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London County Council

ANNUAL REPORT OF THE COUNCIL, 1936

Vol. III (Part I)

PUBLIC HEALTH

(Report for the year 1936 of the County Medical Officer of Health)

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ANNUAL REPORT OF THE COUNCIL, 1936

VOL. III (Part I)

REPORT OF THE COUNTY MEDICAL OFFICER FOR THE YEAR 1936

By Sir Frederick Menzies, K.B.E., M.D., LL.D., F.R.C.P., F.R.S.E., County Medical Officer of Health and School Medical Officer.

Vital Statistics

Population.

The population enumerated in London by the census on the night of 26th April, 1931, was 4,397,003, including 10,500 non-civilians. In this census the place of usual residence was also recorded, so that two population figures are available, the enumerated population already stated, and the normal resident population, which was 4,419,877.

The Registrar-General estimates the resident population of the county in the middle of 1936 to have been 4,141,100, compared with 4,185,200 a year earlier. The corresponding estimates for metropolitan boroughs are shown in table 28, and the rates given in this annual report are calculated upon these figures.

The age and sex-distribution of this estimated population is as follows :—

Table 1.

Age group	Males	Females	Total
0– 5 years	129,000	125,400	254,400
5–15 ,,	290,300	286,300	576,600
15–25 ,,	349,000	380,500	729,500
25–35 ,,	340,100	379,700	719,800
35–45 ,,	262,000	324,300	586,300
45–55 ,,	231,800	286,300	518,100
55–65 ,,	189,200	228,400	417,600
65–75 ,,	103,900	138,400	242,300
75 years and over	34,100	62,400	96,500
Total	1,929,400	2,211,700	4,141,100

Marriages.

The marriages registered in London during 1936 numbered approximately 44,479 or 21·5 per thousand of the population, the corrected rate for the preceding year being 21·1.

Births.

The live births in London during 1936 numbered 56,273, compared with 55,780 in the preceding year. The live birth-rate was 13·6 per thousand as against 13·3 in 1935.

The birth-rates in table 30 show that the marked decline in the rate since the war is now giving place to a slight tendency to increase. It may be that, as the rates since 1931 are dependent upon estimates of the population, some adjustment may have to be made in them when the census results of 1941 are available and the intercensal estimates can be revised ; but it appears to be unlikely that any such adjustments will be so large as to modify the conclusion suggested by the rates as they stand.

The births in the resident populations of each metropolitan borough during 1936 were as follows :—

TABLE 2.—*County of London—Births*, 1936.

Metropolitan boroughs arranged in topographical order	Live-births		Still-births		Total	
	Legitimate	Illegitimate	Legitimate	Illegitimate	Legitimate	Illegitimate
Western.						
Paddington	1,663	258	66	8	1,729	266
Kensington	1,997	231	77	5	2,074	236
Hammersmith ...	1,784	138	56	2	1,840	140
Fulham	2,006	105	52	3	2,058	108
Chelsea	578	60	18	2	596	62
Westminster, City of	928	141	29	7	957	148
Northern.						
St. Marylebone ...	781	125	22	5	803	130
Hampstead	949	99	37	13	986	112
St. Pancras	2,127	233	94	9	2,221	242
Islington	4,404	246	128	10	4,532	256
Stoke Newington ...	678	16	25	1	703	17
Hackney	2,915	103	90	4	3,005	107
Central.						
Holborn	257	32	9	—	266	32
Finsbury	802	38	26	5	828	43
City of London ...	69	2	3	—	72	2
Eastern.						
Shoreditch	1,231	43	41	1	1,272	44
Bethnal Green ...	1,269	43	55	—	1,324	43
Stepney	2,950	117	101	11	3,051	128
Poplar	2,060	50	60	4	2,120	54
Southern.						
Southwark	2,151	104	59	4	2,210	108
Bermondsey ...	1,501	44	43	1	1,544	45
Lambeth	3,617	254	118	10	3,735	264
Battersea	2,041	87	53	7	2,094	94
Wandsworth ...	3,737	195	108	10	3,845	205
Camberwell	3,067	127	97	7	3,164	134
Deptford	1,501	47	55	1	1,556	48
Greenwich	1,281	42	37	2	1,318	44
Lewisham	2,813	119	108	2	2,921	121
Woolwich	1,959	58	53	3	2,012	61
London, 1936 ...	53,116	3,157	1,720	137	54,836	3,294
London, 1935 ...	52,714	3,066	1,712	142	54,426	3,208

Deaths.

The deaths in the total population of London during 1936 numbered 51,142 giving a death-rate of 12·3 per thousand, compared with 11·4 in 1935. Of the total deaths 24,887, or 48·7 per cent., were among females.

The distribution of deaths by ages in 1936 and recent preceding periods is shown in the following table :—

TABLE 3.

Period	0–	1–	2–	5–	10–	15–	20–	25–	35–	45–	55–	65+	All ages
1919-22 (Annual average.)	7,836	2,131	1,919	1,376	853	1,175	1,318	3,103	4,238	6,414	8,265	19,828	58,456
1923-26 (Annual average.)	5,546	1,611	1,453	828	637	1,013	1,220	2,479	3,659	6,080	8,456	21,004	53,986
1927-30 (Annual average.)	4,585	1,396	1,152	818	490	1,009	1,245	2,414	3,444	6,195	9,200	23,788	55,736
1931-34 (Annual average.)	3,906	915	841	669	477	809	1,182	2,320	2,891	5,554	8,968	24,756	53,288
1931	4,270	862	721	622	463	953	1,248	2,353	3,052	5,795	9,047	24,902	54,288
1932	4,143	1,084	960	641	453	847	1,195	2,291	2,897	5,429	8,793	24,878	53,611
1933	3,377	680	728	698	518	728	1,193	2,468	3,008	5,832	9,110	25,196	53,536
1934	3,832	1,036	957	715	475	707	1,094	2,167	2,606	5,160	8,921	24,047	51,717
1935	3,229	365	436	466	385	569	987	1,986	2,413	4,722	8,400	23,889	47,847
1936	3,691	738	661	466	309	577	964	1,930	2,473	4,932	8,720	25,681	51,142

There was a slight increase in the number of fatal street accidents—from 531 in 1935 (52 weeks) to 541 in 1936 (53 weeks). A comparison of the age distribution for the two years is given in the following table :— Street accidents.

TABLE 4.—*County of London—Deaths from street accidents.*

Year	Age-group						
	0–5	5–15	15–25	25–45	45–65	65+	All ages
1935 (52 weeks)	22	73	85	89	122	140	531
1936 (53 weeks)	18	73	73	94	113	170	541
Adjusted increase (+) or decrease (—) per cent.	−19·7	−1·9	−15·7	+3·6	−9·1	+19·1	+ ·04

The death-rates from all causes and from certain specified causes in each metropolitan borough in 1936 and in London as a whole in 1936 and earlier years will be found in tables 28 and 30.

The deaths from the principal causes by age and sex during 1936 in London are shown in table 29.

The deaths under one year of age per thousand live births were 66 compared with 58 in the preceding year. Apart from the expected epidemic of measles during 1936, the chief factor in the increased mortality-rate over the low figure for 1935 was a high mortality from diarrhœa amounting to 13·79 per 1,000 births, a figure not exceeded since 1921. Infant mortality.

The movement of the death-rates from the principal diseases at ages below one year since 1910 are shown in the following table :—

TABLE 5.

Cause of death	1911 to 1914	1915 to 1918	1919 to 1922	1923 to 1926	1927 to 1930	1931 to 1934	1932	1933	1934	1935	1936
Measles	3·40	3·84	1·64	2·02	2·07	1·44	2·44	0·28	2·60	0·07	2·35
Whooping-cough	3·63	4·45	2·50	2·60	3·14	2·27	2·59	2·45	1·88	1·77	2·51
Influenza	0·27	1·10	0·81	0·38	0·48	0·40	0·39	0·46	0·30	0·18	0·27
Tuberculosis	3·40	3·20	1·52	1·26	0·89	0·77	0·96	0·83	0·60	0·56	0·71
Bronchitis	6·41	6·72	4·42	2·91	2·30	2·16	2·09	1·50	2·48	1·90	2·26
Pneumonia	12·28	14·96	12·60	11·51	12·10	11·45	10·25	8·27	13·40	9·79	11·42
Diarrhœa	24·28	16·10	12·16	9·36	8·87	10·86	11·78	10·70	12·01	10·61	13·79
Premature birth	18·16	17·42	17·00	14·74	14·17	14·91	14·51	15·23	14·65	14·11	13·13
Congenital defects	14·69	14·66	11·26	8·39	7·38	7·22	7·58	6·84	7·81	6·88	6·97
Other causes	21·48	20·55	15·09	11·83	12·60	13·52	14·41	13·44	11·27	12·01	12·47
All causes	**108**	**103**	**79**	**65**	**64**	**65**	**67**	**60**	**67**	**58**	**66**

The deaths among infants under one year of age in age-groups from the causes included in the above table are shown by sex and according to legitimacy in the following table :—

TABLE 6.—*County of London—Infant Mortality*, 1936.

Cause of death		Age at death							Total		
		Under 1 day	1 to 7 days	1 to 4 weeks	4 weeks to 3 months	3 months to 6 months	6 months to 9 months	9 months to 1 year	Number	Males	Females
Measles ...	Leg.	—	—	—	—	7	46	74	127	72	55
	Illeg.	—	—	—	—	1	3	1	5	2	3
Whooping-cough ...	Leg.	—	—	2	20	28	44	39	133	65	68
	Illeg.	—	—	—	1	3	—	4	8	2	6
Influenza ...	Leg.	—	—	2	—	1	4	6	13	9	4
	Illeg.	—	—	—	—	1	1	1	3	2	1
Tuberculosis	Leg.	—	—	—	1	8	18	12	39	18	21
	Illeg.	—	—	—	—	—	—	—	—	—	—
Bronchitis ...	Leg.	—	2	8	32	41	19	8	110	69	41
	Illeg.	—	—	2	6	5	2	2	17	10	7
Pneumonia	Leg.	—	9	50	116	154	138	103	570	331	239
	Illeg.	—	2	1	15	20	12	7	57	32	25
Diarrhoea ...	Leg.	—	1	17	147	241	192	84	682	394	288
	Illeg.	—	—	3	22	42	18	9	94	50	44
Premature birth ...	Leg.	312	212	99	53	3	—	—	679	377	302
	Illeg.	23	19	12	6	—	—	—	60	42	18
Congenital defects ...	Leg.	38	81	68	93	32	19	5	336	208	128
	Illeg.	3	5	2	10	8	—	—	28	16	12
Other causes	Leg.	127	133	85	69	92	88	48	642	386	256
	Illeg.	50	3	4	16	6	6	3	88	39	49
All Causes	Leg. M.	278	266	190	322	366	301	206	3,331	1,929	1,402
	Leg. F.	199	172	141	209	241	267	173			
	Illeg. M.	35	16	14	47	42	24	17	360	195	165
	Illeg. F.	41	13	10	29	44	18	10			
Total, 1936 ...		553	467	355	607	693	610	406	3,691	2,124	1,567
Total, 1935 ...		596	461	319	581	617	407	248	3,229	1,919	1,310
1935 Leg. M.		498	425	294	296	328	220	142	2,879	1,714	1,165
1935 Leg. F.					214	219	157	86			
1935 Illeg. M.		98	36	25	45	39	18	11	350	205	145
1935 Illeg. F.					26	31	12	9			

Migration 1861–1931.

The Annual Report for 1935 (Vol. III, Part I, p. 8) contained some notes by Mr. C. A. Gould, M.C., B.Sc., of my department, on migration occurring in the county of London. Further observations on this subject contributed by Mr. Gould are subjoined.

The movement previously estimated was the net or balance of migration by age-groups consisting, in general, of two opposite streams which may mask one another where one is not greatly in excess. Migration can, however, also be considered according to place of birth, and, although it is not possible to separate these two movements by age-groups, this can, however, be done for the whole population of each sex. In the following notes, migration of the London male and female populations during the period 1861–1931, has been investigated in the two groups (i) London-born (ii) born elsewhere. The movements of these two groups were estimated from the census populations at the beginning and end of each period and the total births and deaths during the period, apportioning the latter among the two groups according to their mean populations over the period, *i.e.*, assuming a common death-rate. The result is set out in the following table for each intercensal period between 1861–1931 and is most interesting.

TABLE 7.—*Migration—County of London*—1861–1931,
(+ = migration *in*, − = migration *out*.)

Intercensal period	Sex	Migration of		Net movement
		London born	Born elsewhere	
1861–71	Male ...	−156,936	+205,890	+ 48,954
	Female ...	−142,669	+214,877	+ 72,208
	Persons ...	−299,605	+420,767	+121,162
1871–81	Male ...	−221,715	+267,104	+ 45,389
	Female ...	−213,563	+277,758	+ 64,195
	Persons ...	−435,278	+544,862	+109,584
1881–91	Male ...	−224,599	+160,574	− 64,025
	Female ...	−215,732	+164,974	− 50,758
	Persons ...	−440,331	+325,548	−114,783
1891–1901	Male ...	−297,108	+193,348	−103,760
	Female ...	−271,669	+193,497	− 78,172
	Persons ...	−568,777	+386,845	−181,932
1901–11	Male ...	−348,083	+ 63,542	−284,541
	Female ...	−354,208	+ 84,756	−269,452
	Persons ...	−702,291	+148,298	−553,993
1911–21	*Male ...	−242,417	+ 79,767	−162,650
	Female ...	−255,181	+ 95,827	−159,354
	*Persons ...	−497,598	+175,594	−322,004
1921–31	Male ...	−196,611	+ 44,767	−151,844
	Female ...	−231,889	+ 52,757	−179,132
	Persons ...	−428,500	+ 97,524	−330,976

* Excluding war losses, estimated at 74,000.

It will be noticed that there are two well-defined streams of migration: (i) an outward movement of London-born and (ii) an influx of those born outside the county area. The former, as has been shown in a previous paper, mainly consists of children and married adults, while the latter comprises young persons of both sexes seeking employment within the county.

At the beginning of the period, while London was still growing, the latter movement exceeded the former, but some time after 1881, a saturation point was reached, and afterwards the outward movement of the London-born rapidly outpaced the inward. As has also been previously observed, this net movement out corresponds with the rapid growth of the outer ring. The influx of young people attained a maximum during the period 1871–81, while that of the outward movement of the London-born was reached some time during the period 1901–1911. There was, however, a further spurt in the former during the years 1891–1901, and again in the period 1911–21, the decennium in which the war occurred, but since 1921 there has apparently been a drop of about 45 per cent. in the number of persons entering the county.

Another point to note is that, whereas at first the outward movement of London-born males was in excess of that of the females, at the end of the period the position was reversed, the change occurring during the period 1901–11. On the other hand, the influx of females has always been in excess of that of males.

When the destination of the London-born is examined it can be shown that these have been absorbed mainly by the suburbs comprising the outer ring, and to a lesser extent by the surrounding home counties. A smaller proportion has, of course, moved to other parts of the British Isles or emigrated.

With regard to entrants, it is of interest to trace their place of origin. The following table shows the percentage of the London population according to birthplace for the years 1861, 1891 and 1931, *i.e.*, at the beginning, middle and end of the period considered.

TABLE 8.—*Birthplaces of the London population—Percentage apportionment.*

Where born	Census		
	1861	1891	1931
London	62·1	65·5	70·1
Elsewhere in England	29·8	27·6	21·7
Wales	0·6	0·6	1·3
Scotland	1·3	1·3	1·2
Ireland	3·8	1·6	1·4
Islands in the British seas ...	0·1	0·1	0·1
Alien	1·5	2·3	3·0
Others (at sea, dominions, etc.) ...	0·8	1·0	1·2
Total	100·0	100·0	100·0

As would be expected from the slowing down of the inward movement, the percentage of London-born shows a steady increase over the period. Of those born elsewhere in England the majority, as one would expect, come from the surrounding home counties. Records for the census of 1931 are not available, but according to the census of 1911 the percentages of the London population born in the home counties were Essex (2·3), Kent (2·2), Middlesex (1·9) and Surrey (1·5), the counties next in order being Hampshire (1·2), Sussex (1·1), Devon (1·0), Suffolk (1·0), Norfolk (0·9), Lancashire (0·8) and Yorkshire (0·7). It is seen from the above table that while the percentage of Scotsmen has apparently remained about the same, that of the Irish has decreased by about one-half since 1861. Immigrants from Wales, on the other hand, have increased, especially since the Great War. Again, the percentage of foreigners has doubled during the period considered.

Infectious Diseases

The notifications, attack-rates and death-rates of the principal infectious diseases in London in 1936 and earlier years are shown in tables 30 to 33, and for the constituent metropolitan boroughs in 1936 in table 28.

Smallpox.

No case of smallpox was notified during the year. London has now been free from this disease since June, 1934.

Typhoid fever.

During the nine weeks ended 24th October, 1936, 154 cases of typhoid fever were notified in London. Of these 13 occurred among a party of girl guides from the Rotherhithe district who stayed at a holiday resort on the Sussex coast during the period 23rd July to 8th August. Two further cases were notified later. All the 15 patients were treated in the Council's hospitals and 3 died. The source of infection was not definitely traced. Thirty-four of the 154 cases referred to above were infected during an outbreak of the disease in the Bournemouth area, and two proved fatal. The infection was attributed to an unpasteurised milk supply.

Cerebro-spinal (spotted) fever.

During the year 113 notifications of cerebro-spinal fever were received, but in 14 of these the diagnosis was not confirmed. Of the 99 actual cases, 52 proved fatal. In addition, 24 deaths were recorded by the Registrar-General of cases which had not been notified, making a total of 76 deaths.

Encephalitis lethargica.

The notifications of encephalitis lethargica numbered 12. One case was not confirmed. Of the 11 actual cases, 4 proved fatal. In addition 49 deaths were recorded by the Registrar-General of cases which had not been notified, and one which had been notified in a previous year, making a total of 54 deaths for the year.

Poliomyelitis and polioencephalitis.

Notifications of poliomyelitis and polioencephalitis numbered 38; the diagnosis was not confirmed in one of these. Of the 37 cases, 2 proved fatal. In addition, 5 deaths were recorded by the Registrar-General of cases which had not been notified, and of one which was notified in a previous year, making a total of 8 deaths for the year.

The following table shows the age incidence of actual cases of cerebro-spinal fever, encephalitis lethargica and poliomyelitis (including polioencephalitis).

TABLE 9.

Age periods	Under 3	3–5	5–10	10–20	20–30	30–40	40–50	50–60	Over 60	Total
Cerebro-spinal fever	47	4	11	15	12	7	—	2	1	99
Encephalitis lethargica	—	1	2	3	1	1	—	1	2	11
Poliomyelitis and polio-encephalitis	3	11	8	10	1	2	1	1	—	37

The following statement shows the number of cases notified and confirmed and the number of deaths, including deaths among un-notified cases recorded in the Registrar-General's death returns :—

	1932	*1933*	*1934*	*1935*	*1936*
Cerebro-spinal fever—					
Nos. notified and confirmed ...	234	203	124	89	99
Deaths in the same year among cases notified and confirmed	100	90	62	50	52
Deaths among cases notified in previous years	—	2	1	—	—
Deaths among un-notified cases	48	24	15	19	24
Encephalitis lethargica—					
Nos. notified and confirmed ...	40	18	24	14	11
Deaths in the same year among cases notified and confirmed	12	8	6	4	4
Deaths among cases notified in previous years	9	8	3	4	1
Deaths among un-notified cases	39	31	27	26	49
Poliomyelitis and Polioencephalitis—					
Nos. notified and confirmed ...	82	60	65	82	37
Deaths in the same year among cases notified and confirmed	10	5	4	5	2
Deaths among cases notified in previous years	—	—	1	2	1
Deaths among un-notified cases	9	7	8	4	5

Food poisoning.

In 1936 (53 weeks) particulars of 382 cases of food poisoning notified to the borough medical officers of health under the provisions of the London County Council (General Powers) Act, 1932, and the Public Health (London) Act, 1936, were received compared with 490 for the year 1935. One of the notified cases died.

In some instances more than one member of a family was affected by illness, but the majority were isolated cases and may have been due to idiosyncrasies of the patients. Particulars are set out below in borough order of the only groups of cases that call for special comment.

On 20th August, a woman was removed to a hospital in Greenwich suffering from food poisoning. She died the following day. On 19th August, the woman partook of some fried fish which was a portion of a supply purchased locally. No other suspicious illness was reported in the area. At the post-mortem examination, no pathogenic organisms could be isolated. The cause of death was stated to be septicæmia following the eating of a poisonous portion of fish.

On 12th January, four persons residing in Hackney partook of tinned crab and were removed to hospital. Specimens from the patients and of the tinned crab were examined at one of the Council's laboratories, but they revealed no definite proof of the cause of the illness. The patients were discharged from hospital within 2 or 3 days.

A small outbreak of food poisoning in the borough of Hackney was investigated in July. Fourteen cases were under observation, and inquiries elicited the fact that three families residing in Tottenham had also been affected. The source of infection in all these cases was suspected to be brawn obtained from a tradesman in Hackney. All the cases recovered rapidly.

A number of employees at an office in St. Pancras suffered from illness thought to have been caused by food eaten at the staff canteen on 9th October. Three of the employees who were living in the London area were notified as cases of food poisoning. None of the food eaten at the meal was available for analysis, and material from three patients was bacteriologically examined with negative results. All the cases were mild, and the persons concerned returned to work after short absences.

On 6th November, 17 persons employed in an establishment in St. Pancras were notified as suffering from food poisoning after partaking of a meal in the staff canteen. No food was available for analysis, but it was believed that the outbreak, which was very mild in character, originated from the food consumed in the staff canteen.

Thirty persons residing in a block of service flats in Westminster were notified on 17th October as suffering from food poisoning. No pathogenic organism was isolated from the suspected food—salt beef; and the history of the outbreak suggested that it was due to some toxic products contained in the food eaten.

On 23rd October, another 43 persons employed in an establishment in the City of Westminster were the subjects of gastro-intestinal disorders. Exhaustive examinations were carried out under the direction of the medical officer of health for Westminster, with samples of food eaten in the staff canteen. No pathogenic organisms were isolated, and it was concluded that the symptoms were definitely not attributable to any organism recognised to cause food poisoning.

An outbreak of food poisoning was reported amongst the students and staff of a women's training college at the end of October, 1936. In all, 58 students and staff were affected out of about 200. The attacks were, on the whole, of moderate severity, and the majority of the patients were convalescent in two or three days. An investigation was carried out by Dr. Gunn, divisional medical officer, assisted by the local medical officer of health and Dr. Scott of the Ministry of Health. An unusual type of organism was isolated from a number of the patients, quite unlike the organisms commonly associated with outbreaks of food poisoning and it is possible that this unidentified organism or its toxin was the primary cause of the disorder.

The following table shows the age and sex incidence in all cases notified during the year :—

TABLE 10.

Sex	Under 5 years	5-15 years	15-25 years	25-35 years	35-45 years	45-55 years	55-65 years	Over 65 years	Total
Male	12	10	28	27	23	16	13	2	131
Female	6	16	94	28	15	13	17	7	196

In 55 cases the ages were not stated.

The causes of illness in the 382 notified cases were stated to be as follows :—

Fish	58	Fruit	4
Tinned fish and paste ...	30	Tinned fruit	7
Meat	121	Miscellaneous	155
Tinned meat	7		

The deaths from measles in 1936 numbered 584 compared with 19 in 1935. The death-rate was ·14 per thousand. Measles.

The death-rates in London and England and Wales in recent years have been as follows :—

TABLE 11.

Area.	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
London	0·07	0·20	0·04	0·30	0·05	0·23	0·03	0·19	0·02	0·20	0·00
England and Wales	0·14	0·09	0·09	0·11	0·09	0·11	0·08	0·08	0·05	0·09	0·03

A special report on the measles epidemic of 1935–36 will be published shortly

There were 278 deaths from whooping-cough in London during 1936 compared with 166 in 1935. The death-rate was ·07 per thousand. Whooping-cough.

The death-rates in London and England and Wales in recent years are shown in the following table :—

TABLE 12.

Area	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
London	0·19	0·05	0·12	0·09	0·26	0·03	0·07	0·08	0·07	0·07	0·04
England and Wales	0·16	0·11	0·09	0·08	0·16	0·05	0·06	0·07	0·06	0·05	0·04

There were 10,705 notifications of scarlet fever in 1936 (53 weeks), the corresponding figure for 1935 being 10,954. The attack-rate was 2·6 per thousand, which was also the rate for 1935. The deaths numbered 42, giving a death-rate of ·01 per thousand of the population at all ages and a case-mortality of ·4 per cent. Scarlet fever.

The seasonal incidence, as shown by the notifications (uncorrected for errors of diagnosis) received in successive four-weekly periods during the year, was as follows :—

TABLE 13.

1–	5–	9–	13–	17–	21–	25–	29–	33–	37–	41–	45–	49–53 (5 weeks)
864	740	820	834	840	895	842	722	601	792	921	907	927

The notifications (uncorrected for errors in diagnosis), deaths and crude case-mortality during 1936 were as follows :—

TABLE 14.

Year 1936	Age-period												Total
	0–	1–	2–	3–	4–	5–	6–	7–	8–	9–	10–	15+	
Notifications (53 weeks)	90	466	700	816	1,103	1,206	984	742	624	450	1,567	1,957	10,705
Deaths (366 days)	1	4	10	4	3	4	3	—	—	—	3	10	42
Crude case-mortality percentage	1·11	0·86	1·43	0·49	0·27	0·33	0·30	—	—	—	0·19	0·51	0·39

The death-rates in London and England and Wales in recent years are shown in the following table :—

TABLE 15.

Area	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
London	0·02	0·02	0·01	0·02	0·02	0·03	0·02	0·02	0·02	0·02	0·01
England and Wales	0·03	0·02	0·01	0·01	0·02	0·02	0·01	0·01	0·02	0·02	0·01

Diphtheria.

Notifications of diphtheria numbered 7,030 in 1936 (53 weeks), compared with 9,294 in 1935. This gives an attack-rate of 1·7 per thousand as against 2·2 in the preceding year. There were 226 deaths, giving a death-rate of ·05 per thousand living. The case-mortality was 3·2 per cent., compared with 2·9 per cent. in 1935.

The seasonal incidence, as shown by the notifications (uncorrected for errors of diagnosis) received in successive four-weekly periods during the year, was as follows:—

TABLE 16.

1–	5–	9–	13–	17–	21–	25–	29–	33–	37–	41–	45–	49–53 (5 weeks)
620	573	549	496	440	442	403	453	400	528	668	669	789

The notifications (uncorrected for errors in diagnosis), deaths and crude case-mortality during 1936 were as follows :—

TABLE 17.

Year 1936	Age-period												Total
	0–	1–	2–	3–	4–	5–	6–	7–	8–	9–	10–	15+	
Notifications (53 weeks)	136	333	464	645	716	767	786	547	389	300	840	1,107	7,030
Deaths (366 days)	8	17	22	24	38	34	37	10	6	7	8	15	226
Crude case-mortality percentage	5·88	5·11	4·74	3·72	5·31	4·43	4·71	1·83	1·54	2·33	0·95	1·36	3·21

The death-rates in London and England and Wales in recent years are shown in the following table :—

TABLE 18.

Area	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
London	0·11	0·12	0·09	0·09	0·08	0·10	0·06	0·07	0·08	0·11	0·06
England and Wales	0·07	0·08	0·07	0·08	0·09	0·09	0·07	0·06	0·07	0·10	0·09

Diarrhœa and enteritis.

Diarrhœa and enteritis caused 814 deaths among children under two years of age, or 14·47 per thousand live births. The corresponding rate in 1935 was 11·31.

Puerperal fever and pyrexia : maternal mortality.

There were 175 notifications of puerperal fever and 635 notifications of puerperal pyrexia in 1936 (53 weeks) compared with 241 and 652 respectively in 1935 (52 weeks).

The deaths from puerperal fever numbered 42 and from other puerperal causes 69, the deaths per thousand live-births being 0·75 and 1·23 respectively, giving a total maternal mortality rate of 1·98 compared with 2·58 in 1935.

The maternal mortality rate in 1936 was the lowest hitherto recorded for London residents, the previous lowest being 2·58 in 1935. The lowest previous

rate for puerperal fever deaths was 1·15 in 1935, and for other puerperal causes 1·37 in 1911.

The deaths from puerperal fever and other puerperal causes per thousand live births in each metropolitan borough and in the county of London in the periods 1921 to 1930 and 1931 to 1936, together with the deaths in childbirth in 1936, are shown in the following table :—

TABLE 19.

Metropolitan boroughs arranged in topographical order	Childbirth deaths* per 1,000 live births						Number of deaths in childbirth		
	1921-30			1931-36			1936		
	Puerperal fever	Other causes	Total	Puerperal fever	Other causes	Total	Puerperal fever	Other causes	Total
Western.									
Paddington ...	1·6	1·5	3·1	2·0	2·5	4·5	5	5	10
Kensington ...	2·2	1·5	3·7	1·5	1·5	3·0	1	1	2
Hammersmith ...	1·9	1·9	3·8	1·5	1·4	2·9	1	2	3
Fulham	2·1	1·5	3·6	1·5	1·8	3·3	2	2	4
Chelsea	1·9	3·1	5·0	1·3	2·0	3·3	—	2	2
Westminster ...	2·1	3·2	5·3	1·5	1·8	3·3	—	2	2
Northern.									
St. Marylebone ...	2·3	2·5	4·8	1·9	2·1	4·0	—	2	2
Hampstead ...	1·9	2·3	4·2	1·0	1·0	2·0	2	1	3
St. Pancras ...	1·2	1·5	2·7	1·9	2·0	3·9	5	2	7
Islington	1·6	1·6	3·2	1·4	1·6	3·0	5	5	10
Stoke Newington...	2·3	2·0	4·3	0·9	3·5	4·4	—	4	4
Hackney	1·6	1·6	3·2	1·0	1·7	2·7	1	3	4
Central.									
Holborn	2·4	0·9	3·3	2·6	1·0	3·6	—	—	—
Finsbury	1·3	1·2	2·5	0·8	0·7	1·5	1	—	1
City of London ...	3·7	0·9	4·6	4·9	—	4·9	—	—	—
Eastern.									
Shoreditch ...	1·1	1·4	2·5	0·8	1·2	2·0	—	—	—
Bethnal Green ...	1·1	1·4	2·5	1·2	1·2	2·4	2	1	3
Stepney	1·0	1·4	2·4	0·9	1·6	2·5	3	2	5
Poplar	1·1	1·6	2·7	1·6	1·3	2·9	1	3	4
Southern.									
Southwark ...	1·3	1·3	2·6	1·2	1·7	2·9	1	3	4
Bermondsey ...	1·0	1·8	2·8	1·7	1·6	3·3	3	5	8
Lambeth	1·6	1·5	3·1	1·1	1·1	2·2	1	2	3
Battersea	0·9	1·9	2·8	1·3	1·7	3·0	3	2	5
Wandsworth ...	1·6	1·9	3·5	1·7	1·5	3·2	1	4	5
Camberwell ...	1·9	1·5	3·4	1·4	1·6	3·0	1	6	7
Deptford	1·5	1·7	3·2	1·5	1·4	2·9	—	1	1
Greenwich ...	1·2	1·4	2·6	1·6	2·2	3·8	—	1	1
Lewisham	1·2	1·5	2·7	1·3	1·9	3·2	1	5	6
Woolwich	1·4	2·0	3·4	1·4	1·2	2·6	2	3	5
London	**1·50**	**1·66**	**3·16**	**1·39**	**1·60**	**2·99**	**42**	**69**	**111**

* Including deaths due to abortion *except* those legally determined to have resulted from criminal interference.

The deaths in childbirth in 1936 are shown in the above table but not the death-rates, as, owing to the smallness of the figures, the rates for a single year may be misleading. The maternal mortality rates for each metropolitan borough in 1936 and for London as a whole annually since 1922 are, however, set out in tables 28 and 30.

Enteric fevers.

There were 255 notifications of fevers of the enteric group in London in 1936 (53 weeks) compared with 187 in 1935. The deaths in the calendar year numbered 31 as against 17 in 1935. The remarkable decrease in the mortality from enteric fever during the present century will be seen from the figures in table 30.

The seasonal incidence, as shown by the notifications (uncorrected for errors of diagnosis) received in successive four-weekly periods during the year was as follows :—

TABLE 20.

1–	5–	9–	13–	17–	21–	25–	29–	33–	37–	41–	45–	49–53 (5 weeks)
13	7	18	9	12	25	13	23	49	53	18	4	11

In addition, there were 7 deaths recorded by the Registrar-General of cases belonging to London which had not been notified within the county. Three of these were inmates of mental institutions.

Influenza.

The deaths from influenza during 1936 numbered 533, compared with 471 in 1935.

Rheumatic fever.

The deaths in London from rheumatic fever in 1936 numbered 106, of which 51 were among children under 15 years of age. The corresponding figures in 1935 were 127 and 45, respectively.

Cancer.

There were 7,362 deaths from cancer in 1936, as against 7,091 in 1935. The death-rate per thousand was 1·78. There was an increase of 199 in the deaths among males and of 72 among females compared with the previous year.

Tuberculosis

The deaths from pulmonary tuberculosis in London during 1936 numbered 2,849, giving a death-rate of ·69 per thousand living, the corresponding figures for 1935 being 2,847 and ·68 respectively, and 3,227 and ·76 for 1934. There were 363 deaths from other forms of tuberculosis in 1936 as against 359 in 1935 and 455 in 1934, the death-rates being ·09, ·09 and ·11, respectively.

The annual death-rates from pulmonary and non-pulmonary tuberculosis in recent years are shown in the subjoined table :—

TABLE 21.

Period	Pulmonary tuberculosis death-rates			Non-pulmonary tuberculosis death-rates		
	Males	Females	Total	Males	Females	Total
1922-24	1·28	0·78	1·01	0·22	0·17	0·19
1925-27	1·19	0·67	0·91	0·18	0·14	0·15
1928	1·14	0·68	0·89	0·17	0·12	0·14
1929	1·24	0·72	0·96	0·15	0·11	0·13
1930	1·13	0·64	0·87	0·13	0·11	0·12
1931	1·14	0·68	0·90	0·15	0·11	0·13
1932	1·08	0·59	0·82	0·14	0·11	0·12
1933	1·10	0·58	0·82	0·12	0·10	0·11
1934	1·02	0·54	0·76	0·13	0·09	0·11
1935	0·90	0·49	0·68	0·10	0·08	0·09
1936	0·94	0·47	0·69	0·10	0·07	0·09

The number of primary notifications in metropolitan boroughs during the year 1936, after correction of figures within each metropolitan borough by the exclusion of

cases notified as primary but subsequently found to have been previously notified, was 6,232, the corresponding figure for 1935 being 6,459. The following is an analysis of the notifications in London during the year 1936.

