyance, but considerable headway has since been made to put the premises in good condition. Any defects found upon inspection were reported to the Education Committee, who gave instructions that the requirements of the Public Health Authority should be carried out.

Normally the Schools are kept in a very satisfactory condition: ventilation and lighting are good, as is the water supply.

The action taken in relation to the health of the scholars, and for the prevention of the spreading of disease, is detailed under the heading of "Infectious Diseases."

FOOD.

Milk Supply.—The average number of cows kept in the area has dwindled from 100 heretofore to 30, and consequently the amount of milk provided within the District is very small.

The cowsheds are visited regularly by the Sanitary Inspectors and quarterly by the Veterinary Surgeon, who examines and reports on the health of the cows.

The cows on the whole were well kept, and no disease was found at any of the visits paid to the byres.

The regulations as to lighting, ventilation, cleansing, drainage and water supply in Cowsheds and Dairies are reasonably observed, and the milk produced in the District was found to be quite good and clean.

No complaints were received, and samples taken for bacteriological and chemical examination were reported on very favourably by Drs. Thresh and Beale.

Glaxo or dried milk is now very largely used for the feeding of infants and its utility as a food and in the prevention of Summer Diarrhœa has been generally, if not universally, acknowledged.

Milk (Mothers and Children) Order, 1918.—As in 1919, the Council left in my hands the distribution of milk under the Order and the standards laid down in last year's Report were adhered to.

The Child Welfare Committee from time to time, having had reports from me, confirmed my action.

The following shows the number of applicants and the expenditure incurred :—

Number of families to whom free milk was granted ...	393
Quantity of milk supplied	4,870 qts.
Approximate cost	£394

Other Foods.—Premises where foods are manufactured, prepared, stored or exposed for sale are under the constant supervision of the Sanitary Inspectors, as shown on page 61, and they are generally well kept.

There is no Public Abattoir, but there is an understanding with butchers that if they fail to notify at once any diseased condition in animals slaughtered by them and subsequently found by the Sanitary Inspector, they will be prosecuted.

As a matter of practice this understanding works very well.

The numbers of carcases and parts condemned for Tuberculosis are shown on page 63.

SANITARY ADMINISTRATION OF DISTRICT.

This is under the control of the Medical Officer of Health, who deals particularly with the personal unit, and the Inspector of Nuisances, who deals with the impersonal factor, but a large share of the work incidental to Public Health is under the direct supervision of the Surveyor.

The latter officer alone deals with the plans and supervises the erection of new houses, is responsible for the scavenging of our roads, the collection of house refuse and the disposal of sewage.

The Inspector of Nuisances, under the supervision of the Medical Officer of Health, carries out with the help of four qualified assistants all the work as laid down for him in the Sanitary Officers' Order of 1910.

The reconstruction of drains, the disinfection of clothing and premises—three men are engaged in this work—and the taking of samples under the Sale of Food and Drugs Act also come under his direct supervision.

There are no local Acts in operation, but the following have been adopted :—

Infectious Diseases (Notification) Act, 1889 (January, 1890).
Infectious Diseases (Prevention) Act, 1890 (November, 1890).
Public Health Acts (Amendment) Act, 1890 (November, 1892).
Public Health Acts (Amendment) Act, 1907 (November, 1908).

In addition to the male staff there are four ladies who are directly supervised by the Medical Officer of Health.

One is engaged in the investigation of infectious diseases and the removal of patients to Hospital, one in visiting outworkers' premises and mothers in connection with the feeding of children and the prevention of Summer Diarrhœa.

Two other ladies devote the whole of their time to the latter work, and the work associated with the Ante-Natal Clinic and in the supervision of the Midwives.

House-to-House Inspection.—No inspecting officer has yet been appointed for carrying out Section 17 (1) of the Housing and Town Planning Act.

During the year the time of the Sanitary Inspectors was pretty well consumed in dealing with the complaints received from householders and in effecting necessary sanitary repairs to property neglected during the immediate preceding years, and only a small amount of house-to-house inspection was possible.

The following statement is in accordance with Article 5 of the Housing (Inspection of District) Regulations, 1910:—

1.	Number of houses inspected	415
2.	Number of houses unfit for habitation ...	—
3.	Number of representations made to Local Authority (Section 28, 1919)	31
4.	Number of Closing Orders made ...	—
5.	Number of houses, defects in which were remedied without Closing Orders ...	385
6.	General character of the defects found to exist in the dwelling houses inspected	Drainage Uncleanliness Dampness Deposit of Refuse *e.g.*, want of receptacle

The conditions found were as follows:—

	Conditions Regarding.	Good.	Fair.	Bad.
1.	Arrangements for preventing the contamination of the water supply ...	405	9	1
2.	Closet accommodation	401	11	3
3.	Drainage	392	23	—
4.	Condition of house in regard to light, free circulation of air, dampness and cleanliness	146	251	8
5.	Paving, draining and sanitary condition of yard and outhouse ...	240	173	2
6.	Arrangement for deposit of refuse and ashes	308	107	—
7.	Any room so dangerous or injurious to health as to be unfit for human habitation	None.		
8.	Any other defects which may tend to render house dangerous and injurious to health of any inhabitant	None.		

The conditions referred to under the heading "bad" will be seen to refer to (1) defects in drainage which necessitated reconstruction or

substantial repair, (2) to such an amount of uncleanliness or dampness as to require thorough cleansing of the whole or part of the premises, concreting of sites, insertion of a damp-proof course or repair of roofing, but seldom in more than one of these.

The following summary shows the nature and variety of the works which have been carried out to remedy defects which have been discovered as causing or likely to cause conditions inimical to the Public Health :—

Drains tested	126
,, reconstructed or repaired	239
,, obstructions removed	207
,, means of access provided	18
,, ventilation provided	42
,, ,, repaired	139
Soil pipes repaired	25
,, new provided	10
Rainwater pipes, renewed	189
,, ,, disconnected from drains...	9
Roofs repaired or renewed	410
Gutterings repaired or renewed	243
W.c. pans or traps provided	99
Gully traps provided	52
W.c. flush cisterns provided	47
,, ,, repaired	197
,, reinstated	30
W.c. floors concreted...	20
W.c.'s repaired and cleansed...	279
W.c.'s, light and ventilation improved	3
Waste-pipes renewed or trapped	216
New sinks provided	7
Water supply reinstated	28
Cisterns cleansed and covered	148
Drinking-water cisterns abolished	4
Urinals, improved flushes provided	1
,, cleansed or repaired...	21
,, paved	1
Sculleries paved	46
Yards and forecourts paved and repaired	294
Dirty houses cleansed	81
,, rooms cleansed...	2,863
Floors repaired	157
Ventilations under floors provided	134
New damp-proof courses provided	61
Sites concreted	6
Rooms ventilated	4
Offensive accumulations removed	87

Animals improperly kept removed	11
Manure receptacles provided	13
Stables closed...	—
„ cleansed	24
„ paved and drained	8
Manholes repaired or resealed	34
Bell traps abolished	4
Other cases of dampness remedied	297
Miscellaneous repairs	203

Infectious Diseases.

Visits to premises	1,668
Premises disinfected	1,179
Articles disinfected at Low Hall	10,132
Articles destroyed at Low Hall	46

Dampness in Houses.

Sites concreted	6
Damp-proof courses provided	61
Yards and forecourts paved and drained	294
Roofs made watertight	410
Rainwater pipes made good	189
Guttering repaired or renewed	243
Dampness remedied	297
Ventilation under floors provided	134
House-to-House Inspections	415

Special Premises.

	Number.	Visits paid.
Slaughter-houses	15	222
Butchers' shops	67	298
Bakehouses	44	77
Fishmongers (fish frying and curing) ...	38	194
Eating-houses	34	17
Ice cream vendors	97	97
Cowsheds	12	45
Milkshops	81	81
Laundries	29	43
Rag and bone dealers	12	39
Elementary Schools	27	8
Private Schools	13	0
Piggeries	29	84
Street Stalls	Numerous	155

As a result of the regular periodical visiting of the Special Premises the following works were carried out :—

Butchers' Shops and Slaughter-Houses.

Special cleansings, 18 ; Gutters and Rain-Water Pipes, 1 ; Smoke Nuisance abated, 2 ; Paving repaired, 2 ; Floors repaired, 3 ; Accumulations removed, 3 ; New Safes provided, 1 ; New Galvanised Bins provided, 6.

Bakehouses.

Special cleansings, 35 ; Roofs repaired or improved, 1 ; Paving repaired, 2 ; Rain-Water Pipe provided, 1 ; Gutters repaired, 1.

Fishmongers' Shops.

Premises cleansed, 26 ; Smoke-holes repaired, 3 ; Paving repaired, 8 ; Flushes to w.c.'s repaired, 2 ; Drains cleared, 2 ; Drains repaired, 2 ; New w.c. pan and trap provided, 1 ; New Set Frying Pans, 1 ; Floors repaired, 2 ; Accumulations removed, 4.

Coffee and Eating Houses.

Special cleansings, 10; Choked drains cleared, 2; Dust-bins provided, 3 ; Gutters repaired, 1.

Ice-Cream Vendors.

Special cleansings, 3.

Cowsheds and Milkshops.

Special cleansings, 14 ; Offensive accumulations removed, 3 ; Drainage improved, 2 ; Roofs repaired, 1 ; Yard paving repaired, 2.

Stable Premises.

Cleansings, 24 ; Accumulations removed, 80 ; Gutterings repaired, 8 ; Paved and drained, 8.

Laundries.

Special cleansings, 11 ; Pavings repaired, 1 ; D.W. Cistern cleansed and covered, 1.

Rag and Bone Dealers.

Accumulations removed, 1 ; Cleansings, 7 ; Floors repaired, 3 ; Roofs repaired, 3 ; New rain-water pipes fixed, 2.

Private Schools.

Cleansings, 2 ; Obstruction in drains removed, 2 ; Piggeries cleaned, 12 ; Paved and drained, 1 ; Paving relaid, 3.

Unsound Food.

There have been destroyed or condemned during the year the following articles. In the majority of cases they were either submitted for inspection by the owner or found under conditions which rendered acceptance of surrender a proper course of procedure, thus securing their removal from possibility of sale :—

2½ stones of bruised beef
8 lbs. of bruised beef
14 lbs. of fillets
146 lbs. of beef
42 lbs. of beef
31 lbs. of beef
1 clod of English beef
1 brisket of English beef
2 forequarters of beef
8⅓ stones of English beef
1 forequarter of beef
5 stones of beef
1 immature calf
3 lambs in sac
1 calf in sac
1 calf
4 ox livers (foreign)
1 ox head and tongue
1 liver and milt
1 set of ox tripes, gut fat and udder
1 ox head and tongue
1 set caul and mesenteric fats
1 ox tripe
1 ox tongue
1 tin corned beef
4 trunks dabs
4 lbs. of beef liver
5 meat pies
6 lbs. of Canadian butter
16 tins of condensed milk
8 tins of condensed milk
1 cwt. of chestnuts
66 cocoanuts
37 tins of condensed milk
500 eggs
14 tins of condensed milk
9 tins of condensed milk
2 tins of sardines
6 lb. tin of beef
2 boxes of tomatoes
17 stones of frozen mutton
5 stones of mutton
31½ lbs. of bacon
51 lbs. of bacon
30 lbs. of bacon
8 rabbits
72 rabbits
2 cases of rabbits
1 case of rabbits
30 rabbits
28 rabbits
2 crates of rabbits
3 crates of rabbits
2 crates of rabbits
2 cases of rabbits
4 cases of rabbits
40 lbs. of skinned rabbits
38 frozen rabbits
20 rabbits
3 doz. rabbits
29 frozen rabbits
73 rabbits
1 sheep carcase and all organs
1 box of haddocks
2 boxes of mackerel
6 boxes of kippers
9½ stones of mackerel
1 box of mackerel
1 box of codlings
1 trunk of mackerel
1 trunk of herrings
12 stones of wings
1 cwt. of mixed fish
10 stones of coal fish
10 stones of dog fish
5 stones of whiting
8 stones of cod
5 barrels of herrings
3 hampers of shrimps
1 barrel of herrings
2 sacks of winkles
6 barrels of crabs
1 trunk of skate
1 trunk of haddocks
2 trunks of haddocks
1 sack of winkles

1920.

FACTORY AND WORKSHOP ACT, 1901.

The following Table filled in for your district gives the information as required by the Home Office, and in conformity with Section 132.

Factories, Workshops, Laundries, Workplaces and Homework.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
(1)	(2)	(3)	(4)
Factories ... ... (Including Factory Laundries.)	142	6	—
Workshops ... ... (Including Workshop Laundries)	142	8	—
Workplaces ... ... (Other than Outworkers' premises included in Part 3 of this Report.)	20	2	—
Total	304	16	—

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
*Nuisances under the Public Health Acts:—**				
Want of cleanliness	14		—	—
Want of ventilation	2		—	—
Overcrowding	—		—	—
Want of drainage of floors... ...	3		—	—
Other nuisances	7		—	—
Sanitary accommodations — insufficient... ...	—		—	—
Sanitary accommodations — unsuitable or defective	27	ALL.	—	—
Sanitary accommodations — not separate for sexes	—		—	—
Offences under the Factory and Workshop Act —				
Illegal occupation of underground bakehouse (s. 101)	—		—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	—		—	—
Other offences ... ... (Excluding offences relating to outwork which are included in Part 3 of this Report).	—		—	—
Total	53	ALL.	—	—

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

NATURE OF WORK.	Address received from other Councils.	Forwarded to other Councils.	Outworkers' Lists, Section 107.									Outwork in Unwholesome Premises Section 108.			Outwork in Infected Premises, Sections 109, 110.		
			Lists received from Employers.						Notices served on Occupiers as to keeping or sending lists.	Prosecutions.							
			Sending twice in the Year.			Sending once in the Year.											
			Lists.	Outworkers.		Lists.	Outworkers.			Failing to keep or permit inspection of lists.	Failing to send lists.	Instances.	Notices served.	Prosecutions.	Instances.	Orders made (s. 110).	Prosecutions (ss. 109, 110)
				Contractors.	Workmen.		Contractors.	Workmen.									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Wearing Apparel— (1) making, etc. ... ... (2) cleaning and washing ...	536	28	2	...	26	10	...	69	...	...	...	...	...	...	...	...	...
Household linen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lace, lace curtains and nets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Curtains and furniture hangings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Furniture and upholstery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Electro-plate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
File making	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...
Brass and brass articles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fur pulling	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cables and chains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anchors and grapnels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cart gear	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Locks, latches and keys	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Umbrellas, etc.	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Artificial flowers	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nets, other than wire nets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tents	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sacks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Racquet and tennis balls	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Paper, etc., boxes, paper bags	18	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Brush making	57	2	...	...	...	2	...	15	...	...	...	...	...	...	...	...	...
Pea picking	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Feather sorting, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Carding, etc., of buttons, etc.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stuffed toys	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Basketmaking	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chocolates and sweetmeats	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cosaques, Christmas crackers, Christmas stockings, etc.	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Textile weaving	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	647	30	2		26	12		84									

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.		Number
(1)		(2)
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Domestic Workshops	122
	Other Workshops	65
	Laundries	11
	Bakehouses	16
	Total Number of Workshops on Register ...	214

5.—OTHER MATTERS.

Class.		Number.
(1)		(2)
Matters notified to H.M. Inspectors of Factories:—		
Failure to affix Abstract of the Factory and Workshop Act (s. 133)		3
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5).	Notified by H.M. Inspector ...	10
	Reports (of action taken) sent to H.M. Inspector	Defects remedied.
Other		—
Underground Bakehouses (s. 101):—		
Certificates granted during the year		—
In use at the end of the year...		3

NOTE.—The Factory and Workshop Act, 1901 (s. 132) requires the Medical Officer of Health in his Annual Report to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). If the Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Office the portions which do not relate to factories, workshops, workplaces or homework. The duties of Local Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum of March, 1912.

HOUSING.

Prior to 1914 there was an abundance of five- and six-roomed cottages in all the Wards, letting at rentals of 7s. 6d. to 9s., and flats of three or four rooms at 5s. 6d. to 6s. 6d. per week.

At the census of 1911 it was found that of the 26,399 "separate occupations" 24,110 came within the £26 yearly limit, so that the area is practically covered by working-class dwellings.

The houses are generally modern and convenient, and have been erected under the supervision of the Building Inspectors and in conformity with the local Building Bye-Laws.

According to the Census of 1911, there were 1,207 empty "buildings used as dwellings."

These were returned by the Overseers as 1,606 by reckoning each tenement as a separate unit for the purposes of habitation.

In 1914 these numbers, from the return of the Overseers, had fallen to 547, although in the meantime over 1,000 houses had been erected, thus showing a considerable migration of persons into the District owing to the changes produced by the extension of factory premises.

From the figures given by the Health Visitors as to the number of persons living in one and two rooms *there is considerable overcrowding in the District*, although the Sanitary Inspector reported only 28 instances.

What its extent is cannot be appreciated until house-to-house inspection can be thoroughly undertaken, but the fact that there is not a single empty house in the area, apart from appeals from householders for ampler accommodation for their families, is sufficient for this statement.

Up to the end of May, 1921, the Council, under its building scheme, had completed 30 houses, which were immediately let, and had in course of erection 289 others.

The total amount of land acquired by the Council for building purposes is 179 acres, and it is anticipated that the number of houses to be completed by the end of 1922 will be, probably, 550.

The following tabular statement, for the year ended 31st December, as to housing conditions, is by request of the Ministry of Health :—

1.—GENERAL.

(1) Estimated population	132,912
(2) General death-rate	9·7
(3) Death-rate from tuberculosis	·95
(4) Infantile mortality	59·9
(5) Number of dwelling-houses of all classes	
(6) Number of working-class dwelling-houses... ...	
(7) Number of new working-class houses erected ...	

2.—UNFIT DWELLING-HOUSES.

I.—Inspection.

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)...	6,425
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	415
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	nil
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	385

II.—Remedy of Defects without Service of Formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	2,214

III.—Action under Statutory Powers.

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

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ...	31
(2) Number of dwelling-houses which were rendered fit—	
(*a*) by owners...	29
(*b*) by Local Authority in default of owners	nil
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	nil

B. *Proceedings under Public Health Acts.*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	15
(2) Number of dwelling-houses in which defects were remedied—	
(*a*) by owners	13
(*b*) by Local Authority in default of owners	nil

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

(1)	Number of representations made with a view to the making of Closing Orders ...	nil
(2)	Number of dwelling-houses in respect of which Closing Orders were made	nil
(3)	Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-house having been rendered fit... ...	nil
(4)	Number of dwelling-houses in respect of which Demolition Orders were made ...	nil
(5)	Number of dwelling-houses demolished in pursuance of Demolition Orders	nil

3.—UNHEALTHY AREAS.

Areas represented to the Local Authority with a view to Improvement Schemes under (*a*), Part I., or (*b*), Part II. of the Act of 1890 :—

(1)	Name of area	nil
(2)	Acreage	nil
(3)	Number of working-class houses in area	nil
(4)	Number of working-class persons to be displaced ...	nil

4.—Number of houses not complying with the building bye-laws erected with consent of Local Authority under section 25 of the Housing, Town Planning, &c., Act, 1919 ... ... nil

SCHOOL

MEDICAL SERVICE.

Number of Schools and Accommodation.

	Boys	Girls	Infants	Mixed	Seating Accommodation Boys	Girls	Infants	Mixed
Provided	17	17	16	7	7651	7353	6834	2715
Non-provided	1	2	2	1	244	472	437	314
Special Schools—								
Mentally Defective ...	1	1	—	—	65	65	—	—
Deaf and Dumb ...	—	—	—	1	—	—	—	20
Myope Centre	—	—	—	1	—	—	—	120
Total ...	19	20	18	10	7960	7890	7271	3169

	1919	1920
Number of children on Register, December 31st...	24,170	23,861
Average attendance	20,019	19,599
Percentage attendance	82·8	82·1
Estimated mid-year population	127,684	132,771
Percentage of school children to population	19·0	18·0

FINANCIAL STATEMENT.