TABLE 22.

Form of tuberculosis notified	Sex	Number of formal primary notifications of new cases of tuberculosis												Total notifications
		0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65+	Total all ages	
Pulmonary tuberculosis	M.	3	30	54	51	243	408	658	505	552	392	145	3041	4073
	F.	7	20	55	60	286	497	613	279	162	105	51	2135	2825
Other forms of tuberculosis	M.	6	69	107	66	48	69	82	37	30	22	14	550	633
	F.	7	62	64	56	66	73	88	36	25	16	13	506	604
All forms of tuberculosis	M.	9	99	161	117	291	477	740	542	582	414	159	3591	4706
	F.	14	82	119	116	352	570	701	315	187	121	64	2641	3429

In addition to the primary cases shown in the above table, a number of cases came to the knowledge of medical officers of health otherwise than by notification. These figures include cases not notified until after death :—

TABLE 23.

Form of tuberculosis notified	Sex	New cases of tuberculosis coming to knowledge otherwise than by formal notification											
		0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65+	Total
Pulmonary tuberculosis ...	M.	6	3	12	11	20	72	131	99	120	76	39	589
	F.	3	8	7	13	45	107	175	59	38	21	13	489
Other forms of tuberculosis	M.	7	20	24	26	17	15	15	12	10	9	5	160
	F.	12	23	17	15	17	19	29	13	4	7	12	168
All forms of tuberculosis...	M.	13	23	36	37	37	87	146	111	130	85	44	749
	F.	15	31	24	28	62	126	204	72	42	28	25	657

The sources of information as to the unnotified cases shown in the above table were as follows :—

TABLE 24.

Source of information	Number of cases	
	Pulmonary	Non-pulmonary
Death returns { from local registrars	166	62
Death returns { transferable deaths from Registrar-General ...	98	45
Posthumous notifications	62	35
"Transfers" from other areas	733	178
Other sources	19	8

The returns received under the Public Health (Tuberculosis) Regulations, 1930, from the medical officers of health of the metropolitan boroughs show that there were 24,696 cases of pulmonary tuberculosis (14,099 males and 10,597 females) and 8,248 cases of other forms of tuberculosis (4,296 males and 3,952 females) on the registers of the metropolitan boroughs at the end of 1936.

The following table has been prepared from quarterly returns supplied by the medical officers of health of the metropolitan boroughs as to the number of cases added to and removed from the notification registers in each borough during the registration year, and the numbers remaining on the registers at the beginning and end of the period. As these figures relate to the registration year, the totals are not the same as those shown in the preceding tables.

TABLE 25.

Metropolitan boroughs in topographical order	Cases on notification register at beginning of 1936	Cases added to register during registration year. Brought to knowledge by		Cases removed from register during the registration year		Cases on notification register at end of 1936	
		Notification	Otherwise	Cured, removed, etc.	Deaths	Total	Per 1,000 of population
Western.							
Paddington... ...	1,033	217	24	257	65	952	6·8
Kensington... ...	779	208	103	285	131	674	3·8
Hammersmith ...	1,059	196	54	125	121	1,063	8·3
Fulham	1,778	243	16	131	122	1,784	12·6
Chelsea	350	100	34	114	60	310	5·5
Westminster, City of	1,474	188	34	92	89	1,515	12·2
Northern.							
St. Marylebone ...	858	130	31	226	84	709	7·7
Hampstead... ...	440	94	40	188	45	341	3·8
St. Pancras... ...	1,155	288	92	328	157	1,050	5·7
Islington	2,323	530	110	404	247	2,312	7·7
Stoke Newington ...	304	67	40	69	62	280	5·6
Hackney	1,862	249	96	519	177	1,511	7·2
Central.							
Holborn	326	68	22	42	34	340	9·8
Finsbury	748	100	19	365	97	405	6·7
City of London ...	70	19	1	28	4	58	6·1
Eastern.							
Shoreditch	1,538	116	35	132	81	1,476	17·3
Bethnal Green ...	1,268	137	30	143	92	1,200	12·4
Stepney	2,123	344	51	226	156	2,136	10·3
Poplar	1,096	226	40	279	142	941	6·7
Southern.							
Southwark	1,586	257	30	233	137	1,503	9·9
Bermondsey ...	934	176	25	124	94	917	9·1
Lambeth	2,526	405	89	291	209	2,520	9·1
Battersea	933	232	26	200	149	842	5·8
Wandsworth ...	2,114	399	170	357	245	2,081	6·1
Camberwell... ...	2,112	299	75	236	202	2,048	8·9
Deptford	717	156	20	100	64	729	7·4
Greenwich	647	161	34	126	69	647	6·7
Lewisham	1,538	379	35	161	157	1,634	7·3
Woolwich	975	248	30	165	122	966	6·6
London	**34,666**	**6,232**	**1,406**	**5,946**	**3,414**	**32,944**	**8·0**

The localisation of disease and source of notification, as stated on the weekly return of notification of tuberculosis received from the metropolitan borough medical officers of health, has been classified by age for the two years 1935 and 1936, and the results are shown in the following tables :—

TABLE 26.—*County of London. Age distribution of primary notifications of tuberculosis according to localisation of disease,* 1935 *and* 1936.

Age group	Respiratory system		Spine	Hip	Knee	Other limbs bones and joints	Abdominal	Peripheral glands	Other sites	Total
	Lungs	Other								
					1935.					
0– 1 year	5	—	—	—	—	1	1	2	9	18
1– 5 years	49	11	12	13	7	16	6	59	43	216
5–10 „	91	24	15	20	13	13	17	96	26	315
10–15 „	125	15	12	11	8	21	24	58	21	295
15–20 „	525	23	11	3	5	20	29	28	28	672
20–25 „	911	15	9	6	7	10	43	34	22	1,057
25–35 „	1,351	11	22	1	6	26	42	42	9	1,510
35–45 „	820	9	19	5	1	9	24	13	8	908
45–55 „	669	5	4	5	2	7	13	8	3	716
55–65 „	443	4	5	1	1	7	8	3	1	463
65 + „	196	3	2	5	1	1	4	8	5	225
Age not stated	1	—	—	—	—	—	—	—	—	1
All ages ...	5,176	120	111	70	51	131	211	351	175	6,396
					1936					
0– 1 year	6	—	—	1	—	—	1	—	8	16
1– 5 years	43	13	15	9	3	11	6	48	36	184
5–10 „	93	22	9	15	7	3	16	80	30	275
10–15 „	97	13	9	5	6	14	20	54	10	228
15–20 „	512	18	13	12	2	12	23	35	18	645
20–25 „	892	14	15	10	5	23	40	33	7	1,039
25–35 „	1,247	16	22	9	8	20	56	32	14	1,424
35–45 „	768	5	9	6	1	12	28	9	8	846
45–55 „	714	3	6	4	1	6	21	5	7	767
55–65 „	485	8	8	1	3	2	13	7	3	530
65 + „	196	2	3	1	2	3	7	9	2	225
Age not stated	1	—	1	—	—	—	—	—	—	2
All ages ...	5,054	114	110	73	38	106	231	312	143	6,181

TABLE 27.—*County of London. Age distribution of primary notifications of tuberculosis according to source of notification*, 1935 *and* 1936.

Tuberculosis of the respiratory system, 1935 *and* 1936.

Age group	Dispensary	Hospital	Private	L.C.C. hospitals and institutions	Total
0– 1 year	—	8	2	1	11
1– 5 years	16	77	7	16	116
5–10 ,,	61	120	19	30	230
10–15 ,,	68	111	38	33	250
15–20 ,,	257	323	316	182	1,078
20–25 ,,	507	531	538	256	1,832
25–35 ,,	701	801	753	370	2,625
35–45 ,,	386	442	468	306	1,602
45–55 ,,	312	333	407	339	1,391
55–65 ,,	162	231	277	260	930
65 + ,,	36	72	120	169	397
Age not stated	2	—	—	—	2
All ages ...	2,508	3,049	2,945	1,962	10,464

Other forms of tuberculosis, 1935 *and* 1936.

0– 1 year	1	14	2	6	23
1– 5 years	44	153	27	60	284
5–10 ,,	82	197	22	59	360
10–15 ,,	58	137	23	55	273
15–20 ,,	28	110	27	74	239
20–25 ,,	26	128	28	82	264
25–35 ,,	52	148	36	73	309
35–45 ,,	26	66	20	40	152
45–55 ,,	13	39	14	26	92
55–65 ,,	5	22	9	27	63
65 + ,,	2	14	10	27	53
Age not stated	—	1	—	—	1
All ages ...	337	1,029	218	529	2,113

It should be observed that the returns from which these tables are prepared have been corrected for duplicate notification within each metropolitan borough, and do not therefore agree with the annual summary of primary notifications shown elsewhere.

TABLE 28.—*Vital statistics for the metropolitan boroughs and the County of London in the year* 1936. (*Rates per* 1,000 *of population.*)

Metropolitan boroughs arranged in topographical order	Estimated resident population 1936	Live births	Deaths	Infant mortality (per 1,000 live births)	Measles	Scarlet fever	Diphtheria	Whooping cough	Typhoid fever	Diarrhœa and enteritis, age 0–2 (per 1,000 live births)	Pulmonary tuberculosis	Pneumonia	Other resp. dis.	Cancer	Maternal mortality (per 1,000 live births)	Notifications of infectious disease (53 weeks)					
																Scarlet fever	Diphtheria	Typhoid fever	Erysipelas	Cerebro-spinal fever	Acute pneumonia
Western.																					
Paddington	139,200	13·8	12·8	72	·06	·01	·04	·02	·01	16·1	·47	·89	·57	1·95	5·21	1·86	1·54	·05	·35	·02	·93
Kensington	176,100	12·7	12·5	73	·15	·01	·06	·07	·01	17·5	·60	·94	·34	1·82	·90	1·74	·99	·05	·38	·03	·99
Hammersmith	127,700	15·1	12·5	60	·12	·02	·04	·05	·02	12·5	·78	·86	·61	1·95	1·56	2·59	1·03	·09	·29	·05	·70
Fulham	141,300	14·9	12·6	64	·10	·01	·07	·04	·02	9·9	·76	·94	·53	1·78	1·89	2·26	1·24	·11	·44	·03	1·58
Chelsea	56,500	11·3	13·7	53	·07	—	·02	·05	·02	21·9	·94	·90	·62	1·96	3·13	2·58	1·19	·10	·66	·03	1·54
Westminster, City of	124,100	8·6	11·7	64	·04	·01	·03	·03	—	10·3	·62	·69	·69	1·85	1·87	1·42	·68	·08	·26	—	·17
Northern.																					
St. Marylebone	92,400	9·8	12·7	75	·09	·01	·06	·05	·01	24·3	·67	·78	·45	2·11	2·21	1·51	1·27	·07	·30	·01	·68
Hampstead	90,700	11·6	11·3	66	·02	—	·01	·07	·04	11·5	·35	·54	·35	1·78	2·86	1·33	·66	·16	·36	·01	1·00
St. Pancras	183,900	12·8	13·1	78	·10	·04	·04	·08	·01	25·4	·83	·99	·59	1·96	2·97	2·29	2·61	·06	·43	·01	1·22
Islington	301,000	15·4	12·6	62	·18	·02	·11	·08	·00	15·1	·69	·97	·81	1·89	2·15	2·49	1·91	·02	·42	·02	·69
Stoke Newington	50,350	13·8	11·4	45	·04	—	·06	·04	—	4·3	·70	·60	·44	1·57	5·76	2·59	1·49	·04	·37	—	·57
Hackney	209,100	14·4	12·0	63	·22	·01	·03	·09	—	12·6	·61	·78	·42	1·68	1·33	2·59	1·62	·02	·59	·00	·66
Central.																					
Holborn	34,850	8·3	12·0	62	·06	—	·09	·06	—	10·4	·92	·98	·52	1·92	—	1·90	1·73	·08	·54	·06	·91
Finsbury	60,800	13·8	14·0	81	·35	·02	·07	·12	—	20·2	·87	1·09	·84	1·86	1·19	2·42	2·50	·06	·50	·02	1·18
City of London (a)	9,500	7·5	11·8	141	—	—	—	—	—	42·3	·42	·74	·53	1·89	—	2·91	·62	—	·21	—	·21
Eastern.																					
Shoreditch	85,400	14·9	12·8	75	·48	—	·06	·09	—	22·0	·59	1·09	·85	1·66	—	3·32	2·53	·06	·61	·02	·55
Bethnal Green	96,900	13·5	12·7	98	·18	·02	·04	·13	·02	30·5	·67	·89	·58	1·81	2·29	3·40	2·26	·09	·95	·06	·89
Stepney	207,800	14·8	12·6	99	·25	·00	·05	·11	—	32·6	·69	·87	·43	1·46	1·63	2·43	2·45	·02	·56	·02	·96
Poplar	140,300	15·0	12·5	73	·35	·01	·09	·11	—	16·1	·71	·88	·70	1·51	1·90	3·23	3·38	·08	·46	·04	2·34
Southern.																					
Southwark	152,200	14·8	13·1	59	·15	—	·06	·11	·01	8·4	·83	1·06	·63	2·03	1·77	2·28	2·19	·01	·48	·06	·82
Bermondsey	100,400	15·4	12·8	60	·21	—	·07	·05	·04	10·4	·80	·86	·79	1·78	5·18	2·61	2·03	·15	·38	·04	1·23
Lambeth	277,500	13·9	12·5	59	·09	·00	·05	·05	·00	9·6	·70	·81	·64	1·83	·77	2·50	1·48	·05	·39	·02	·82
Battersea	145,500	14·6	13·1	59	·16	·01	·05	·08	—	10·3	·87	·53	·78	1·79	2·35	3·32	2·17	·09	·45	·05	1·81
Wandsworth	343,000	11·5	11·8	58	·07	—	·07	·03	·01	9·2	·61	·60	·64	1·68	1·27	1·90	1·11	·08	·33	·01	·97
Camberwell	229,300	13·9	12·6	59	·14	·00	·05	·05	·00	8·5	·72	·87	·61	1·82	2·19	3·04	1·11	·02	·38	·03	·66
Deptford	98,900	15·7	12·2	50	·09	·01	·06	·07	—	11·6	·66	·64	·83	1·78	·65	2·60	1·96	·05	·42	·03	·82
Greenwich	95,900	13·8	11·4	51	·06	·02	·03	·05	·01	16·6	·67	·64	·64	1·42	·76	3·13	2·64	·05	·35	·01	·85
Lewisham	224,000	13·1	10·9	56	·10	·01	·02	·07	—	7·5	·63	·67	·57	1·62	2·05	3·68	1·03	·05	·41	·04	·95
Woolwich	146,500	13·8	11·3	60	·09	·03	·05	·05	·01	12·4	·71	·69	·63	1·77	2·48	4·06	1·58	·08	·47	·07	1·66
London, 1936	4,141,100	13·6	12·3	66	·14	·01	·05	·07	·01	14·5	·69	·82	·61	1·78	1·97	2·55	1·67	·06	·43	·03	·99
London, 1935	*4,185,200*	*13·3*	*11·4*	*58*	*·00*	*·01*	*·06*	*·04*	*·00*	*11·3*	*·68*	*·67*	*·48*	*1·69*	*2·58*	*2·62*	*2·23*	*·04*	*·45*	*·03*	*·89*

(*a*) Including Inner and Middle Temple.

TABLE 29.—*County of London—Principal causes of death by sex and age*, 1936.

Causes of death	Sex	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
Typhoid and para-typhoid fevers.	M.	14	1	—	—	—	3	5	1	1	2	1	—
	F.	17	—	—	—	2	3	4	2	2	3	1	—
Measles	M.	323	74	131	98	18	—	—	—	—	1	1	—
	F.	261	58	117	61	20	4	1	—	—	—	—	—
Scarlet fever ...	M.	21	—	2	11	4	2	1	—	—	—	—	1
	F.	21	1	2	6	6	2	1	2	—	1	—	—
Whooping-cough ...	M.	134	67	42	18	6	—	—	—	—	—	—	1
	F.	144	74	41	25	4	—	—	—	—	—	—	—
Diphtheria	M.	109	3	12	38	51	2	1	1	—	—	1	—
	F.	117	5	5	46	51	4	2	2	—	2	—	—
Influenza	M.	242	10	3	4	4	11	13	20	33	60	49	35
	F.	291	5	3	4	3	9	13	14	28	46	78	88
Encephalitis lethargica.	M.	30	—	—	—	2	2	7	3	3	7	5	1
	F.	24	—	—	—	—	2	6	4	5	3	3	1
Cerebro-spinal fever	M.	40	12	8	6	—	7	4	3	—	—	—	—
	F.	31	12	3	4	5	3	1	—	1	1	1	—
Tuberculosis of respiratory system.	M.	1,810	5	1	6	11	247	369	289	413	327	119	23
	F.	1,039	3	5	4	13	311	271	158	123	99	43	9
Other tuberculous diseases.	M.	202	14	12	16	25	43	29	18	16	17	9	3
	F.	161	18	10	28	20	29	11	10	6	12	13	4
Syphilis	M.	113	13	—	—	3	2	2	10	23	34	21	5
	F.	54	7	—	—	2	—	3	10	9	15	5	3
General paralysis of the insane, tabes dorsalis.	M.	145	—	—	—	—	2	5	17	43	51	21	6
	F.	52	—	—	—	—	1	—	10	21	9	9	2
Cancer, malignant disease.	M.	3,665	4	1	8	6	18	54	137	504	1,064	1,261	608
	F.	3,697	2	2	1	6	15	77	238	590	880	1,101	785
Diabetes	M.	216	—	—	—	4	2	3	3	25	51	88	40
	F.	412	—	—	—	1	1	6	10	34	104	160	96
Cerebral hæmorrhage	M.	792	—	—	—	—	1	4	13	63	166	294	251
	F.	1,134	—	—	—	—	—	2	29	79	213	367	444
Heart disease ...	M.	6,711	1	2	3	31	75	74	180	502	1,305	2,236	2,302
	F.	7,478	—	1	—	32	86	128	186	351	912	2,116	3,666
Aneurysm	M.	175	—	—	—	—	1	9	12	33	62	37	21
	F.	119	—	—	—	—	4	6	8	21	29	27	24
Other circulatory diseases.	M.	1,085	1	—	—	1	2	4	9	71	190	388	419
	F.	1,239	1	—	—	—	1	4	17	62	180	378	596
Bronchitis	M.	1,158	79	6	3	3	7	10	35	143	255	282	335
	F.	888	48	6	5	1	4	10	19	39	103	222	431
Pneumonia (all forms)	M.	1,906	363	108	41	22	30	48	113	257	373	332	219
	F.	1,472	264	86	56	18	28	56	58	111	185	276	334
Other respiratory diseases.	M.	260	2	2	5	4	14	14	18	36	46	50	69
	F.	223	4	2	6	3	9	7	11	17	31	36	97
Peptic ulcer ...	M.	462	—	—	—	—	3	17	52	130	140	79	41
	F.	147	1	1	—	—	—	4	10	28	52	28	23

TABLE 29—*continued.—County of London—Principal causes of death by sex and age*, 1936.

Causes of death	Sex	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
Diarrhœa, etc. ...	M.	513	444	21	4	1	2	4	3	5	10	9	10
	F.	414	332	17	4	3	5	12	4	8	11	5	13
Appendicitis ...	M.	164	1	1	9	27	16	14	23	19	31	17	6
	F.	127	—	—	5	13	12	9	4	20	34	23	7
Cirrhosis of liver ...	M.	111	1	—	—	—	—	3	12	25	35	26	9
	F.	63	—	—	—	1	—	1	7	20	17	15	2
Other diseases of liver, etc.	M.	77	—	—	—	—	—	2	3	11	17	27	17
	F.	154	—	—	—	—	—	4	12	19	30	47	42
Other digestive diseases.	M.	427	32	6	10	13	19	26	23	54	81	95	68
	F.	470	18	5	11	15	9	15	34	49	97	115	102
Acute and chronic nephritis.	M.	718	—	—	2	9	24	31	35	74	154	225	164
	F.	721	1	1	1	11	13	21	42	80	146	192	213
Puerperal sepsis ...	F.	42	—	—	—	—	10	20	11	1	—	—	—
Other puerperal causes	F.	69	—	—	—	—	10	46	13	—	—	—	—
Congenital debility, premature birth, malformation, etc.	M.	848	834	1	1	5	3	1	1	1	1	—	—
	F.	593	584	—	4	4	2	2	1	1	—	—	—
Senility	M.	318	—	—	—	—	—	—	—	—	—	46	272
	F.	536	—	—	—	—	—	—	—	—	1	58	477
Suicide	M.	396	—	—	—	—	27	46	65	70	120	51	17
	F.	202	—	—	—	—	9	31	33	55	48	22	4
Other violence ...	M.	1,011	37	11	24	89	139	107	91	99	145	128	141
	F.	709	43	15	19	28	41	32	35	45	73	126	252
Other defined diseases	M.	2 052	126	30	33	89	122	102	120	207	356	466	401
	F.	1,750	85	16	31	85	87	115	168	245	281	324	313
Causes ill-defined, or unknown.	M.	7	—	—	—	—	1	—	1	—	—	3	2
	F.	11	1	—	—	—	—	—	—	1	1	2	6
All causes ...	M.	26,255	2124	400	340	428	827	1009	1311	2861	5,101	6,367	5,487
	F.	24,887	1567	338	321	347	714	921	1162	2071	3,619	5,793	8,034

TABLE 30.—*County of London.—Principal vital statistics*, 1891–1936.

Period	Annual rate per 1,000 living			Annual mortality per 1,000 living																Annual mortality per 1,000 live births			
												Tuberculosis											
	Live births	Marriages	Deaths (all causes)	Cerebrospinal fever	Diphtheria	Enteric fever	Scarlet fever	Smallpox	Whooping-cough	Measles	Influenza	Pulmonary	Non-pulmonary	Pneumonia (all forms)	Bronchitis	Other resp. diseases	Heart disease	Cancer	Diabetes	Infants 0—1	Diarrhœa and enteritis 0—2	Puerperal fever	Other acc. of ch. birth
1891–95	30·8	17·3	19·8	(*a*)	0·53	0·13	0·24	0·02	0·52	0·59	0·41	1·83	0·80	1·45	2·45	0·48	(*a*)	0·80	0·07	156	23·8	2·15	2·22
1896–1900	29·7	18·4	18·5	(*a*)	0·45	0·14	0·14	0·00	0·47	0·57	0·27	1·75	0·69	1·32	1·80	0·35	(*a*)	0·92	0·07	162	41·3	1·70	1·74
1901–05	28·6	17·7	16·4	(*a*)	0·20	0·08	0·11	0·07	0·36	0·45	0·17	1·58	0·57	1·46	1·41	0·26	1·31	1·01	0·08	139	30·4	1·64	1·52
1906–10	26·5	17·4	14·9	(*a*)	0·14	0·04	0·10	0·00	0·29	0·42	0·22	1·39	0·48	1·49	1·22	0·22	1·26	1·11	0·10	114	23·8	1·46	1·47
1911–15	24·0	20·0	14·8	0·02	0·13	0·03	0·05	0·00	0·22	0·43	0·16	1·39	0·39	1·33	1·29	0·21	1·54	1·16	0·11	108	28·0	1·40	1·57
1916–20	20·0	20·1	15·1	0·04	0·17	0·02	0·03	0·00	0·20	0·28	1·01	1·43	0·34	1·38	1·30	0·19	1·70	1·28	0·09	92	15·4	1·64	1·72
1921–25	19·9	17·9	12·3	0·01	0·17	0·01	0·04	0·00	0·15	0·17	0·32	1·01	0·19	1·14	0·97	0·16	1·66	1·38	0·10	71	11·7	1·36	1·63
1926–30	16·2	18·6	12·3	0·02	0·10	0·01	0·02	0·00	0·11	0·16	0·30	0·90	0·14	1·00	0·72	0·16	2·29	1·52	0·12	64	10·2	1·66	1·69
1923	20·1	17·2	11·4	0·01	0·13	0·01	0·03	0·00	0·09	0·08	0·17	0·97	0·19	0·95	0·84	0·15	1·60	1·39	0·10	61	10·3	1·37	1·52
1924	18·6	17·2	12·2	0·01	0·12	0·01	0·03	0·00	0·11	0·29	0·37	0·98	0·18	1·16	0·98	0·15	1·69	1·42	0·10	69	8·7	1·24	1·84
1925	17·9	17·2	11·9	0·01	0·11	0·01	0·02	0·00	0·19	0·07	0·24	0·95	0·17	1·04	0·90	0·16	1·77	1·44	0·09	68	10·8	1·42	1·77
1926	17·1	17·2	11·6	0·02	0·12	0·01	0·02	0·00	0·05	0·20	0·18	0·88	0·15	0·94	0·79	0·16	1·79	1·46	0·10	64	12·0	1·61	1·74
1927	16·1	18·2	12·1	0·01	0·09	0·01	0·01	0·00	0·12	0·04	0·40	0·91	0·14	1·00	0·83	0·17	2·01	1·49	0·11	59	7·6	1·31	1·60
1928	16·2	18·9	12·1	0·01	0·09	0·01	0·02	0·00	0·09	0·30	0·13	0·89	0·14	0·93	0·59	0·16	2·22	1·52	0·12	67	10·3	1·59	2·00
1929	15·8	19·1	14·2	0·02	0·08	0·01	0·02	0·00	0·26	0·05	0·71	0·96	0·13	1·33	0·97	0·20	2·93	1·55	0·13	71	11·0	1·88	1·73
1930	15·8	19·5	11·6	0·02	0·10	0·01	0·03	0·00	0·03	0·23	0·08	0·87	0·12	0·78	0·44	0·12	2·51	1·57	0·12	59	9·9	1·93	1·40
1931	14·9	18·9	12·3	0·03	0·06	0·01	0·02	0·00	0·07	0·03	0·25	0·88	0·12	1·01	0·59	0·14	2·83	1·62	0·13	65	9·7	2·01	1·80
1932	14·3	18·1	12·3	0·03	0·07	0·00	0·02	0·00	0·08	0·19	0·28	0·82	0·12	0·84	0·47	0·14	2·91	1·61	0·13	67	12·5	1·33	1·66
1933	13·2	19·0	12·5	0·03	0·08	0·01	0·02	0·00	0·08	0·02	0·52	0·82	0·11	0·83	0·47	0·15	3·06	1·65	0·14	60	11·7	1·69	1·97
1934	13·4	20·4	12·2	0·02	0·11	0·00	0·02	0·00	0·07	0·20	0·13	0·76	0·11	0·90	0·47	0·14	3·01	1·72	0·14	67	12·8	1·34	1·46
1935	13·3	21·1	11·4	0·02	0·06	0·00	0·01	—	0·04	0·00	0·11	0·68	0·09	0·67	0·36	0·11	3·12	1·69	0·15	58	11·3	1·15	1·43
1936	13·6	21·5 (*b*)	12·3	0·02	0·05	0·01	0·01	—	0·07	0·14	0·13	0·69	0·09	0·82	0·49	0·12	3·43	1·78	0·15	66	14·5	0·75	1·23

(*a*) Comparable figures are not available for this period. (*b*) Provisional rate.

TABLE 31.—*County of London.—Notifiable infectious diseases.—Notifications per* 1,000 *of population.*

Period	Annual rates per 1,000 living																	
	Anthrax	Cerebrospinal fever	Continued fever	Diphtheria	Dysentery	Encephalitis lethargica	Enteric fever	Erysipelas	Malaria	Ophthalmia neonatorum (per 1,000 live births)	Pneumonia	Polio-encephalitis	Polio-myelitis	Puerperal fever (per 1,000 live births)	Puerperal pyrexia (per 1,000 live births)	Scarlet fever	Smallpox	Typhus
1891–95	(a)	(a)	·00	2·4	(a)	(a)	·78	1·54	(a)	(a)	(a)	(a)	(a)	2·17	(a)	5·3	·26	·00
1896–1900	(a)	(a)	·00	2·9	(a)	(a)	·82	1·24	(a)	(a)	(a)	(a)	(a)	2·03	(a)	4·4	·02	·00
1901–05	(a)	(a)	·00	1·9	(a)	(a)	·52	1·08	(a)	(a)	(a)	(a)	(a)	2·10	(a)	3·6	·46	·00
1906–10	(a)	(a)	·00	1·6	(a)	(a)	·28	·97	(a)	(a)	(a)	(a)	(a)	2·27	(a)	4·2	·00	·00
1911–15	·00	·05	·00	1·8	(a)	(a)	·17	·98	(a)	(a)	(a)	(a)	(a)	3·11	(a)	3·6	·00	·00
1916–20	·00	·07	·00	2·3	(a)	(a)	·09	·60	(a)	8·95	(a)	(a)	·02	3·00	(a)	2·7	·00	·00
1921–25	·00	·02	·00	2·86	·00	·05	·08	·43	·03	9·05	1·24	·00	·01	3·59	(a)	3·69	·00	·00
1926–30	·00	·02	·00	2·81	·01	·03	·08	·47	·01	9·89	1·46	·00	·01	4·10	(a)	3·28	·33	·00
1931–35	·00	·04	·00	2·20	·02	·01	·04	·55	·01	9·02	1·31	·00	·02	4·25	12·90	3·60	·15	—
1921	·00	·02	·00	3·62	·01	·05	·07	·47	·05	10·81	·96	·00	·01	3·55	(a)	7·27	·00	·00
1922	·00	·02	·00	3·38	·01	·01	·06	·43	·03	9·17	1·56	·00	·01	3·28	(a)	3·81	·02	·00
1923	·00	·01	·00	2·26	·00	·02	·07	·40	·02	8·33	1·04	·00	·02	3·84	(a)	2·21	·00	—
1924	·00	·02	·00	2·30	·00	·13	·09	·41	·02	8·36	1·47	·00	·02	3·43	(a)	2·50	·00	—
1925	·00	·02	·00	2·72	·00	·06	·09	·42	·01	8·58	1·18	·00	·01	3·83	(a)	2·66	·00	—
1926	·00	·02	·00	2·95	·00	·05	·07	·39	·01	8·97	1·22	·00	·02	4·24	(a)	2·68	·00	—
1927	·00	·02	·00	2·69	·01	·03	·07	·43	·01	11·11	1·49	·00	·02	3·57	12·21	2·91	·00	—
1928	·00	·02	·00	2·74	·01	·02	·13	·48	·02	10·19	1·38	·00	·01	4·09	10·67	3·45	·07	·00
1929	·00	·03	·00	2·68	·01	·02	·08	·49	·01	10·42	1·98	·00	·01	4·46	10·84	3·60	·43	—
1930	·00	·02	·00	3·01	·01	·01	·07	·54	·01	8·74	1·24	·00	·01	4·15	10·48	3·74	1·15	·00
1931	·00	·04	·00	1·90	·01	·01	·04	·52	·01	9·60	1·56	·00	·01	4·44	12·64	2·72	·33	—
1932	·00	·06	·00	1·86	·02	·01	·04	·51	·01	11·07	1·31	·00	·02	3·51	11·94	3·25	·26	—
1933	·00	·05	·00	2·23	·01	·01	·04	·65	·00	9·31	1·47	·00	·01	4·51	14·81	5·11	·12	—
1934	·00	·03	·00	2·79	·01	·01	·03	·61	·01	8·24	1·32	·00	·02	4·48	13·37	4·32	·03	—
1935	·00	·03	·00	2·23	·05	·00	·04	·45	·01	6·87	0·89	·00	·02	4·33	11·72	2·62	—	—
1936	—	·03	·00	1·67	·07	·00	·06	·43	·01	8·10	0·99	·00	·01	3·07	11·13	2·55	—	—

(a) Comparable figures are not available for this period.

TABLE 32.—*County of London.—Annual number of notifications of infectious disease,* 1926–36.