	£	s.	d.
Rateable value of District	505,182	0	0
The average cost of education per child :—			
(1) In the ordinary school	9	0	6
(2) Mentally Defective centre	30	17	0
(3) Deaf and Dumb centre	24	14	11
(4) In the Myope centre	21	8	$6\frac{3}{4}$
The education rate for—			
The half year ending March 31st, 1920	0	1	$3\frac{3}{4}$
" " " September 30th, 1920 ...	0	2	$1\frac{1}{4}$
" " " March 31st, 1921 ...	0	2	$5\frac{1}{4}$
Total cost of medical inspection for 1920	4,641	15	2
Grant towards the above for the year ending March, 1920, from Board of Education	1,707	17	8
Other receipts :—			
Medical treatment	123	14	1
Spectacles	53	10	3
Amount spent on repairs, improvements, etc., to school for the year ending March 31st, 1920...	8,554	11	1

REPORT OF THE WORK OF THE SCHOOL MEDICAL SERVICE.

Arranged According to the Suggestions made by the Board of Education, December, 1920.

1. STAFF.

The Staff consists of the School Medical Officer, who is also Medical Officer of Health, two Assistant School Doctors, a whole-time Dentist, a part-time Ophthalmic Surgeon, five School Nurses and a Dentist's Assistant.

2. CO-ORDINATION.

Co-ordination of the work of the School Medical Service with that of other health services obtains in the case of Infant and Child Welfare work :—

(i). The School Medical Officer is Chairman of the Executive Committee of the Voluntary Child Welfare Society which is responsible for half the District.

(ii.) One of the Assistant School Medical Officers superintends the work of the Council's Welfare Centre which is responsible for the other half.

(iii.) The School Dentist attends to the teeth of children sent from the Welfare Centre and also to the teeth of expectant and nursing mothers sent from the Centre or from the Ante-natal Clinic.

(iv.) The Ophthalmic Surgeon also attends to cases sent from the Welfare.

Nursery Schools have not yet been established in the District.

Debilitated Children under school age have received the benefit of the Milk (Mothers and Children) Orders, of 1918, and particulars are shown under the report of the Medical Officer of Health.

3. SCHOOL HYGIENE.

There are 20 provided schools with 57 departments, 3 non-provided schools with 6 departments, and 3 special schools with 4 departments.

All the provided schools have central halls, one for each department, with the exception of Higham Hill Temporary Infants. The non-provided schools are deficient in this respect. Twelve of these schools are ground floor buildings, 8 having separate buildings for departments, the remaining 4 having 2 or 3 departments under one roof. Two schools have 2 storeys, and 4 schools one storey, the remaining 2 being partly ground and 1-storeyed buildings. The non-provided schools are ground floor buildings.

The Surroundings in the majority of these schools are favourable, being open and quiet; in 6 of them, however, the reverse obtains, the schools being on, or near, the main road; not only are the class rooms noisy, but the playgrounds get very dirty with the dust and paper blown in.

Ventilation is adequately secured; in addition to sash windows, fanlights, etc., most classrooms have fresh air inlets and ceiling ventilators.

Lighting.—In the vast majority of the classrooms the natural lighting is good and comes from the left. Artificial lighting is either by electric light or by inverted incandescent burners; the heads of the various departments are not unanimous on the goodness of their artificial lighting.

Warming.—The majority of the schools are warmed by hot-water radiators; some by stoves, some by stoves and radiators combined, and one by hot air. The problem has not been solved in some of the classrooms, as evidenced by the temperature charts.

Equipment.—Dual desks are used in all the schools, and are of various sizes; in Markhouse Infants, in one class, they are an old type, having no backs; two of the mistresses remarked that very big girls appeared to be cramped in even the largest desks. Blackboards and easels are sufficient and in good condition. The general condition as regards cleanliness of the schools, is, with few exceptions, satisfactory; these exceptions, which refer to walls and ceilings, are, I believe, to be seen to this year.

Sanitary Conveniences.—The w.c.'s are mostly automatic in their water action, being either of the trough or pedestal form; some schools have a separate cistern for each w.c. The urinals are either of an asphalt or a composition surface and are flushed either automatically, or by tap; they are not all perfect—neither are the boys!—but even with care, it is difficult to avoid smells. Those without a roof are, as a rule, sweeter and lighter than those roofed in. With one exception, these offices are in the playground.

Water Supply.—All departments are supplied with basins and towels, usually situated in the cloakroom. There are taps on the main in all the lavatories for drinking-water and usually a fountain in the playground. The cloakrooms usually contain a sufficient number of pegs, sometimes less than 12 inches apart; they are not all equally lit nor airy, and a fair proportion have no heating arrangements.

Staff Accommodation.—Many of the schools have two private rooms, one for the Head and another for the Assistants, also indoor sanitary convenience; in some of the schools both these conveniences are wanting.

Playgrounds.—All the provided schools have asphalt playgrounds, the majority of fair extent, but one or two of the schools are cramped in this respect.

Similarly, they all have playing sheds—some of these are suitable and nice—others are not so nice and, owing to the proximity of urinal or offices, are not suitable for open-air classes as suggested.

The majority of the schools have receptacles on wheels for refuse; they are not all perfect. The smaller schools have a sanitary dust-bin. As regards door mats, the schools are well supplied—a sunk metal mat or grating, with one or more fibre mats.

The non-provided schools, as previously stated, have no central halls. There are three of these, with an accommodation of nearly 1,500. St. Mary's Infants has a loose stone playground which requires asphalting, and the Girls have a similar one, but not adjoining the school.

St. Saviour's Boys and St. Mary's Girls have each one large room for three classes; in the former, not even curtains between. The forms in the latter are still the long old-fashioned ones with no back.

There are no private rooms in either of the three departments of St. Saviour's School, nor in St. Mary's Girls.

During the year ending March, 1920, £8,504 have been spent on repairs and improvements, etc.

4. MEDICAL INSPECTION.

Description of arrangements made and methods adopted for the Medical Inspection of the Children.

About a week prior to Medical Inspection, the Head is informed of the date and the age group which it is proposed to inspect and is requested to give the approximate number of children coming within that age group. Blank medical cards and a book of forms are sent on. The forms invite the parent to be present at the medical examination, giving the date and hour; the parent is asked to mark on the back any disease or illness that the child may have had, in case she is not able to be present. The Head Teacher is responsible for filling in the medical cards and the invitations to the parent: the latter are sent on the day previous to the examination. The number of the children arranged for is 25 in the morning and 20 in the afternoon.

The District is divided into two areas, with practically the same number of children in each: each Assistant School Medical Officer is responsible for the examination of the children in an area. Three-and-a-half days each week are devoted to routine inspection and re-inspection at the Schools, the remaining two days being occupied with the Clinic and Child Welfare Centre.

A School Nurse is present at every inspection; her duties are, mainly, to take the height and weight of the child, to test the vision, to write out after-care cards for those children who have defects and, in the case of those whose parents are not present, to send a notice of the defect found home by the child. These defect notices are printed cards and

are accompanied by a leaflet showing the arrangements made for the treatment of dental defects, enlarged tonsils and adenoids ; those with defects of vision, suffering from Otorrhœa or deafness or minor ailments, are advised of the facilities offered by the School Clinic.

The medical cards, after the necessary abstracts are recorded, are returned to the school, with a list of defects found, inviting the co-operation of the Head with regard to their remedy. When a scholar leaves school, his medical card is handed to the Attendance Officer ; if the scholar be over 14, the card is filed ; if under, it is sent to the new school.

4*a*. During the year 1920, all the leavers, that is, those over 12 years of age, and all the entrants have been examined.

In this last group is included all children under 7 not examined previously.

Both this group and that of the leavers are unduly swollen owing to war conditions not being wholly recovered from. This and an outbreak of Diphtheria in the early months of the year, necessitating constant supervision of the scholars and systematic swabbing of the noses and throats, resulted in only 570 of the intermediate group—8-9 years—being examined. The work is well in hand this year, and, provided nothing unduly happens, the three age groups will be duly examined.

The actual numbers examined, etc., are given in Table I.

4*b*. The Board's Schedule of Medical Inspection has been adopted and followed.

4*c*. The early ascertainment of crippling defects is secured by (1) the bringing forward of any particular child by the Head Teacher at any routine inspection, and (2) by sending the child to the School Clinic ; this latter is perhaps the more common, as it is very frequently at the request of the mother, who wishes to obtain medical advice.

4*d*. The Inspection is always conducted on the school premises, in the Department concerned, sometimes in the Teachers' Room, sometimes in a class-room ; in the latter case it usually means that the class has to move into the hall, as there is rarely a spare class-room. The average time that any child would be away from his class might be 30 to 40 minutes ; exceptional cases, where the scholar waits for his mother to arrive, and who turns up late, sometimes occur. Taken on the whole, the disturbance of school arrangements is very little.

Sixty-nine children were excluded from School under Article 53 (*b*) as the result of Routine Inspection for the following defects :—

Sore Throat	9
Tonsilitis	4
Bronchitis	18
Impetigo	6

Ringworm	3
Scabies	4
Chorea	1
Mumps	7
Scarlet Fever	1
Pediculosis	2
Debility	4
Chicken-pox	2
Various	8
Total	69

Other exclusions under Article 53 (*b*) of children attending the Clinic are given in Table VII.

5. REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

5*a*. **Uncleanliness.**—Physical uncleanliness of body or head is met with in the schools in the poorer areas, but is not marked. On the other hand, the prevalence of nits and pediculi is still too great, in spite of strenuous endeavours to combat this evil.

Nearly 5 per cent. is a large percentage, but it compares favourably with the 10 per cent. of the year 1915. My own impression is that there is improvement as regards this condition, but it is up-hill work.

The Cleansing of Persons Act has not been adopted by the Council, so one has to rely on other forces—exclusion from school, an unsatisprocedure ; the School Nurse to call and see the mother ; or to put the matter into the hands of the local Inspector for the Prevention of Cruelty to Children. The fashion of "bobbing" the hair, which facilitates cleanliness, appears to have died out ; it might usefully be adopted for all girls under 10 years of age and would save a good deal of the parent's time.

Further particulars are given later on in the summary of the work done by the School Nurses.