Year	Anthrax	Cerebrospinal fever	Continued fever	Diphtheria	Dysentery	Encephalitis lethargica	Enteric fever	Erysipelas	Malaria	Ophthalmia neonatorum	Pneumonia	Polio-encephalitis	Polio-myelitis	Puerperal fever	Puerperal pyrexia	Scarlet fever	Smallpox	Typhus
1926	8	83	4	13,526	13	224	302	1,799	52	705	5,589	10	85	333	293	12,293	5	—
1927	5	93	2	12,183	24	142	322	1,929	65	812	6,733	7	79	261	892	13,178	5	—
1928	3	70	17	12,155	39	100	580	2,146	73	733	6,118	9	45	294	768	15,297	295	2
1929	5	121	8	11,788	56	92	351	2,158	38	728	8,717	4	62	312	758	15,855	1,908	—
1930	1	88	6	13,411	40	60	291	2,387	29	617	5,531	8	29	293	740	16,699	5,149	2
1931	2	175	3	8,384	58	40	186	2,294	32	629	6,880	5	51	291	828	12,025	1,452	—
1932	3	247	4	8,087	79	47	195	2,230	41	687	5,673	10	79	218	741	14,119	1,131	—
1933	3	216	5	9,557	31	22	164	2,766	21	527	6,299	6	60	255	838	21,911	531	—
1934	3	137	4	11,782	58	29	109	2,586	30	467	5,569	8	66	254	758	18,238	144	—
1935	2	105	3	9,294	199	15	187	1,868	37	382	3,707	4	81	241	652	10,954	—	—
1936	—	113	4	7,030	304	12	255	1,815	35	462	4,141	2	36	175	635	10,705	—	—

TABLE 33.—*County of London.—Notifications of infectious disease during the 53 weeks ended 2nd January, 1937.*

Metropolitan boroughs (in topographical order)	Anthrax	Cerebro-spinal fever	Continued fever	Diphtheria (including membranous croup)	Dysentery	Encephalitis lethargica	Enteric fever	Erysipelas	Malaria	Ophthalmia neonatorum	Pneumonia	Polio-encephalitis	Polio-myelitis	Puerperal fever	Puerperal pyrexia	Scarlet fever	Smallpox	Typhus
Western—																		
Paddington ...	–	3	1	218	9	–	7	50	4	14	131	–	1	14	42	263	–	–
Kensington ...	–	6	–	176	7	1	9	67	2	12	177	–	3	12	21	310	–	–
Hammersmith ...	–	6	–	133	14	–	12	37	2	6	91	–	2	7	24	335	–	–
Fulham ...	–	4	–	178	8	2	16	63	–	13	227	–	4	6	25	323	–	–
Chelsea	–	2	–	68	4	–	6	38	1	7	88	–	1	2	5	148	–	–
Westminster, City of	–	–	–	85	10	–	10	33	2	10	21	–	–	1	13	178	–	–
Northern—																		
St. Marylebone	–	1	–	119	1	–	7	28	–	7	64	1	2	3	15	141	–	–
Hampstead ...	–	1	–	61	3	–	15	33	1	18	92	–	1	1	21	122	–	–
St. Pancras ...	–	2	–	486	41	–	11	81	4	31	228	–	2	9	23	426	–	–
Islington ...	–	6	–	582	35	–	7	127	–	45	210	–	1	24	56	761	–	–
Stoke Newington	–	–	–	76	2	–	2	19	–	5	29	–	–	5	8	132	–	–
Hackney ...	–	1	–	343	11	–	5	126	2	25	139	–	2	19	75	550	–	–
Central—																		
Holborn ...	–	2	–	61	7	–	3	19	2	3	32	–	–	2	3	67	–	–
Finsbury ...	–	1	–	154	7	–	4	31	–	10	73	–	–	1	7	149	–	–
City of London	–	–	–	6	1	–	–	2	–	–	2	–	–	–	1	28	–	–
Eastern—																		
Shoreditch ...	–	2	–	219	51	–	5	53	–	11	48	–	–	2	23	287	–	–
Bethnal Green	–	6	–	222	32	–	9	93	1	10	87	–	1	2	9	334	–	–
Stepney... ...	–	5	–	517	19	1	4	118	–	12	202	–	–	2	34	512	–	–
Poplar	–	6	–	481	6	–	11	65	–	5	333	–	3	5	16	459	–	–
Southern—																		
Southwark ...	–	9	–	338	8	–	2	74	–	26	127	–	1	13	17	352	–	–
Bermondsey ...	–	4	–	207	1	2	15	39	–	6	125	–	–	6	10	266	–	–
Lambeth ...	–	5	–	415	15	–	13	109	3	54	231	–	1	5	46	703	–	–
Battersea ...	–	7	3	320	–	–	14	67	–	29	267	–	2	4	16	489	–	–
Wandsworth ...	–	5	–	385	4	2	29	115	4	30	336	1	4	7	20	660	–	–
Camberwell ...	–	7	–	259	3	–	5	89	1	13	153	–	1	8	15	706	–	–
Deptford ...	–	3	–	196	1	–	5	42	2	11	82	–	–	3	10	261	–	–
Greenwich ...	–	1	–	257	–	1	5	34	–	6	83	–	1	4	19	304	–	–
Lewisham ...	–	8	–	234	–	2	12	93	2	19	216	–	2	3	36	836	–	–
Woolwich ...	–	10	–	234	4	1	12	70	2	24	247	–	1	5	25	603	–	–
Ages 0– ...	–	22	–	136	29	–	7	40	–	462	245	–	2	–	–	90	–	–
„ 1– ...	–	32	1	2,158	155	1	22	52	–	–	775	–	11	–	–	3,085	–	–
„ 5– ...	–	13	–	2,789	50	2	25	40	–	–	402	–	10	–	–	4,006	–	–
„ 10– ...	–	9	1	840	14	1	31	65	1	–	160	1	5	–	–	1,567	–	–
„ 15– ...	–	11	1	333	8	2	35	70	2	–	185	–	4	8	42	636	–	–
„ 20– ...	–	8	–	277	11	1	36	98	1	–	233	–	–	44	197	497	–	–
„ 25– ...	–	12	–	290	16	2	41	165	13	–	405	–	2	82	315	540	–	–
„ 35– ...	–	4	–	133	7	–	18	235	13	–	402	–	1	40	78	196	–	–
„ 45– ...	–	–	–	51	5	–	22	353	5	–	450	–	1	1	3	56	–	–
„ 55– ...	–	1	1	15	8	1	13	349	–	–	449	1	–	–	–	21	–	–
„ 65– ...	–	1	–	6	1	2	5	234	–	–	283	–	–	–	–	8	–	–
„ 75+ ...	–	–	–	2	–	–	–	114	–	–	152	–	–	–	–	3	–	–
Total, 1936 ...	**–**	**113**	**4**	**7,030**	**304**	**12**	**255**	**1,815**	**35**	**462**	**4,141**	**2**	**36**	**175**	**635**	**10,705**	**–**	**–**
Total, 1935 ...	*2*	*105*	*3*	*9,294*	*199*	*15*	*187*	*1,868*	*37*	*382*	*3,707*	*4*	*81*	*241*	*652*	*10,954*	–	–

Administration

Housing

Representations by medical officers of the public health department in respect of clearance areas under the Housing Act, 1930, have been maintained during the year 1936 at the same rate as in 1935. Clearance.

	Areas	*Houses*	*"Other buildings" included under the terms of sec. 62 (1) of the Housing Act, 1935*
During the year 1936	52 ...	4,084 ...	144
Total number under the 1930 Act up to 31st December, 1936	197 ...	14,311 ...	191

The Metropolitan Borough Councils are housing authorities equally with the Council, but before a Borough Council proceeds to declare an area to be a clearance area it is necessary for the Council to be notified in accordance with section 16 (5) of the Housing Act, 1930. Altogether notifications were received from the boroughs in respect of 2,335 houses in 137 areas, and in eleven instances, involving 322 houses, the area with which the borough proposed to deal formed part of a larger scheme of the Council, or for some other reason could be more appropriately dealt with by the Council. In each case the Borough Councils were informed whether the Council proposed to deal with the areas or not.

The following table shows, in respect of each metropolitan borough, the number of houses during the year represented by medical officers of the Council's public health department and the number of houses included in notifications from the Borough Councils.

Table 34.

Metropolitan borough	Number of houses represented to L.C.C. by its medical officers	Number of houses notified (Sec. 16 (5)) by Borough Councils	Metropolitan borough	Number of houses represented to L.C.C. by its medical officers	Number of houses notified (Sec. 16 (5)) by Borough Councils
Battersea	—	19	Islington	132	141
Bermondsey	83	162	Kensington	—	19
Bethnal Green	420	21 *69	Lambeth	†351	115
			Lewisham	25	39
Camberwell	143	106 *14	Paddington	—	224
			Poplar	618	27
Chelsea	—	—	St. Marylebone	—	—
Deptford	139	—	St. Pancras	69	26
Finsbury	147	112	Shoreditch	—	30
Fulham	8	74 *9	Southwark	281	66 *140
Greenwich	290	174 *30	Stepney	825	—
			Stoke Newington	—	—
Hackney	156	285 *60	Wandsworth	—	38
			Westminster	—	76
Hammersmith	—	65	Woolwich	498	191
Hampstead	—	—			
Holborn	—	3	Total	†4,185	‡2,335

* The London County Council decided itself to deal with these houses.
† Includes 101 houses re-represented (Murphy-street).
‡ Includes 322 houses with which the Council decided to deal.

Public inquiries were held by the Ministry of Health in respect of clearance and compulsory purchase orders made by the Council relating to 38 areas, comprising 2,972 houses represented as suitable for action under Part I of the Housing Act, 1930. Inquiries.

Less than 1 per cent. of these houses have been excluded from orders confirmed by the Minister, on the grounds that they were not suitable for inclusion within the terms of Part I of the Act of 1930.

Redevelopment.

Mention was made in the report for last year of the new procedure introduced in the Housing Act, 1935, for dealing with redevelopment areas. In December, 1936, an area of some 46 acres in Bethnal Green lying between Regent's canal on the north and Old Bethnal Green-road on the south, was declared to be a proposed redevelopment area—the first of its kind in the county. As there was no precedent for the preparation of evidence in respect of a redevelopment area, a considerable amount of work was entailed by the collection of data relating to the various conditions to which an area of this kind must conform.

The total number of properties in the area was found to be 1,210, of which nearly 700 were working-class houses, and rather more than 47 per cent. of these were unfit for human habitation and not capable, at reasonable expense, of being rendered so fit. Taking into account also the other two factors of congestion and overcrowding, 55 per cent. of the working class dwellings in the area were in such condition that section 13 (1) of the Housing Act, 1935, could apply. The statutory proportion is a minimum of one-third.

Overcrowding.

The duties of local authorities in respect of overcrowding may be divided into three parts: firstly, a survey to ascertain which dwellings are overcrowded; secondly, the preparation and submission to the Minister of Health of a report as to the result of the inspection and the number of new houses needed to abate overcrowding; and, thirdly, the submission of proposals for the provision of the required houses.

In the county of London the work of the survey fell to the Borough Councils and their reports were submitted, in the first place, to the County Council as required by section 21, of the Housing Act, 1935, thus enabling the Council to effect the necessary measure of co-ordination. The results of the survey in the various boroughs and for London as a whole were published in March, the outstanding fact being that 70,953 families, equivalent to 357,989 persons, representing 9·1 per cent. of the population of the county, were found to be living in overcrowded conditions as defined by the Act.

As the abatement of overcrowding entails the provision of fresh accommodation and cannot be achieved immediately the extent of such overcrowding has been ascertained, the Housing Act, 1935, provided that no offence would be committed in this respect until after an "appointed day" had been fixed by the Minister, who might appoint different days for different purposes and different provisions of the Act and for different localities. For these purposes the different provisions fall into two groups, *viz.* (a) section 6 providing for the entry in rent books of information concerning overcrowding and for certificates to be supplied with respect to the permitted number of persons in relation to the house, and (b) sections 3, 4, 8 and 68 concerning offences in relation to overcrowding, exceptional conditions and the supersession of by-laws for fixing the number of persons who may occupy a house let in lodgings or occupied by members of more than one family.

The survey indicated that it would be impracticable to bring the overcrowding provisions of the Act into force throughout the county on the same date, unless it were unreasonably delayed, and, after consultation with the Council and the Metropolitan Borough Councils concerned, the Minister appointed 1st July, 1936 (section 6), and 1st January, 1937 (sections 3, 4, 8 and 68), as the appointed days in the boroughs of Kensington, Lewisham, Stoke Newington, Wandsworth, Woolwich and the City of Westminster. The appointed days for Battersea, Camberwell, Chelsea, Deptford, Fulham, Greenwich, Hackney, Hammersmith and Lambeth were fixed as 1st January, 1937, and 1st July, 1937, respectively.

The fixing of early dates is in contemplation as regards six other boroughs, but in the seven remaining boroughs, *viz.* Bermondsey, Bethnal Green, Finsbury, Islington, Poplar, Shoreditch and Stepney, conditions are such that it is not possible yet to fix the appointed days.

By-laws.

As a result of amendments by section 68 of the Housing Act, 1935, to the Council's power to make by-laws under section 6 of the Housing Act, 1925, the question of amending or replacing the existing by-laws in respect of houses let-in-lodgings has been under consideration. Owing to legal technicalities it was considered desirable that new by-laws should be made under section 6 of the Housing Act, 1936. These new by-laws will be based generally on the former code, but their exact form is still the subject of consideration.

Staff.

At the beginning of the year six medical officers and eighteen inspectors were occupied wholly upon housing work and, except during short periods when a total of twenty inspectors were employed, there has been no change in the number of the staff.

Housing Act, 1936.

On 31st July, 1936, the Housing Act, 1936, received the Royal Assent. This Act, which consolidates the Housing Acts, 1925–35, and certain other enactments relating to housing, has effect from 1st January, 1937.

Programme of clearance operations.

The programme of clearance operations adopted by the Council in 1934 embraced a period of three years ending in June, 1937. At the end of the year 1936 therefore it was considered advisable to review the position as regards the progress made in respect of the programme, and also to consider the addition of further property now falling within the scope of the Housing Act. This review had not been completed by the end of the year 1936.

Milk and Dairies (Consolidation) Act, 1915, *and Tuberculosis Order*, 1925

Examination of milk.

Since 1st July, 1908, it has been the practice for the Council to take samples of liquid milk arriving by road or rail from the provinces for biological examination to ascertain the extent to which the milk supply on its arrival in London is infected with tuberculosis.

In consequence of the decision arrived at in 1934 that no useful purpose would be served by sampling milk brought into London in large tanks on account of the practical impossibility of tracing the farm of origin, samples are taken only from churns known to have come direct from the producer.

The result of such sampling during 1936, as compared with that of 1935, is as follows :—

Table 35.

Quarter	1935			1936		
	Completed examinations	Number tuberculous	Percentage	Completed examinations	Number tuberculous	Percentage
1st	445	50	11·2	514	61	11·9
2nd	515	74	14·4	478	44	9·2
3rd	431	60	13·9	465	31	6·6
4th	489	53	10·8	494	47	9·5
Total	1,880	237	12·6	1,951	183	9·3

The milk subject to sampling in 1936 was received from 26 counties. In the cases where the sample proved to be tuberculous the medical officer of the county of origin was notified and arrangements were made by him for the farm from which the milk originated to be visited and the herd examined. As a result of such consequential investigations 135 cows were dealt with under the Tuberculosis Order, 1925, as against 119 in 1935; in some additional cases it was reported that the owners of the cows had taken action before the medical officer of the county concerned made his inspection, and in a few cases no trace of tuberculosis could be discovered in the herd examined. The increase in the number of cows dealt with under the Tuberculosis Order, 1925, may be put down to greater attention to the matter on the part of the county authorities to whom notifications have been sent.

Institutions under the control of the Council

The cows kept at institutions under the control of the Council have been inspected quarterly by the Council's veterinary surgeons, and samples of the milk have been taken at least twice during the year. The results of sampling and of veterinary inspection were as follows:—

TABLE 36.

Department	Approximate stock at 31st December, 1936			Visits by veterinary surgeon	Samples taken of which examination completed	Samples found to be tuberculous	Cows with tuberculosis	Cows with unhealthy conditions not tuberculous
	Cows	Bulls	Young stock					
Education	9	2	—	9	12	1	2	3
Mental hospitals	1,155	21	18	58	240	11	7	131
Public assistance	35	1	14	12	34	1	2	8
Public health	33	2	—	6	8	—	—	—
Total	1,232	26	32	85	294	13*	11	142

* Or 4·4 per cent.

In the first instance cows are sampled in groups; when a specimen proves positive and it is impossible to discover the diseased cow by clinical methods, individual samples are taken under the instructions of the veterinary surgeons, who confer with the farm bailiffs and give such advice as may be necessary for the treatment of suspected milk and the general maintenance of the herds.

Licensed cowsheds

The cows in the London licensed sheds are inspected under the provisions of Part IV of the Milk and Dairies Order, 1926. The veterinary surgeons inspected each shed at least four times during the year, making 161 visits in all. During these inspections 3,385 cows were examined of which 304 were found to be unhealthy, one being in a state of tuberculous emaciation, 188 suffering from mastitis, 34 from induration of the udder and 81 with some other defect. The animal found to be tuberculous was slaughtered voluntarily by the owner.

In connection with these inspections, 33 samples of milk were taken for biological examination in suspected cases; of these, three results were incomplete and the remainder negative. In addition to the special samples, 80 routine samples were taken, the examination of 3 of which was incomplete and of the remainder two (or 3·6 per cent.) were tuberculous.

The number of licensed cowsheds in the county has been diminished from 738 in 1889, the year of the Council's inception, to 38 in the year now under review. The existing premises are mostly situated in the metropolitan boroughs of Stepney and Bethnal Green.

By-laws for the protection of food

By-laws for promoting sanitary and cleanly conditions in the manufacture, preparation, storage, transport, or exposure for sale of articles intended to be sold for food, have been made by the Council after consultation with authorities and organisations interested. These by-laws have been confirmed by the Minister of Health and come into force on 1st January, 1937.

Venereal diseases

In the Annual Report for the year 1916, particulars were given of a scheme for the provision of the necessary facilities for the diagnosis and treatment of venereal disease which had been formulated as a result of conferences between representatives of the counties of London, Buckingham, Essex, Hertford, Kent, Middlesex and Surrey, and of the county boroughs of Croydon, East Ham and West Ham.

The Local Government Board, in due course, signified its approval of the scheme which came into operation on 1st January, 1917, and is known as the London and Home Counties Scheme.

Hospitals.

The general and special hospitals undertaking in-patient or out-patient treatment and other work under the scheme at the end of 1936, were as follows :—

General Hospitals.—St. Thomas's ; Seamen's ; Royal Free (women) ; Guy's ; West London ; Royal Northern ; St. Mary's ; St. George's ; University College ; Metropolitan ; King's College ; Albert Dock ; Miller General ; St. John's (Lewisham) ; Westminster.

Special Hospitals.—South London hospital for Women ; St. Paul's ; Great Ormond-street (Children) ; Mothers' hospital (Salvation Army), Lower Clapton-road, E. ; Children's Medical Home, Waddon.

Clinics with all-day medical and intermediate treatment have been provided at St. Thomas's hospital ; St. Paul's hospital ; Guy's hospital ; West London hospital ; the London County Council (Whitechapel) clinic (see page 34) and the Royal Free hospital (women).

In addition the following hospitals provide facilities for all-day intermediate treatment : Miller General ; Royal Northern ; St. John's (Lewisham) ; St. Mary's ; Seamen's ; University College.

The number of new patients attending the hospitals during the year 1936 was 26,077, of whom 2,921 were suffering from syphilis, 10,043 from gonorrhœa, and 296 from soft chancre, while 12,817 were diagnosed as not suffering from these diseases.

A summary of the work done by the hospitals for each of the areas in the joint scheme during the year 1936 is shown in the following table :—

TABLE 37.

	London	Middlesex	Essex	Surrey	Kent	Herts.	Bucks.	East Ham	West Ham	Croydon	Total	"Other" places	Grand total
New patients—													
Syphilis	2,070	275	106	84	55	33	21	20	41	12	2,717	204	2,921
Soft chancre ...	192	8	13	5	3	4	—	2	5	2	234	62	296
Gonorrhœa ...	6,761	1,091	416	293	164	150	56	97	191	29	9,248	795	10,043
Not venereal ...	8,542	1,475	643	633	281	145	91	125	196	64	12,195	622	12,817
Total	17,565	2,849	1,178	1,015	503	332	168	244	433	107	24,394	1,683	26,077
Total attendances ...	826,944	102650	57,394	28,230	10,298	8,828	3,259	14,614	26,095	2,587	1,080,899	21,479	1,102,378
No. of in-patient days	34,115	3,737	3,092	1,796	2,688	647	681	245	290	51	47,342	10,000	57,342
Pathological Examinations.													
For or at centres—													
Spirochaetes ...	2,662	88	85	38	6	7	3	28	56	1	2,974	146	3,120
Gonococci ...	107,849	14,356	11,603	5,404	2,643	1,480	829	2,648	3,754	407	150,973	3,884	154,857
Wassermann ...	33,570	4,074	2,316	2,353	809	499	246	409	717	196	45,189	1,615	46,804
Others	40,359	4,539	4,118	2,701	897	555	274	801	1,445	206	55,895	2,374	58,269
Total	184,440	23,057	18,122	10,496	4,355	2,541	1,352	3,886	5,972	810	255,031	8,019	263,050
For practitioners—													
Spirochaetes ...	6	—	—	—	—	—	—	—	—	—	6	—	6
Gonococci ...	3,217	198	185	93	185	30	24	41	5	920	4,898	9	4,907
Wassermann ...	16,204	861	1,316	816	227	77	125	32	10	668	20,336	524	20,860
Others	8,633	239	1,078	374	45	59	18	35	8	1,025	11,514	461	11,975
Total	28,060	1,298	2,579	1,283	457	166	167	108	23	2,613	36,754	994	37,748

The distribution of new cases of venereal disease between the sexes is shown in the following table, the figures for the preceding years being given for comparison :—

TABLE 38.

Year	New cases						Total venereal cases	
	Syphilis		Soft chancre		Gonorrhœa			
	M.	F.	M.	F.	M.	F.	M.	F.
1917	4,427	3,351	199	11	3,830	1,207	8,456	4,569
1918	3,764	3,002	116	13	4,844	1,940	8,724	4,955
1919	6,394	3,391	463	18	10,441	2,440	17,298	5,849
1920	6,988	3,579	766	25	10,669	2,427	18,423	6,031
1921	5,088	3,100	458	13	8,573	2,136	14,119	5,249
1922	4,207	2,600	309	12	8,233	2,402	12,749	5,014
1923	4,497	2,631	311	4	9,043	2,520	13,851	5,155
1924	4,174	2,452	301	4	8,565	2,785	13,040	5,241
1925	3,556	2,346	268	11	8,464	2,857	12,288	5,214
1926	3,725	2,013	301	2	8,825	2,858	12,851	4,873
1927	3,886	2,209	203	7	9,637	2,859	13,726	5,075
1928	3,433	1,837	229	6	8,249	2,647	11,911	4,490
1929	3,303	1,628	276	4	8,271	2,503	11,850	4,135
1930	3,389	1,836	347	12	8,620	2,503	12,356	4,351
1931	3,009	1,521	326	12	7,713	2,260	11,048	3,793
1932	3,270	1,671	172	15	8,566	2,656	12,008	4,342
1933	3,072	1,638	185	10	8,791	3,313	12,048	4,961
1934	2,673	1,506	159	6	8,689	3,031	11,521	4,543
1935	2,578	1,352	336	14	8,184	2,768	11,098	4,134
1936*	1,866	1,055	275	21	7,724	2,319	9,865	3,395

* The marked decrease in the number of new cases of venereal disease shown in the table for the year 1936 is mainly due to the fact that for the year in question only patients who acknowledged no previous treatment for their infection at a treatment centre have been included as new cases. New patients who admitted having received previous treatment at some other centre totalled 1,724, and if these are added to the total for the year 1936 a figure more strictly comparable with that of previous years is obtained. With the addition of these cases the totals for 1936 are as follows :—

	Males	*Females*
Syphilis	2,283	1,328
Soft chancre	280	21
Gonorrhœa	8,387	2,685
Total	10,950	4,034

It will be seen that the number of new cases of syphilis was the lowest yet recorded.

With regard to the new cases of venereal disease, information was obtained as to whether the infection was recently acquired in patients attending the clinics for the first time during the year 1936, and also as to the number of cases of congenital syphilis. The returns received from the treatment centres showed that, as regards syphilis, in approximately 40 per cent. of the new patients the disease was in either a primary or secondary stage, and, in the case of gonorrhœa, in 91 per cent., the infection had taken place within a year. Cases of congenital syphilis not known to have received previous treatment, numbered 265. The age and sex distribution was as follows :—

TABLE 39.

Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Total	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
20	21	10	16	26	27	42	103	98	167

Attendances.

The need for improving conditions likely to cause patients to discontinue attendance at the clinics continues to receive careful attention. Where necessary, patients are transferred from one clinic to another, which they can attend more

conveniently. Efforts to secure the requisite provision of facilities for intermediate treatment of gonorrhœa at times other than during the hours when the medical officer attends are meeting with considerable success. A number of patients still fail to complete the full course of treatment because of the false impression that a cure has been effected on the disappearance of outward signs of the disease.

In past years the ratio of attendances has been stated as so many attendances to each new case of V.D. admitted to the clinics during the year. By this means an estimate, comparable year by year, is obtained of the efficiency of the work as measured by the continued attendance. For the year 1936 the total attendances of V.D. patients was 1,005,711, and the ratio of attendances of V.D. patients to new V.D. cases was 67, compared with 59 in 1933, 66 in 1934 and 69 in 1935.

Comparative figures for the twenty years during which the scheme has been in force are shown in the following table :—

TABLE 40.

Year	New cases			Total attendances (venereal and non-venereal)	In-patients days
	Venereal	Non-venereal	Total		
1917	13,025	2,360	15,385	120,659	63,923
1918	13,679	2,693	16,372	169,485	66,095
1919	23,147	5,118	28,265	307,722	73,211
1920	24,454	6,592	31,046	464,033	81,612
1921	19,368	6,050	25,418	496,209	79,692
1922	17,763	5,950	23,713	529,003	112,564
1923	19,006	6,644	25,650	555,509	106,662
1924	18,281	7,292	25,573	589,002	102,456
1925	17,502	8,680	26,182	646,131	102,454
1926	17,724	8,988	26,712	687,075	101,735
1927	18,801	10,164	28,965	767,278	112,413
1928	16,401	9,595	25,996	763,535	65,106
1929	15,985	8,801	24,786	768,872	51,520
1930	16,707	10,162	26,869	836,219	51,216
1931	14,841	11,106	25,947	930,348	56,541
1932	16,350	11,602	27,952	983,921	54,023
1933	17,009	11,705	28,714	1,097,214	52,581
1934	16,064	12,059	28,123	1,142,287	54,089
1935	15,232	13,171	28,403	1,138,492	55,566
*1936	13,260	12,817	26,077	1,102,378	57,342

* See note to table 38.

The number of non-venereal patients who present themselves for examination indicates that the general public is appreciating the efforts which have been, and are being, made to spread a knowledge of the serious nature and grave after-effects of the venereal diseases.

Defaulting.

The question of defaulting is one to which attention is frequently drawn. Analysis of the returns for 1936 shows that, as regards syphilis, 2,521 patients failed to continue treatment until discharged. Of these, 480 ceased to attend before completing *one* course of treatment; 1,620 before completing treatment; and 421 after completion of treatment but before final tests. Of the 480 who ceased before completing *one* course of treatment, no less than 122 were in the primary stage of the disease when not only is the danger of transference of the disease greatest, but when also the greatest benefit can accrue to the patient by continuing treatment.

In the case of gonorrhœa, 5,187 patients failed to continue treatment until discharged. Of these, 3,840 ceased to attend before completing treatment and 1,347 after completion of treatment but before final tests of cure.

Much time is spent in the almoner's department of the various clinics in "following up" defaulters. Many letters are despatched to patients and where

considered practicable home visiting is undertaken. In cases where default is due to inability to attend through lack of means, bus or tram fares are paid.

Pathology and bacteriology.

Another point worthy of note is the total number of examinations made of pathological specimens. Comparative figures for the twenty years are shown in the following table :—

Year	*From treatment centres*	*From medical practitioners*	*Year*	*From treatment centres*	*From medical practitioners*
1917	13,988	3,649	1927	107,512	27,046
1918	25,973	6,380	1928	107,410	29,785
1919	51,554	10,464	1929	114,840	32,605
1920	58,920	14,027	1930	125,177	33,309
1921	66,134	18,472	1931	161,092	35,498
1922	74,022	19,836	1932	196,357	40,626
1923	69,784	24,403	1933	219,852	39,649
1924	79,005	24,797	1934	261,116	37,286
1925	106,064	26,346	1935	255,403	38,354
1926	100,543	27,565	1936	263,050	37,748

The use made by medical practitioners of the facilities for the examination of pathological specimens is highly satisfactory.

Under the scheme, medical practitioners who fulfil certain conditions are entitled to free supplies of the approved arsenobenzene preparations for the treatment of their private patients. The number of medical practitioners within the county availing themselves of this service is now 556, compared with 108 at the end of 1917, the first year of the operation of the scheme.

Venereal disease ; hostel accommodation.

From the outset the necessity was recognised for accommodation where young women under treatment could be lodged during the period of infectivity, and where various interests and occupations could be provided. Certain hostels managed by, or independently of, hospitals have received grants-in-aid for this purpose, and experience has proved the value of these hostels for the more efficient treatment of certain cases and for preventing the spread of disease. During the year 1936, the number of patients dealt with at these institutions from the areas in the scheme was 229, the aggregate number of days in residence being 23,496. Comparative figures for 1935 were 266 and 28,727.

The hostels undertaking work in connection with the scheme for the year 1936, were as follows :—

20-22, Highbury-quadrant, N. (Royal Free Hostels Committee) ; 148, Lambeth-road, S.E. (St. Thomas' hospital) ; 35, Parkhurst-road, N. (West London Mission) ; 62, Regent's-park-road, N.W. (Royal Free Hostels Committee) ; Salvation Army Hostels, 122–124 and 126–128, Lower Clapton-road, E.

Rescue homes.

The desirability of maintaining treatment and observation of girls and women for whom residence in hostels has been provided during the acute stages of venereal disease, engaged the attention of the Public Health Committee of the Council during the year 1928. As a result, arrangements were made with the authorities of certain rescue homes providing vocational training in domestic and other work, to receive up to eleven young women and girls who, although requiring continued treatment and observation, had been certified by the medical officer of a clinic as fit to reside in an institution without danger to other residents. These arrangements were completed in the autumn of 1928, but have not been utilised to the extent anticipated despite several circulars to V.D. clinics and hostels.

The London County Council (Whitechapel) clinic.

On 1st July, 1930, the venereal diseases clinic at the London hospital, one of the institutions in the London and Home Counties scheme, was taken over by the Council as an all-day clinic, and is now known as the London County Council (Whitechapel) clinic. The premises are rented from the London hospital, but the staff is appointed and the clinic maintained entirely by the Council. It remains

open from 8 a.m. to 9 p.m. every week-day, and provision for intermediate treatment is available also on Sundays and Bank Holidays.

During the year 1936 the number of new patients attending the clinic was 3,430, and attendances totalled 298,086. Of the new patients 75 per cent. of the male and 73 per cent. of the female venereal cases were infections of less than one year's duration.

The number of pathological examinations made at the clinic during the year was 70,980; of these 10,017 were made for private practitioners. All these figures are included in the figures for the scheme as a whole.

As at other clinics in the scheme, facilities for the study of venereal diseases are available for midwives, medical students and post-graduates. In addition a special course of instruction for post-graduates is held twice a year.

On the 31st March, 1936, Dr. T. Anwyl Davies, the director of the clinic, resigned, on his appointment as director of the venereal diseases clinic at St. Thomas' hospital. Dr. Anwyl Davies was the first director of the Council's clinic and by his initiative, energy and professional skill was mainly responsible for the great success which has attended the work of the clinic.

The position was filled by the appointment of Colonel E. T. Burke, D.S.O., formerly medical officer of the Salford venereal diseases clinic.

Facilities for the treatment of venereal diseases are also provided within the Council's municipal hospitals service. Special wards are provided for both male and female patients and provision is also made for maternity cases. In addition, children suffering from vulvo-vaginitis or from congenital syphilis are accommodated in special units. Further details are contained in Vol. IV, Part I, of the Annual Report.

Publicity and propaganda.

Under present arrangements, the British Social Hygiene Council exercises certain of the Council's powers relating to propaganda work, and is assisted in this work by local propaganda committees which work in close co-operation with the public health committees of the Metropolitan Borough Councils. During the year 1936, some 448 addresses and lectures, several illustrated by film exhibitions were given in the London area, the total estimated attendance thereat being 57,160. A grant of £1,350 was made by the Council to the British Social Hygiene Council for this work.

Apparent decline in the incidence of syphilis.

In the Annual Report of the Chief Medical Officer of the Ministry of Health for the year 1935, reference is made to the incidence of venereal disease in England and Wales as disclosed by the returns received from the various treatment centres. It is pointed out that as regards syphilis, the number of cases dealt with in all stages of the disease in 1920 was 42,805, whilst for the year 1935 the figure had declined to 19,335.

From 1931, the first year in which detailed figures relating to cases of acquired syphilis were recorded, the incidence of syphilitic infections of less than one year's duration is shown to have fallen by over 34 per cent., *viz.*, from 9,104 cases in 1931 to 5,971 in the year 1935. As regards congenital syphilis dealt with at the centres a steady fall in the number of cases has occurred and evidence of a steady decline in the transmission of syphilis to offspring is apparent from the mortality rate of children under one year per 1,000 live births from this disease; the rate for 1917 being 2·03, and for the year 1935, 0·29 per 1,000 live births.

The above figures for England and Wales are reflected in those received from treatment centres in the London and Home counties scheme.

The number of cases of syphilis dealt with for the first time *at the clinics in the London and Home Counties Scheme* has fallen from 10,567 in 1920 to 3,611 for the year 1936. Acquired syphilis with infections of less than one year has declined

from 2,537 in 1931 to 1,424 in 1936, and congenital syphilis during the same period from 543 to 265 cases. The mortality rate of children under one year per 1,000 live births, from syphilis *for London only*, has declined from 2·46 in 1917 to 0·36 in 1935.

The following statement shows the number of cases of syphilis dealt with at the clinics in the London and Home Counties Scheme for the first time from 1931 to 1936 :—

Year	*Cases (all stages)*	
	M.	*F.*
1931	3,009	1,521
1932	3,270	1,671
1933	3,072	1,638
1934	2,673	1,506
1935	2,578	1,352
1936	2,283	1,328

These figures are strictly comparable year by year and are not governed by the note to table 38.

Cases of congenital syphilis dealt with at the clinics during the same period are shown below :—

TABLE 41.

Year	Under 1 year	1–5 years	5–15 years	15 + years	Total
1931	37	33	168	305	543
1932	54	18	88	176	336
1933	51	25	88	163	327
1934	54	13	61	151	279
1935	41	26	46	139	252
1936	41	26	53	145	265

It cannot, I think, be denied that the figures quoted represent a genuine decrease in the incidence of new syphilitic infections. In support of this contention it may be pointed out that for several years, and more especially during the last decade, the school medical service, the maternity and child welfare centres, the practising midwife and the various departments of the voluntary hospitals have been on the alert to detect signs and symptoms of this disease and to refer suspects to the approved treatment centres.

For the past twenty years, local authorities have provided free facilities for diagnosis and treatment of venereal disease, and have endeavoured by lectures, demonstrations, public meetings, etc., to draw the attention of the public to the serious effects of venereal disease and to the paramount duty of sufferers to seek early and skilled treatment not only for their own physical well-being but also for that of their potential offspring. All this has occasioned expenditure but the results show that such expenditure has been justified.

Gonorrhœa.

Unfortunately the same satisfactory story cannot be told with regard to gonorrhœa where, owing to the nature of the disease, the uncertainty of treatment and length of time required for complete cure, patients remain in an infective condition for much longer than is the case where syphilis receives proper treatment by modern methods. The position regarding gonorrhœa is briefly summarised in the following paragraphs.

As regards England and Wales, the greatest number of cases attending the centres in any one year since the facilities for diagnosis and treatment were provided in 1917, was 45,001, which occurred in the year 1930. For the year 1935, the number was 41,332. This latter figure is, however, greater than that for any year prior to 1928.

The returns received from the centres in the London and Home Counties scheme show a somewhat more favourable result. The peak year in this case was 1920, when 13,096 cases were recorded, while for the year 1936 the number of cases returned was 11,072.

Treatment of tuberculosis

The Council is under statutory obligation to make, for the administrative county of London, adequate arrangements for the treatment of tuberculosis at or in dispensaries, sanatoria or other institutions approved by the Minister of Health, and also has power to make such arrangements as the Council may think desirable for the after-care of persons who have suffered from tuberculosis.

The arrangements made by the Council in compliance with the foregoing obligation and authority are published in detail in document No. 3194 (price 4d.), obtainable from P. S. King & Son, Limited, 14, Great Smith Street, S.W.1.

It will be sufficient to state, in broad outline, that the scheme resolves itself into two main divisions, *viz.*, (1) a tuberculosis dispensary service provided by the Metropolitan Borough Councils in accordance with general principles laid down by the Council, and (2) arrangements for residential treatment and various auxiliary services undertaken directly by the London County Council.

As to (1), the tuberculosis dispensary service is under the administrative direction of the medical officer of health of each borough. The tuberculosis officers work in co-operation with the medical practitioners of their area, and their services are available for consultation. They also act as honorary consultants on the staff of the Council's general hospitals which serves their areas.

The dispensaries are required to be linked with hospitals for special services, such as provision for X-ray examinations, and artificial pneumothorax refills. The Council's general hospitals and certain voluntary hospitals are available for these services.

A tuberculosis care committee (or equivalent organisation) is associated with each dispensary. The constitution of these committees includes representatives of the various social service agencies, voluntary and public, operating in the borough to help families whose social and economic circumstances are disturbed owing to the presence of the disease in the family.

With regard to (2), residential treatment is provided by the Council both in its own hospitals or sanatoria and in privately owned institutions.

By this method the Council secures a wide choice of institutions of various types and is enabled to give attention, in addition to clinical considerations, to personal preferences of patients, an important factor in some cases, and to such matters as climatic conditions and social or religious amenities. Patients are, however, sent to the Council's hospitals and sanatoria if beds equally suitable are available, before accommodation is taken in voluntary institutions.

The arrangements for residential treatment include the provision of observation beds (a) for the purpose of diagnosis, and (b) to determine disposal for treatment of definitely diagnosed cases which present difficulty of decision. These " observation " beds are provided principally at Brompton hospital, St. George's home, Chelsea, and in the Council's general hospitals. The last mentioned are also used for acute and emergency cases and for advanced cases mainly confined to bed.

The voluntary institutions used by the Council include Papworth village settlement and Preston Hall colony where suitable patients have the prospect of settlement and employment in the industries, and Burrow Hill sanatorium colony, which provides for youths between 14 and 18 years of age and, during treatment, trains them for clerical employment or for gardening work.

A feature of the scheme is the facility with which it is possible to interchange patients between various types of institution. Thus patients who deteriorate

while under sanatorium treatment or develop complications are returned to general or special hospitals ; the constant outflow of patients from general hospitals to institutions in the country is a considerable asset in creating an atmosphere of hopefulness among the bedridden patients.

Further features worthy of note as regards general hospitals are (1) the liaison between Grove Park tuberculosis hospital and Lewisham general hospital as regards pregnant women, and (2) the unit at St. Mary Abbots hospital, Kensington, for thoracic surgery. As regards the former, pregnant women are sent to Grove Park hospital for treatment of tuberculosis and while there attend the ante-natal clinic at Lewisham hospital situated nearby, to which they are admitted for the confinement. They can afterwards, if necessary, resume treatment for tuberculosis at Grove Park hospital or elsewhere.

Auxiliary services provided by the Council include the following :—

(1) Dental treatment, dentures and spectacles certified to be essential during residential treatment. Patients are, however, required to contribute, towards the cost any benefits to which they may be entitled under the National Health Insurance Acts or from societies to which they may be contributors.

(2) Essential clothing in necessitous cases is also supplied during residential treatment if not obtainable by patients from their own resources or from voluntary agencies.

(3) Arrangements for the boarding out of (i) children from heavily infected and overcrowded homes in order to remove them from risk of infection, and (ii) children who cannot otherwise be adequately cared for during the absence of the mother undergoing residential treatment.

(4) Open-air schools for children suffering from pulmonary tuberculosis or from tuberculous glands who do not need residential treatment and for children suspected to be suffering from tuberculosis or living in contact with advanced cases of the disease.

(5) After-care clinics for certain surgical cases treated in the Council's special tuberculosis hospitals.

Operation of tuberculosis scheme during 1936.

The following pages indicate the operation of the tuberculosis scheme during the year 1936, and in certain particulars during previous years.

TABLE 42.—*Beds occupied at end of year.*

Year	Adults	Children	Total	Year	Adults	Children	Total
1914	722	90	812	1926	1,841	880	2,721
1915	544	241	785	1927	1,946	884	2,830
1916	481	320	801	1928	1,920	855	2,775
1917	526	375	901	1929	2,083	858	2,941
1918	816	376	1,192	1930	2,017	890	2,907
1919	1,308	557	1,865	1931†	2,255	898	3,153
1920	1,636	704	2,340	1932†	2,368	811	3,179
1921	1,382	669	2,051	1933†	3,216	787	4,003
1922	1,370	655	2,025	1934	3,574	781	4,355
1923	1,458	707	2,165	1935	3,673	813	4,486
1924	1,612	746	2,358	1936	3,217	728	3,945
1925	1,668	792	2,460				

N.B.—The above figures include cases dealt with by the Insurance Committee from 1914 to 1921.

† The figures for 1931 and 1932 include patients sent to sanatoria as "municipal" patients independently of the tuberculosis scheme, and those for years from 1933 onwards include these patients and also tuberculous patients treated in the Council's general hospitals, who since 1st April, 1933, have all been regarded as tuberculosis scheme patients.

The numbers of applications for residential treatment during each of the last five years were as follows :—

TABLE 43.

Year	For first period of treatment				For further treatment				Total
	Ex-service	Civilian adults		Children	Ex-service	Civilian adults		Children	
		Male	Female			Male	Female		
1932	18	2,191	1,811	905	159	1,162	779	215	7,240
1933	2	2,793	2,121	753	155	1,707	1,113	214	8,858
1934	6	2,808	2,118	821	131	1,773	1,172	229	9,058
1935	8	2,480	1,880	835	80	1,621	1,192	232	8,328
1936	9	2,621	1,890	812	70	1,645	1,187	218	8,452

N.B.—From 1933 cases formerly treated in general hospitals as "municipal" patients are included in these figures as tuberculosis scheme cases.

Patients recommended for treatment during 1936 were dealt with as follows :—

	Adults	*Children*
(*a*) Admitted to "observation" beds to determine diagnosis or suitability for sanatorium treatment	1,450	241
(*b*) Passed for admission direct to sanatoria or hospitals ...	5,846	742
(*c*) Not accepted for residential treatment	73	26
(*d*) Withdrawn after application but before decision was reached	53	21
Total	7,422	1,030

N.B.—The treatment offered was refused in the cases of 153 adults and 17 children.

In the following tables patients of 15 years of age on admission are, except where otherwise stated, regarded as adults, owing to the "age" division required for the purposes of the Ministry of Health, although treatment for cases up to 16 years of age was arranged in institutions for children.

The extent of residential observation and treatment is shown below :—

TABLE 44.

Classification		In institutions on 1st January, 1936	Admitted during the year	Discharged during the year	Died in institutions	In institutions on 31st December, 1936
Number of doubtfully tuberculous cases admitted for observation.	Adult males	49	195	204	3	37
	Adult females	49	167	166	1	49
	Children ...	8	239	230	—	17
	Total ...	106	601	600	4	103
Number of patients suffering from pulmonary tuberculosis.	Adult males	1,869	4,772	3,830	1,111	1,700
	Adult females	1,194	2,904	2,512	514	1,072
	Children ...	315	217	220	25	287
	Total ...	3,378	7,893	6,562	1,650	3,059
Number of patients suffering from non-pulmonary tuberculosis.	Adult males	264	282	310	53	183
	Adult females	248	287	323	36	176
	Children ...	490	399	425	40	424
	Total ...	1,002	968	1,058	129	783
Grand total		4,486	9,462	8,220	1,783	3,945

The distribution of patients in institutions on 31st December, 1936, is shown below, the figures for 1935 being given in brackets :—

TABLE 45.

Hospitals and institutions	Ex-service men	Civilian adults	Children *under 16 years*	Total
London County Council special hospitals	3 (1)	1,255 (1,346)	648 (675)	1,906 (2,022)
London County Council general hospitals	4 (10)	979 (1,219)	19 (70)	1,002 (1,299)
Voluntary institutions	15 (18)	961 (1,079)	61 (68)	1,037 (1,165)
Total	22 (29)	3,195 (3,644)	728 (813)	3,945 (4,486)

The following table shows the results of observation of doubtfully tuberculous cases discharged from observation hospitals :—

TABLE 46.

Diagnosis on discharge from observation	For pulmonary tuberculosis						For non-pulmonary tuberculosis						Total		
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	Male	Female	Children	Male	Female	Children	Male	Female	Children	Male	Female	Children	Male	Female	Children
Tuberculous	35	31	12	32	40	9	—	—	6	—	1	2	67	72	29
Non-tuberculous	71	54	19	56	28	80	3	2	13	10	11	89	140	95	201
Total	106	85	31	88	68	89	3	2	19	10	12	91	207	167	230

The immediate results of the treatment of patients discharged during 1936 and the two preceding years, are indicated in the subjoined tables.

The figures given in the second line under each classification group represent the percentage of the total number of cases falling within each classification group. For example, in 1936 there were 701 " A," 336 " B 1," 3,004 " B 2 " and 1,518 " B 3 " cases discharged during the year. Of these numbers, 335 or 47·8 per cent. group " A," 135 or 40·2 per cent. group " B 1," 174 or 5·8 per cent. group " B 2 " and 4 or 0·3 per cent. group " B 3 " cases were discharged as quiescent, totalling 648 quiescent cases, or 11·7 per cent. of the total number (5,559) of pulmonary cases discharged during 1936.

TABLE 47.—*Immediate results of treatment.*

ADULTS.

Classification	Quiescent			Not quiescent			Died in institution			Total		
	Years			Years			Years			Years		
	1934	1935.	1936	1934	1935	1936	1934	1935	1936	1934	1935	1936
A. Number	286	328	335	395	364	343	40	25	23	721	717	701
Percentage	39·7	45·7	47·8	54·8	50·8	48·9	5·5	3·5	3·3	100	100	100
B1. Number	105	103	135	133	183	201	2	2	—	240	288	336
Percentage	43·8	35·8	40·2	55·4	63·5	59·8	0·8	0·7	—	100	100	100
B2. Number	191	179	174	2,558	2,601	2,716	110	63	114	2,859	2,843	3,004
Percentage	6·7	6·3	5·8	89·5	91·5	90·4	3·8	2·2	3·8	100	100	100
B3. Number	3	—	4	787	593	605	1,024	943	909	1,814	1,536	1,518
Percentage	0·2	—	0·3	43·4	38·6	39·8	56·4	61·4	59·9	100	100	100
Total Pulmonary	585	610	648	3,873	3,741	3,865	1,176	1,033	1,046	5,634	5,384	5,559
Percentage	10·4	11·3	11·7	68·7	69·5	69·5	20·9	19·2	18·8	100	100	100
Non-pulmonary	219	181	210	239	252	259	60	43	47	518	476	516
Percentage	42·3	38·1	40·7	46·1	52·9	50·2	11·6	9·0	9·1	100	100	100
Grand total	804	791	858	4,112	3,993	4,124	1,236	1,076	1,093	6,152	5,860	6,075
Percentage	13·1	13·5	14·1	66·8	68·2	67·9	20·1	18·3	18·0	100	100	100

CHILDREN.

Classification	Quiescent			Not quiescent			Died in institution			Total		
	Years			Years			Years			Years		
	1934	1935	1936	1934	1935	1936	1934	1935	1936	1934	1935	1936
A. Number	114	159	102	38	26	19	3	3	5	155	188	126
Percentage	73·6	84·6	81·0	24·5	13·8	15·1	1·9	1·6	3·9	100	100	100
B1. Number	5	10	15	2	8	7	—	1	—	7	19	22
Percentage	71·4	52·6	68·2	28·6	42·1	31·8	—	5·3	—	100	100	100
B2. Number	—	4	3	13	7	4	1	—	1	14	11	8
Percentage	—	36·4	37·5	92·9	63·6	50·0	7·1	—	12·5	100	100	100
B3. Number	—	—	—	2	3	3	18	17	8	20	20	11
Percentage	—	—	—	10·0	15·0	27·3	90·0	85·0	72·7	100	100	100
Total Pulmonary	119	173	120	55	44	33	22	21	14	196	238	167
Percentage	60·7	72·7	71·8	28·1	18·5	19·8	11·2	8·8	8·4	100	100	100
Non-pulmonary	359	354	285	44	52	48	16	13	6	419	419	339
Percentage	85·7	84·5	84·1	10·5	12·4	14·1	3·8	3·1	1·8	100	100	100
Grand total	478	527	405	99	96	81	38	34	20	615	657	506
Percentage	77·7	80·2	80·0	16·1	14·6	16·0	6·2	5·2	4·0	100	100	100

Papworth and Preston Hall village settlements.

Cases sent to the Papworth village settlement, Cambridge, and Preston Hall colony, Aylesford, Kent, are carefully selected, having regard to the special facilities afforded at these institutions for the employment of patients in the industries, and possible settlement. In addition to the patients accepted as permanent settlers at the village settlements there are a certain number of patients who become capable of work of value to the establishment, but who have little or no prospect of becoming full settlers. For these a weekly partial maintenance fee of from 10s. (occasionally even lower) to 20s. is paid, and such patients are regarded as continuing to receive residential treatment under the tuberculosis scheme.

The average numbers of patients under the scheme at Papworth and Preston Hall, respectively, during each of the past nine years are shown below :—

TABLE 48.

	1928	1929	1930	1931	1932	1933	1934	1935	1936
Papworth	9	16	33	61	90	109	118	140	136
Preston Hall	13	13	10	53	84	89	113	150	173

The youths between 14 and 18 years of age who are sent to Burrow Hill colony for treatment, combined with training either for clerical work or gardening, are retained in the first instance for 12 months. In suitable cases the Council has granted a second year where there are definite indications that prolonged residence is likely to be of special benefit to the boys both as regards health and fitness for employment. The course of instruction is approved both by the Ministry of Agriculture and the Board of Education. During 1936, 29 youths were discharged from the colony. Of this number 10 completed a two-years' course of training. The instruction given permits the youths to continue their general education during their period of residence. The high standard of the theoretical instruction in gardening is shown by the success attained by students who have studied for the examinations of the Royal Horticultural Society and been awarded the Society's certificate. The clerical course provides for skilled tuition in shorthand, typewriting, bookkeeping and business methods in addition to a sound general education. The students are prepared for the examinations set by Pitman's Institute for shorthand and by the Royal Society of Arts for other subjects. The percentage of passes at these examinations is high.

In conjunction with this scheme, there is an arrangement whereby selected youths who have taken the gardening course are offered employment in the parks

department of the Council as "improvers." Since 1931, 24 youths have been accepted for employment and only one left the service on health grounds, which result is undoubtedly very gratifying. Three are now on the permanent adult staff and two others are eligible, but failed to pass the medical examination for entrance; they will be re-examined in due course. Four have been certified fit for employment in a temporary capacity only. The youths have done well in the Council's horticultural examination, the passing of which is a condition of appointment. Fourteen have qualified, including one first place in the examination. Of the thirteen who entered the scheme during the first three years (*i.e.*, 1931–4) only one has still to qualify. In no case has a bad report been received. The youths are evidently keen to do well and are rendering the Council good value in their work. Time lost owing to sickness has been approximately 4 per cent., which is considered very satisfactory.

Contact investigation

Reference was made in the reports of 1934 (pp. 51–3) and 1935 (pp. 57–58) to an investigation conducted by Dr. F. J. Bentley, divisional medical officer, as to the proportion of cases of tuberculosis in which there had been known intimate association with a previous case of the disease. This inquiry has been continued and information is now available in respect of 5,504 cases which have undergone residential treatment under the Council's scheme. Of these, it was noted that, in 3,814 cases there was "no known contact" with a previous case of the disease, leaving 1,690 cases, or approximately 30·7 per cent., which exhibited contact of some sort.

These figures have again been analysed, as in the tables published in last year's report, and confirm previous conclusions to the effect that :—

(1) Contact with a previously diagnosed case of tuberculosis in the family is of sufficiently common occurrence in the history of new patients to stimulate examination of contacts in the attempt to find early cases.

(2) In the age groups 16 to 30, 21 per cent. of new male positive sputum cases and 25 per cent. of similar female cases arise from families in which there have been recent previously known cases in parent, husband or wife, brother or sister, or child.

(3) Approximately three-quarters of such previously known cases are or were sufferers with positive sputum disease.

(4) Every effort, therefore, should be made to examine and supervise, over a considerable period of time, contacts, especially—having regard to the frequency of the disease at this period of life—young adult contacts, of living positive sputum cases or of those recently dead from the disease.

Following-up of discharged cases.

Adults.—During the year investigations were made concerning the adult cases discharged from hospitals or sanatoria in 1930; the number investigated was 3,634 including 272 non-pulmonary cases. The following table shows the result of the enquiry and also (in brackets) the corresponding figures ascertained from last year's enquiry into the 1929 cases :—

TABLE 49.

Classification	Total	Percentage alive five years after discharge	Percentage dead
A	481 (514)	74·8 (76·6)	25·2 (23·4)
B 1	126 (169)	71·4 (72·1)	28·6 (27·9)
B 2	1,866 (1,975)	34·7 (35·2)	65·3 (64·8)
B 3	889 (895)	6·7 (4·4)	93·3 (95·6)
Non-pulmonary	272 (276)	76·8 (74·3)	23·2 (25·7)

Particulars obtained in 1935 as to the fitness for work of the 1,367 surviving adult patients who were discharged from treatment in 1930 show that out of a total of 450 A and B1 cases, 70·2 per cent. were at work. The corresponding percentage for the A and B1 cases in the 1929 group was 68·4. The percentages at work in the other categories and also the corresponding figures for the 1929 group (shown in brackets) are as follows :—B2, 47·6 (52·2) per cent.; B3, 21·6 (38·5) per cent.; and

surgical, 62·6 (63·4) per cent. Of the total number of 1,367 in all categories, 56·3 (59·2) per cent. were at work, 5·6 (6·5) per cent. were fit for work but were unemployed, 31·2 (29·3) per cent. were unable to work (including cases receiving further residential treatment).

Children.—The particulars obtained as to the after histories of children discharged under 16 years of age in 1930 relate to 641, of whom 206 are pulmonary and 435 non-pulmonary.

The mortality records are as follows, the figures in brackets referring to last year's enquiry into the 1929 cases :—

TABLE 50.

Classification	Total	Percentage alive five years after discharge	Percentage dead
A	153 (132)	91·5 (91·7)	8·5 (8·3)
B 1	6 (2)	66·7 (100·0)	33·3 (—)
B 2	27 (22)	33·3 (45·5)	66·7 (54·5)
B 3	20 (17)	— (5·9)	100·0 (94·1)
Non-pulmonary	435 (419)	90·8 (90·3)	9·2 (9·7)

The mortality rates of the non-pulmonary cases classified according to the location of the disease are as follows :—

TABLE 51.

Location of disease	Total	Percentage alive five years after discharge	Percentage dead
Hip	42 (52)	92·9 (84·6)	7·1 (15·4)
Spine	52 (40)	73·1 (75·0)	26·9 (25·0)
Other bones	88 (108)	94·3 (94·5)	5·7 (5·5)
Glands	231 (181)	93·1 (92·3)	6·9 (7·7)
Other parts	22 (38)	90·9 (92·1)	9·1 (7·9)

Of the 395 surviving non-pulmonary cases, 157 were at school and 111 at work.

The pulmonary cases class A (*i.e.*, T.B. minus) have been the subject of inquiry in some detail by Dr. F. J. Bentley, divisional medical officer, for, whilst pulmonary tuberculosis with positive sputum in childhood is universally recognised as a rare and grave condition, less certainty exists as regards the extent and outcome of the disease when tubercle bacilli have not been demonstrated.

A preliminary survey showed that 171 T.B. minus children were discharged in 1930 and yielded the following results five years later :—

	No.	*Percentage*
Alive	125	73·1
Dead	19	11·1
Untraced ...	27	15·8
Total ...	171	100·0

As the public health department receives information of all deaths from tuberculosis occurring within the county, it has always been assumed that the untraced are more likely to be alive than dead. This view has received some support in this instance as the special inquiry has brought to light 15 out of the 27 previously recorded as untraced and all these 15 were alive.

As regards the 19 children who were ascertained to have died by the end of the 5-year period, detailed inquiry has provided a basis for the attitude held in the department that the commonly encountered childhood type of pulmonary tuberculosis fares favourably, and that the children who die within five years from the date of receiving treatment for pulmonary tuberculosis were either acutely ill when under residential treatment or were suffering from the adult type of the disease with definite lesions of the lung substance, or that they succumb to some other illness.

Thus detailed inquiry has shown that of these 19 children reported dead, three were found to have yielded tubercle bacilli on one or more occasions when under residential treatment but this had not been recorded centrally. Such cases, of course, properly fall within the " B " group. A further three cases died from other (non-tuberculous) conditions.

The following are short notes of the remaining 13 T.B. minus cases, who died from pulmonary tuberculosis, indicating the condition found whilst under residential treatment :—

(1) Deposits throughout right lung and at left apex.
(2) Advanced pulmonary tuberculosis, 5 lobes, with possible enteritis ; grave constitutional disturbance.
(3) Miliary tuberculosis ; grave constitutional disturbance.
(4) Extensive foci in each lung ; grave constitutional disturbance.
(5) Left apex ; signs of cavity ; prolonged pyrexia.
(6) Pleural effusion, air replaced and maintained as artificial pneumothorax ; suspicious upper lobe other side.
(7) Probably both upper lobes (T.B. in sputum and extensive bilateral disease 10 months later).
(8) Suspicious case only ; treated at residential open-air school.
(9) Pleurisy and meningitis.
(10) Old tuberculous spine ; pleural effusion ; subsequent re-activation of spine and tuberculous meningitis.
(11) Consolidation right middle lobe ; hæmoptysis.
(12) Bilateral pleural effusion.
(13) Mass of glands in both roots ; moist sounds all over chest ; grave constitutional disturbance ; probably acute generalised tuberculosis.

It will be seen that, with the exception of case no. 8, no child died of pulmonary tuberculosis who was not seriously ill at the outset.

Up to the present time it has been possible to trace 140 survivors, whilst 12 cases still remain untraced. Of the 140 traced survivors, as many as 121 (86·4 per cent.) are well and at full work or school, whilst 26 of them have been removed from the tuberculosis registers as " recovered." Without a doubt many more are capable of such decertification if the definition were sufficiently strictly applied, and these will shortly be dealt with in this manner. Of the remaining 19 survivors who are not known to be at full work or school : 1 has arrested tuberculosis but suffers from chorea ; 2 are fit for work but unemployed ; 2 are arrested cases doing part-time domestic duties ; 4 are unfit for work because of their disease ; and 10 have not attended at a dispensary and information is incomplete.

It is interesting to note that, of the survivors, 19 had subsequent residential treatment for tuberculosis, 12 having further periods during childhood, whilst 7 underwent treatment as adults. Of the 12 subsequent periods of treatment during childhood 10 were treated again as T.B. minus cases, and two for surgical tuberculosis. Of the 7 treated later as adults, 4 had developed positive sputum, there being an average interval of 2 years since discharge after the original period of treatment ; 2 were treated at Burrow Hill colony as T.B. minus cases whilst another developed a tuberculous hip.

To summarise, the final figures arrived at after a careful study of the T.B. minus children discharged from treatment in 1930 are as follows :—

	No.	*Percentage*		
Untraced	12	7·3		
Traced	153	92·7		
Alive	140	91·5	of traced	cases.
Known to be well and at full work or school	121	79·1	„	„
Died from tuberculosis	13	8·5	„	„

These results are, it will be generally conceded, remarkably good.

In addition to the foregoing after-history investigation, Dr. F. J. Bentley in collaboration with medical superintendents of the Council's (formerly Metropolitan Asylums Board) and voluntary sanatoria, has conducted a detailed investigation into the results of artificial pneumothorax treatment provided for the Council's patients between the years 1921 and 1930. The cases were examined as regards

survival and condition at the end of the year 1933. No selection was made, the investigation including all cases which could be traced in 1933. This number was 677 cases, comprising 418 females and 259 males. The value of artificial pneumothorax was assessed by comparing the fate of the 677 cases with that of 3,329 cases treated by conservative methods only, after correction for age, sex and clinical classification, before this form of treatment came into general use. Both groups were classified and followed up in a uniform manner and were drawn from identical sociological and environmental sections of the population. All the 677 pneumothorax cases were followed up for a minimum period of 3 years while 411 of them were observed over a period of five years. The 3,329 " conservative " group were followed up for five years.

The report, which is of an exhaustive nature, has been published by the Medical Research Council and may be obtained from His Majesty's Stationery Office. It will be sufficient here to quote the following paragraph (page 88, no. 9) of Dr. Bentley's conclusions from his investigation :—

> The results of pneumothorax therapy as judged by the results in the 677 new cases here investigated show a gain in lives of 129·53 at the end of 3 years, that is an increase in the number alive over the expected number amongst those conservatively treated of 19·1 per cent. The smaller group followed for 5 years shows a gain in the number alive of 18 per cent. at the end of 3 years and 19·8 per cent. at the end of 5 years.

Tuberculosis dispensary service.

The tuberculosis dispensary service in London, while forming an integral part of the Council's tuberculosis scheme, is provided by the Metropolitan Borough Councils under conditions laid down by the Council.

An annual grant, based on actual expenditure approved by the Council for the year, was formerly made by the Council to the Metropolitan Borough Councils, subject to the dispensary service being carried out to the satisfaction of the Council. The grant, as nearly as possible, represented 25 per cent. of the actual net approved expenditure after deduction of the sum paid by the exchequer to the Metropolitan Borough Councils in compensation for loss of income arising from the withdrawal of " sanatorium benefit " for persons insured under the National Health Insurance Acts. The question of these grants was reviewed during 1933, and the Council, as from 1st April, 1933, substituted, for annual percentage grants based on actual expenditure, a system of fixed block grants in the form of annual payments of fixed amounts operating for periods of three years, based on examination of audited statements of actual expenditure during the triennium immediately preceding the commencement of each block grant period, together with a further statement of the amount of the probable expenditure by the Metropolitan Borough Councils during the ensuing grant period, and reasons for variations from previous expenditure. This arrangement does not include the City of London, which maintains its own dispensary at St. Bartholomew's hospital.

There are now 33 dispensaries in all, including 4 branch dispensaries. Of these, 25 are *ad hoc* municipal dispensaries, and 8 (including 1 branch dispensary) are at voluntary hospitals or under voluntary management. This excludes the City of London dispensary at St. Bartholomew's hospital. In some cases a borough has two dispensaries, while in other cases a hospital dispensary serves more than one borough.

In order to encourage the closer association of the municipal dispensaries with the Council's general hospitals, special facilities have been made available enabling the Borough Councils' tuberculosis officers to utilise the hospital X-ray installation for their patients and also to provide their patients with artificial pneumothorax refills at the hospitals. This has resulted in an increased number of boroughs arranging for the whole or part of their work in this connection being carried out at the Council's general hospitals.

Detailed information has been furnished by the Metropolitan Borough Councils' tuberculosis dispensary service as to the work of the tuberculosis dispensaries, including particulars as to the numbers of new cases and " contacts " examined, and the number of home visits, etc. The information is summarised in the table on pages 46 and 47.

Table 52.—Tuberculosis Dispensaries.—Analysis of Returns, January-December, 1936.

Metropolitan borough	On dispensary register, 1-1-36		Transferred during 1936 from other areas and cases returned after discharge	Examined for first time during 1936 (a) New cases excluding contacts (b) Contacts (printed in italics)										Total number (including contacts) under dispensary supervision during 1936	Removed from dispensary register during 1936.		On dispensary register 31-12-36		Total attendances	Visits to home for dispensary purposes by		No. of specimens of sputum examined	No. of X-ray examinations	Number of T.B. + cases on dispensary register
				Pulmonary		Non-pulmonary		Diagnosis not confirmed		Non-tuberculous		Total			(a) Recovered, (b) Non-tuberculous (printed in italics)	(a) Transferred to other areas or lost sight of (b) Died (printed in italics)	Definitely tuberculous	Diagnosis not completed		Tuberculosis officers	Nurses or health visitors			
	Definitely tuberculous	Diagnosis not confirmed		Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children											
Battersea	800	108	45	132 *4*	6 *1*	6	6	11 *1*	1	300 *106*	134 *126*	449 *111*	147 *127*	1,787	70 *766*	114 *98*	724 | 15 739		4,024	403	4,089	671	401	375
Bermondsey	819	16	16	87 *13*	11 *4*	14	6 *3*	13 *1*	4 *2*	274 *158*	82 *244*	388 *172*	103 *253*	1,767	41 *771*	69 *70*	796 | 20 816		3,875	1,112	2,473	1,275	997	332
Bethnal Green	721	13	25	85 *1*	5	7	17	12	7 *3*	233 *68*	99 *64*	337 *69*	128 *67*	1,360	44 *472*	123 *57*	647 | 17 664		4,186	140	3,555	349	501	267
Camberwell	1,672	17	50	127 *39*	5 *2*	21 *2*	15 *4*	20 *6*	— *3*	376 *308*	131 *345*	544 *355*	151 *354*	3,143	18 *1,177*	166 *127*	1,626 | 29 1,655		5,896	626	9,223	1,357	666	724
Chelsea	307	3	31	74 *2*	2 *2*	12	—	4	1	225 *54*	96 *75*	315 *56*	99 *77*	888	29 *456*	73 *47*	279 | 4 283		1,856	53	3,329	407	581	130
Deptford	494	27	56	89 *2*	6 *2*	8	10	21	10 *1*	173 *81*	76 *87*	291 *83*	102 *90*	1,143	23 *444*	123 *51*	475 | 27 502		2,680	212	3,235	677	216	268
Finsbury	439	8	24	75 *1*	9	9	2 *3*	2	1 *1*	79 *54*	23 *46*	165 *55*	35 *50*	776	41 *217*	52 *62*	399 | 5 404		1,362	158	2,200	135	298	196
Fulham	749	16	65	151 *3*	6	13	10	13 *1*	7	256 *125*	297 *138*	433 *129*	320 *138*	1,850	41 *833*	136 *115*	703 | 22 725		5,109	426	3,418	1,015	420	335
Greenwich	529	3	34	110 *4*	12 *2*	12	13 *2*	10	10 *8*	236 *79*	150 *90*	368 *83*	185 *102*	1,304	70 *558*	77 *58*	513 | 28 541		2,930	95	2,372	242	554	257
Hackney	1,248	9	95	133 *7*	9 *3*	18	10	19 *2*	4 *1*	381 *260*	158 *187*	551 *269*	181 *191*	2,544	82 *1,003*	199 *94*	1,150 | 16 1,166		6,613	288	3,019	995	815	529
Hammersmith	802	3	59	129 *14*	3 *1*	11 *1*	16 *2*	1	—	177 *178*	61 *170*	318 *193*	80 *173*	1,628	32 *589*	86 *87*	833 | 1 834		2,650	255	4,135	462	300	371
Hampstead	218	6	27	60 *1*	—	7	5 *1*	4	3 *1*	63 *28*	19 *21*	134 *29*	27 *23*	464	3 *137*	81 *17*	218 | 8 226		1,236	63	1,768	173	95	115
Holborn	226	1	12	40 *1*	1 *3*	8	3	—	— *1*	14 *25*	4 *27*	62 *26*	8 *31*	366	1 *77*	31 *18*	238 | 1 239		854	41	1,002	112	86	115
Islington	1 356	7	136	265 *27*	19 *12*	33 *1*	23 *3*	4 *2*	— *2*	401 *249*	73 *231*	703 *279*	115 *248*	2,844	57 *959*	293 *161*	1,366 | 8 1,374		8,862	468	6,316	908	658	694
Kensington	630	14	68	133 *1*	5	16	10	10	5 *1*	235 *81*	79 *77*	394 *82*	99 *78*	1,365	90 *505*	147 *70*	537 | 16 553		2,606	62	2,314	754	516	277
Lambeth	1,368	100	86	187 *24*	4 *1*	15 *1*	11 *1*	56 *39*	12 *25*	363 *394*	77 *212*	621 *458*	104 *239*	2,976	50 *1,068*	279 *129*	1,345 | 105 1,450		6,230	895	4,781	1,165	1,400	654
Lewisham	975	4	89	147 *1*	2 *1*	12	10 *2*	6	—	149 *120*	41 *137*	314 *121*	53 *140*	1,696	39 *451*	121 *95*	987 | 3 990		3,405	267	4,610	395	140	555
Paddington	871	14	24	103 *2*	6	8	23 *2*	6	5	344 *100*	330 *105*	461 *102*	364 *107*	1,943	27 *893*	117 *43*	852 | 11 863		7,245	494	5,168	386	333	255
Poplar	777	27	40	129 *7*	10 *2*	21	15	9 *4*	14 *2*	265 *220*	194 *168*	424 *231*	233 *172*	1,904	69 *879*	86 *109*	741 | 29 770		6,764	647	7,288	831	369	420
St. Marylebone	412	7	30	87 *9*	1 *4*	11	6	4	— *4*	72 *60*	22 *49*	174 *69*	29 *57*	778	20 *218*	99 *56*	375 | 10 385		2,311	237	2,749	172	353	195
St. Pancras	702	23	112	188 *1*	13 *1*	30	15	30 *4*	3 *1*	177 *128*	59 *124*	425 *133*	90 *126*	1,611	54 *497*	172 *92*	754 | 42 796		3,181	104	4,382	529	243	417
Shoreditch	622	22	36	60 *1*	5	8	10	12 *1*	6	226 *103*	154 *109*	306 *105*	175 *109*	1,375	37 *614*	59 *55*	591 | 19 610		3,845	152	3,136	883	268	255
Southwark	608	45	50	94 *8*	3 *2*	13	8 *1*	32 *4*	14 *6*	120 *100*	16 *136*	259 *112*	41 *145*	1,260	38 *376*	153 *80*	557 | 56 613		4,315	315	4,139	495	988	297
Stepney	1,725	143	69	206 *2*	9 *1*	24	18 *1*	14 *2*	6	253 *275*	63 *360*	497 *279*	96 *362*	3,171	85 *1,094*	148 *146*	1,676 | 22 1,698		5,293	458	5,545	915	468	763
Stoke Newington	213	3	25	38 *2*	1	3	—	4 *1*	—	74 *42*	24 *36*	119 *45*	25 *36*	466	12 *176*	42 *18*	213 | 5 218		1,089	109	1,028	315	74	119
Wandsworth	1,378	26	120	244 *15*	8	27 *1*	8 *1*	15 *3*	1	408 *182*	255 *201*	694 *201*	272 *202*	2,893	53 *1,072*	202 *168*	1,379 | 19 1,398		5,059	788	5,112	1,443	201	804
Westminster	655	—	15	221 *2*	3 *1*	16	11 *5*	—	—	82 *44*	36 *75*	319 *46*	50 *81*	1,166	3 *248*	201 *68*	646 | — 646		2,393	109	2,885	187	100	203
Woolwich	880	1	3	181 *11*	9 6	24	18 *4*	—	—	314 *221*	158 *250*	519 *232*	185 *260*	2,080	64 *958*	75 *106*	877 | — 877		5,494	433	4,316	462	815	337
Total	22,196	666	1,442	3,575 *205*	173 *51*	407 *6*	299 *35*	332 *71*	114 *62*	6,270 *3,843*	2,911 *3,890*	10584 *4,125*	3,497 *4,038*	46,548	1,193 *17,508*	3,524 *2,288*	21,497 | 538 22,035		111363	9,410	107587	17,710	12,856	10,259

The following is a summary, for purposes of comparison, of certain sections of the foregoing table :—

TABLE 53.