5*b*. **Minor Ailments.**—These, including mostly skin and external eye affections, are not met with frequently as a result of the routine inspection ; this is as one would expect, for the teacher promptly sends such cases to the School Clinic. A comparison of the figures in Table II, under the two separate columns Routine Inspections and Specials, shows that the latter is much greater ; this column includes all such cases sent by the Head Teachers. It will be noticed how very few cases of Ringworm or of Scabies (itch) have been overlooked, showing carefulness on the part of the individual teacher.

5c. **Tonsils and Adenoids.**—Enlarged tonsils and adenoids were present in 7·8 per cent. of the children examined ; 3 per cent. causing symptoms necessitating removal, the remaining 4·8 per cent. requiring watching. In the vast majority of the latter, the enlargement of the tonsils does not subside, but on the contrary, frequently becomes more pronounced ; secondary symptoms, such as deafness, appear and removal is considered necessary.

Taking into consideration the relationship between enlarged tonsils and adenoids and microbic infection, such as diphtheria carrier, acute rheumatic fever and infective endocarditis, there is a feeling that one must not necessarily depend too much upon secondary symptoms due to physical causes when advising as to their removal or not.

Table II shows that a large number of children suffering from nasal obstruction are sent to the Clinic apart from routine medical inspection.

In the same Table it will be seen that 432 cases of enlarged tonsils and only 20 cases of tonsils and adenoids were referred for further treatment. This sub-division is far from being correct ; it simply means that 432 children had tonsils large enough to cause symptoms and that in the other 20 cases they were not so prominent, and a further examination had to be made to reveal the cause of the obstruction.

The report of the Surgeons operating on these cases is of interest ; of 361 children, 314 had enlarged tonsils and adenoids, 42 had adenoids only, and 5 had enlarged tonsils only.

5d. **Tuberculosis.**—It is rare to come across children with definite signs of tuberculosis of the lungs. Five such cases, of whom two were already under treatment, were found during routine inspection, and 52 were found with suspicious signs. In the majority of cases these signs clear up within a comparatively short time ; in the small minority they may last for months, with no obvious impairment of the general health. Of the non-pulmonary tubercular lesions, that of the cervical glands is the most common. Five such cases were advised to secure treatment, whilst 16 were kept under observation.

A fair number of children are seen who have fused submaxillary glands, small and hard, but freely moveable under the skin ; it is probable that this condition represents a healed tubercular focus.

A list of tubercular contacts of school age is furnished by the doctor in charge of the County's Local Tuberculosis Dispensary, and these children are regularly seen by Medical Inspectors at the routine examination.

5e. **Skin Diseases** were not commonly found during the routine inspection ; the majority of these cases had been found by the teacher and promptly referred to the Clinic. Scabies is as prevalent as in 1919, but one rarely meets with such extensive lesions as in that year.

The number of cases of Ringworm is a slight improvement on that of 1919, but the number of cases of Impetigo has nearly doubled ; many, however, of these cases are of slight extent and are soon cured.

In a few cases of Impetigo, the diphtheria bacillus has been found, suspicion being aroused by the condition of the nose.

5f. **External Eye Disease,** excluding Squint, practically resolves itself into Blepharitis and Conjunctivitis, many of these latter being of the phlyctenular variety.

5g. **Defects of Vision.**—In Table IV it is seen that 731 children were referred for further examination; this figure includes 69 cases of Squint given in Table II. Any child seeing less than $^{6}/_{12}$ with one or both eyes, and children with better vision but with frequent headaches and no obvious cause are advised to secure this further examination.

5h. **Deafness and Ear Disease** is unfortunately too prevalent, as instanced by the figures in Table II. Both are more prevalent in the schools in the poorer area, and can, I think rightly, be ascribed to neglect of nasal hygiene. Handkerchief drill is of real value in the prevention of these serious disabilities.

5i. **Dental Defects.**—As the result of routine inspection it was found that, of the entrants, only 17·3 per cent. of the boys and 26·1 per cent. of the girls were free from dental caries; of the leavers the corresponding figures are 27·9 per cent. and 32 per cent. These figures include those children who have had extractions of bad teeth, and so does not represent those who have a perfect denture. Table IV "D" gives further particulars as to the age group of those treated at the Clinic. The condition of the temporary teeth in the younger children is very unsatisfactory; sepsis is very common and unfortunately is rarely associated with pain—hence, no notice is taken of such teeth and it—the absence of pain—is frequently used as a protest by the mother when advised to seek dental treatment.

Referring to the same table it will be seen that 77 per cent. of the temporary teeth treated had to be extracted. There is no doubt that dental sepsis in these young children is a great detriment to health; the enamel of the permanent teeth underlying may suffer; enlargement of tonsils and submaxillary glands result, sometimes with invasion of the latter by the tubercle bacillus; when pus is constantly being swallowed with the food, impaired appetite and deranged digestion may occur, and in a fair proportion of these cases one can find a dilated heart with the consequent symptoms of tiredness, etc.

For this reason and because the number of school children is too great for one dentist, children over 9 years are not treated by the School Dentist, unless the case is urgent or there is some special reason, usually financial.

Unfortunately one meets with a good deal of parental opposition to dental treatment, why, I don't know, unless it is ignorance of the value of good teeth, and this opposition is not so much active as passive. The mother readily promises to see a dentist or to come to the Clinic, but fails to do so; in some cases an appointment is made for dental treatment at the Clinic, but both patient and mother fail to appear. In

other cases the mother is quite willing but will ask the father—nothing happens! Walthamstow is not well supplied with qualified dentists and that does not improve matters.

6. INFECTIOUS DISEASES.

All children suffering from Scarlet Fever, Diphtheria (whether of throat, nose or non-clinical), Measles, Whooping Cough, Chicken Pox, and Mumps, are excluded from school, and, in the case of the first two diseases, the contacts of school age as well; these latter are seen by the Medical Officer of Health at the Clinic; the contacts of Scarlet Fever are kept away from school until the incubation period has elapsed, and the contacts of Diphtheria, if thought necessary, are swabbed, nose, throat, ear, or sores as the case may be.

In the early part of the year, Diphtheria was prevalent and accompanied by a number of non-clinical cases, or carriers; the disease attacked the nose in many children, causing simply a sore nose, but taking a long time to clear up as proved by successive negative swabs. For the first six weeks of the year, the Assistant School Medical Officers were engaged in visiting schools and examining the throat and noses of children. During this period 644 swabs were taken of suspected children, apart from those that were swabbed as contacts. During the whole of the year the total number of school children swabbed primarily as suspicious, was 1,213. The Education Committee have a small laboratory on the premises, and one of the Assistant School Medical Officers is responsible for the bacteriological work; further details are given under the Laboratory Report.

During the summer holidays, Scarlet Fever became more prevalent, and continued so during the next four months of the year. A careful record of schools affected is kept, and any unusual number of cases appearing in any department resulted in a visit of inspection to discover if possible any missed case.

During November, Mumps became prevalent and continued so for several months.

The following table gives the incidence of the various infectious illnesses during the year :—

	Scarlet Fever.	Diphtheria.	N.C.D.	Measles	Whooping Cough.
January ..	14	46	73	32	285
February ...	14	18	22	58	25
March ...	11	18	17	147	4
April ...	12	14	10	112	2
May ...	17	15	13	85	2
June ...	22	22	9	45	8
July ...	37	13	5	3	0
August ...	32	8	12	0	0
September ...	78	16	7	3	1
October ...	73	21	19	1	5
November ...	79	20	14	42	0
December ...	52	7	4	5	3
Totals ...	440	218	205	533	334

Cases of Mumps are excluded for a period of 3 weeks dating from the onset of the swelling—as that is usually the first diagnostic sign—but apparently the exclusion does not save other children.

I noticed this particularly in the Infants' Department of a school near the Clinic, to which children were promptly sent on suspicion: the incidence of the disease went calmly on week after week until the Christmas Holidays, and resumed its career on the re-opening of the school.

No action was taken during the year under Articles 45 (*b*) and 57 of the Code. All the necessary exclusions were made under Article 53 (*b*). See Section 4 and Table VII.

NUTRITION.—Only 20 children were found as a result of routine inspection to be suffering from Malnutrition: the average heights and weights are very similar to those of previous years.

Dr. Bullough, the County Medical Officer, has kindly sent me the heights and weights of 25 boys and 27 girls attending the local Secondary Schools, between the ages of 12 and 13. Their average heights are respectively 55·4 inches and 55 inches and their average weights 83lbs. and 82 lbs., being 9 lbs. heavier than the average of the boys and girls attending the Elementary Schools, of the same age. The number examined in the Secondary Schools is small, but that probably does not account for the marked difference.

Nutrition was noted as excellent in 11 per cent. of the entrants and 18 per cent. of the leavers.

7. FOLLOWING UP.

Every child having a defect has a white card made out for it at the time of inspection, giving the necessary details and filed under the heading of the various schools at the Clinic. For special cases a blue card is used.

Some 6 or 8 weeks after the inspection, the school is visited and the children with defects are seen. If the defect is remedied, the card is entered up with the details of treatment and filed under the headings of the various defects; if not remedied, the School Nurse visits the house and if possible interviews the parent. In cases where the defect is likely to injure the child's health, and the parents take no notice, a letter from the School Medical Officer is sent, inviting the parent to see him, and in a few cases the Inspector for the Prevention of Cruelty to Children has been asked to see the parents.

Subsequent re-inspections of unremedied defects are made at intervals of two or three months by the School Doctors.

During the year, the Nurses paid 2,707 visits to the homes in connection with the following:—

Uncleanliness ...	61	Defective Teeth ...	861
Impetigo	49	Whooping Cough ...	290
Ringworm	62	Mumps	387
Other Skin Diseases ...	23	Chicken-pox ...	182
Defective Vision, etc. ...	314	Measles	38
Tonsils and Adenoids...	139	Various	199
Otorrhœa and Deafness	102		

An additional Nurse was appointed in May, 1920, in order to comply with the Board's wish regarding systematic survey of children for uncleanliness.

The following is a summary of the School Nurses' work apart from home visits and routine medical inspection :—

Total number of visits to schools	472
Average number of visits for the year made to each school	10
Total number of examinations for uncleanliness (Section 122, Children's Act)	68,738
Number of children found unclean	3,940
Number of notices sent to parents under the above Act ...	147

Summonses were issued for non-attendance in six cases under the School Attendance Bye-laws, and convictions were obtained.

At the close of the school year, there were 3,391 children on the School Nurses' "Head Lists."

8. MEDICAL TREATMENT.

8*a*. **Minor Ailments.**—This practically means diseases of the skin, of the external eye, and slight injuries, and is undertaken at the School Clinic four mornings in the week.

Ringworm is treated at the School Clinic on two afternoons. Arrangements have been made with the local Dispensary for X-ray treatment, and during the year 47 cases have been sent there with beneficial results. The parents are charged 5s., 2s., or nil, and accept all responsibility of a possible traumatic alopecia ; the average period of absence from school is 8½ weeks.

8*b*. **Tonsils and Adenoids.**—These are treated at the same Dispensary, usually on two days in the week ; the children are kept under observation for 3 to 4 hours after the operation. During the year 361 children received operative treatment. The parents pay nothing or up to 5s. according to their income. All children who have received treatment at the Dispensary, whether for Ringworm or for Tonsils and Adenoids are seen afterwards at the School Clinic by one of the School Doctors in order to see that the result is satisfactory.

8*c*. **Tuberculosis.**—All children found, or suspected to be found suffering from Tuberculosis and who are not already receiving treatment, usually at a hospital, are sent on to the Tuberculosis Dispensary under the aegis of the Essex County Council. During the year 37 boys and 18 girls have been referred to see the physician attending, Dr. Sorley, and the following is his report as to the findings :—

	Boys.	Girls.
Tuberculosis of the lungs	3	2
Probable or suspicious	19	11
No definite signs	8	4
Tuberculosis of the glands	5	1
,, ,, ,, probable ...	2	0
Excluded from school for lung condition...	3	2

The following figures have been kindly given me by Dr. Sorley and refer to school children between the ages of 5 and 14 :—

Number of new cases seen during 1920, 173.
,, notified : 2 pulmonary, 1 knee, 2 glands.
,, excluded from school, 24.
,, receiving treatment by drugs, etc., about 200.
,, receiving Sanatorium treatment, 23.

The total number of notifications of tuberculosis received at the Public Health Department for children between the ages of 5 and 14 was :—

	Boys.	Girls.
Tuberculosis of the lungs	14	7
,, ,, ,, glands	10	4
,, ,, ,, hip	2	0
,, ,, other joints	4	0
,, ,, the spine	3	0
,, ,, other bones	1	1
,, ,, meninges	2	2
,, ,, peritoneum	3	2

Of the above, 1 of the lungs and 8 of the glands were notified by the School Doctors. It will be seen that boys appear to be more commonly affected than the girls.

8*d* and 8*e*. Skin diseases and external eye diseases are already discussed under 8*a*.

8*f*. **Vision.**—A part-time ophthalmic surgeon devoted two sessions weekly to defects of vision ; exceptionally, a third session had to be given on account of the large number of children. The glasses prescribed are obtained at a very moderate price locally, arrangements

having been made with an optician and a chemist. The glasses, on being obtained, are verified by the surgeon and a further appointment in 6 months or 12 months is made, depending on the nature of the defect. It is a sign of the times to come across a boy who deliberately says that he is not going to bother about glasses for his defective vision ; he is going into the trade followed by his father, and expects to be better off financially than if he worried about his sight and the possibilities of a further education.

A separate report by Dr. Corbett, the opthalmic surgeon, is given.

8*g*. **Ear Disease and Hearing.**—Arrangements are made with the Walthamstow Dispensary for the treatment of these defects; the children attend twice weekly. Many of these cases of ear disease persist from year to year with little amelioration, in some cases due to want of home attention. Having the ears syringed twice weekly will not do much good! The average attendance at the Dispensary was 35.

8*h*. **Dental Defects.**—A whole-time dentist has been at work during the whole of the year, but is unable to cope with the large amount of work ; for that reason, children over 9 years of age are not attended to at the Clinic, unless for some urgent reason ; the whole attention of the dentist is practically given now to children under that age, this arrangement dating from the middle of 1920. Comparatively few children are treated by private dentists, and unfortunately Walthamstow is badly supplied with qualified dentists.

Table IV "D" gives details of the work of the dentist during the year.

8*i*. **Crippling Defects and Orthopædics.** — Children requiring high boots, instruments for infantile paralysis, etc., have usually obtained these from a London hospital. In some cases the local branch of the Invalid Children's Aid Association has helped financially, and the Education Committee have granted help in two cases, representing an expenditure of £23 10s. under Section 13 (1)b, of the Education (Administration Provisions) Act, 1907.

9. OPEN AIR EDUCATION.

9*a*. **Playground Classes** have been held in some of the schools on the initiative of the Head Teacher, in the past, but it is the policy of the Education Committee to encourage these classes. In a circular letter to the various Head Teachers, dated April 29th, 1921, it is stated that "the Committee desire Head Teachers to make the best use of the facilities afforded in their neighbourhood for open-air work. A certain amount of ordinary school work can be better done in the open-air than in the class-room. Physical geography, mensuration, nature study and drill, can usually be taken out of doors, but other lessons, oral and written, may be taken in the open-air when the weather is favourable. The Committee recognise that a certain amount of open-air teaching has been carried out in the schools, but they are of opinion that the work already done is capable of extension. A fuller

use could be made of the playground for class work, and of parks and open spaces for nature study and other suitable lessons . . . . the Committee have under consideration the provision of light furniture in certain cases where there are classes of backward children who derive great benefit from open-air work."

Unfortunately, in some of the playgrounds, the close proximity of w.c.'s and urinals to the covered shed makes the latter practically impossible to use in the manner suggested.

9*b*. **School Journeys.**—There was one school journey during 1920, towards the expense of which the Committee granted £100. Thirty-four children from the Myope Special School spent a fortnight at Tankerton and this outing was a success from all points of view.

There have been no school camps, nor open-air class-rooms during 1920. The same applies to day open-air schools and residential open-air schools.

10. PHYSICAL TRAINING.

The School Medical Service is not associated with the work of physical training in the schools, and there is no Area Organiser of Physical Training.

11. PROVISION OF MEALS.

The School Medical Service is not associated with the above: it is directly under the care of the Education Committee. There were 1,570 free meals given during the year to December 31st, 1920.

12. SCHOOL BATHS.

There are no school baths, but all the senior children in the schools have the chance of learning to swim at the Public Swimming Bath and a large number each year gain a swimming certificate.

13. CO-OPERATION OF PARENTS.

This is, in the majority of cases, afforded us willingly; only a small percentage refuse the routine medical inspection, and the majority are anxious to have defects remedied; this applies more especially to defective sight and enlarged tonsils, and adenoids, but the parents are not so anxious about dental defects; this, however, will probably be better as time goes on. Practically, however, the same percentage of those referred received treatment, namely, 78 per cent. for sight, 73 per cent. for tonsils and adenoids, and 78 per cent. for teeth, but this latter figure includes those children who were brought directly to the Clinic for aching teeth or a gumboil.

As stated previously all parents are invited to be present at medical inspection and the percentage attendance varies from 70 per cent. in the case of infants to 30 per cent. in the case of the elder boys.

14. CO-OPERATION OF TEACHERS.

This is accorded us willingly and involves a fair amount of time. The necessary children have to be selected according to the age group, either a new medical card has to be made out, or, if the child has been previously examined, the old card has to be brought up-to-date regarding address, school, standard. The teachers fill in age, address, date of birth, school, standard and the condition of the boots and clothing, and very frequently, the age of child and date of the inspection. The notices to parents are made and sent out by the Heads, who, on the inspection days, see personally that everything is done to make the inspection pass smoothly, both for doctor and parent.

A list of defects is sent to the Head following the inspection and in which the majority take an active interest. The influence of the Head Teacher is often valuable in getting a defect remedied or in persuading the parent to get advice from the School Clinic.

15. THE SCHOOL ATTENDANCE OFFICERS.

The School Attendance Officers undertake no work in connection with medical inspection, following up, etc. The names and addresses and schools of all children who are excluded by the School Medical Officers are sent to the Attendance Department together with the reason for the exclusion, and, conversely, children who make bad attendances for some health reason and regarding whom the Attendance Officer is in doubt, these are brought to the Clinic for a medical report.

16. CO-OPERATION OF VOLUNTARY BODIES.

There is no formal co-operation, but some cases are referred to the local secretary for the Prevention of Cruelty to Children, and one frequently finds that the local branch of the Invalid Children's Aid Association has been assisting crippled children to obtain the necessary instrument to assist walking.

17. BLIND, DEAF AND DEFECTIVE CHILDREN.

Blind, Deaf and Defective Children in the area are ascertained in two ways, depending on whether they are at school or not.

In the latter part of 1919 the Education Committee employed extra assistance and made a schedule of all children in the area, with their ages. When the fifth birthday has arrived the Attendance Officer sees that the child is in school; if not, a call at the home is made and the reason found.

When the child is already in school, and the teacher thinks there is some abnormality, it is presented to the School Medical Officer as a

"special" at the next routine inspection; in other cases the defective child is referred to the School Medical Officer directly through the Attendance Department.

A bi-annual statement of mentally defective and epileptic children is made by the Head Teachers to the School Medical Officer.

The following is a statement of the work done by the Special Schools during the year.

17*a*. **Mentally Defective Children.**—There are two separate departments for boys and girls with two classes in each. All children are certified by the School Medical Officer before admission. The curriculum for elementary subjects is followed, but a large amount of time is devoted to hand-work, basket-work, rug-making, mat-making, metal-work: wood-work for the boys and laundry and cookery for the girls. On March 31st, 1921, there were 34 boys and 32 girls on the register of this Centre.

17*b*. **Deaf and Dumb Centre.**—In this Centre, speech and lip reading are taught concurrently, whilst hand-work is made an important feature. This includes needlework, rafia, cane-weaving and chair-caning. After the age of 12, boys go to wood-work and the girls to laundry and cookery. At the end of the year, March 31st, 1921, there were 17 boys and 7 girls on the register.