Metropolitan borough	Deaths from tuberculosis		Number per 100 deaths from tuberculosis in the borough						Total attendances per case on register	Tuberculosis officers' visits per case on register	Total consultations with medical practitioners per case on register	Nurses' visits per case on register	X-ray examinations	
	Actual	Per 1,000 inhabitants	Ratio of cases on dispensary register to cases on notification register	Definitely tuberculous persons on dispensary register.	T.B. + cases on dispensary register	Examinations							per 100 new cases and contacts	per 100 new cases
						New cases	Contacts							
							Adults	Children						
Battersea	146	1·00	·88	496	257	408	76	87	5·4	·55	·54	5·5	48·1	67·3
Bermondsey	95	·95	·89	838	349	517	181	266	4·7	1·36	·43	3·0	108·8	203·1
Bethnal Green	81	·84	·55	799	330	574	85	83	6·3	·21	·50	5·4	83·4	107·7
Camberwell	185	·81	·81	879	391	376	192	191	3·6	·38	·37	5·6	47·4	95·8
Chelsea	54	·96	·91	517	241	767	104	143	6·6	·19	·42	11·8	106·2	140·3
Deptford	76	·77	·69	625	353	517	109	118	5·3	·42	·33	6·4	38·2	55·0
Finsbury	61	1·00	1·00	654	321	328	90	82	3·4	·39	·63	5·4	97·7	149·0
Fulham	120	·85	·41	586	279	627	108	115	7·0	·59	1·32	4·7	41·2	55·8
Greenwich	72	·75	·84	712	357	768	115	142	5·4	·18	·66	4·4	75·1	100·2
Hackney	144	·69	·77	799	367	508	187	133	5·7	·25	·89	2·6	68·4	111·3
Hammersmith	116	·91	·78	718	320	343	166	149	3·2	·31	·71	5·0	39·3	75·4
Hampstead	39	·43	·66	559	295	413	74	59	5·5	·28	·65	7·8	44·6	59·0
Holborn	35	1·00	·70	680	329	200	74	89	3·6	·17	·49	4·2	67·7	122·9
Islington	232	·77	·59	589	299	353	120	107	6·4	·34	·54	4·6	48·9	80·4
Kensington	123	·70	·82	437	225	401	67	63	4·7	·11	·53	4·2	79·0	104·7
Lambeth	211	·76	·58	637	310	344	217	113	4·3	·62	1·34	3·3	98·5	193·1
Lewisham	158	·71	·61	625	351	232	77	89	3·4	·27	·40	4·7	22·3	38·1
Paddington	76	·55	·91	1,121	336	1,086	134	141	8·4	·57	·41	6·0	32·2	40·4
Poplar	117	·83	·82	633	359	562	197	147	8·8	·84	·38	9·5	34·8	56·2
St. Marylebone	69	·75	·54	543	283	294	100	83	6·0	·62	·24	7·1	107·3	173·9
St. Pancras	165	·90	·76	457	253	312	81	76	4·0	·13	·31	5·5	31·4	47·2
Shoreditch	61	·71	·41	969	418	789	172	179	6·3	·25	·25	5·1	38·6	55·7
Southwark	135	·89	·41	413	220	222	83	107	7·0	·51	·40	6·8	177·4	329·3
Stepney	158	·76	·79	1,061	483	375	177	229	3·1	·27	·35	3·3	37·9	78·9
Stoke Newington	38	·75	·78	561	313	379	118	95	5·0	·50	1·66	4·7	32·9	51·4
Wandsworth	239	·70	·67	577	336	404	84	85	3·6	·56	1·38	3·7	14·7	20·8
Westminster	85	·68	·43	760	239	434	54	95	3·7	·17	·58	4·5	20·2	27·1
Woolwich	116	·79	·91	756	291	607	200	224	6·3	·49	1·32	4·9	68·1	115·8
LONDON (excluding City)	3,207	·78	·67	670	320	439	129	126	5·1	·43	·66	4·9	57·8	91·3

Tuberculosis contact scheme.

The tuberculosis contact scheme was put into operation on 1st April, 1925, and provides :—

(*a*) for the removal of children from heavily infected and overcrowded homes occupied by a member of the family suffering from advanced tuberculosis ;

(*b*) for the boarding-out of children who cannot otherwise be satisfactorily provided for while their mothers are undergoing residential treatment for tuberculosis.

With regard to (*b*), it is also found that the boarding-out of children is sometimes necessary in cases where the patient is a widower.

The scheme is carried out through the Invalid Children's Aid Association, who secure suitable homes, make all arrangements for the admission and discharge of children referred to them by the county medical officer of health, and keep them under supervision during the time they are boarded out. The Association also arrange for the homes to be periodically inspected.

The scheme continued to operate satisfactorily during 1936 with the co-operation of the Association.

There were 176 applications during 1936, concerning 320 children, of whom 264 were accepted, the remaining 56 being withdrawn or regarded as unsuitable. At the end of the year 114 children were being maintained under this scheme.

The total number of children dealt with (264) is an increase over that for the previous year (252). The number still being cared for at the end of the year (114) is 7 more than the previous year's figure.

Supply of surgical appliances

Arrangements were also made through the Invalid Children's Aid Association for assisting in providing children with surgical appliances after discharge from institutional treatment; such assistance was given in 31 instances. The Council's contribution is borne from the balance of a fund known as the "Tuberculosis Contributions Fund" into which contributions made by parents towards the cost of their children's residential treatment under the Council's tuberculosis scheme were paid prior to 1st April, 1925. Payments into this separate account are no longer made as, since 1st April, 1925, the contributions towards the cost of residential treatment of patients have been paid into the County Fund until August, 1934, on the basis of assessment on parents according to means and since that date only on a purely voluntary basis. The balance of the Tuberculosis Contributions Fund is, however, being applied as indicated above.

Open-air schools.

In addition to the arrangements for residential treatment of tuberculous children, the Council has established six open-air day schools with accommodation for 515 children (allowing for a nominal roll of 618) suffering from pulmonary tuberculosis or from tuberculous glands with no open wounds, who do not require treatment in residential institutions and children suspected to be suffering from tuberculosis or living in conditions rendering them particularly liable to the disease. The work of these schools is dealt with in the school medical officer's report (Vol. III, Part II, p. 46).

Tuberculosis care committee work.

In each metropolitan borough there is a tuberculosis care committee or other organisation appointed or provided by the Metropolitan Borough Council for various welfare purposes, working in association with the tuberculosis dispensaries.

Social care and after-care work has been carried on with continued zeal and usefulness in connection with the Borough Council tuberculosis dispensaries, by the tuberculosis care committees and by the officers appointed for social services.

Tuberculosis care committees have, hitherto, had to rely on local charitable agencies when any problem involving expenditure of money has arisen.

Of recent years, however, certain tuberculosis care committees have raised money by means of the Christmas Seal sales inaugurated by the National Association for the Prevention of Tuberculosis. In some boroughs public meetings and lectures have been held for the purpose of starting the Seal sales. It appears probable that the scheme will have the additional result of making the work of the care committees more widely known in their own localities and of awakening local interest.

The Christmas Seal sale scheme is a national and an international effort to produce funds exclusively for the fight against tuberculosis. The possession of funds increases the usefulness of the care committees and provides them with more scope to experiment in the difficult problems which arise in connection with the after-care of tuberculous patients and the welfare of their families. To some extent it alters the character of the care committees because it turns them into local charities for the specific purpose of granting aid, direct or indirect, to tuberculous persons. It is hoped that as a result it may be possible for tuberculosis care committees to perform certain forms of constructive work which, owing to lack of resources, have hitherto been beyond their power.

Since June, 1935, a useful link has been established between the London County Council and the borough tuberculosis care committees by regular visits to the Council's tuberculosis hospitals of the Council's organiser of tuberculosis care work, who acts in the capacity of a visiting almoner and co-operates with the local care committees in dealing with the social problems which arise.

Handicraft classes.

The work of the handicraft classes has been continued with keen interest for the benefit of patients who are unfit for ordinary work, thus providing them with occupations to relieve them of the evils resulting from idleness. No central exhibition and sale of their work was held in 1936, but sales were held by individual boroughs during the autumn with satisfactory results. There are now 13 handicraft classes, one of which serves two boroughs, and one is a woodworking class which is held daily instead of weekly. For ten of these classes instructors are provided by the Council's education department. There are also two glovemaking classes for women which are conducted by the Central Fund for the Industrial Welfare of

Tuberculous Persons. Membership of these is not confined to the two boroughs where the classes are held.

Workshops for the tuberculous.

The Central Fund for the Industrial Welfare of Tuberculous Persons conducts workshops in which are carried out the manufacture of wooden toys and firewood; and a leather workshop. The woodwork and toy factory employs between 25 and 30 men, and the leather workshop between 15 and 20. The employees are all tuberculous patients and priority is given to the engagement of ex-sanatorium cases recommended by the county medical officer and the borough tuberculosis officers. The goods produced by the workers are sold in the best markets available but the income is insufficient to enable the Central Fund to work without a loss. To assist the Central Fund Committee in its valuable work the Council made a grant of £500 in 1935 and of the same amount in 1936.

After-care clinics.

Clinics are held at County Hall for the after-care of ex-patients by the medical superintendents of three of the Council's tuberculosis hospitals for cases of surgical tuberculosis, *viz.*, St. Luke's hospital, Lowestoft, for adults, Princess Mary's hospital, Margate, and Heatherwood hospital, Ascot, for children. The clinic for adults (ex-patients of St. Luke's hospital, Lowestoft) is held once a month, the average attendance being 40. The clinic conducted by the medical superintendent of Princess Mary's hospital is held every Monday, the average attendance per session being 20. The clinic conducted by the medical superintendent of Heatherwood hospital is held twice a month, the average attendance per session being 13. Copies of the case-notes made by the medical superintendents are forwarded to the borough medical officers of health for the use of the tuberculosis officers.

Housing of tuberculous persons.

As part of the Council's arrangements for the care of tuberculous persons, special consideration is given to housing applications from families in which there is a case of tuberculosis. If the existing home conditions are found to justify it, the Council's valuer is asked to deal specially with such applications and they are given preference over others in the allotment of vacancies. During the year 1936 approximately 217 families were rehoused under this scheme.

Mental Deficiency Acts, 1913–27

Cases dealt with by the Council.

On 31st December, 1936, 10,794 cases were being dealt with by the Council under the provisions of the Mental Deficiency Acts, 1913–27. Of these, 6,845 were in institutions, 299 under guardianship, 3,640 under supervision and 10 in places of safety awaiting action. During the year 1,279 cases were examined with the following results :—

TABLE 54.

Sex	Source of notification	Feeble-minded		Imbecile		Idiot		Morally defective		Not defective		Total	
		Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults
Male	Mental hospitals department, etc.	56	37	66	4	6	1	—	—	7	18	135	60
	Special school leavers	325	—	—	—	—	—	—	—	1	—	326	—
	Public assistance	5	11	2	5	—	—	—	—	—	4	7	20
	General hospitals	12	8	2	1	1	1	—	—	4	6	19	16
	Sections 8 & 9 of M.D. Acts	25	34	—	4	—	—	—	1	1	8	26	47
Female	Mental hospitals department, etc.	46	52	41	3	7	—	—	—	4	27	98	82
	Special school leavers	311	—	—	—	—	—	—	—	—	—	311	—
	Public assistance	4	28	—	6	—	—	—	—	1	20	5	54
	General hospitals	5	12	3	1	—	—	—	1	3	3	11	17
	Sections 8 & 9 of M.D. Acts	4	28	—	—	1	—	—	—	—	12	5	40
Total		793	210	114	24	15	2	—	2	21	98	943	336
		1,003		138		17		2		119		1,279	
Total for 1935		719	209	163	19	18	—	—	—	31	57	931	285
		928		182		18		—		88		1,216	

Blind Persons Act, 1920

The following table contains particulars for 1936 of applicants for registration or training under the provisions of the Blind Persons Act, 1920 :— Blind persons.

TABLE 55.

Description	Registration of the blind		Training of the blind		Total
	M.	F.	M.	F.	
(1) Applicants who were examined and were certified as blind	454	761	35	19	1,269
(2) Acceptance of certificates issued by hospital and private doctors...	33	35	—	—	68
(3) Acceptance of certificates issued by hospital and private doctors stating applicants were not certifiable as blind	3	2	—	—	5
(4) Applicants who were examined and not certified as blind	191	244	12	9	456
(5) Found blind but unfit for training	—	—	1*	3*	4*
(6) Previously certified as blind and found fit for training	—	—	19	10	29
(7) Previously certified as blind and found unfit for training	—	—	7	2	9
Total	681	1,042	74	43	1,840
Total for 1935 ...	543	676	85	51	1,355

* Included in (1) above.

Midwives Acts, 1902 *to* 1936, *Nursing Homes Registration and Maternity and Child Welfare Contribution Schemes.*

The Midwives Acts, 1902–1926, and the Rules of the Central Midwives Board regulating the practice of midwives provide for :— Midwives

(*a*) Prevention of the practice of midwifery by unauthorised persons.

(*b*) Training of midwives. (The Council's scheme of training includes, apart from the full training provided in certain of the hospitals,

(i) lectures to pupil midwives of London on the Rules of the Board, etc., and on venereal diseases to certain of them ;

(ii) post-certificate lectures to certified midwives ;

(iii) grants for special instruction of midwives and midwife-teachers.)

(*c*) Supervision of the practice of midwives.

(*d*) Suspension of midwives from practice on grounds of the possibility of spreading infection, and compensation for loss of practice resulting from such suspension.

(*e*) Payment of fees to doctors called by midwives to attend patients in cases of abnormality or emergency.

(*f*) Payment of proportion of the annual deficit incurred by Central Midwives Board.

The Midwives Act, 1936, which amends the Midwives Acts, 1902 to 1926, became operative on 31st July, 1936. New legislation, 1936.

The Act requires every local supervising authority to secure, either by making arrangements with welfare councils or voluntary organisations for the employment by those councils or organisations of certified midwives as whole-time servants, or by itself employing such midwives, that the number of certified midwives so employed who are available in its area for attendance on women in their own homes as midwives or as maternity nurses during childbirth and from time to time thereafter during a period not less than the lying-in period, is adequate for the needs of the area.

Other matters dealt with in the Act are—

(1) Appointment and terms of employment of midwives by authorities.
(2) Fees from patients for attendance of midwives employed by authorities.
(3) Compensation to midwives ceasing or required to cease practice.
(4) Prohibition of unqualified persons acting as maternity nurses for gain.
(5) Attendance of midwives at courses of instruction.
(6) Miscellaneous amendments of the Midwives Acts relating to—

(a) Conditions subject to which fees to medical practitioners are payable ;

(b) Qualifications of supervisors of midwives ;

(c) Fees for examinations and certificates of the Central Midwives Board ;

(d) Central Midwives Board's powers to frame rules—

(i) regulating the grant of diplomas in the teaching of midwifery ;

(ii) applying to proceedings before the Board for the removal of the name of a midwife from the roll of midwives.

(e) Expenses incurred by an authority in taking proceedings.

Under section 1 (2) of the Act, the Council, as supervising authority for the county of London, is required to submit its proposals to the Minister of Health, and, before doing so, to consult—

(i) with all the voluntary organisations which, to the knowledge of the authority, employ or are willing to employ domiciliary midwives in the area of the authority ; and

(ii) with such local organisation (if any) of registered medical practitioners as appears to the authority effectively to represent the opinions of such practitioners practising in that area on the questions to be considered in formulating the proposals ; and

(iii) with such local organisation (if any) of midwives as appears to the authority effectively to represent the opinions of midwives practising in that area on the questions aforesaid ; and

(iv) with any association or committee which appears to the Council to be representative of the Metropolitan Borough Councils.

The problem of formulating a comprehensive scheme for London under the Act is one of unusual complexity owing to the multiplicity of the public and voluntary agencies concerned in the provision of maternity services and of the ancillary social services. At the end of the year the scheme was still in course of preparation. Prior to the passing of the Act a complete review of these services was instituted, and the results were published in May, 1936, in a report entitled " Maternity Services of London."*

The contents of the report include :—

The various systems in London under which maternity cases are dealt with ; the approximate numbers under each system ; domiciliary confinement (private doctor ; private midwife ; salaried midwife ; borough midwife ; extern department of voluntary, maternity or general hospital ; voluntary association for provision of midwives ; medical student) ; institutional confinement (voluntary maternity or general hospital ; borough maternity home ; London County Council general hospital ; private nursing home) ; provision for special cases (tuberculous ; venereal) ; provision for unmarried mothers ; arrangements for medical assistance for cases booked by private or salaried midwives ; whole-time midwives employed by voluntary hospitals, homes and nursing associations, and by the London County Council ; maternal mortality (statistics ; factors in its prevention ; extent to which these factors occur among London maternal deaths ; mortality rates in the east end and west end of London) ; facilities for teaching midwifery to medical students ; the midwifery service in London County Council hospitals ; ante-natal clinics of Metropolitan Borough Councils ; abortions ; prevention of sepsis ; and the appendices were :—

I.—Nature of attendance at confinements during 1934. Information furnished by Metropolitan Borough Councils.

II.—Provision of nursing for patients booked by doctors. Information furnished by Metropolitan Borough Councils.

* *Maternity Services of London* (No. 3195). Price 1s. May be purchased from P. S. King & Son, Limited, 14, Great Smith Street, S.W.1.

III.—Existing salaried service of midwives. Information furnished by Metropolitan Borough Councils.
IV.—Arrangements for nursing medical students' cases. Information furnished by Metropolitan Borough Councils.
V.—Westminster City Council maternity scheme.
VI.—Return of whole-time salaried midwives employed by voluntary hospitals and nursing associations. Information furnished by hospitals and associations.
VII.—Analysis of causes of 458 maternal deaths in London County Council hospitals (1931-35).
VIII.—Attendances at Metropolitan Borough Council ante-natal clinics during 1934. Information furnished by Metropolitan Borough Councils.
IX.—"A thousand cases of abortion." Summary of article by Dr. T. N. Parish.

Births in London in 1936.

The following statement shows the number of confinements which occurred in London in 1936, classified under the various forms of attendance. The figures have been arrived at as a result of an examination of statistics furnished from various sources. The total number of confinements in London in 1936 was 64,736.

Institutional confinements	
Voluntary hospitals	19,943
Borough maternity homes	2,410
L.C.C. hospitals	18,300
Private nursing homes	3,954
Total ...	44,607
Domiciliary confinements	
Borough midwives	358
Voluntary hospitals and organisations ...	7,645
Independent midwives	*7,425
Private doctors	*4,701
Total ...	20,129

* Estimated.

Rules of Central Midwives Board.

During the year the Central Midwives Board, with the consent of the Minister of Health, has amended rule 17 (a) in section E of the Board's rules, which substitutes "14 days" for "10 days" in the definition of the lying-in period. The amendment came into force on 1st January, 1937.

Certified midwives to the number of 956 gave notice of intention to practise within the county during the year, compared with 974 in 1935.

These 956 midwives fall into the following categories :—

Midwives in private practice	242
Out-county midwives	29
Nursing homes	127
Municipal midwives	4
L.C.C. hospitals	175
Voluntary maternity hospitals (district) ...	162
Voluntary general and special hospitals ...	87
Borough maternity homes	57
Voluntary nursing associations	73
Total ...	956

The following is a summary of returns which have been made voluntarily by the 242 midwives in private practice in London as to the number of cases attended by them during 1936 :—

Number of midwives who attended under 25 cases ...	*137
,, ,, ,, 25 to 50 ,, ...	47
,, ,, ,, 50 to 75 ,, ...	26
,, ,, ,, 75 to 100 ,, ...	17
,, ,, ,, over 100 ,, ...	15
Total ...	242

* Of whom 66 took no patients.

Practising midwives, other than those who work entirely under medical supervision in hospitals approved by the Central Midwives Board are subject to inspection by the Council's inspectors of midwives with a view to ensuring that a proper standard of efficiency is maintained. The work of inspection is carried out by four women assistant medical officers, who supervise the work of the midwives generally, give advice in regard to any difficulties that may arise in connection with their work and pay special visits where cases of a septic nature or persistent high temperature, inflammation of the eyes or blisters on the child occur; 2,978 visits were paid this year compared with 2,590 in 1935.

Infringements of the Rules of the Central Midwives Board to the number of 28 were reported during the year, compared with 26 in 1935. Of these, 23 were slight, and an oral caution by the inspector was deemed to be sufficient; 4 cases of a more serious nature were dealt with by a written caution, and one midwife was interviewed and cautioned by the Medical Officer.

Suspension of midwives.

The Midwives Act, 1926, requires that, in the case of midwives suspended from practice in order to prevent the spread of infection, the local supervising authority must compensate the midwife for loss of practice by the payment of such amount as is reasonable in the circumstances of the case, provided that the midwife was not herself in default; 26 midwives were suspended from practice during the year in order to prevent the spread of infection, and 9 claimed and received compensation.

An analysis of the causes of suspension follows :—

TABLE 56.

Cause of suspension.	No. of cases.	Under one week.	One week and under two.	Over two weeks.	Compensation.
					£ s. d.
Pemphigus	17	13	4	—	12 14 10
Tonsillitis and septicæmia ...	1	1	—	—	—
Septic throat	1	1	—	—	—
Discharging carbuncle	1	—	1	—	—
Skin eruption	1	—	1	—	3 6 0
Chickenpox	1	—	—	1	—
Septic finger	1	—	1	—	—
Streptococcal carrier	1	—	—	1	29 3 6
Puerperal pyrexia	1	1	—	—	—
Streptococcal sinusitis	1	—	—	1	—
Total ...	26	16	7	3	45 4 4

Uncertified persons.

The Midwives Act, 1926, amended section 1 (2) of the Midwives Act, 1902, so as to make it an offence for any uncertified person to attend women in childbirth, except under the direction and personal supervision of a registered medical practitioner, unless the case was one of sudden or urgent necessity. During the year 5 enquiries were made into cases of alleged contraventions of the Act, the same number as in the previous year. In 1 case a caution was administered; in 4 cases no further action was considered necessary.

Still-births.

During the year there were 211 still-births reported to the Council by midwives in their practice, compared with 249 in 1935. Of the cases reported this year 110 were male and 101 female; 129 were reported as macerated, and 80 not macerated; 2 not described.

Puerperal fever.

During the year 170 cases of notified puerperal fever were investigated, compared with 242 in 1935. Of these cases 11 proved fatal, compared with 23 in 1935, a case mortality of 6·47 per cent., compared with 9·5 per cent. in 1935. The case mortality in 1934 was 12·8. The distribution of notified cases, with the mode of delivery, was as follows, deaths being shown in brackets: medical practitioners 45 (2); certified midwives 25 (0); hospitals and certified midwives 1 (1); hospitals 81 (7); medical students 7 (0); cases of miscarriage or abortion where no attendant was engaged 11 (1)—total 170 (11).

Puerperal pyrexia.

The number of notifications of puerperal pyrexia investigated during 1936 was 681, compared with 694 in 1935. The cases were distributed as follows, the deaths being shown in brackets: medical practitioners 72 (4); certified midwives 94 (6); hospitals and certified midwives 3 (0); hospitals 488 (12); medical students 7 (0); cases of miscarriage or abortion where no attendant was engaged 17 (3)—total 681 (25). Seventeen of the cases, with 2 deaths, were subsequently notified as puerperal fever, and are therefore shown in both tables.

Medical aid.

The Rules of the Central Midwives Board indicate the emergencies for which a midwife must call in a medical practitioner. A notice in the approved form is sent to the doctor, and to the Council. In the year now under review 4,726 such notices were received, compared with 4,822 in 1935. The estimated number of confinements conducted by midwives (other than in hospitals approved by the Central Midwives Board under rule E2) during the year was 17,500. This appears to indicate that medical aid was necessary in about 27 per cent. of the cases, compared with 28·4 per cent. during 1935.

The report on *Maternity Services of London* contains, on pages 12 and 13, an analysis of reasons for calling for medical aid by midwives in 1913 and 1934. It was noticeable from the comparative figures that there was a distinct probability that forceps were used with greater frequency in 1934 than in 1913. The increase in medical aid between these two dates was largely due to a great increase in cases of laceration of the perineum; this does not mean necessarily that there was more laceration, but that probably midwives were more alive to the need for calling in a doctor as required by the rules. Further, the greater attention paid to ante-natal care has resulted in doctors being called in for illnesses or abnormalities arising during pregnancy approximately four and a half times as often in 1934 as in 1913.

Ophthalmia neonatorum.

In 1926, regulations came into force rendering it no longer necessary for a midwife to notify a case of ophthalmia neonatorum to the local sanitary authority, this duty being assigned to the medical practitioner only. This, however, did not relieve the midwife of the necessity of sending a copy of her medical aid notice in all such cases to the Council. The Ministry of Health issued a memorandum in connection with the regulations, suggesting that the Council should consider whether it should not refrain from exercising the power of recovery from the patient's representative of the fee paid to a medical practitioner summoned by a midwife in a case of ophthalmia neonatorum, and the Council decided that parents should not be asked to reimburse the Council for fees paid for medical attendance on account of a baby's eye affection. The number of claims for attending cases of eye affection during the year was 477 and the amount paid to medical practitioners in respect of the cases was £516, compared with £534 in 1935.

Inflammation of the eyes—Notices.

During the year, 782 notices were received from midwives indicating that medical aid had been summoned for inflammation of the eyes of infants, compared with 799 in 1935; 16 other cases arose in which either medical aid was not called in by the midwife or she failed to notify the Council that she had done so. Of the total 798 cases, 158 proved to be ophthalmia neonatorum (·81 per cent. of the 17,500 patients attended by midwives), compared with 166 in 1935; 307 other cases that did not occur in midwives' practices were also notified, making a total of 465 cases during the year, the percentage occurring in the practice of midwives being 33·97 per cent. of all cases of ophthalmia neonatorum, compared with 44·03 per cent. in 1935. All the midwives' cases were investigated, and it was found that 156 were completely cured; in one child the sight was impaired; one child died from a cause other than ophthalmia. Thirty-five cases became in-patients at St. Margaret's hospital compared with 28 during 1935.

Pemphigus neonatorum.

During the year, 53 cases of pemphigus neonatorum occurred in the practice of midwives, compared with 61 during the previous year.

Instruction of midwives.

As in past years, courses of demonstrations and lectures at convenient centres were provided for the post-certificate instruction of midwives practising in London, Middlesex, Ealing, Edmonton, Tottenham and Willesden, the cost being shared by the local supervising authorities in proportion to the numbers of their midwives attending.

In April, 1930, the Central Midwives Board suggested that lectures to pupil midwives on the Rules of the Central Midwives Board and on the relationship of the midwife to the various health authorities should be given by the medical officer of health of the local supervising authority.

The Board approved the arrangements made by the Council for providing, at suitable intervals, a course of two lectures by two of the Council's medical officers particularly associated with the supervision of midwives. This course of lectures is provided four times a year for the instruction of pupils before each examination of the Central Midwives Board for candidates for admission to the Midwives Roll. Pupil midwives in training at the Council's hospitals and other institutions in London are admitted to the courses, which are held at the County Hall. A certificate of the attendance of a pupil at the course is signed by the Council's medical officer and furnished to the Central Midwives Board. Pupils attending during the year numbered 751, compared with 811 in 1935.

Maternal mortality.

The arrangement made at the suggestion of the Ministry of Health, whereby confidential reports are made on maternal deaths by medical officers of the Council and are exchanged with the metropolitan borough medical officers of health as described in the annual report for 1929, was continued during the year.

Payment of medical fees.

The Midwives Act, 1918, imposed upon the Council the duty of paying fees to medical practitioners called in by midwives in cases of emergency and the Minister of Health has laid down a scale of fees to which local authorities must adhere. The patient is required to reimburse the Council according to her means, but, in cases of inflammation of the eyes, as already mentioned, the Council has decided to forego any claim to a fee.

The Minister of Health in Circular 1582 (2.11.36) referred to Circular 1488 (17.6.35) following a judgment in the Court of Appeal, the effect of which was that paragraph 8 of the scale of fees set out in Circular 358 (20.12.22) was *ultra vires*.

In pursuance of sub-section (1) of section 9 of the Midwives Act, 1936, the Minister made the Medical Practitioners (Fees) Regulations, 1936, dated 26th Oct., 1936, fixing the scale of fees to be paid by local supervising authorities to medical practitioners called in by midwives under section 14 of the Midwives Act, 1918, and prescribing the conditions subject to which the fees are to be payable.

The effect of the new regulations is to maintain the fees, as before, and to restore the conditions which were operative prior to the judgment in the Court of Appeal declaring the conditions to be *ultra vires*.

Claims for fees accepted during the year numbered 2,854, compared with 2,905 in 1935, the total amount involved being £3,386, compared with £3,487 in 1935. The Midwives Act, 1926, fixed a limit of time, namely, two months from the date of the first visit, within which a medical practitioner must submit his claim. In pursuance of this provision, 25 claims amounting to £41 10s. 6d. were refused during 1936.

Registration of nursing homes.

The Nursing Homes Registration Act, 1927, came into operation on 1st July, 1928, and repealed Part II of the Midwives and Maternity Homes Act, 1926, and also so much of any local acts as provided for the registration of maternity homes. The Annual Report for 1928 (Vol. III, pp. 53–54) indicates fully the powers of the Council under the Act.

The Nursing Homes Registration Act, 1927, has been repealed, so far as London is concerned, by the Public Health (London) Act, 1936, which came into operation on 1st October, 1936, and provisions with regard to the registration of nursing homes are now contained in Part XI of that Act.

The number of nursing homes on the register on 1st January, 1936, was 207. During the year 1936, 8 homes were added, of which 5 had applied during 1935, while 29 were removed on cancellation of the registration, leaving 186 on the register on 31st December, 1936. In 25 cases cancellations were made at the request of the

persons registered and/or upon change of ownership. The remaining four cancellations were made for the following reasons: bankruptcy of keeper, 1; death of keeper, 1; premises vacated, 1; home exempted from provisions of Act, 1.

During the year proceedings were instituted against two persons: (i) for conducting premises as a nursing home without being duly registered in respect thereof—defendant fined £50 and ordered to pay 50 guineas costs; (ii) infringement by keeper of Council's by-laws in respect of the keeping of registers and receipts books—case dismissed on payment to the Council of £2 2s. 0d. costs.

In respect of one nursing home the keeper was informed of the Council's intention to issue an order within 14 days cancelling her registration on the grounds that (1) the keeper was not a fit person to conduct a nursing home, and (2) the premises were unsuitable by reason of staffing and equipment. The keeper surrendered her certificate before the Council's order was made.

There were 25 applications (including three which were subsequently found to be unnecessary) for registration during the year, of which, at the end of the year, 10 had been withdrawn, 1 refused by the Town Planning Committee, and 3 granted, 8 being still under consideration.

The general considerations taken into account by the Council in administering the Act are fully described in the Annual Report for 1930 (Vol. III, Part I, pp. 53-54).

In 1936 the Council granted 113 exemptions from the provisions of the Nursing Homes Registration Act, 1927, in respect of premises not conducted for profit. These exemptions are for a period due to expire on 30th June, 1937; the exemption may be renewed at the discretion of the Council from year to year.

The homes have on the whole been satisfactorily conducted. Improvement in the cleanliness, general orderliness and in the staffing of homes has continued.

Some of the older homes have closed or have changed ownership. Upon change of ownership the new owners were required to fulfil the requirements for a "new" home.

In circular 1574, dated 30th September, 1936, the Minister of Health drew the attention of local supervising authorities to the need for ascertaining promptly the existence of unregistered nursing homes and for taking action to prevent the carrying on of such homes, and suggested that the authorities concerned should endeavour to secure the co-operation in this matter of the medical practitioners in their areas.

The Council prepared a list of registered and exempted nursing homes in the county of London and a circular to medical practitioners inviting them to notify the existence of any unregistered nursing homes of which they might become aware. The Metropolitan Borough Councils have co-operated with the Council by arranging for a copy of the list and the circular to be furnished to each medical practitioner in their respective boroughs, and arranging to notify to the Council premises suspected to be conducted as nursing homes, but not on the list of registered nursing homes, which might come to the notice of their officers.

Midwifery in registered nursing homes.

The following information concerning midwifery work undertaken in registered nursing homes was obtained:—

	1934	*1935*	*1936*
Number of nursing homes with maternity beds registered...	150	150	132
Number of beds provided for maternity patients in such nursing homes	1,299	1,310	1,234
Number of births in such nursing homes:—		*Births*	
with doctor engaged to attend	2,797	2,954	3,020
with State certified midwife (no doctor being in attendance)	899	1,174	848
with State certified midwife and doctor summoned in emergency by the midwife	99	98	86
Total	3,795	4,226	3,954

Maternity and child-welfare work by voluntary associations.

The Maternity and Child Welfare Contributions (London) Schemes, 1933 to 1936, for the four years from 1st April, 1933 to 31st March, 1937, provide for payment by the Council of grants in each of the financial years 1933–34, 1934–35, 1935–36, 1936–37, to forty-nine voluntary associations. The current schemes provide for payment by the Council of grants amounting to £31,587 in the year 1936–37.

The grants are payable on the conditions (*inter alia*):

(i) that the Council is satisfied as to the efficiency of the maternity and child-welfare service provided by the association in respect of which the contribution is payable, and that such service is being used by a reasonable number of those persons for whom it is provided;

(ii) that no reduction or alteration of such service is made without the consent of the Council.

It is necessary therefore that these associations should be inspected from time to time by the Council's officers. This work is performed by the medical staff engaged on work in connection with the registration of nursing homes, while it also involves the employment of a sanitary inspector, who is detailed by the chief inspector from amongst his staff.

In the course of the year two baby homes were closed and the services, temporarily in one case, are now being conducted at premises outside the county.

An increase in the amount of grant to one mother and baby home was authorised in respect of additional maternity and child welfare services.

The Council pays a grant of £222 a year, as the agent of the Middlesex County Council, to one association which has transferred the service of a branch home from the county of Middlesex to premises within the administrative county of London.

The Council at the request of the Minister of Health (Circular 1541) considered the question of the voluntary associations conducting maternity and child welfare services in London, which the Minister should be advised to include in a new scheme to be prepared by him under section 101(6) of the Local Government Act, 1929, with effect for five years from April, 1937, and the amount of annual contribution to be paid to each association. The Minister of Health was informed of the result of the Council's consideration of this matter. The following table indicates the nature of the services which will be aided by the Council:—

TABLE 57.

*Number of associations	Description of service	Total of beds	Grant paid by the Council
			£
6	Maternity hospitals or maternity wards	303	10,425
11	District midwifery and maternity nursing	—	3,175
2	Infant welfare centres	—	631
1	Children's wards	20	398
1	Ante-natal and post-natal clinics ...	—	136
26	Mother and baby homes	418 for mothers 351 for babies	11,191
10	Babies' homes	325	5,530

* 45 associations provide a single service and 4 associations provide more than one type of service.

Examination of staff

During the year 12,751 examinations, including 178 home visits, were made of members of the staff. These may be classified as follows:—

Entrants	2,505
Sickness and miscellaneous cases	9,698†
Casualties, illness, etc., at County Hall	548

† 2,057 of these were dealt with in the first instance by telephone and correspondence.

One hundred and forty-two applicants for appointment to the permanent service failed to pass the medical examination for the following reasons :—

	Males	*Females*	*Total*
Defective hearing and ear disease ...	1	7	8
Defective vision and eye diseases ...	13	11	24
Poor physique and deformities	9	13	22
Cardio-vascular disease	9	10	19
Varicose veins	3	1	4
Rheumatism	3	4	7
Genito-urinary disease	2	6	8
Tuberculosis and lung diseases	4	16	20
Nervous disorders	1	13	14
Diseases of bones and joints	3	1	4
†Miscellaneous	4	8	12
Total ...	52	90	142

† Including, in the males, two cases of hernia, and one each of gout and hæmatemesis, and in the females, six of Graves's disease and one each of dermatitis and peritonitis.

As a result of the examinations of the staff, 347 officers were deemed to be permanently unfit to carry out their ordinary duties in the service of the Council on the following grounds :—

	Males	*Females*	*Total*
Cardio-vascular disease	60	48	108
Diseases of the bones and joints ...	21	14	35
Disability following trauma	2	2	4
Pulmonary tuberculosis	16	13	29
Diseases of the lungs other than pulmonary tuberculosis	17	13	30
Malignant disease	3	6	9
Gastro-intestinal disorder	5	—	5
Renal disease	5	1	6
Functional nervous disorder	18	28	46
Organic nervous disorder	7	1	8
Senile decay	3	1	4
Post-operative disability	3	4	7
Sight and hearing defect	6	7	13
Endocrine disorder	—	3	3
Varicose veins and ulceration	3	5	8
Rheumatism	6	9	15
Skin disease	1	6	7
*Miscellaneous	5	5	10
Total ...	181	166	347

* Including, in the males, two cases each of diabetes and anæmia and one of hernia, and in the females one case each of diabetes, hernia, anæmia, enteroptosis and pyrexia of unknown origin.

In July, 1936, the Council approved a scheme for providing pensions to spouses and dependents of contributors to the superannuation and provident fund. It is a condition before part of the pension can be allocated to the spouse that the officer about to retire on pension must have a normal expectation of life ; hence the need for medical examination. Ten applicants for admission to the scheme were examined during the remainder of the year, and of these two were rejected on medical grounds.

Work done in the bacteriological laboratory at County Hall

The investigations carried out during the year 1936 are summarised below under the various headings. The work undertaken in this laboratory is chiefly associated with the control of infectious diseases in the Council's day and residential schools ; in addition a certain amount of bacteriological investigation is carried out on material such as water, milk, etc., submitted to the Council's chemist for analysis. Examinations made also include sundry material, *e.g.*, sputa and urines sent for report by the Council's examining medical officer (from Council employees, school children and others.)

Diphtheria investigations.—Including 97 reswabs, a total of 4,237 swab cultures (4,206 from throat and nose, and 31 from ears) were examined and found to yield 3,981 negative results and 256 in which bacilli morphologically resembling diphtheria were reported; of the latter cultures 207 were submitted to animal test for virulence, 152 (73·4 per cent.) proving virulent and 55 non-virulent. Among the 4,140 primary swabs, 213, or 5·1 per cent. of those swabbed proved positive, including 3 positive out of 31 swabs from ears.

Ringworm and favus.—A total of 464 hair specimens yielded 125 in which fungus was present, 87 being of the small spore and 37 of the large spore variety of ringworm, but only one favus.

Sputum.—Eighteen specimens from the same number of individuals were examined for tubercle bacilli, with positive results in 5.

Gingivitis (oral infection).—A total of 89 slide preparations were examined from the gums and buccal mucous membrane of 23 children in whom the organisms associated with Vincent's stomatitis had been found in the primary smears.

Miscellaneous.—(1) Slide preparations from the cervix, vagina, or urethra of 35 individuals were examined for the presence of gonococci; 6 were regarded as positive, 10 doubtful and 19 negative.

(2) Chemical and microscopical examinations were made of five specimens of urine and of one specimen of cerebro-spinal fluid.

(3) Bacteriological examinations were made of a specimen of fæces with negative results for the Salmonella group, and of samples of cellophane vaccination dressings, and bamboo cane, without yielding evidence of specific pathogenic contamination.

(4) Throat and nose swabs from 9 individuals were examined for evidence of scarlatinal infection; all proved negative, except one, in which hæmolytic streptococci were found.

(5) In two cases of conjunctivitis, smears from the conjunctivæ showed the presence of cocci and bacilli, not identified as specific causative organisms.

Milk.—Sixteen samples of school milk were examined bacteriologically; 10 were reported as unsatisfactory and six as satisfactory.

Water examinations.—(1) *Institutional supplies.*—Examinations were made of 532 samples from 30 establishments.

(2) *Swimming baths.*—Four samples of the water from separate baths yielded, on the whole, satisfactory results.

Preparation of media.—During the year approximately 80 litres of various media for cultural use were prepared at the County Hall laboratory.

Work of the chemical branch

The work of the chemical branch is carried out at three laboratories, *viz.*, the central laboratory at County Hall, and the laboratories at the northern and southern outfall works.

The work done at the central laboratory consists mainly of the chemical examination of materials of all kinds bought by the Council, for use in its numerous institutions or for its other activities. The greater portion of these are materials supplied under contract to the Council's specifications, where chemical analysis is essential to ensure that the quality of the goods delivered is equal to that specified. In addition, analysis is made of samples of air in tunnels, foods, etc., materials which have failed in use, and other matters arising out of the Council's undertakings. A considerable number of samples have been examined in connection with the Petroleum Act, 1928, and the Fertilizers and Feeding Stuffs Act, 1926.

A systematic determination is made of the amounts of sulphur in air both in London and in urban areas in connection with the scheme of the Department of Scientific and Industrial Research for the investigation of atmospheric pollution.

An important part of the work of the branch consists of the consideration of, and giving advice on, matters involving scientific questions in connection with the various branches of the Council's work.

The total number of samples examined in 1936 amounted to 23,973. The following table shows their classification :— Examination of samples.

Air			258
Air (various special examinations)			20
Asphalt			70
Building materials			74
Cable (tinning test)			533
Coal, coke and ash			117
Cement and lime			130
Chemicals			16
Disinfectants			23
Driers			18
Drugs and medical stores			1,079
Dust (atmospheric pollution)			25
Enamelware			221
Fertilisers and feeding stuffs			211
Floor oils and polishes			43
Food (suspected poisoning)			7
Foods—			
Baking and egg substitute powders		34	
Beef extracts		97	
Cakes, biscuits, bread		4	
Cheese		4	
Cocoa		14	
Flavouring essences		38	
Fish		8	
Fish, tinned		3	
Flour		8	
Margarine		15	
Miscellaneous foodstuffs		26	
Mustard		9	
Preserved meats		4	
Sugar and syrup		9	
Vinegar		4	
		—	277
Gas—dry cleaners			40
Gas—flue			204
Greases			13
Gum and paste			24
Hospital equipment			53
Ink			35
Insecticides			7
Meals			51
Metals—			
Solder		18	42
Various		24	
Milk, condensed			5
„ schools and institutions			160
„ (cream)			6
Motor spirit			53
Oils—			
Fuel		11	218
Lighting		25	
Lubricating		147	
Painting		17	
Miscellaneous		18	
Oilman's sundries			24
Paints, stains			709
Petroleum (Petroleum Act, 1928)			77
Rainwater, etc. (atmospheric pollution)			140
Rubber			28
Sewage			4,281
Sludge			4,707
Soap and soap powders			66
Soil			8
Sulphur determinations (air)			2,153
Turpentine and turpentine substitute			26
Urine			2,775
Varnish			11
Water, boiler			1,216
„ river			3,384
„ drinking (from wells)			191
„ and deposit (in leakage)			53
„ various			7
„ open-air baths			9
Miscellaneous			75

The following table shows the results of the analyses of paints, colours and stains :—

Satisfactory	586
Not complying with the specification	31
Not suitable for the Council's requirements	40
Unsatisfactory	52

Observations on the effect of the London atmosphere on paint films of different composition have been made during the last three years, and information has been obtained which will prove valuable in assessing the suitability of paints submitted for use in the Council's service.

The following table shows the classification and the results of the analyses of oils :—

	Satisfactory	*Unsatisfactory*
Fuel	9	2
Lighting	24	1
Lubricating	88	59*
Painting	17	0
Miscellaneous	18	0

* Either unsatisfactory or not suitable for the Council's requirements.

Various materials and apparatus for special purposes sent to the laboratory for examination in 1936 included :—

(1) *Foods.*—During the year 277 samples of the food supplied to the Council's various institutions and hospitals were examined and, except in a few instances where minor defects were observed, these were found to be of a satisfactory quality.

(2) *School meals.*—In connection with the provision of meals for necessitous children, 103 samples were examined during the year, representing 51 complete two course meals. The standard adopted is that each meal shall contain not less than 25 grammes protein and have a heat value of not less than 750 calories. The average of the samples examined was 33 grammes protein and 810 calories, which indicates that the meals were generally well balanced as well as being satisfactory in quality and quantity. In several cases, where the requirements were not fulfilled, suggestions were made to remedy the deficiencies.

(3) *Food poisoning.*—Seven samples were submitted during the year for chemical examination in connection with three cases of suspected food poisoning. The results were all negative but in one instance were interesting, this being in connection with the supply of boned and rolled cooked herrings in open metal containers. As regards the particular case of suspected poisoning, the amounts of poisonous metals found in the herrings were so small as to have no significance, particularly in view of the amounts which have been found to be naturally associated with certain varieties of fish. Analysis of the tinned coating, however, led to a recommendation that tinplate used for cooking purposes should be in conformity with the official government specification, which requires pure tin (99·5 per cent. tin) to be used for this purpose.

(4) *Anæsthetic ether.*—A systematic investigation into the question of the decomposition of ether was begun during the year. Preliminary experiments confirmed the results of previous workers, and emphasised the fact that ether used for anæsthetic purposes should be stored in the dark, that only small bottles filled almost to the stopper should be used and that these should be wrapped in black paper not reaching all round, thus leaving a vertical slit through which the level of the ether can be observed. The necessity for the production of a very pure ether has for long been generally recognised, especially with regard to the absence of even extremely small amounts of peroxides, and there is no doubt that autoxidation of ether is closely related to its initial purity. The question of peroxide contamination seemed, therefore of primary importance and this aspect of the matter was first studied. Experiments were carried out in several ways, some of which involved imitating the use of the " open mask " method of anæsthesia, and others the use of a Boyle's apparatus. The results showed conclusively that ether peroxide was much less volatile than ether itself, and that, on bubbling air through ether the peroxide was not volatilised in appreciable amount even in the case of ethers so badly contaminated that they would in no case be used for anæsthetic purposes; also that, under normal conditions of use, the time is too short for the original ether to deteriorate to any great extent. It was finally concluded that, although it is unquestionable that anæsthetic ether should be as pure as possible, peroxides themselves are not the cause of the after-effects which may be produced by impure ether.

(5) *Enamelware.*—There has again been a marked improvement in the quality of the samples examined. In all 221 samples were tested and only six were rejected (2·7 per cent. compared with 4·7 per cent. in 1935), 4 for failing to comply with the Council's acid resistance test and 2 for containing antimony.

(6) *Special investigations* have been made in connection with efflorescence on plaster and brickwork; failure of cement concrete; corrosion of iron water pipes by softened water; leakage of methyl chloride from a refrigerating plant; the chlorination of sewage; the abnormal reading of an automatic water level recorder, which was found to be due to the diffusion of carbon dioxide gas from the liquid through the rubber diaphragm of the instrument; the disturbance of earth level in the vicinity of a school, found to be due to the character of the waste material which had been used for making up the ground.

Milk samples.

The total number of milk samples examined during the year in the laboratory at County Hall was 160. Of this number 46 were of milk supplied to children in residential schools and educational institutions, whilst 110 were from supplies to

general, special and mental hospitals and public assistance institutions, under contracts which require a minimum of 3·25 per cent. of fat and 8·5 per cent. of other solids, except during the months of March and April, when the fat must not be less than 3 per cent., and 2 were from farms attached to institutions, etc. The quality of the supplies generally has been much less satisfactory than in recent years, 20 samples (12·7 per cent.) being deficient in fat, one of the latter and four other samples giving presumptive evidence of added water.

The condition of the supplies in respect of extraneous matter was less satisfactory also, for of the 158 contract samples examined, 14 (8·8 per cent.) were unsatisfactory in this respect.

The arrangement made for the co-operation of the borough medical officers of health in regard to the examinations of milk supplied to Council's institutions in the county and in certain areas outside the county has been continued during the year with very satisfactory results.

Under this scheme reports have been received on the chemical examination of 323 samples, of which 15 were deficient in fat.

In addition to the above, results have been received from borough medical officers of the bacteriological examination of 206 samples of pasteurised milk, of which 2 failed to comply with the standard laid down in the Milk (Special Designations) Order, 1923.

The results of all examinations are forwarded to the chief officer of supplies for his information and he takes any action that he may consider necessary.

Drugs.

During the year 1,079 samples of drugs and medical supplies were examined, and of these 85 (or 7·9 per cent.) were found to be either definitely unsatisfactory for use or below standard strength or quality. In the large majority of cases the latter description applied, and in general the deficiency was small though definite.

Satisfactory		994
Unsatisfactory or below standard—		
Deficient in active constituent ...	31	
Tincture, etc., deficient in alcohol ...	2	
Specific impurities found	32	
Dirty or badly made	4	
General deficiency	13	
Misdescribed	3	
	—	85
Total ...		1,079

The percentage of samples reported upon adversely during the previous year was 7·2, which is not very different from this year's figure. Among the more notable rejections was that of a sample of senna fruit, the average size and weight of which was under standard, indicating that the pods had not been well selected and were of an inferior grade. A sample of senega root yielded a large excess of ash and contained much dust. A consignment alleged to be pulvis talci co. contained no zinc oxide or boric acid and was simply talc. Some tablets of calcium acetylsalicylate had decomposed with the liberation of free acetic and salicylic acids.

Fertilisers and feeding stuffs.

In connection with the provisions of the Fertilisers and Feeding Stuffs Act, 1926, 207 samples have been examined during the year under the supervision of the chemist-in-chief who is the official agricultural analyst for those parts of the county which do not come within the purview of the City Corporation or Port Sanitary Authority. The results of the analyses were :—

Samples of feeding stuffs.

Complied with guarantee	81
Deficient	21
Constituents in excess of guarantee	25
Guarantee incorrect in form or no guarantee	5
Contained deleterious substances	27
Total	159

Samples of fertilisers.

Complied with guarantee	18
Deficient	15
Constituents in excess of guarantee	8
Guarantee incorrect in form or no guarantee	7
Total	48

The large proportion of samples of feeding stuffs which was found to contain deleterious substances was due to the attention concentrated during the year by the inspectorate on the quality of linseed cake supplied, and to the fact that, having found that a sample from bulk contained evidence of the presence of castor seed, further samples from different portions of the same consignment were examined. It is evident that a considerable amount of contaminated linseed cake is still being put on the market, and in a number of cases the amount of sand and very coarse grit was also so great as to constitute a danger to young stock. A sample of ground nut-cake was reported upon adversely for the latter reason. An interesting case which occurred was that of a cargo of grass nuts imported from Egypt, part of which had been contaminated with green paint from the sacking in which it had been packed. One portion of the grass nuts free from any sacking contained arsenic equivalent to 50 parts per million, and a piece of the sacking itself heavily impregnated with paint contained 5·8 per cent. of arsenic. A sample of white fish meal was reported against as having an admixture of at least 1·55 per cent. of crustacean shell. Three samples of alleged bone meal were found to contain amounts of acid insoluble matter ranging up to 28·7 per cent., and these were reported as not complying with the definition given.

Drinking water supply.

A regular chemical examination has been made of the drinking water at those institutions of the Council which derive their supplies from private wells, and water from other sources has been tested when required. During the year 191 samples have been examined from 33 institutions.

Sewage treatment.

The use of ferric chloride added to the sewage has been continued with satisfactory results.

Chlorination in the sewers has been found to improve the condition of the sewage and is being continued and extended.

The activated sludge plant at the Northern outfall has continued to treat, with satisfactory results, ten million gallons per day of sedimented sewage. The construction of five activated units similar to the one in use is proceeding, and it is hoped that one unit will be at work in the early summer of 1937.

The dry matter in individual cargoes of sewage sludge sent to sea from the Northern outfall varied from 2 per cent. to 15 per cent., the average being 7·9 per cent. In the case of the cargoes from the Southern outfall, the variations were from 2 to 13 per cent., with an average of 6·9 per cent., similar to that of last year. The dry solids in the greater number of cargoes from both outfalls did not diverge much from the average.

The condition of the river, which had been affected by the prolonged dry weather, has improved steadily since October, 1935, when the increase in the rainfall made itself felt. The steps taken by the Council, described above, also contributed materially to the improved conditions. The new units at the Northern outfall as they come into being will tend to restore the balance between oxygen absorption and re-absorption at the critical times of low flow of fresh water and high temperature.

Vehicular tunnels.

The systematic investigations, commenced in 1928, as to the condition of the air in Blackwall and Rotherhithe tunnels, were continued during 1936, 103 samples of air from each tunnel having been examined for the carbon monoxide content and 26 from each for black suspended matter. The remarkable increase in motor traffic using the tunnels has continued, and at Blackwall some changes have been made in the ventilation scheme in an attempt to cope with the large amount of polluting exhaust gas emitted by these vehicles.

Atmospheric pollution.

The work on atmospheric pollution which has been carried on systematically for some years has been continued and considerably extended during the period under review. In connection with the scheme by which the Department of Scientific and Industrial Research of His Majesty's Government became responsible for co-ordinating local observations of atmospheric pollution and for carrying out researches into the nature of pollution and the best methods of measurement, the results of much of this work have been communicated to that department and will in due course be incorporated in its annual report. Briefly the methods of examination now in use are :—

(a) monthly analysis of the contents of rain-water deposit gauges at 12 different stations ;

(b) daily volumetric determination of the average sulphur dioxide content of the air at seven stations ;

(c) monthly determination by the lead peroxide " candle " method of the atmospheric pollution by sulphur dioxide at 19 stations ;

(d) hourly determination of the black suspended matter content of the air at two stations by Owen's automatic air filter ; and

(e) visibility measurements at two stations.

In the case of methods (a) and (c), in order to obtain comparisons with districts in which the air is less polluted, observation stations have been established at two of the Council's institutions situated outside the county, at Godalming (Surrey) and Rustington (Sussex).

TABLE 58.

County of London.—Statistics of the administrative work carried out by the Metropolitan Borough Councils during the year 1936.

Sanitary authority	Cow-sheds		Slaughter-houses		Offensive trades		Smoke nuisances				Common lodging houses		Cleansing of persons and rooms				Water supply	Milk-shops		Ice cream premises		Restaurants and eating houses	
													Persons		Rooms or premises								
	No. licensed	No. of inspections	No. licensed	No. of inspections	No. authorised	No. of inspections	Observations	Intimations	Complaints	Notices	Houses licensed	No. of inspections	Adults	Children	After infectious diseases	For vermin	Tenement houses extra supply	No. on register	No. of inspections	No. on register	No. of inspections	No. of places	No. of inspections
City of London	—	—	—	—	—	—	480	—	27	—	1	4	123	1,284	129	—	—	74	115	42	68	1,012	724
Battersea	—	—	2	123	3	4	13	2	3	1	2	69	265	4,524	1,920	475	12	119	438	220	217	126	313
Bermondsey	—	—	—	—	13	121	127	14	10	8	3	65	134	3,383	1,291	2,281	25	264	647	141	340	134	227
Bethnal Green	8	56	11	285	1	28	24	1	—	1	4	17	320	29	643	925	—	354	628	180	305	99	354
Camberwell	1	9	2	95	11	21	193	10	30	3	2	136	65	5,012	2,227	1,542	11	557	1,253	375	539	205	310
Chelsea	—	—	1	12	—	—	10	—	3	—	2	20	7	513	273	376	2	73	172	35	35	70	65
Deptford	—	—	2	243	7	29	23	4	—	—	6	52	48	2,580	725	192	—	255	348	189	111	69	387
Finsbury	—	—	1	102	2	310	197	5	23	4	2	112	23	13	1,163	200	205	186	612	131	378	274	636
Fulham	—	—	1	47	—	—	53	2	5	—	1	13	29	—	774	342	—	107	453	221	65	117	190
Greenwich	3	6	2	319	2	2	25	4	15	1	1	4	11	1,728	608	114	6	168	270	121	135	83	291
Hackney	3	67	8	600	10	62	1,438	36	61	1	2	45	423	3,806	2,498	864	19	127	1,051	313	537	206	248
Hammersmith	—	—	4	146	—	—	83	22	5	1	1	13	287	2,840	748	35	49	175	987	189	170	184	578
Hampstead	—	—	—	—	—	—	20	2	5	—	—	—	52	618	1,960	74	64	105	236	116	28	91	20
Holborn	—	—	1	2	—	—	137	5	6	5	2	22	112	—	257	140	—	137	189	60	110	479	574
Islington	—	—	8	430	12	311	32	2	45	5	24	579	81	6,656	2,898	361	219	256	877	494	460	605	798
Kensington	—	—	2	27	—	—	22	2	12	—	3	105	886	4,772	1,027	480	77	138	565	247	387	175	648
Lambeth	—	—	3	116	3	49	78	46	46	—	3	156	343	—	3,941	2,311	11	533	1,189	404	1,211	246	467
Lewisham	1	8	—	—	—	—	56	5	10	—	—	—	1	1,002	1,559	156	—	273	545	182	468	121	285
Paddington	—	—	1	302	2	45	19	2	5	—	3	83	54	20	167		91	135	311	184	159	126	130
Poplar	1	23	7	41	5	46	94	12	33	1	5	171	105	3,653	1,850	1,727	5	90	337	203	266	1,062	2,043
St. Marylebone	—	—	1	16	1	20	162	10	10	—	2	38	1,134	1,273	561	598	15	159	261	100	120	377	436
St Pancras	—	—	3	124	2	48	418	9	5	—	1	8	2,195	6,895	1,149	268	103	187	893	344	266	286	909
Shoreditch	1	13	—	—	1	11	66	2	5	—	4	32	21	6	774	274	70	316	833	190	281	241	452
Southwark	—	—	4	341	3	20	815	1	11	—	15	124	2,047	5,297	942	1,513	30	401	1,911	269	1,805	390	478
Stepney	19	130	—	—	48	592	491	36	36	3	18	316	211	1	2,119	1,683	4	228	1,556	368	526	342	465
Stoke Newington	—	—	3	15	—	—	19	1	15	—	—	—	—	2,209	325	138	9	102	221	73	97	37	101
Wandsworth	1	4	5	1,227	2	4	164	14	29	3	—	—	251	7	1,945	163	5	203	715	654	1,411	480	512
Westminster	—	—	—	—	—	—	728	19	78	2	5	186	308	712	542	59	1	239	354	111	234	1,426	2,149
Woolwich	5	79	4	16	1	4	37	3	12	—	9	38	7	2,379	1,011	1,256	13	73	278	221	270	170	424

NOTE.—In the columns above a dash signifies a nil return

Seamen's lodging houses, 15—Bermondsey, 3 (18 inspections); Poplar, 2 (45 inspections); Stepney, 10 (107 inspections).

Prosecutions.—*Ice Cream*—Stepney, 4. *Milkshops*—Islington, 1; Stepney, 6. *Seamen's lodging houses*—Poplar, 2. *Smoke nuisances*—Bermondsey, 2. *Water supply*—St. Pancras, 1.

TABLE 59.

Borough	No. of houses in borough	Public Health Act			Housing Acts 1925–1935																	
						Housing Act 1930							Housing Act 1935 † Overcrowding				Underground rooms		Houses let in lodgings			
						Section 1		Sections 17 & 18		Number of houses demolished		Closing Orders										
								No. of houses repaired														
		No. of houses in spection account of complaints or illness	No. of statutory notices served	No. of houses repaired	No. of houses inspected	No. of houses represented	No. of houses demolished	By owners	By L.A.	Section 19	Voluntarily	No. made	No. determined	No. of houses investigated.	No. of families overcrowded	No. of families alternative accom. obtained	No. of houses for working classes erected during the year	No. occupied but unfit	No. closed or modified occupation approved	No. in borough	No. of inspections	No. of prosecutions	No. of complaints remedied
City of London	2,154	50	3	23	165	—	—	—	—	—	68	—	—	1,748	80	—	—	1	—	38	59	—	1
Battersea	28,329	5,791	1,441	2,490	1,087	15	—	518	—	—	—	6	—	25,750	1,968	95	50	2,547	—	65	587	1	—
Bermondsey	19,402	3,999	1,665	4,599	3,912	251	367	741	—	18	8	2	—	18,350	3,189	300	462	2,350	5	1,191	4,168	—	33
Bethnal Green	18,285	2,122	2,555	5,759	733	96	—	—	—	—	—	—	—	26,093	4,071	461	56	*	—	276	1,235	7	—
Camberwell	41,097	6,767	2,655	5,060	1,703	179	77	100	—	3	1	10	—	41,097	2,950	157	—	537	15	428	361	—	3
Chelsea	12,636	754	56	290	126	23	—	—	—	6	80	—	—	5,112	749	164	14	—	—	605	10	—	—
Deptford	18,600	1,954	658	2,863	1,078	6	—	—	—	1	—	1	—	18,572	1,285	101	—	*	26	695	*	—	*
Finsbury	10,600	2,211	305	2,450	842	—	—	—	—	—	—	—	—	10,600	2,442	31	*	591	25	776	2,260	—	—
Fulham	26,892	4,828	649	2,463	703	249	—	642	8	—	—	3	—	24,502	1,795	14	22	75	31	746	12	—	—
Greenwich	21,174	2,618	244	2,287	625	311	11	18	—	9	5	2	—	15,981	1,088	79	79	17	1	98	100	—	—
Hackney	37,866	6,352	1,280	5,073	1,216	343	80	2	—	—	18	—	—	35,167	2,866	401	—	103	11	477	893	1	67
Hammersmith	23,791	5,719	1,383	2,913	86	126	6	—	—	—	—	—	—	20,823	1,654	—	—	1	1	1,773	2	—	3
Hampstead	16,616	1,155	386	697	74	—	—	—	—	—	34	4	—	17,913	455	1	—	396	19	1,565	469	2	163
Holborn	6,462	610	59	180	107	13	—	—	—	5	42	4	—	3,832	735	87	—	746	36	427	723	—	24
Islington	‡ 46,000	7,717	805	21,672	1,464	141	—	36	—	—	45	9	—	44,390	6,757	105	—	*	162	983	6,307	—	669
Kensington	29,498	2,490	206	1,460	1,108	19	7	217	23	—	12	1	—	11,674	2,534	71	—	6	358	3,161	5,829	—	762
Lambeth	48,873	12,661	246	4,171	23	126	24	95	3	3	7	4	5	48,184	3,881	199	63	90	30	—	—	—	—
Lewisham	‡ 52,000	2,768	376	1,182	622	103	40	—	—	—	2	6	—	35,182	1,057	461	—	9	1	48	84	—	—
Paddington	21,392	2,156	684	1,967	—	198	—	559	—	—	—	26	1	12,100	1 998	15	—	*	139	1,751	10,170	19	6,337
Poplar	23,952	5,272	1,662	4,560	—	30	26	—	—	1	—	—	—	23,285	4,080	44	52	*	5	315	1,568	1	57
St. Marylebone	19,420	3,330	10	1,205	927	—	—	—	—	—	—	—	—	16,009	1,614	7	—	790	105	1,055	8,693	—	—
St. Pancras	25,670	4,420	837	3,089	1,028	62	77	143	—	2	1	24	—	‡20,000	4,425	58	106	*	166	4,685	2,433	10	319
Shoreditch	13,925	8,824	840	4,684	535	104	4	78	—	—	81	—	—	13,925	3,887	235	20	17	—	417	444	—	—
Southwark	29,253	2,418	1,015	2,723	979	271	—	536	—	5	—	53	3	27,810	4,321	609	48	2,349	15		See footnote.		
Stepney	37,237	3,876	3,596	12,243	207	22	49	—	—	2	—	—	—	35,199	8,286	255	154	6,134	10	3,427	2,096	1	94
Stoke Newington	8,721	778	48	2,084	150	—	3	—	—	—	4	—	—	6,486	476	120	—	1	1	‡100	47	—	—
Wandsworth	78,405	7,179	746	4,422	2,237	38	97	—	—	100	82	2	—	81,365	1,801	278	117	5	20	340	680	—	—
Westminster City of	22,536	1,396	37	954	2,838	11	62	—	—	—	30	3	53	14,936	1,174	247	202	2,531	221	3,350	7,402	3	—
Woolwich	‡ 36,164	4,312	412	1,841	384	80	60	2	—	6	252	—	—	34,461	683	45	338	2	2	*	237	—	—

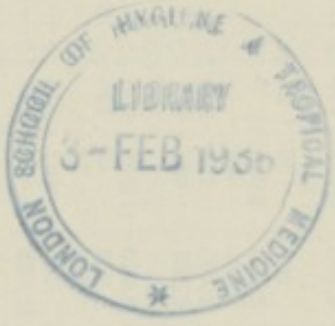
* Information not available. ‡ Estimated.

† The figures shown for inspections under the overcrowding survey include a certain number made prior to the year 1936 and not included in the return for 1935. The question of "houses let in lodgings" in the case of Southwark is the subject of a special report by the borough medical officer to his Council, which will be included in his annual report.

Table 60—Sanitary Inspectors, 1936.

Sanitary authority	Population (Census) 1931	Male		Female		Health visitors	
		Whole time	Part time	Whole time	Part time	Whole time	Part time
City of London ...	10,999	22	—	1	—	2	—
Battersea	159,552	11	—	—	2*	10	2*
Bermondsey ...	111,542	14	—	—	—	11	—
Bethnal Green ...	108,194	11	—	—	—	13	—
Camberwell	251,294	16	—	1	—	12	3
Chelsea	59,031	4	—	—	1*	—	1*
Deptford	106,891	8	—	—	—	8	1
Finsbury	69,888	8	—	1	—	7	—
Fulham	150,928	15	—	1	—	11	—
Greenwich	100,924	7	—	1	—	7	—
Hackney	215,333	26	—	—	—	18	—
Hammersmith ...	135,523	9	—	1	—	4	—
Hampstead	88,947	8	—	—	1	4	1
Holborn	38,860	4	—	—	1	1	1
Islington	321,795	24	—	2	—	10	—
Kensington	180,677	14	—	8	—	—	—
Lambeth	296,147	16	—	2	—	6	—
Lewisham	219,953	12	—	1	—	13	—
Paddington ...	144,923	16	—	2	—	9	2
Poplar	155 089	16	—	1	—	12	—
St. Marylebone ...	97,627	11	—	1	2	7	5
St. Pancras ...	198,133	15	—	1	—	17	2
Shoreditch	97,042	12	—	1	—	10	4
Southwark	171,695	18	—	1	—	9	—
Stepney	225,238	22	—	1	—	10	—
Stoke Newington ...	51,208	4	—	—	—	4	—
Wandsworth ...	353,110	18	—	—	—	11	—
Westminster, City of	129,579	16	—	1	—	8	—
Woolwich	146,881	13	—	1	3*	9	3*
Total County of London... ...	**4,397,003**	**390**	**—**	**29**	**10**	**243**	**25**

* Act both as sanitary inspectors and health visitors.



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PUBLIC HEALTH

(Report for the year 1936 of the School Medical Officer)

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ANNUAL REPORT OF THE COUNCIL, 1936

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REPORT OF THE SCHOOL MEDICAL OFFICER FOR THE YEAR 1936.
By Sir FREDERICK MENZIES, K.B.E., M.D., LL.D., F.R.C.P., F.R.S.E., County Medical Officer of Health and School Medical Officer.