17*c*. **Myope and Blind Centre.**—During the year this Centre has been transferred to more commodious quarters, comprising two large class-rooms, a manual room and a hall suitable for games and physical training: attached is a large piece of ground for gardens and playing fields. The conditions under which the children work are so pleasant that the memory of their school days will always be a happy one. Incidentally, I am sorry I cannot make a similar remark regarding the Mentally Deficient Centre.

In April, 1920, there were 16 boys and 18 girls on the roll: during the twelve months 3 boys and 3 girls left, and 6 boys and 12 girls were admitted, making 19 boys and 27 girls on the register in April, 1921. Of these 16 are "blind within the Act," and have to be taught braille, whilst 30 are partially sighted. The children attend the Elementary School adjoining—Wood Street—for scripture, history, geography, and nature study. Manual-work includes elementary basket-work and chair-caning for the "blind."

The feature of the year was undoubtedly the fortnight's visit to Tankerton, already mentioned; and the majority of the scholars are looking forward to a similar visit to Hastings in the coming June.

In order to meet the needs of after care, a club is being formed and will meet in the School hall fortnightly: each student will bring a friend and the proposed programme includes lectures, entertainments, games and dancing.

There is no after care for the Deaf and Dumb, but there is a Voluntary After Care Committee for the Mentally Defective: the members of this Committee keep in touch with children who have left this Special School and make reports at the monthly meeting. This Committee works in co-operation with the Essex County Council's statutory one.

18, 19 and 20. There are no Nursery Schools, nor Continuation Schools, whilst the County Council carries on the work of Medical Inspection in the two Secondary Schools.

21. EMPLOYMENT OF CHILDREN OF SCHOOL AGE.

This work is practically limited to milk rounds, newsvendors, and the distribution of parcels, goods, etc., a few assisting in shops.

The opinion of the School Medical Officers with regard to the health of these children, is that it is beneficial, also that it promotes cleanliness. If the home conditions are favourable, then a little regular and routine duty outside the school life benefits the boy. The exception to this is sometimes met with and appears to be due to the boy not being under favourable conditions at home as regards food, etc.

22 and 23. No special enquiries have been made by members of the School Staff during the year, and no examination of scholarship candidates, etc., have been made.

24. Appended are Dr. Corbett's Report and the six statistical tables required by the Board regarding the Elementary Schools. Table I., letter "C," requires explanation. Here is asked the total number of children seen by the School Doctors, no child being counted more than once in one year. The figure given, 11,520, gives the number of new cases, or new defects, though a child might come up to the Clinic on different occasions for different defects. A child might be medically examined and found all right, then develop Impetigo and come to the School Clinic: later on he might fall in the playground and be sent to the Clinic for observation. He is thus treated as three cases and this explains the way in which the figure 11,520 is arrived at. In order to be able to give the number of individual children seen during the year it would be necessary to keep either a register or card index for over 7,000 children seen at School and about half the number seen at the Clinic, a total of about 10,500: in addition, there would be the work of verification with regard to the 11,520 new cases. This would mean the work of three or four hours daily, and the expense entailed hardly justifies the result.

Table VII shows very clearly the work carried out at the School Clinic, and the succeeding Tables give the incidence of the Infectious Fevers in the various schools and departments.

TO THE CHAIRMAN AND MEMBERS

OF THE

Walthamstow Education Committee.

Mr. Chairman, Ladies and Gentlemen,

During the year 1920, 554 "new cases" attended the Clinic for treatment.

Ninety-seven per cent. of this number suffered from defective sight due to "error of refraction," 3 per cent. to disease, injury or congenital defects of the eye.

As in previous Reports, the cases will be considered under three groups.

Group A.—External disease of the eye, including squint.

Group B.—Defective vision due to "errors of refraction."

Group C.—Defective vision due to disease in infancy or congenital malformations of the eye.

GROUP A.

External Disease of the Eye.

TABLE I.

Disease.	Boys.	Girls.	Total.
Blepharitis	5	12	17
Nebulæ	5	10	15
Blepharospasm ...	7	5	12
Phlyctenulæ	3	4	7
Styes	1	2	3
Trichiasis	1	—	1
Ptosis	—	1	1
	22	34	56

Reference to the above table shows the nature and sex incidence of these ailments.

Squint.

	Boys.	Girls.	Totals.
Convergent Squint ...	R = 23 ...	R = 15 ...	38
"	L = 19 ...	L = 40 ...	59
Divergent Squint ...	R = — ...	— ...	—
"	L = 1 ...	— ...	1
Occasional Squint ...	— ...	1 ...	1
Alternating Squint ...	3 ...	3 ...	6
	46	59	105

The above table shows the nature and sex incidence of this deformity. Thirty-seven children showed evidence of Unilateral Convergent Squint, six children had Alternating Squint, one child a Divergent Unilateral Squint, and one child squinted occasionally.

The left eye is much more frequently involved than the right.

GROUP B.

Ninety-seven per cent .of the children submitted for treatment had defective sight, due to errors of refraction, a condition in which the eye is slightly out of shape, or has a difficulty or insufficient power of focussing.

The optical conditions associated with defective sight are known as (1.) Hypermetropia. (2.) Astigmatism. (3.) Myopia.

Odd eyes is a condition in which one eye is Hypermetropic, the other Myopic.

The appended Table II shows the relative proportions of the various forms of error of refraction :—

TABLE II.

Grand Totals.

	Totals.	Per cent.
Hypermetropia	245 ...	45·63
Hyp. Astigmatism	158 ...	29·43
Mixed Astigmatism	22 ...	4·09
Myopia	59 ...	10·99
Myopic Astigmatism	24 ...	4·46
Odd Eyes	29 ...	5·40
	537	100·00

Grouping the first two of these classes under the heading "Hypermetropia," and the four latter under the heading "Myopia," we find that 75 per cent. are "Hypermetropes," and 25 per cent. "Myopes."

TABLE III.

Sex Incidence.

	Boys.	Per cent.	Girls.	Per cent.	Totals.
Hypermetropia	101	46·76	144	44·86	245
Hyp. Astigmatism	58	26·85	100	31·15	158
Mixed Astigmatism	7	3·24	15	4·67	22
Myopia	32	14·82	27	8·41	59
Myopic Astigmatism	8	3·70	16	4·99	24
Odd Eyes	10	4·63	19	5·92	29
	216	100·00	321	100·00	537

As in previous reports girls are in the preponderence, accounting for 59 per cent. of all the cases. The girls show a higher percentage of Hypermetropia (76 per cent.) than the boys (73·61 per cent.), and a corresponding lower incidence of Myopia.

TABLE IV.

Age Incidence.

Age.	Hypermetropia.	Hyper-Astigmatism.	Myopic Group.	Totals.
5	17	9	3	29
6	21	15	3	39
7	23	10	10	43
8	25	17	17	49
9	23	22	9	54
10	30	10	10	50
11	33	9	17	59
12	39	40	42	121
13	34	26	33	93
	245	158	134	537

The above table shows the variation of the refractive error with age. Considering first Hypermetropia and neglecting oscillations we find a steady decrease from 58 to 36 per cent. in the nine years under consideration. There is a corresponding decrease, but not so marked in the Astigmatic Group, from 37 to 28 per cent. In the Myopic Group, on the contrary, there is a steady increase, from 5 to 36 per cent. We are led to the conclusion that the diminution in the Hypermetropic and Astigmatic Groups has been due to the transference of these cases to the Myopic Group.

GROUP C.

TABLE V.

	Boys.	Girls.	Totals.
Interstitial Keratitis ...	2	0	2
Superficial Keratitis ...	1	1	2
Corneal Opacities... ...	—	3	3
Cataract (congenital) ...	—	1	1
Cataract (traumatic) ...	1	—	1
Choroiditis (disseminated) ...	—	2	2
Congenital Dislocation lens...	—	1	1
Coloboma Iris, Lens, Choroid	1	—	1
Coloboma Macular Area ...	1	—	1
Dermoid Cyst Cornea ...	1	—	1
Anophthalmos	2	—	2
	8	9	17

Reference to Table V indicates the nature and sex incidence of these diseases and defects.

The percentage is higher for boys than girls, 4 per cent. boys of the total, 2·43 per cent. of the girls. This is accounted for by two boys losing an eye each owing to perforating wounds and subsequent Sepsis necessitating removal of the eyes, and a case of Cataract following a perforating wound of the Cornea.

These children and two other children suffering from Progressive Myopia were transferred to the " Myopic Centre."

There are now 46 children, 19 boys and 27 girls attending the Centre. Of this number 16 are " Blind within the Act," and are taught braille.

TABLE I.

Number of Children Inspected, 1st January, 1920, to 31st December, 1920.

"A"—Routine Medical Inspection.

	Entrants.				Inter-med'te Group	Leavers.					Grand Total.
Age.	5	6	Other Ages.	Total.	8	12	13	14	Other Ages.	Total.	
Boys .	737	708	400	1845	299	1161	358	17	1	1537	3681
Girls .	647	663	321	1631	271	1156	303	11	2	1472	3374
Totals	1384	1371	721	3476	570	2317	661	28	3	3009	7055

"B"—Special Inspections.

	Special Cases.		Re-examinations (*i.e.*, No. of children re-examined).	
	At Schools.	At Clinic.	At Schools.	At Clinic.
Boys ...	119	1898	2275	10662
Girls. ...	144	2304	2581	9377
Totals ...	263	4202	4856	20039

"C"—Total Number of Individual Children Inspected by the Medical Officer, whether as Routine or Special Cases (no Child being counted more than once in one year).

No. of Individual Children Inspected.
*11520

*The number 4,202 included in the figure 11,520 must not be accepted as for **individual children.**

During the whole year the records at the School Clinic were not kept in such a way as to indicate "individual children" but rather "new cases." Among the latter, no doubt, were children who had been treated at different times for dissimilar defects and counted as new cases.

Probably the figure 4,202 is from 5 to 10 per cent. in excess for **individual children.**

TABLE III.

Numerical Return of all Exceptional Children in the Area in 1920.