Introduction

In the pages of this, the thirty-third annual report on the school medical service in London, the story of the physical progress of the children is continued. Betterment in social conditions and the work of the school medical staff and care committees have brought about progressive improvement.

In the early stages this improvement was comparatively rapid, in later years it has been naturally less rapid, but none the less sure and steady. Each year a "peak" in one or other respect has been established and very rarely has there been a slipping back.

The year 1936 now under review is no exception, and in many directions the children have been found to present less sickness and defect. In the last two or three years have been experienced a new wave of interest and a fresh urge with regard to the children's health, which has expressed itself in anxious concern for their nutritional well-being, for the progress of physical culture and for improvement in environmental conditions both in and out of school.

Particulars of the work of the nutrition centres, first founded in 1935, will be found on page 19; a contribution by Mr. Gem and Miss Grant Clark, the Council's organisers of physical education on page 50; and a section on the improvement in school buildings and amenities on page 6.

In cleanliness, in the incidence of heart defect and anæmia found at medical inspections, and in a large number of other particulars reviewed in the section on medical inspection, results are indicated which are better than any before recorded (pp. 9–16).

Although the state of perfect health for all children may be impossible of attainment, it is at least heartening to see that each successive year records a step forward in the direction of that ideal.

Staff

The public health department is organised in three branches, (i) special hospitals, including control of the acute infectious diseases and of the ambulance and pathological laboratory services; (ii) general hospitals and district medical work transferred from the late London poor-law guardians; and (iii) general public health administration, including housing and the school medical service. A principal medical officer is in charge of each of the three branches, *viz.*, (i) special hospitals, etc., Dr. J. A. H. Brincker; (ii) general hospitals and public assistance medical administration, etc., Dr. W. Brander; and (iii) general public health administration, etc., Dr. W. A. Daley. With the exception of the administrative work in connection with infectious disease in schools, which is directed by Dr. Brincker, assisted by a principal assistant medical officer (Dr. J. G. Forbes), the work of the school medical service falls entirely in the branch directed by Dr. Daley and is organised in two main sections.

One of these sections, of which the senior medical officer in charge is Dr. C. J. Thomas, embraces the medical and dental inspection of school children, the medical and dental treatment and cleansing of school children, open-air schools and general school hygiene. For purposes of routine medical inspection, etc., London is divided into five divisions, north-west (divisional medical officer, Dr. R. H. Simpson); north (divisional medical officer, Dr. Margaret C. Hogarth); north-east (divisional medical officer, Dr. G. Chaikin); south-east (divisional medical officer, Dr. H. R. Kidner); south-west (divisional medical officer, Dr. C. N. Atlee). Dr. Hogarth during the

latter part of the year was seconded for the purpose of assisting with schemes under the Midwives Act, 1936, and her place is temporarily being filled by Dr. M. C. Polhill as acting divisional medical officer. The remaining staff in this branch of the school medical work includes one principal assistant medical officer for aural work (Mr. A. G. Wells); ten part-time assistant aurists; one part-time principal assistant medical officer (Dr. Barbara Tchaykovsky); one divisional medical officer for ophthalmic work, nursery schools, etc. (Dr. Elizabeth M. McVail); *21 whole-time assistant medical officers; 6 assistant medical officers giving six sessions a week; 54 assistant medical officers giving three sessions a week; additional temporary medical assistance for 135 sessions a week; 9 medical officers (part-time) at open-air schools; and 72 part-time inspecting dental surgeons. There are 264 part-time doctors, surgeons and anæsthetists, and 102 part-time dental surgeons engaged at the hospitals and school treatment centres under the Council's scheme. These last appointments are made by the authorities of the hospitals and treatment centres, each individual appointment being subject to the approval of the Council.

The other section concerned with the school medical service (Dr. Verner Wiley, senior medical officer) includes the medical examination at the County Hall of scholarship candidates, school teachers, etc., and the medical work in special and approved Home Office schools. Dr. Wiley also deals with the work under the Mental Deficiency Acts, the Blind Persons Act, and, together with a principal assistant medical officer (Dr. E. J. Boome), the medical examination of the Council's staff. In this section for school purposes are included the services of a part-time consulting orthopædic surgeon (Mr. K. J. Acton Davis); a part-time ophthalmic consultant (Mr. J. M. Bickerton); two divisional medical officers (Drs. A. C. Williams and Jessie G. Duncan), and a part-time medico-psychologist at the Council's remand home (Dr. J. D. W. Pearce). The duties of consulting surgeon for aural disease in this section are performed by Mr. A. G. Wells, while Dr. McVail carries out the medical supervision of schools for the partially sighted, etc.

The new post of whole-time consulting dental surgeon, created by the Council in 1935, was filled by the appointment of Major-General J. P. Helliwell, C.B.E., M.R.C.S., L.R.C.P., L.D.S., who took up his office in February, 1936. His duties are concerned with the development of dental services in all the Council's institutions and hospitals, and are thus not confined to the school medical service.

The duties of Miss D. E. Bannon, matron-in-chief in the public health department, include the superintendence of the school nursing staff in addition to the supervision and organisation of the nursing and certain other staff at hospitals and institutions. The school nursing service comprises at present five assistant superintendents, 62 nursing sisters and 345 nurses.

School buildings and equipment

A three years' programme of development adopted for the years 1935–38 includes the erection of 15 new schools, the rebuilding or modernisation of 40 existing schools, the enlargement of 4 schools, the provision of further accommodation to meet housing developments, etc., and the acquisition of playing fields. A further feature of the programme is the reconditioning of premises and the provision of the amenities included in the new standard planning by a systematic overhaul of schools in which rebuilding or remodelling is not contemplated or due.

At the end of the year 1936, considerable progress has been made. Eight new schools or enlargements have been completed, and the schools opened. In three more cases the building work is in progress or about to commence; in seven, preliminary plans are in preparation; and, in a further seven, the accommodation and organisation are under consideration.

Of the 40 rebuilding or modernising cases, in two the work has been completed; it is in progress in eight; working drawings have been approved by the Board of Education in three; preliminary plans have been approved by the Board of Education and working drawings are in preparation in fifteen; preliminary plans

* Not including two officers temporarily seconded for work under the Housing Acts (equivalent substitutes authorised).

are awaiting the Board's approval in three, and are in preparation in five more. In the remaining three cases, the accommodation and organisation are under consideration.

Amongst the schools of which preliminary plans have been approved by the Board of Education is one in which the proposals have been the subject of much interest, as they involve a departure from the standard planning adopted by the Council and contain features which are new and have not hitherto been tried.

A proposal from the Council for Art and Industry that they should be allowed to design and supervise the erection of a new Council school was approved as an experiment and Mr. Oliver Hill, F.R.I.B.A., the architectural member of the Council for Art and Industry, was appointed as the responsible architect for the rebuilding of Lyndhurst-grove school.

The lay-out of the building is conditioned largely by the shape of the site, which runs east and west and is of shallow depth, being bounded in the south by a deep railway cutting. The school is to accommodate 798 children, and will occupy two storeys and part of a third. A very important innovation is the abolition of staircases and their replacement by ramps, the gradient of which will be not more than one in six. The north face of the long building will abut closely upon the street and will be occupied entirely by corridors, ramps, lavatories, cloakrooms, medical inspection rooms, etc. All classrooms, babies' rooms and rest rooms will face south.

The playgrounds will all be on the south side. There will be an isolated babies' section with two classrooms, 648 square feet each, with two rest rooms adjoining, a medical inspection room with bath and waiting-room, etc. In addition to the usual halls, classrooms, teachers' rooms, cloakrooms and store rooms, there will be milk dispensaries and lifts, spray and foot baths, drying-rooms and covered playgrounds.

All classrooms will be placed at first-floor level so as to be relieved from noise arising from the playground. In every case the south aspect of each classroom will consist entirely of windows, of which portions will slide to give access to a continuous balcony along the south side of the building, thus permitting of open-air work in suitable weather.

The three years' programme provided for 21 schools to be reconditioned in 1935–36. All these have been completed, and considerable progress has been effected in the case of 51 schools scheduled for reconditioning in 1936–37. In 26 of these the building work involved has been completed or practically completed.

Similar progress has been made with the schemes for the acquisition of playing fields, for which purpose a sum of £40,000 was provided in each of the three years of the programme.

Washing facilities.

Amongst the amenities which are being introduced under the new standard planning in schools for older children are gymnasia completely equipped and provided with changing rooms supplied with shower baths.

In elementary schools, also, washing troughs with spray taps are being introduced in place of the old-fashioned basins. A question having arisen on the relative advantages of the old and new type of installation, a conference was held with the education officer. Of eighteen head teachers consulted, seventeen preferred troughs and one preferred basins.

It was pointed out, however, that the sprays are liable to get out of order, and that the troughs should have a more decided slope in order that the water may more readily escape.

As a result of the conference it was decided that in new schools jets and troughs should be the rule, manufacturers being asked to provide, if possible, chromium jets to avoid the necessity of frequent polishing, the trough slope to be increased and a jet introduced at the end for flushing.

In reconditioned schools, on the other hand, it was arranged that basins should be continued for the present, and that in a year's time consideration should again be given to the question in the light of further experience.

Towels.

I was asked to report upon the question " what is considered an adequate number of towels from a hygienic point of view which should be supplied to an ordinary elementary school for the use of the pupils ? " To such a query it is not possible to reply without qualification.

According to the strict demands of hygiene, common roller towels would be condemned and the answer would be that the number of towels required would vary according to the number of ablutioners, each of whom should have his own separate hand towel changed at least weekly.

Such a standard, however, is clearly at present unattainable. A great deal depends upon the policy adopted in encouraging or discouraging ablutions at school. In some schools the children come to school very clean and the need for ablution, except under very special circumstances, does not arise ; in other schools the children are habitually dirty and a great deal more washing at school is necessary.

In order to obtain some idea of the general practice, I requested the school doctors to make a report on the practice in this respect in all schools visited by them during the month of November. As the result I received reports in regard to upwards of 500 schools or departments. Taking 50 consecutive reports in each case on infants', girls' and boys' departments in Council's schools the following results with regard to towels issued weekly are obtained :—

Departments	*Children on roll*	*Roller towels*	*Hand towels*
50 infants	12,513	182	152
50 girls	13,123	259	19
50 boys	12,249	260	27

On an average, therefore, there are issued in the London elementary schools about one towel for every 40 children or one towel per class per week. But the practice differs through a very wide range in different schools. Thus, a senior boys' department with 436 on the roll and 150 ablutions a week has 12 roller towels issued per week, while in a girls' department with 312 on the roll only three roller towels are issued and these are described as being in a very dirty condition at the end of the week.

The difficulties of estimating what a reasonable number of towels should be is shown by the report on two neighbouring schools by the same school doctor ; in the girls' department of one with 451 children on the roll, 300 ablutions are carried out a week and five roller towels are held to be sufficient, while in the other school in the senior girls' department with 286 children on the roll there are 2,500 ablutions a week and the issue of 12 roller towels a week is considered " not nearly enough." At one girls' department with 170 children, only two roller towels are issued weekly, but the rule at this school is that each girl brings to school her own toilet bag ; at another girls' department with 291 girls on the roll six roller towels are issued a week, but here again the children are encouraged to bring their own towels.

Only a few elementary schools issue the equivalent of two roller towels weekly for each class, but this standard is nearly always adopted by central school departments. Although it is impossible, as will be understood from the foregoing, to lay down a definite standard at present owing to the widely varying needs and policies prevailing from school to school, it is very clear that in some schools conditions are unsatisfactory, and when one department can supply 12 clean roller towels a week, it is difficult to see why another department, similar in all respects and receiving the same sum for general requisitions, can only supply four.

When the education officer visited Canada some little time ago he found that the use of paper towels in schools was general in the Dominion. In consequence, an experiment has been made in two schools in London in the use of paper towels. One of these came within the scope of this enquiry, and this school alone of the 500 upon which reports were made gives an impression of conforming to proper hygienic requirements in regard to ablutionary practice. As the experiment is still in progress it is not desirable entirely to prejudge the results, but it may be that it is in this direction that the solution of a problem, which is hygienically a serious one in London schools, will be found.

Meanwhile, it appears that the average number of towels issued weekly is too low and that it would be quite possible to obtain a better hygienic standard within the present allowances under which the issue of two roller towels or their equivalent per class per week seems quite easily managed by many schools.

Medical inspection

The foundation of the medical work in the schools continues to be the periodical examination of the children in certain age groups prescribed by the Board of Education. By agreement with the Board, so far as London is concerned, the age groups selected are four. These are (1) all children on first entrance to school, (2) all children in their eighth year, (3) all children in their twelfth year, and (4) all children in the term before that in which they normally leave school. Elsewhere in the country generally the age groups as prescribed by the Board are three, *viz.*, entrants, children aged 8 and children aged 12.

The additional age group in London is that of the leavers. Great importance is attached by social workers to the examination of this group. It not only affords an opportunity for a final survey of the results of the child-care activities in school, but gives a last opportunity for pressing attention to defects which have been ignored or have developed late, and, perhaps most important of all, provides for advice upon the choice of occupation in relation to physical condition and needs.

The arrangement whereby the two intermediate medical surveys are made at ages 7 and 11 brings the system of medical inspection into close relation to the modern educational ladder and provides for examination at the most important moments of school life—the promotion of children from infant to junior school at age 7, and from junior to senior school at age 11.

The examination at age 7 provides an earlier examination of the vision of the school children at the best possible moment since such examination is not possible in the case of entrants to school.

The change in the ages to be examined in London took place in 1933. The 12-year-old children in that year were ignored, as they would all be examined a year or so later as leavers, and the 11-year-old children were examined instead.

It was, however, realised that considerable hardship would follow if the 8-year-old children were similarly ignored, especially as this particular age group would have gone through school life until the age of 11 without an overhaul since entrance to school and without a general survey of their visual acuity. The 7 to 8 year period is also one of importance physiologically, corresponding as it does to an ancestral beach where profound alterations of bodily development attended by the possible manifestation or unmasking of physical defects are taking place.

The plan was therefore adopted of rapidly screening over the 8-year-old children, testing the vision of all, and referring for detailed examination only those who appeared on ocular inspection by the school doctor to need it.

The time saved by this method was occupied by the doctor in carrying out a detailed examination of as many children aged 7 as was possible. Such 7-year-old children as could not be seen in the year were to be examined in the succeeding year by the rapid method.

It was estimated that it would take 5 years to complete the change over from 8 to 7 without the appointment of additional staff. Owing, however, to the continued fall of the numbers of children in the schools, it has been possible to complete the change over in 3 years, and in 1937 the working of the routine inspections will again become normal.

Several of the leading school medical officers in the provinces have recently denounced the system of routine examination of school children, maintaining that much time is spent in overhauling relatively healthy children and limiting the amount of time of the school doctors which might be spent to better advantage. If local authorities were to limit their staff to little more than the number required to carry out the routine inspection, there is much ground for this contention.

If, however, the routine inspections are considered merely as the bare foundation upon which a complete edifice of children's care in the schools is erected, the plaint loses its force.

Over and over again it has been shown that it is unsafe to rely upon the teachers for bringing before the school doctors children who appear to them to need medical examination as a basis upon which to found the medical work in the schools. It is strange that, while some medical officers are deploring the time spent in routine inspections, others with strong public support are advocating regular "vetting" of all classes of the population at periodical intervals, and there is at present a vigorous campaign being prosecuted by social workers with the object of securing more frequent examinations of all children in the schools, particularly at the younger ages, and of providing routine inspection for those who have left school.

If the routine inspections were abolished, or had they never been prescribed by the Board of Education, it is highly probable that public opinion would demand and secure their resumption or introduction.

An instance arose in the past year which brought into prominence the great importance of the routine inspection of school children. A girl fell suddenly dead in school immediately before her school-leaving examination. The teachers in the school and the girl's parents were alike ignorant of the fact that she was not a healthy, normal girl. At the coroner's inquest it was established that she suffered from advanced valvular heart disease of, probably, rheumatic origin.

When these facts were reported, close investigation was made as to why the scholar's condition had not been discovered earlier. It transpired that the only illness of note the girl had ever had was an attack at the age of 11 of tonsillitis, for which she had attended hospital.

Upon scrutiny of her school medical record it was found that the second intermediate examination at age 11–12 had been omitted, the explanation being that she belonged to the group of 12-year-old children whose examination was omitted in the year 1933. The absence of one of the routine inspections in that year, owing to the change in the age groups examined, was, therefore, the reason why her condition had not been discovered.

Upon the routine inspection of the children as one of the foundations is built a complete system of care in which reference of children is made to special modifications of education, to convalescence, to supervisory centres for rheumatism, or for nutritional observation, or to treatment centres or hospitals for defects of all kinds. Many children detected at primary examinations to have defects are kept under continuous observation by systematic re-inspection until the school doctor is satisfied with their condition, and, apart from routine inspections, increasing numbers of children not falling within the age groups are examined by the school doctors as special cases at the instance of teacher, care worker, parent, or attendance officer.

The average roll of children in London elementary schools for the year 1935–6 was 507,392, and the average attendance 444,349.

The number of elementary school children examined in the three statutory age groups (entrants, children aged 7 and children aged 11) during the year 1936 was 135,838. These were made up of 50,508 entrants, 37,264 children aged 7, and 48,066 children aged 11.

The children aged 8 coming under preliminary survey by the school doctors numbered 10,258, of whom 1,977 were submitted to detailed examination. In addition, 48,895 children were examined in detail in the term prior to that in which they were due to leave school, and 1,226 children in special schools were examined on reaching their respective age groups.

In addition to routine groups, children referred by nurses, school teachers, care committee workers, divisional officers, etc., for examination for special reasons numbered 122,963; and 30,535 were examined in connection with outbreaks of infectious disease.

The total inspections amounted to 349,715. To these must be added the children, 129,867 in number, who were re-inspected because of some previously noted defect.

As inspections of all kinds and re-inspections totalled no less than 479,582 it is clear that, although some duplicate inspections are included, very few indeed of the children in school escaped coming under the eye of the doctor in some way or another during the course of the year.

Co-operation of parents.

Parents are invited to be present at all routine inspections, and attended in 76·9 per cent. of the examinations in the three prescribed age groups, compared with 78·5 per cent. in 1935 and 77·6 per cent. in 1934. At the inspection of entrants, the proportion was 90·7 per cent., and in the "leaver" group 42·3 per cent. The presence of the parent has a very considerable effect, and relieves very greatly the task of following-up, as it eliminates the necessity for home visiting and correspondence.

In view of the special character of the examination of the 8-year-old group, the results of their inspection will be separately treated in the following analysis of the results. In accordance with the precedent of previous years, the results of inspection of the leaver group will also be separately analysed.

Refusals of parents to submit children for medical inspection are so few in number as to be almost negligible. During the year 1936, the parents of 58 children (18 boys, 40 girls) being 7 less than in 1935 and 31 less than in 1934, refused to allow them to be examined by one of the Council's assistant medical officers. Nine objections were subsequently withdrawn, and in 8 instances medical record cards were completed by a private medical practitioner.

The number of children subjected to routine inspection in the three prescribed age groups who were referred for treatment was 54,677, 40·2 per cent. of the number examined. This figure includes 39,363 cases noted by the school doctors for dental treatment only, and, if these cases be excluded, the percentage is reduced to 15·9 compared with 15·8 in the previous year, and 15·5 in 1934.

The state of nutrition of the children.

The key-note of the medical service in the schools during the past three or four years has been the careful assessment of the nutritional state of the children.

The Board of Education syllabus provides for every child to be marked during routine inspection as "1," "2," "3" or "4"; 1 being exceedingly good nutrition, 2 normal, 3 subnormal, and 4 definite pathological malnutrition.

The analysis, with regard to nutrition, of the results of routine medical inspection in the elementary schools during 1936 is shown in the following table :—

TABLE 1.—*Assessment of nutrition*, 1936

Group	Numbers examined	Nutrition			
		1	2	3	4
Entrant boys	25,439	3,633	20,100	1,675	31
Entrant girls	25,069	3,985	19,625	1,448	11
Seven-year-old boys	18,802	2,305	14,798	1,689	10
Seven-year-old girls	18,462	2,978	14,170	1,302	12
Eleven-year-old boys	24,222	3,353	19,248	1,602	19
Eleven-year-old girls	23,844	4,365	18,061	1,390	28
Leaver boys	24,393	4,539	18,048	1,003	3
Leaver girls	24,502	5,614	18,054	826	8
Total	184,733	30,772	142,904	10,935	122
Percentage		*16·66*	*77·35*	*5·92*	*0·07*

On a careful clinical assessment of the state of the children's nutrition, assisted by continuous growth charts made by the nurses, 16·66 per cent. of the children are classed 1 (nutrition exceedingly good), and 77·35 per cent. are classed 2 (nutrition normal), making 94·01 per cent. whose nutrition is satisfactory.

The remaining 5·99 per cent., whose nutrition was adjudged unsatisfactory, were mainly in class 3, nutrition subnormal (5·92 per cent.), but 122 (·07 per cent.) children out of 184,733 examined fell into class 4.

Corresponding figures for the previous year are shown in the following table :—

TABLE 2.—*Assessment of nutrition*, 1935

Group	Numbers examined	Nutrition			
		1	2	3	4
Entrant boys	28,485	4,346	22,435	1,677	27
Entrant girls	27,106	4,797	20,869	1,419	21
Seven-year-old boys	15,869	1,926	12,603	1,312	28
Seven-year-old girls	16,096	2,683	12,367	1,034	12
Eleven-year-old boys	24,486	3,485	19,370	1,611	20
Eleven-year-old girls	23,952	4,377	18,112	1,442	21
Leaver boys	26,739	5,039	20,534	1,155	11
Leaver girls	26,470	6,271	19,191	996	12
Total	189,203	32,924	145,481	10,646	152
Percentage		*17·36*	*76·89*	*5·67*	*0·08*

There is thus no significant change in the assessment of the nutritional state of the children during the past year. The very slight increase in the total percentage in column 3 is largely accounted for by an alteration in the relative proportions of the age groups examined. The 7-year-old children examined formed a larger proportion of the total than in 1935, and this age is a particularly critical age. Each year the nutritional assessment of this group, particularly the boys, shows a greater proportion of nutritional failure than in any other group.

The percentage of 7-year-old girls assessed as subnormal was 7·1, and that of the boys no less than 9·0. Amongst the entrant infants, 6·7 per cent. of the boys and 5·8 per cent. of the girls were subnormal; and in the 11-year-old group, 6·7 per cent. of the boys and 5·9 per cent. of the girls were subnormal.

It is satisfactory to note that the leaver children are found to be in a very satisfactory condition, as amongst these only 4·1 per cent. of the boys and 3·4 per cent. of the girls are assessed as subnormal, whereas the corresponding figures for 1935 were 4·4 per cent. and 3·8 per cent.

The number of children found to be suffering from pathological malnutrition was only 122 (·07 per cent.), compared with 152 (·08 per cent.) in 1935.

A very important factor influencing the nutritional classification of the children during the past two years has been the scheme of the Milk Marketing Board, as only those children who are adjudged to be physically subnormal by the school doctor can obtain the milk free of cost.

In all cases of doubt the child is naturally given the benefit and is placed in class 3 rather than in class 2.

Cleanliness

Personal hygiene is the second of three great indices—nutrition, cleanliness, clothing—by which social conditions and their improvement can be assessed.

In 1936 the percentage of children in the three prescribed age groups found free from traces of nits or pediculi in the hair was 97·4 compared with 97·0 in the previous year, and 96·5 in 1934. *This is the best result ever obtained.* For some years past the condition of the hair of the 12-year-old girls has been taken as the criterion of cleanliness, and it has been pointed out that there has been a gradual improvement from 67·2 per cent. free from all traces of vermin in 1913 to 75 per cent. in 1923, 91·9 per cent. in 1930, and 93·5 per cent. in 1931. This figure was still further improved in 1932, when the high level of 95·8 per cent. was obtained.

In the year 1934 the percentage of 11-year-old girls (who now take the place of the 12-year-old group) entirely free from vermin was 94·8. This percentage was raised to 95·1 in 1935, and 95·7 in 1936.

It must be remembered that the parents are warned of the medical inspections upon which these figures are based, and the children appear spick and span for the occasion. The figures given in these results are therefore better than would be the case at surprise inspections, such as those carried out by the nurses in their rota visits to the schools. It is, however, impossible for the parents to eradicate at short notice

the traces of persistent neglect. It is a pleasure to record that the mothers of the children have responded so well to the persistent advice of the school nurses.

It is now very rare for the school doctor to find a child actually infested with body vermin; a condition which 3 to 4 per cent. of the elementary school children exhibited in the early days of medical inspection. Only 80 children were found in the statutory age groups to be affected by body vermin in 1936, out of 135,838 examined.

It is apropos here to quote Dr. Kerr's description in the first annual report of the medical officer of the School Board for London in 1903, of numerous "children, the back of whose heads was encrusted with a thick mass of scabs, exudation and lice." We are happily far away now from those times.

The remarkable progress since the inauguration of the school medical service in freeing the children of the elementary schools from parasitic infestation has been accompanied by the raising of the general level of care, of tidiness and of happiness, and forms by no means the least of the benefits which the school medical service has brought to the schools, the teachers, and the population generally.

It is regrettable, however, that the control of infestation by lice and ringworm, which has succeeded so well, had not its counterpart in the control of scabies, which shows no progressive diminution such as has taken place in these other conditions.

Clothing and footwear.

When the children are undressed by the nurse preparatory to the medical inspection, she enters on the medical record card a note of the condition of the clothing and footwear. The results of this classification for 1935 and 1936 are given below.

TABLE 3.—*Clothing and footgear—Percentages*

Age group	1935			1936		
	Good	Fair	Bad	Good	Fair	Bad
Entrant boys	56·5	43·0	0·5	57·0	42·6	0·4
Entrant girls	56·8	42·7	0·5	58·6	41·0	0·4
Seven-year-old boys	52·2	47·2	0·6	55·1	44·5	0·4
Seven-year-old girls	55·2	44·3	0·5	56·8	42·9	0·3
Eleven-year-old boys	52·0	47·6	0·6	55·2	44·3	0·5
Eleven-year-old girls	54·1	45·6	0·3	57·5	42·2	0·3
Leaver boys	51·0	48·3	0·7	53·0	46·5	0·5
Leaver girls	55·0	44·8	0·2	57·9	42·0	0·1

The position with regard to the adequacy of clothing and footgear is now very satisfactory. In earlier years the percentages of children with insufficient clothing and inadequate footgear were much higher.

Dental decay.

In 1936 the percentage of children found by the school doctors in the statutory age groups with sound teeth was 68·5 compared with 66·6 in 1935, and is a considerable advance upon the figures of former years as shown in the following table :—

TABLE 4

Age group	1924		1927		1934		1935		1936	
	Sound	Serious decay	Sound	Serious decay	Sound	Serious decay	Sound.	Serious decay	Sound	Serious decay
Entrant boys	59·0	12·5	51·7	15·3	54·3	11·3	56·8	9·7	58·1	8·2
Entrant girls	58·4	12·4	50·7	15·2	54·3	11·4	54·8	10·0	56·6	8·1
7 or 8-year-old boys	58·5	10·0	61·1	8·1	68·7	5·0	70·1	3·6	72·1	3·2
7 or 8-year-old girls	58·0	10·2	60·9	8·3	67·6	5·5	69·4	3·7	71·0	3·4
11 or 12-year-old boys	68·0	3·4	70·6	2·7	75·9	1·5	76·1	1·4	77·1	1·0
11 or 12-year-old girls	70·5	2·6	72·3	2·3	77·9	1·2	77·3	1·0	78·9	0·8
All above age groups	62·1	8·5	60·3	9·3	65·7	6·3	66·6	5·3	68·5	4·3

N.B.—Serious decay means four or more carious teeth requiring treatment.

Not only has the percentage of children with sound teeth increased in 1936, but the percentage of those with serious, as opposed to slight, decay has declined, and fewer " bad mouths " were found than ever before.

It must be remembered, however, that these figures represent only the impressions recorded by the school doctors, and do not correspond with the findings of the school dentists making special inspections with mirror and probe. Nevertheless, the continued improvement, especially as regards the diminution of oral sepsis, is noteworthy.

Vision.

All children in elementary schools, other than entrant infants, have their distant visual acuity tested by means of the Snellen cards, those whose defects have been corrected having their vision tested wearing their glasses. The results for 1935 and 1936 are given in the table below in percentages, column 1 containing those with normal visual acuity, column 2 those with slight defect, and column 3 those with more serious defect.

TABLE 5

Age group	Visual acuity (percentages) 1935 and 1936					
	Normal		Slight defect		More serious defect	
	1935	1936	1935	1936	1935	1936
Seven-year-old boys	63·4	63·5	25·2	25·1	11·4	11·4
Seven-year-old girls	62·8	63·0	25·1	25·6	12·1	11·4
Eleven-year-old boys	67·7	68·1	17·8	16·9	14·5	15·0
Eleven-year-old girls	65·7	66·1	18·9	18·7	15·4	15·2
Leaver boys	69·5	68·3	14·9	15·5	15·6	16·2
Leaver girls	66·7	66·6	16·6	17·0	16·7	16·4

Satisfaction was expressed in recent reports that the excessive incidence of visual defect on older girls compared with the boys, which was formerly such a striking result of school medical inspection returns, had diminished as the result, it was thought, of improvements in school hygiene such as by a rule of the Education Committee that sewing should not be done by artificial light unless the school medical officer has given his consent after examination of the lighting in each case.

The figures for 1936 show that there is again a heavier incidence upon older girls, although the excess of visual defect in girls is much less than in former years.

Enlarged tonsils and adenoid growths.

In the prescribed age groups 6,808 children were referred for some form of treatment of enlarged tonsils or adenoid growths; this is 5·0 per cent. of the children examined compared with 6·6 per cent. in 1931, 6·7 per cent. in 1930, and 7 per cent. in 1929. These nose and throat conditions are found chiefly among the entrant group, many of the children in the older groups having already been dealt with before their examination in those age groups. The percentages requiring treatment for these conditions in the individual age groups were: entrant boys 8·5, girls 7·6; 7-year-old boys 4·7, girls 5·2; 11-year-old boys 1·6, girls 2·1.

There has been a fall in recent years in the percentage of children referred for treatment for enlarged tonsils and adenoid growths. The older the children the fewer there are that suffer from ear, nose and throat defects.

Many cases found with slight degrees of defect are not referred for treatment but are placed under observation.

The proportion of those recorded as having enlarged tonsils and adenoid growths who were referred for treatment was 45 per cent. compared with 39 per cent. in 1935, 38 per cent. in 1933 and 1934, and 43 per cent. in 1932.

Of the 6,808 children referred for treatment for these defects, 4,683 were referred for enlarged tonsils only, 704 for adenoid growths only, and 2,507 for both enlarged tonsils and adenoid growths.

Otorrhœa and hardness of hearing.

Otorrhœa was noted in 911 children, or ·7 per cent. of those examined in the prescribed age groups, compared with ·8 per cent. in 1935, ·9 per cent. in 1934, ·8 per cent. in 1933 and in 1932, and with 1 per cent. in 1931 and 1930. In no year prior to 1930 was the percentage of children with " running cars " less than one;

in 1927 the percentage was 1·3, and in 1913 it was over 2 per cent. This defect is most prevalent amongst entrants and diminishes during school life year by year.

Hardness of hearing was found at routine medical inspections in 276 children, or only ·2 per cent. of those examined. This compares favourably with 383 in 1933, 453 in 1930, and 868 in 1927, and again equals the best result yet obtained.

Mention is made in another part of this report (page 18) of the extended use of the audiometer in elementary schools, which brings to light many minor degrees of hardness of hearing and cases of unilateral deafness, which, while not interfering with education, are sometimes the indication for active preventive treatment. Many of these cases are missed by the ordinary method of medical inspection, in which the test is the forced whisper at 20 feet.

Heart defect (functional or organic) was reported in 1,990 children in the prescribed groups or 1·5 per cent., compared with 1·7 in 1935, 1·9 in 1934 and 2 per cent. in 1930. As usual, older girls presented a percentage (1·7) in excess of older boys (1·3). Heart defect.

In studies of rheumatism in the metropolis it is found that girls suffer to a greater extent than boys in the proportion of about 3 to 2. It is reasonable to deduce that the figures for heart defect reflect this excessive incidence of rheumatism in the female sex.

The continuous reduction in the percentage of children found with heart disease of late years corresponds with the increase in preventive measures described in the account of the rheumatism scheme (p. 31).

Anæmia was recorded in 837 cases, or ·6 per cent., compared with ·7 in 1935, 1·0 in 1934, 1·1 in the years 1931 and 1932, and 1·2 per cent. in 1930. In this respect also the children's health shows steady improvement. Anæmia.

Lung defects were noted in 2,875 children in the prescribed age groups (2·1 per cent., the same percentage as last year). Lung defects.

The bulk of the cases is provided by the entrants (3·7 per cent. boys and 3·3 per cent. girls). This is due largely to bronchial catarrh, which is especially prevalent amongst entrant infants.

There were 66 children in the three age groups reported to have symptoms indicative of pulmonary tuberculosis, but only 20 of these were not already under treatment. In addition, 30 children were found with other forms of tuberculosis. The percentage of children with tuberculosis in any form found at routine inspections is ·76 per thousand. For many years the amount of tuberculosis amongst school children has been very small. Tuberculosis.

Epilepsy was noted in 30 cases, compared with 28 in 1935, 52 in 1932, 65 in 1931, and 73 in 1929; chorea in 101 cases, compared with 104 in 1935, 158 in 1932, and 170 in 1931; paralysis in 41 children, compared with 45 in 1935, 55 in 1934, 63 in 1932, and 81 in 1931. Nervous diseases.

Symptoms of rickets or the effects of early rickets were noted in 653 children in the prescribed groups. This is ·5 per cent., compared with ·4 in 1935, ·5 in 1934, ·3 in 1932, and ·4 per cent. in 1931 and 1930. Infant boys had an incidence of 1·1 per cent., compared with 1·0 in 1935 and 1934, ·7 in 1933, and ·9 per cent. in 1932, and infant girls ·5 per cent., as last year, compared with ·3 in 1933, and ·4 per cent. in 1932. The stigmata of early rickets tend to disappear as growth proceeds. It appears therefore that there has been some increase in rickets, which is a nutritional disease, amongst children below school age, affecting those entering school in the years 1934 to 1936. Rickets.