			Boys.	Girls.	Totals.
Blind (including partially blind), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893		Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for Blind	2	2	4
		Not at School	—	—	—
		Myope Centre	18	24	42
Deaf and Dumb (including partially deaf), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for Deaf	17	8	25
		Not at School	—	—	—
Mentally Deficient	Feeble Minded	Attending Public Elementary Schools	—	—	—
		Attending Certified Schools for Mentally Defective Children	29	29	58
		Notified to the Local Control Authority by Local Education Authority during the year :—			
		Imbeciles	—	—	—
		Idiots	—	—	—
		Not at School	—	—	—
	Imbeciles	At School	—	—	—
		Not at School	2	1	3
	Idiots	... ...	—	—	—
Epileptics		Attending Public Elementary Schools	13	17	30
		Attending Certified Schools for Epileptics	—	—	—
		In Institutions other than Certified Schools	—	—	—
		Not at Schools	1	—	1
Physically Defective	Pulmonary Tuberculosis	Attending Public Elementary Schools	37	27	64
		Attending Certified Schools for Physically Defective Children ...	—	—	—
		In Institutions other than Certified Schools	10	5	15
		Not at School	1	3	4
	Crippling due to Tuberculosis	Attending Public Elementary Schools	6	2	8
		Attending Certified Schools for Physically Defective Children ...	—	—	—
		In Institutions other than Certified Schools	—	—	—
		Not at School	3	2	5
	Crippling due to causes other than Tuberculosis, i.e., Paralysis, Rickets, Traumatism	Attending Public Elementary Schools	36	39	75
		Attending Certified Schools for Physically Defective Children ...	—	—	—
		In Institutions other than Certified Schools	—	—	—
		Not at School	3	2	5
	Other Physical Defectives, e.g., delicate and other children suitable for admission to Open-Air Schools; children suffering from severe heart disease.	Attending Public Elementary Schools	116	240	*356
		Attending Open-Air Schools ...	—	—	—
		Attending Certified Schools for Physically Defective Children other than Open-air Schools	—	—	—
		Not at School	1	2	3
Dull or Backward		Retarded 2 years	226	219	445
		Retarded 3 years	99	129	228

* From information supplied by Head Teachers only.

TABLE II.

Return of defects found in the course of Medical Inspection in 1920.

Defects or Disease.		Routine Inspections.		Specials.	
		Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.
1		2	3	4	5
Malnutrition		5	15	—	—
Uncleanliness, Head		326	—	71	—
,, Body		12	—	—	—
Skin.	Ringworm, Head	4	—	116	—
	,, Body	2	—	56	—
	Scabies	4	—	108	—
	Impetigo	22	—	700	—
	Other Diseases (Non-Tubercular) ...	9	7	1	—
Eye.	Blepharitis	45	—	1	—
	Conjunctivitis	9	—	162	—
	Keratitis	—	—	—	—
	Corneal Ulcer	—	—	1	—
	,, Opacities	—	—	—	—
	Defective Vision	317	6	345	—
	Squint	68	—	1	—
	Other Conditions	—	—	—	—
Ear.	Defective Hearing	135	9	17	—
	Otitis Media	84	1	111	—
	Other Ear Disease	9	5	5	—
Nose and Throat.	Enlarged Tonsils	172	297	260	—
	Adenoids	34	16	7	—
	Enlarged Tonsils and Adenoids ...	19	8	1	—
	Other Conditions	—	—	—	—
Enlarged Cervical Glands (Non-Tubercular)		—	46	—	—
Defective Speech		—	12	—	7
Teeth—Dental Diseases (see above)		—	—	—	—
Heart and Circulation.	Heart Disease, Organic	—	21	—	—
	,, ,, Functional	—	163	—	—
	Anæmia...	2	29	—	2
Lungs.	Bronchitis and Bronchial Catarrh ..	4	187	1	—
	Other Non-Tubercular Diseases ...	2	3	—	—
Tuberculosis.	Pulmonary Definite	3	2	—	—
	,, Suspected	6	46	—	3
	Non-Pulmonary Glands	5	16	—	—
	,, Spine	1	—	—	—
	,, Hip	—	2	—	—
	,, Other Bones & Joints	1	—	—	—
	,, Skin	1	2	—	—
	,, Other Forms ...	—	—	—	—
Nervous System.	Epilepsy	—	4	—	—
	Chorea	1	1	1	—
	Other Conditions	14	4	—	—
Deformities.	Rickets	—	6	—	—
	Spinal Curvature	4	2	—	—
	Other Forms	2	5	—	—
Other Defects or Diseases		29	57	334	1
Number of Individual Children having Defects which required Treatment or to be Kept Under Observation ..					6539

TABLE IV.

Treatment of Defects of Children during 1920.

"A"—Treatment of Minor Ailments.

Disease or Defect.	Number of Children			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Totals.
Skin—				
Ringworm—Head ...	120	99	21	120
Ringworm—Body ...	58	56	2	58
Scabies	112	111	1	112
Impetigo	722	680	42	722
Minor Injuries	5	5	—	5
Other skin diseases ...	10	3	7	10
Ear Disease	210	159	21	180
Eye Disease (external and other)	217	194	12	206
Miscellaneous	87	84	3	87

"B"—Treatment of Visual Defect.

Number of Children									
Referred for Refraction.	Submitted to Refraction.				For whom Glasses were prescribed.	Number who obtained Glasses.	Recommended for Treatment other than by Glasses.	Received other Forms of Treatment.	For whom no Treatment was considered necessary.
	Under Local Education Authority's Scheme—Clinic or Hospital.	By Private Practitioner or Hospital.	Otherwise.	Total.					
731	568	10	7	585	478	438	4	5	81

"C"—Treatment of Defects of Nose and Throat.

Number of Children				
Referred for Treatment.	Received Operative Treatment.			Received other Forms of Treatment.
	Under Local Education Authority's Scheme—Clinic or Hospital.	By Private Practitioner or Hospital.	Total.	
493	361	14	375	—

"D"—Treatment of Dental Defects.

1.—Number of Children dealt with.

	Age Groups.										"Specials."	Totals.
	5	6	7	8	9	10	11	12	13	14		
(*a*) Inspected by Dentist :												
Clinic	202	349	335	248	136	147	134	236	186	67	21	2061
Schools	—	21	33	—	—	—	—	—	—	—	713	2846
(*b*) Referred for treatment											(*b*)	4357
(*c*) Actually treated ...											(*c*)	3411
(*d*) Re-treated (result of periodical examination) ...											(*d*)	—

2.—Particulars of Time given and of Operations undertaken.

No. of Half-Days devoted to Inspection.	No. of Half-Days devoted to Treatment.	Total No. of Attendances made by the Children at the Clinic.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of General Anæsthetics included in (4) and (6).	No. of other Operations.	
			Extracted.	Filled.	Extracted.	Filled.			Permanent Teeth.	Temporary Teeth.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
*33	431	3587	1011	1023	6241	1809	2832	2183	134	346

* Inspection is also made of Urgent Cases at the Dental Clinic on Monday, Tuesday, Wednesday and Friday Mornings.

TABLE V.

Summary of Treatment of Defects as shown in Table IV (A, B, C, D and F, but excluding E).

Disease or Defect.	Number of Children			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Totals.
Minor Ailments	1541	1391	109	1500
Visual Defects	731	568	17	585
Defects of Nose and Throat...	493	361	14	375
Dental Defects	4357	3411	92	3503
Other Defects	25	7	16	23
Totals	7147	5738	248	5986

TABLE VI.

Summary Relating to Children Medically Inspected at the Routine Inspections during the year 1920.

(1) The total number of children medically inspected at the routine inspections	7,055
(2) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment)	972
(3) The number of children in (1) suffering from—	
Malnutrition	20
Skin Disease	41
Defective Vision (including squint)	385
Eye Disease	54
Defective Hearing	141
Ear Disease	93
Nose and Throat Disease	258
Enlarged Cervical Glands (non-tubercular)...	46
Defective Speech	12
Dental Disease	1,318
Heart Disease—	
Organic	21
Functional	163
Anæmia	31
Lung Disease (non-tubercular)	197
Tuberculosis—	
Pulmonary { definite	5
Pulmonary { suspected	42
Non-pulmonary	28
Disease of the Nervous System	24
Deformities	13
Other defects and diseases	94
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	2,774
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	1,220

"Specials" should not be included in this Table.

TABLE VII.

Statement of Defects for which attendances were made by Children at School Clinic during 1920.

Conditions.	First Inspection.				Re-inspections.	
	No. Excluded under Art. 53B.		No. to Return to School.			
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Ringworm	38	40	50	45	1524	1081
Scabies	44	60	23	16	503	551
Impetigo	7	3	12	14	276	184
Impetigo, Sores, etc., treated ...	95	94	271	220	2758	1840
Skin	7	9	51	59	150	99
Verminous Heads, etc.	6	33	6	26	63	557
Sore Throat...	193	366	174	249	746	902
Discharging Ears and Deafness at Dispensary	2	2	79	64	2734	2288
Defective Vision	—	3	168	233	153	151
External Eye Diseases	11	26	67	79	825	1004
Tonsils and Adenoids	6	1	100	136	135	120
Mumps	4	28	10	8	44	17
Various	144	189	290	301	751	583
Totals	597	854	1301	1450	10662	9377
	4202				20039	

Number of children seen at first inspection	4202
„ „ sent by Attendance Officers and Attendance Committees	129
„ attendances made by children	24241
„ children sent by Head Teachers	4073
„ swabs taken	1213
„ specimens of hair examined for Ringworm... ...	8
„ operated on for Tonsils and Adenoids	361
„ children X-rayed	48
„ „ seen by Dr. Corbett— new cases	567
„ „ prescribed for...	620
Total inspections	3375

Ophthalmic Surgeon's Inspections—New cases, 568. Re-inspections, 2,789

NON-NOTIFIABLE INFECTIOUS DISEASES.

Walthamstow Education Committee's "Regulations as to Infectious Diseases in Schools."

Notifications received from Head Teachers during period from January 1st to December 31st, 1920.

District.	School.	Department.	Measles.	Whooping Cough.	Mumps.	Chicken Pox.	Ringworm.	Sore Throat.	Impetigo and Pediculosis.	External Eye Disease.	Totals.
N.W.	Blackhorse Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	57	44	1	10	5	3	3	—	123
	W. E. Whittingham	Boys	—	—	—	—	—	—	—	—	—
		Girls	2	1	6	6	3	34	2	—	54
		Infants	44	17	7	23	3	5	17	—	116
	Higham Hill	Junior Mixed	2	—	1	3	—	2	—	—	8
		Temporary Infants	—	—	—	—	—	—	—	—	—
C.	Pretoria Avenue	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	3	5	20	7	—	23	—	1	59
	Higher Elementary	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
	Coppermill Road	Boys	—	—	11	1	1	—	—	—	13
		Girls	—	—	—	—	—	—	—	—	—
		Junior Mixed	1	1	27	2	1	—	15	—	47
		Infants	3	19	116	34	—	—	—	—	172
N.E.	Wood Street	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	—	—	—	—	—	—	—	—	—
	Joseph Barrett	Boys	—	—	—	—	1	—	1	—	2
		Girls	—	—	—	—	—	—	—	—	—
		Infants	15	56	—	3	—	5	5	—	84
E.	Maynard Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	1	3	—	2	—	2	1	—	9
		Infants	55	50	2	3	1	9	16	—	136
	St. Mary's	Girls	6	3	—	—	2	7	—	—	18
		Infants	52	3	1	—	—	—	1	—	57
	St. George's	Mixed	—	—	—	—	—	—	—	—	—
	Shernhall Street	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Boys	—	—	—	—	—	—	—	—	—
W.C.	William Morris	Girls	—	—	—	—	—	1	—	—	1
		Junior Mixed	—	—	63	4	1	—	1	—	69
	Marsh Street	Boys	—	—	—	—	—	—	—	—	—
	Mission Grove	Girls	—	—	—	—	—	1	—	—	1
		Infants	42	43	86	10	2	—	—	—	183
	Deaf and Dumb	Mixed	—	—	—	—	—	—	—	—	—
S.W.	Edinburgh Road	Junior Mixed	—	—	—	—	—	—	—	—	—
	Markhouse Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	10	27	16	2	—	21	2	—	78
		Junior Mixed	—	—	—	—	—	2	—	—	2
	St. Saviour's	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	1	—	—	1	—	1	—	—	3
E.C.	Forest Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	5	11	36	46	1	1	3	—	103
	Winns Avenue	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	22	—	—	—	—	—	1	—	23
		Junior Mixed	6	1	18	10	3	—	—	—	38
N.	Chapel End	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	35	—	—	16	—	—	—	—	51
		Junior Mixed	—	—	—	—	—	—	1	—	1
	Selwyn Avenue	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	149	34	—	6	—	4	17	—	210
S.	Gamuel Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	—	11	30	9	—	—	—	—	50
	Queen's Road	Boys	—	—	—	—	—	—	—	—	—
		Girls	—	—	—	—	—	—	—	—	—
		Infants	22	5	—	—	—	—	—	—	27
		TOTALS	533	334	441	198	24	121	86	1	1738

RETURN showing the number of Cases of SCARLET FEVER and DIPHTHERIA notified in each month of Children attending the PUBLIC ELEMENTARY SCHOOLS—1920.

	SCHOOL.	DEPARTMENT.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTALS.	
			S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.	S.F.	D.
N.W.	Blackhorse Road ...	Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	—	1	—	4	—
		Girls	1	2	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	1	1	—	1	—	—	—	3	6
		Infants	—	—	—	2	—	1	—	—	—	—	—	—	—	1	—	—	1	—	1	—	—	2	2	—	4	6
	W. E. Whittingham .	Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	4	—	2	1	—	—	8	1
		Girls	—	2	—	—	—	—	1	—	—	1	—	2	1	1	2	—	—	—	2	—	3	—	4	—	13	6
	Higham Hill	Infants	—	—	—	—	—	1	—	—	3	—	—	—	1	1	2	1	—	1	1	—	1	1	6	—	14	5
		Junior Mixed ...	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	—	3	—	3	—	2	—	4	1	15	1
		Temp. Infants ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.	Pretoria Avenue ...	Boys	—	—	—	—	—	—	1	—	1	—	2	—	2	—	1	—	—	—	1	—	1	—	1	—	10	—
		Girls	—	—	—	—	—	—	—	—	—	2	3	—	2	—	1	—	6	1	2	—	2	—	1	2	17	5
		Infants	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	12	—	3	1	1	1	6	—	25	2
	Higher Elementary ...	Boys	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2	—
		Girls	—	1	—	—	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	2	—	—	—	5	1
		Boys	1	—	1	—	—	—	6	1	2	1	—	—	—	—	1	—	—	—	1	1	3	—	1	—	16	3
	Coppermill Road ...	Girls	1	—	—	—	—	—	—	1	—	—	—	—	1	—	1	—	1	—	2	—	1	—	1	—	8	1
		Infants	—	—	1	1	2	—	2	—	1	—	1	—	—	—	1	—	2	2	2	—	2	—	—	—	14	3
		Junior Mixed ...	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	—	4	1
N.E.	Wood Street ...	Boys	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	—	2	2
		Girls	—	2	—	—	—	—	—	—	—	—	—	—	—	1	2	—	1	—	1	—	1	—	—	—	5	3
		Infants	1	—	—	—	—	2	1	—	—	1	—	—	4	—	—	—	2	1	—	—	1	—	1	—	10	4
	Joseph Barrett ...	Boys	—	—	—	1	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	3	1	—	—	4	3
		Girls	1	1	—	3	—	—	—	1	—	—	—	2	—	1	—	—	1	—	—	—	2	—	—	—	4	8
		Infants	1	—	—	1	—	—	—	—	—	—	—	—	—	1	1	—	1	—	1	—	—	—	1	—	5	2
E.	Maynard Road ...	Boys	1	3	—	—	1	1	—	1	—	—	2	—	1	—	2	—	2	2	—	1	1	3	—	—	10	11
		Girls	1	11	1	1	1	—	—	1	—	—	1	2	—	—	2	—	—	—	—	1	—	—	—	—	6	16
		Infants	1	1	—	2	—	2	—	—	—	1	2	—	4	—	—	—	2	—	—	1	—	—	—	—	9	7
	St. Mary's	Girls	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	1
		Infants	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—	—	1	1	—	2	1	1	—	—	4	5
	St. George's	Mixed	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
	Shernhall Street ...	Boys	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—
		Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W.C.	William Morris ...	Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	3	—	—	1	—	—	5	1
		Girls	—	—	—	—	—	1	—	—	—	1	—	1	1	—	—	—	3	—	1	—	—	1	1	—	6	3
		Junior Mixed ...	—	—	—	—	—	—	—	1	—	—	—	—	4	—	1	—	—	—	2	2	—	—	—	—	7	3
	Marsh Street ...	Boys	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	2	2	—	—	—	3	—	2	—	8	3
	Mission Grove ...	Girls	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—	3	1
		Infants	—	—	—	1	—	1	—	—	—	—	—	1	1	—	1	—	4	—	1	—	1	—	6	1	14	4
	Deaf and Dumb ...	Mixed	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—
	Edinburgh Road ...	Junior Mixed ...	—	—	—	—	—	—	—	—	1	—	—	—	1	1	—	1	1	—	5	—	1	—	—	—	9	2
		Boys	—	2	—	—	—	1	—	2	1	—	—	—	1	1	—	1	1	—	—	—	—	—	—	3	7
	Markhouse Road ...	Girls	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	2	—	—	—	4	1
S.W.		Infants	—	—	—	—	—	—	—	—	—	—	—	2	—	—	1	—	1	—	—	1	—	1	—	—	2	4
		Junior Mixed ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	1	—	1	—	—	—	7	—
	St. Saviour's ...	Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1	2	1
		Girls	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	3	1	—	—	6	1
		Infants	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	2	—	1	—	2	4	—	—	7	4
	Forest Road ...	Boys	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	5	—	2	—	—	—	8	—
		Girls	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	2	1	—	—	2	2
		Infants	—	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	1	—	5	3	2	—	—	—	9	5
E.C.	Winns Avenue ...	Boys	1	1	1	1	—	—	—	1	—	1	—	4	—	—	—	1	—	—	2	—	2	—	1	—	7	9
		Girls	—	1	1	1	—	—	—	—	—	—	1	—	1	—	1	1	—	—	—	—	1	—	—	—	5	3
		Infants	—	—	4	1	1	1	—	—	—	4	—	3	—	—	1	1	1	—	1	—	3	—	—	—	11	10
		Junior Mixed ...	—	—	—	—	—	2	—	1	1	—	2	—	1	—	—	—	—	1	1	1	1	—	—	—	6	5
	Chapel End	Boys	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
		Girls	—	6	—	—	1	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	1	—	—	1	3	8
		Infants	—	1	—	1	—	—	—	—	—	—	—	1	—	1	1	—	—	2	1	1	2	—	3	—	8	7
N.		Junior Mixed ...	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	3	—	1	—	1	—	—	—	7	—
	Selwyn Avenue ...	Boys	—	1	—	—	1	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	1	—	3	3
		Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	2
		Infants	1	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2	2	—	3	1	1	—	8	4
	Gamuel Road ...	Boys	—	3	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	4	1	3	—	1	—	9	4
		Girls	—	3	—	1	—	—	—	—	—	—	—	—	3	—	7	—	4	—	5	1	2	—	2	—	17	5
		Infants	—	1	—	1	—	—	—	—	—	—	—	—	—	—	3	—	2	—	1	—	2	1	1	—	9	3
S.	Queen's Road ...	Boys	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—	—	1	1	4	2
		Girls	—	—	1	—	—	1	—	1	—	—	—	—	—	—	—	—	1	1	1	—	3	—	—	—	6	3
		Infants	—	—	1	—	—	—	—	1	—	—	2	—	2	—	—	—	1	1	2	1	1	—	—	—	9	3
		TOTALS ...	14	46	14	18	11	18	12	14	17	15	21	22	37	13	32	8	78	16	73	21	79	20	52	7	440	218
	TOTAL	CASES NOTIFIED	29	67	28	26	19	43	18	28	30	28	34	31	53	24	46	17	102	23	101	32	129	36	81	20	670	375