Amongst deformities, spinal curvature accounted, in the prescribed age groups, for 445 cases (·3 per cent.), compared with ·4 per cent. last year. Of these 181 (·8 per cent. of those examined) were among the 11-year-old girls, while the 11-year-old boys showed ·3 per cent. Other deformities, mainly flat foot, were present in 1,276 children (·9 per cent., compared with 1·0 in 1935 and 1934). Deformities.

During 1936 the school medical staff were completing the change-over from inspection at 8 years to inspection at 7 years. The 8-year group.

In 1935, 31,965 children aged 7 had been examined. The remainder of those 8 years old in 1936 were dealt with by preliminary inspection, followed by detailed examination of those selected by the doctor at the preliminary inspections as obviously requiring it.

The number of 8-year-old children in the elementary schools who came up for preliminary inspection was 10,258, and of these 1,977 (19·2 per cent.) were submitted to detailed inspection. In 74 per cent. a parent attended this detailed inspection. Of the children examined in detail, 41·8 per cent. were referred for treatment for defects found.

The whole group of 10,258 children was tested for visual acuity. Of these, 845 children were referred for refraction, *i.e.*, 8·2 per cent., while 2,870 (27·9 per cent.) were referred for treatment for dental caries.

The health of the leaving child.

The Council has undertaken the examination of a fourth age group, namely, children who are leaving school. This examination takes place in the term prior to that in which the children are due to leave school. The results of this examination are available at the school-leaving conference, and are of assistance in determining the choice of a suitable occupation. Coming at the end of the school career, the examination is useful in estimating the results of medical attention received since the children entered school.

This year's " leaver " group comprised 24,393 boys and 24,502 girls. In nutrition they were found to be better than the younger groups, only 4·1 per cent. of the boys and 3·4 per cent. girls being classed as subnormal. They compared with 4·1 per cent. boys, and 3·8 per cent. girls in the previous year.

In personal cleanliness this group also shows an improvement on the 11-year-old group, 99·0 per cent. boys and 97·0 per cent. girls having perfectly clean heads. The dental condition of this group was found to be slightly inferior to that of the 11-year-old group, for both boys and girls, the percentage with satisfactory mouths being 76·0 in the case of boys, and 75·6 in the case of girls, compared with 77·1 and 78·9 respectively in the 11-year-old group. In other respects the " leaver " children showed an improvement in health over the 11-year-old group.

Spinal curvature in the " leaver " girls was reported in ·9 per cent. compared with ·8 per cent. at age 11; on the other hand, heart defect in the " leaver " girls was 1·6 per cent., compared with 1·7 in the 11-year-old group. The older girls invariably present more cases of spinal curvature and heart defect than do the older boys. The percentage of spinal defect in " leaver " boys was ·4 per cent. and of heart defect 1·2 per cent.

The falling off in the condition of the teeth of the " leaver " children is not a satisfactory feature of the school medical work. It is due partly to the fact that skilled inspection of the teeth by the inspecting dental surgeons has not yet extended in all cases to the children aged 12 and 13 years, but ceases at the age of 11 in many schools. This defect in the system will be remedied by the increased dental inspections which are provided for in the 3-year programme now being carried out.

The reorganisation of the tops of schools has also caused difficulty in the way of following up the older children.

Co-operation between the school medical service and juvenile advisory committees.

The Board of Education forwarded an administrative memorandum (137), dated 16th September, 1935, directing the attention of local education authorities to the report of the Board's chief medical officer for 1933, in which he discussed the question of co-operation between the school medical service and juvenile employment and advisory committees. The Board had found that in many areas arrangements for such co-operation did not exist or, where they existed, were not on the lines which the chief medical officer suggested as likely to prove most useful. The matter is one to which the Ministry of Labour and the National Advisory Council for Juvenile Employment attach considerable importance

The Board suggested that the most useful form of advice is in terms related to the specific unsuitability of certain children for particular types of work.

This question had already been discussed between the London school medical staff and representatives of the National Institute of Industrial Psychology and of

the Ministry of Labour, when it was unanimously considered that the method of contra-indication was the best way of communicating the result of the examination in those cases where choice of employment should be limited by medical considerations.

In view of the Board's memorandum, it was decided immediately to print and issue "choice of employment" slips for supply to school doctors, with an intimation that a slip should be made out for every child who possesses some disability which affects choice of employment. These slips show the following occupational conditions for which a child might be unsuitable and are attached to the school-leaving form, thus being available at the school-leaving conferences: heavy manual work; sedentary confined work; work involving exposure to bad weather; work in a dusty atmosphere; climbing; proximity to moving machinery; prolonged standing; eye strain; work requiring acute distant vision or acute hearing; handling of confectionery; food preparation.

The school doctor indicates any of these occupational groups for which a child is physically unsuitable.

Some criticism has been expressed with regard to the results of this procedure, and cases have been reported in which children reported "fit" by the school doctor have subsequently been rejected as "unfit" by the factory surgeon. The scheme, however, has not yet been in operation long enough for its value to be assessed.

Vaccination.

Records are made of the presence or absence of vaccination marks when children are stripped for medical examination, but no inquiries are made. The following are the results of the doctors' observation of the percentage of children having vaccinal scars: entrants, 44·9; 7-year-olds, 45·5; 11-year-olds, 49·3; and "leavers" (13½), 49·2; compared with, in 1935, entrants, 45·8; 7-year-olds, 47·7; 11-year-olds, 52·7; and "leavers" (13½), 48·4. These figures show that, except in the case of leavers, the percentage of children with obvious vaccination marks is less than last year, just as last year's percentages were less than those of the previous year.

Special examinations.

The number of children, not in the age groups for routine examinations, submitted to the school doctors as special cases was 122,963, equivalent to two and a half additional age groups, and this figure does not include another 30,535 who came under inspection in the course of enquiries into outbreaks of infectious diseases. The number of special examinations in 1935 was 125,199, and in 1934, 91,880.

The increase in the number of special examinations in the past two years is remarkable, and is chiefly due to the solicitude aroused in regard to the nutritional state of the children generally, and to the desire that no child needing additional nourishment should be debarred from taking part in the scheme of the Milk Marketing Board. The additional work thus thrown upon the staff is equivalent to that of four whole-time school doctors, and explains why considerable strain has been felt. It could not have been carried out had it not been that the age groups, particularly the leaver group, were smaller than in recent years.

Although the number of children seen at special inspections was much less than the number seen in the routine age groups, yet in the case of many diseases the actual numbers found to be suffering therefrom in the former exceeded those in the latter. Thus 2,473 children with scabies were referred for treatment at special inspections, compared with 157 only at routine inspections. In regard to epileptics 65 first came to notice at special inspections, compared with 16 at routine inspections, and 224 children with chorea were seen at special inspections, compared with 48 at routine examinations.

This is evidence that full advantage is being taken of the doctors' visits to the schools promptly to present to them really ailing children.

The number of children amongst the special cases who were submitted to the school doctors on account of real or supposed nutritional defect was 78,706 compared

with 53,066 in the previous year. At the resulting medical examinations the nutritional classification, on the Board's scale, of the children was as follows :—

TABLE 6

Sex	Number	Nutritional classification			
		1	2	3	4
Boys	37,614	929	19,017	17,465	203
Girls	41,092	1,201	20,519	19,082	290
Total 1936	78,706	2,130	39,536	36,547	493
Total 1935	53,066	1,038	24,876	26,329	827

The very large increase in the numbers submitted for nutritional classification should be noted, as it is due to the anxiety that the children needing milk in school or other help should not be missed. Although so many more children were considered than in 1935 the number found to be seriously ill-nourished was fewer, being 493 compared with 827.

Audiometric examination in elementary schools.

In November, 1934, following experimental use, systematic audiometric examination of children in the elementary schools, by means of the gramophone audiometer was introduced by the Council. The object of this scheme is the ascertainment of defective hearing in one or both ears, especially in its early stages, so that (*a*) by means of timely treatment the defective condition may be remedied and permanent deafness in later life averted, and (*b*) the suitable educational environment for the child may be decided upon. One unit was established in the north-west division of the county in November, 1934, a second unit in the south-east division in May, 1935, and a third unit in 1936 in the south-western division thus completing the development foreshadowed in the three-year programme.

A unit consists of one gramophone audiometer ; one full time nurse, who carries out the testing of the children in the schools, and is present at the clinical examination; and an otologist, who conducts one clinical examination and one treatment session each week.

The work is under the direction of Mr. A. G. Wells, to whom I am indebted for the following report :—

Audiometric work.

The number of children tested during the year was 45,579, and the total number of individual tests was 53,375. Particulars of children who failed are shown in the following table :—

TABLE 7.—*Routine audiometer tests*

School	Total number tested	Total number of children failed	Number failed in		Percentage of failures (either ear)
			One ear	Both ears	
Boys	23,631	1,922	1,178	744	8·1
Girls	21,948	1,833	1,136	697	8·3
Total	45,579	3,755	2,314	1,441	8·2

The subjoined table gives the total number of ears tested and shows the number falling in 4 separate groups, *viz.* —3 to 6 decibels = the passes ; 9 decibels = those who just failed ; 12 to 18 decibels = moderate degree of hearing loss ; 21 and upwards = severer degree of hearing loss. (The audiometer records are graded in steps of three decibels.)

TABLE 8

Total ears	Number of ears showing level of correct recording in decibels			
	—3 to 6	9	12 to 18	21 and upwards
91,158	85,962	1,564	2,244	1,388
Percentage	*94·3*	*1·7*	*2·4*	*1·5*

The subjoined table shows the percentages of passes and failures of 41,792 children at various ages :—

TABLE 9

Age	Pass		Fail	
	Number	Percentage	Number	Percentage
6 years	110	92·4	9	7·5
7 ,,	2,289	88·7	291	11·2
8 ,,	5,444	90·3	583	9·6
9 ,,	5,865	92·2	491	7·7
10 ,,	6,289	92·6	503	7·3
11 ,,	5,863	92·4	477	7·5
12 ,,	5,603	92·6	442	7·3
13 ,,& over	7,039	93·4	494	6·5

It will be noticed that between 9 and 12 years the percentage of failures is approximately constant. At 12 years and over the percentage of passes is higher than in the younger children. This is not because the hearing of these children is better, but because they are more advanced educationally. It will be seen also that the children of 6 years give a higher percentage of passes than the 7 and 8 years ; this is because those in the 6 years' group who have come up from the infants' schools are particularly bright and intelligent.

In the Annual Report for 1935 (Vol. III, Part II, p. 19) graphs were given showing the differential analysis of all ears before and after treatment. The graphs for 1936 are very similar.

Defects found in failed children.

The clinical examination of the failed children conducted by the assistant otologists revealed the following defects, which were partly or wholly responsible for their loss of hearing :—

Catarrhal condition of middle ear ...	1,150
Wax	824
Rhinitis	777
Deflected septum	40
Ethmoiditis	3
Suppurative otitis media (active) ...	456
Post suppurative otitis media (now dry)...	546
Tonsils and adenoids	226
Old mastoid operation	175
Internal ear deafness	7
Deafness due to injury	1
Foreign body	7
Congenital malformations	5
Nothing abnormal found	46
Total	4,263

Among the 45,579 children tested by the gramophone audiometer, there were 136 who gave no better response than the 18 decibel level in the better ear and consequently appeared to be possible cases for transfer to a partially deaf school, or cases requiring special facilities in the ordinary school. All these were invited to County Hall and were given a complete test, with the result that 105 were found to be suitable for ordinary school, and these should be known as grade I children. Twenty-five were able to benefit educationally in the ordinary school with special facilities such as favourable position in class ; these should be known as grade IIa children. Five needed education in a partially deaf school ; these should be known as grade IIb children. One child proved to be mentally defective.

Nutrition centres

The nutrition centres established in May, 1935, have continued to do excellent work and seem thoroughly to have established themselves as an arm of the school medical service. One essential character of life they have at least exhibited, and that is growth. In anticipation of this the estimates for 1936–7 provided for five additional sessions weekly to be used in case of need.

In the first instance, to secure close oversight, the centres were established at, or as near as possible to, the divisional medical offices. These situations, while excellent for supervision and administration, were not necessarily easy of access or in reasonable proximity to poorer neighbourhoods. Owing to the difficulty in securing the attendance of children from a distance, it was found desirable to establish sub-centres in the poorer areas rather than to increase the number of sessions at the original main centres.

In the south-western division it was found desirable to close the centre at the divisional medical offices at Stowey House and to re-open it at the Stockwell treatment centre, whereupon the difficulties which had attended the running of the centre largely disappeared, and in its new habitat it became so successful that a sub-centre in Southwark proved desirable.

Sub-centres were also established in the poorer neighbourhoods of the north, north-eastern and south-eastern divisions, so that there now exist five main centres and six sub-centres distributed as below :—

TABLE 10

Division	Centres and sub-centres	Date of opening	Physician in charge	Day and time of session
N.W.	*Main centre.*			
	Paddington school treatment centre.	–/5/35	L. W. Batten, M.B.,B.Ch., M.R.C.P.	Thursday, 1.30 p.m.
N.	*Main centre.*			
	Hoxton school treatment centre.	–/5/35	Evelyn E. Gourlay, M.D.	Alternate Wednesdays, 1.30 p.m.
	Sub-centres.			
	The Forster school, Hornsey-road, N.7.	10/9/36	Florence Louis, M.D., M.R.C.P.	do.
	Stanhope-street school, St. Pancras, N.W.	10/6/36	Evelyn E. Gourlay, M.D.	do.
N.E.	*Main centre.*			
	Poplar school treatment centre, 69, East India Dock-road, E.14.	–/5/35	A. C. M. Elman, M.D., M.R.C.P.	Wednesday, 1.30 p.m.
	Sub-centres.			
	Kingsland school treatment centre, Albion-road baths, E.8.	11/9/36	do.	Alternate Fridays, 9.30 a.m.
	Wapping school treatment centre, 5, Pierhead, E.1.	4/9/36	do.	do.
S.E.	*Main centre.*			
	Divisional medical offices, 19, Breakspears-road, S.E.4.	–/5/35	Olive Rendel, M.D., M.R.C.P.	Wednesday, 9.30 a.m.
	Sub-centre.			
	Care committee office, 123, Peckham-rd., S.E.15	15/6/36	D. G. Morgan, M.A., M.R.C.P.	Tuesday, 9.30 a.m.
S.W.	*Main centre.*			
	Stockwell school treatment centre, 1-3, Stockwell-gardens, S.W.9.	–/5/35 (transferred)	Cicely M. Peake, M.D.	Alternate Thursdays, 10 a.m.
	Sub-centre.			
	St. George's dispensary, Blackfriars-road.	10/12/36	do.	do.

Particulars of attendances at nutrition centres during 1936 are shown below :—

Number of appointments made for new cases ...			707
Attendances : new cases	519		
old cases	1,381		
		1,900	
Number discharged : no longer needing supervision	74		
leaving school	20		
		—	94
Number of sessions			271

The centres have attracted much attention and many visitors both from home and abroad. General approbation has been extended to them and the only suggestions have been directed towards extension and elaboration. As was partly foreseen and hoped the centres are becoming the *loci* of intensive study of nutritional conditions.

Of great interest is the photometric investigation of vitamin A deficiency which Dr. Leslie Harris of the Nutritional Laboratory of the University of Cambridge is conducting at the Poplar centre. Although at the outset the centres were intended to be places of study and advice only, one after another of the physicians in charge

confessed that they felt the need of being able to prescribe simple supplements when special deficiencies were diagnosed. Such supplements are comparatively cheap and remarkably so in relation to the good they do. The practice has, therefore, grown up of administering various inexpensive vitamin concentrates, and in cases of nutritional anæmia a simple iron preparation.

The following is the substance of a report by Dr. Batten :—

It is difficult to bring to one centre all the children in this division who require nutritional guidance, as, wherever it were placed, the centre would be inaccessible to many of the poorer mothers, while parents who are comparatively well off are unwilling to believe that anything can be amiss with their children. At other centres the economic problem looms very large, but at the Paddington centre the poverty picture is rare. The problem here is more individual than social.

Causal factors fall into four groups. Inherited constitution, disease (past or present), environment and food (also past and present).

Inherited constitution appears a factor of considerable influence. Present organic disease is rare. Infected tonsils are occasionally seen and the nutritional state of some children improved after operation. Even carious teeth are uncommon. A few have been seen with bronchial catarrh and a few give a history of asthma, but very few.

A history of past illness is much commoner and many have had a succession of respiratory, gastro-intestinal or infectious complaints in their early years which have left their constitutions in need of building up. Most of the children are pale, but hæmoglobin indications in practically every case show no anæmia, and many children conspicuously pale have high percentages reaching 110 to 115 on the Hellige scale. The conclusion appears to be that anæmia is very rare in school children in London, and recent research carried out by Dr. Leonard Findlay in the east end confirms this.

The triad of extrinsic influences—environment, diet and way of life—plays a part in the state of health of any child at any time. They are not, however, inevitably yoked, and the evidence at the Paddington centre points to environment and way of life as the predominant influences and not to food. The general environment is far from ideal, in many cases families live in ill-lit, ill-ventilated, overcrowded rooms, sometimes in a basement. Sleep is curtailed and often disturbed, and too little vigorous and well-directed physical exercise is obtained. In addition to this there is often ample evidence of unhappiness in the home. With food it is different. Good food is easier come by than a good home, and there is little evidence of under-feeding although food habits often determine an unwise choice. Some good cheap foods like cheese and herring seldom appear. In most cases it is not ample food that is lacking but sleep, light, exercise and fresh air. In these circumstances it is found that while other action rarely produces anything more than a slow improvement, the effects of removal to the country, to a residential open-air school or convalescent home for a time are generally dramatic and last for months after return. The aim has been to continue observation of each child until his nutritional state could be described as good and it was clear that he was growing and gaining steadily. The day open-air school is suggested as the key to unlock the problem for most of the children. The combination of a well-regulated open-air life with good food has been shown time and again to be what they need.

With regard to the Poplar centre, Dr. Elman's report is summarised below :—

Of the "old" cases, *i.e.*, those attending first in 1935, 77·6 per cent. made satisfactory progress. Of 80 children attending first in 1936, evidence of rickets was found in 28, a history of prematurity in 7, low birthweight 1, members of twins 4, congenital syphilis 1, infantile marasmus 3, history of pneumonia 10, dental disease 9, tuberculosis contact 4. In contrast with some of the other centres, secondary (nutritional) anæmia is found to be common at this centre, 54 of the 80 children having hæmoglobin percentages below 80 per cent. It is found that amongst the children in this area the economic factor is of great importance. Thirty-seven of the "new" children have already made satisfactory improvement.

The following remarks summarise Dr. Elman's notes on the Wapping sub-centre :—

Help is obtained from the ultra-violet ray installation which there exists. The housing conditions of the children seen here are almost unbelievable. Out of 18 children seen 12 are living under deplorable conditions, in one case eight persons and in another six persons occupy a single-room home.

Dr. Elman, like Dr. Batten, dwells upon the value of the open-air school for the malnourished town child.

Following-up

The returns of the school doctors who re-inspect children found at the routine inspections in elementary schools to be ailing and in need of treatment make it possible to compile a statistical record of following-up. During 1936, 129,867 children were re-inspected. At the first re-inspection, which takes place in the next term but one after primary inspection, 82,666 cases of defects requiring treatment (some children

having more than one defect) were reviewed. At the second re-inspection, which takes place after the lapse of a clear term after the first re-inspection, 47,201 cases not cleared up at a first re-inspection were again reviewed. By combining the results of both re-inspections it is found that 83·9 per cent. of the children re-inspected were treated or discharged as no longer requiring treatment. This figure is a great improvement over that of the year 1934, when only 75·1 per cent. were found by the time the second inspection was reached to have been satisfactorily dealt with. *The result in* 1936 *is the best ever attained in London.* In 1935 the percentage was 82·3.

It is the dental cases, which contribute more than half of the cases to be followed-up, that cause the most difficulty and give the worst results. If these be eliminated the cases of defect satisfactorily dealt with, at the time of the second re-inspection, reached the proportion of 85·0 per cent.

The relatively poor result in 1934 was almost entirely due to failure to obtain dental treatment. The better results in this respect in 1935 and 1936 correspond with the better condition of the teeth found at inspections, and reinforce the impression of redoubled efforts on the part of social workers in response to the statements contained in my recent reports.

It will be observed in table 11 that 17 per cent. of the children obtaining dental treatment went outside the Council's scheme to get relief. The figures refer only to children recommended for dental treatment from medical examinations.

During the year the results of following-up of 3,219 children dentally inspected by dentists were minutely analysed by the organisers, and it was found that, while 57·1 per cent. of those needing dental treatment obtained it, of these 21·1 per cent. obtained their treatment outside the scheme.

TABLE 11

FIRST RE-INSPECTIONS, 1936

(Percentages are given in italic type.)

Defect treated	No. of defects	Treated						Untreated		
		By private doctor or dentist		Under Council's scheme		At other hospitals		Discharg'd	Improved. For observation only	Still needing treatment
		Discharg'd	Not discharg'd	Discharg'd	Not discharg'd	Discharg'd	Not discharg'd			
Refraction	14,485	79	60	3,435	1,992	300	136	1,290	3,083	4,110
		0·5	*0·4*	*23·7*	*13·8*	*2·1*	*0·9*	*8·9*	*21·3*	*28·4*
Minor ailments	4,854	111	36	1,191	350	292	138	1,424	628	684
		2·3	*0·7*	*24·6*	*7·2*	*6·0*	*2·8*	*29·4*	*12·9*	*14·1*
Nose and throat	10,176	22	10	3,405	215	494	67	1,196	1,359	3,408
		0·2	*0·1*	*33·5*	*2·1*	*4·8*	*0·7*	*11·7*	*13·4*	*33·5*
Teeth	43,940	1,104	278	17,117	750	2,263	110	3,051	956	18,311
		2·5	*0·6*	*39·0*	*1·7*	*5·1*	*0·3*	*6·9*	*2·2*	*41·7*
Other ailments	9,211	123	68	509	605	823	703	2,276	2,713	1,391
		1·3	*0·7*	*5·5*	*6·6*	*8·9*	*7·6*	*24·8*	*29·5*	*15·1*
Total	82,666	1,439	452	25,657	3,912	4,172	1,154	9,237	8,739	27,904
		1·7	*0·5*	*31·1*	*4·7*	*5·0*	*1·4*	*11·2*	*10·6*	*33·8*
SECOND RE-INSPECTIONS, 1936										
Refraction	11,225	44	38	1,852	1,639	222	127	883	2,922	3,498
		0·4	*0·3*	*16·5*	*14·6*	*2·0*	*1·1*	*7·9*	*26·0*	*31·2*
Minor ailments	2,574	29	17	429	282	109	69	743	408	488
		1·1	*0·7*	*16·7*	*10·9*	*4·2*	*2·7*	*28·9*	*15·8*	*19·0*
Nose and throat	6,206	6	5	1,528	80	326	36	969	990	2,266
		0·1	*0·1*	*24·6*	*1·3*	*5·3*	*0·6*	*15·6*	*16·0*	*36·4*
Teeth	21,267	597	175	7,200	353	1,274	61	1,676	561	9,370
		2·8	*0·8*	*33·8*	*1·7*	*6·0*	*0·3*	*7·9*	*2·6*	*44·1*
Other ailments	5,929	34	32	285	509	416	464	1,569	1,941	679
		0·6	*0·5*	*4·8*	*8·6*	*7·0*	*7·8*	*26·5*	*32·7*	*11·5*
Total	47,201	710	367	11,294	2,863	2,347	757	5,840	6,822	16,301
		1·5	*0·6*	*23·9*	*6·1*	*5·0*	*1·6*	*12·4*	*14·4*	*34·5*

Children's care committees.

The following-up of children found to be in need of treatment or special observation is carried out by the school care organisation, consisting of upwards of 5,000 voluntary workers aided and supervised by a staff of paid organisers.

The voluntary workers are responsible for acquainting the school doctor with any particular difficulties with which the family has been contending, such as unemployment, lack of proper accommodation, or illness, any of which might help the school doctor in determining the action desirable in any particular case. Such action may not be confined to medical treatment under the Council's arrangements, but may require that use be made of other ameliorative channels which are not always under the Council's supervision.

In this way the Council's school medical service is brought into touch with other social and medical organisations with undoubted advantages to the children and their parents.

Cases referred to the N.S.P.C.C.

During 1936, 423 children, involving 551 defects, were reported to the National Society for the Prevention of Cruelty to Children: these included 263 dental defects, 102 vision cases, 63 nose and throat affections and 20 cases of ear disease or deafness.

Aural disease and the acute infections.

The influence of the acute infectious fevers on the production of aural disease is shown by the high proportion of children who are deaf and partially deaf, in whom the trouble can be traced originally to an attack of measles or scarlet fever. One of the most important means therefore of preventing deafness and hardness of hearing is the after-care of children when they are discharged from the fever hospitals.

An arrangement has been made whereby notification is received of children who have suffered from ear discharge while in a fever hospital. The names of infants under school age are sent to the borough medical officers of health for the necessary action, while children of school age are examined by the school doctors at intervals of six months, until at two consecutive examinations no symptoms of the disease are found. The number of cases reported was 802, of which 37 were forwarded to Borough Councils or other local authorities. Of the children followed up at school, 24 were found on the first examination to have otorrhæa, and of those seen at second examinations the condition persisted in two children. All those not cleared up are being kept under observation.

In view of the importance of this procedure, efforts were made to secure fuller notification of cases. That these were successful is shown by the fact that the number of notifications from the isolation hospitals was in 1936 almost double that of the previous year.

Medical and dental treatment

The arrangements made by the Council for the medical and dental treatment of children attending public elementary schools, scholars and pupils attending secondary, trade and day continuation schools and certain evening institutes and junior instruction centres, have been continued during the year. The number of hospitals and centres included in the scheme at the end of the year was 17 hospitals and 78 centres. The centre at St. Marylebone general dispensary was closed on 30th September, 1936, owing to the removal of the dispensary to other premises not conveniently situated for the children in the district. A new centre to deal with these children is contemplated in Marylebone-road. In the meantime children requiring treatment are being referred to neighbouring centres. Three additional centres for the treatment of minor ailments, *viz.* the Camberwell sub-centre at Comber-grove school and the Deptford sub-centre at the Turnham school, Honor Oak, were opened on 1st April, 1936, and the Downham sub-centre was opened at the Coopers-lane school on 1st October, 1936. The attendance of the children at the centres has been well maintained, and, in spite of the fall in the school roll, the actual number of cases treated during the year has increased compared with the numbers dealt with during 1935.

Particulars of the numbers treated are set out below :—

Ailment	*1935*	*1936*
Vision	39,450	39,570
Ear, nose and throat ...	12,766	13,190
Ringworm	120	89
Minor ailments	117,140	122,305
Teeth	144,383	144,416
Total ...	313,859	319,570

Eye defects.

The numbers dealt with in the eye departments of the centres and hospitals during the year was 39,570, compared with 39,450 during the year 1935. There are 38 centres where refraction is undertaken by specialists appointed by the local committees responsible for the centres in addition to special school children's departments at 11 voluntary hospitals in various districts of London. The following are the hospitals where these arrangements are in operation : Belgrave, Central London Ophthalmic, King's College, London, Metropolitan, Princess Louise Hospital for Children, Royal Eye, Royal London Ophthalmic, St. Mary's, South Eastern, and Western Ophthalmic.

Of the total number dealt with (39,570) about 2,000 were suffering from diseases of the eye. Spectacles were prescribed in 27,744 cases.

Increased attention has been given to the treatment of children suffering from squint. Special sessions are devoted to this work at the Belgrave, Central London Ophthalmic, Lewisham, Royal Eye, and St. Mary's hospitals, and at the Paddington, Streatham and Whitechapel centres. During the year an experiment has been in operation at the Streatham centre under which the services of an orthoptist are employed for training the children under the supervision of the eye surgeon in charge of the department. Orthoptists are specially trained for this work and hold diplomas issued by a body recognised by the British Medical Association. Their duties, under the direction of an eye surgeon, are confined to the training of patients suffering from squint, to obtain single binocular vision with stereoscopic fusion by means of exercises with suitable apparatus. This training is a long and tedious process calling for personal attention at frequent short intervals for varying periods of time. The employment of orthoptists to undertake this particular task not only enables considerably more attention to be devoted to each particular patient with the consequent encouragement of persistent endeavour on the part of the child, but effects an economy in expenditure compared with the employment of ophthalmologists to undertake the work. The rate of payment of orthoptists is about 10s. a session, compared with £1 16s. 4d. a session for eye surgeons. The work at the Streatham centre is under the direction of Mr. P. M. Moffatt, M.D., D.P.H., D.O.M.S., who attends the centre for one session a week to see the children and to deal with ordinary refraction patients. The orthoptist attends on two sessions a week to carry out the training. Great care is necessary in the selection of cases for training, as good results can only be obtained if the visual acuity is capable of being brought up to a certain standard, which is regarded as better than 6/12 in the worse eye. The initial examination of the child consists of determining :—

(1) Visual acuity with and without glasses.
(2) The angle of the squint on the synoptophore.
(3) The presence of fusion and degree.
(4) The presence of stereoscopic vision.

It is necessary for the orthoptist to devote to each child a minimum of 20 minutes at least twice a week. The more regular the visits, the quicker a permanent cure can be obtained, as the effect of the training at the previous attendance does not then wear off. The arrangement was only put into operation on 1st April, 1936, so that it is not yet possible to draw any definite conclusions as to the value of the work, but there is no doubt that the parents are most appreciative of the efforts being made on behalf of their children, and no difficulty is experienced in obtaining

the regular attendance and earnest attention of the patients. During the nine months ended 31st December, 1936, 40 children had been accepted for training and 5 had been discharged cured, whilst those remaining were making good progress. Work of a similar nature for school children is also being undertaken at the Central London Ophthalmic hospital and at the Royal Eye hospital.

Ear, throat and nose.

The number of ear, nose and throat cases dealt with during the year was 13,190, including 9,116 operations, as compared with 12,766 and 9,037 respectively during the year 1935. Of the operations, 7,973 were for both enlarged tonsils and adenoids, 742 for tonsils only, and 386 for adenoid growth only. The remaining 15 were mainly operations in which cauterisation was used.

Ringworm.

The incidence of ringworm of the head amongst elementary school children is now happily of comparatively rare occurrence. This is undoubtedly due to the continued supervision by the school nursing staff. An amazing improvement has been effected in this direction during the past 15 years. In the year 1921 there were as many as 1,913 ringworm cases dealt with annually under the Council's scheme, whereas during the year 1936 the number of cases was 89, of which 80 were treated by X-rays, compared with 120 cases (110 X-rays) during the year 1935. X-ray apparatus is available at five hospitals and five centres in different districts of London, so that any cases that arise can be dealt with expeditiously.

Minor ailments.

The number of minor ailments dealt with during the year was 122,305, including 16,548 seen by the nurses only, compared with 117,140 and 14,537 during the year 1935. The total number of attendances made was 1,395,378. In addition, a number of children suffering from scabies and impetigo were treated at the bathing centres, and these are included under the heading of minor ailments in table IV at the end of this report which brings the total of minor ailments treated to 130,783. The early treatment of ailments of a minor character among children is of very great importance, as the failure to deal with many of the ailments would inevitably lead to chronic conditions which would not only cause prolonged suffering but would materially affect the educational progress and attendance of the children in the schools. It has, therefore, always been the practice to provide centres convenient of access for the children in the various districts, and in many instances latterly these have been provided actually in schools themselves, where the daily attendance of a nurse enabled prompt treatment to be given. The total number of minor ailment centres is 74, including the three new centres opened during the year at the Comber-grove, Coopers-lane and the Turnham schools. In addition, a nurse attends daily to carry out treatment of minor ailments at the following 13 schools, where difficulty is experienced in arranging for the attendance of the children at the centres :—Ackmar-road (deaf), Anerley residential (deaf), Chequer-street, Elizabeth-street, Forster, Hugh Myddelton (deaf), King's Park, Newington-green, Old Kent-road (deaf), Oldridge-road (partially deaf), Randall-place (deaf), Sleaford-street and Union-street.

Dental treatment.

The number of dental treatment centres included in the Council's scheme at the end of 1936 was 69, including the centre at the Berkshire-road school, which is undertaken without cost to the Council by the Manor Charitable Trust for the special benefit of the children attending that school. The centre at St. Marylebone general dispensary was closed on 30th September, 1936. Pending the completion of a new centre in Marylebone-road, the children in the district are referred for treatment to neighbouring centres. Dental inspections have been held in the schools by the 72 part-time inspecting dental surgeons of whom 14 are women, and 2,810 sessions were devoted to the work during the year. The number of children inspected was 306,969, and of these 193,990 were found to require treatment, a percentage of 63·39. All children in the schools were seen, with the exception of the entrants and leavers. It is proposed that during the coming year these shall be included in the inspections by the dental surgeons. Thereafter it will be the normal practice for the dental surgeons to inspect children of all ages in the schools at least once a year.

The subjoined table shows the number of children inspected and the number found to require treatment :—

TABLE 12

Year	Number of children inspected	Number found to require treatment	Percentage
1914	56,491	46,290	81·94
1915	69,516	56,864	81·79
1916	81,794	66,624	81·45
1917	89,962	71,447	79·42
1918	106,586	83,068	77·99
1919	144,456	112,227	77·68
1920	154,347	115,619	74·91
1921	151,395	111,250	73·48
1922	192,730	137,487	71·33
1923	236,658	166,454	70·33
1924	256,542	178,802	69·69
1925	262,482	182,524	69·53
1926	237,022	163,422	68·94
1927	224,553	157,537	70·15
1928	226,279	156,001	68·94
1929	240,040	163,114	67·95
1930	251,251	165,616	65·91
1931	268,545	173,180	64·48
1932	273,737	174,089	63·86
1933	275,213	175,559	63·79
1934	273,672	176,509	64·49
1935	290,021	183,035	63·11
1936	306,969	193,990	63·39

No appreciable progress has been made since 1932. The total number of children treated at the hospitals and centres was 144,416, compared with 144,383 during the year 1935. Statistics relating to the work done will be found in table IV, group IV, at the end of this report. Included in the total is the number of children, 4,234 from the 16 elementary schools allocated to the Eastman clinic and 30 scholarship and central school cases dealt with at the Eastman clinic, as well as 507 cases treated at the Berkshire-road school centre, to which reference has previously been made. The special arrangements for the treatment of school children at the Eastman clinic were begun in May, 1931. At that time, through the generosity of the late Mr. George Eastman, of Rochester, New York, a large dental clinic had been erected and equipped adjoining the Royal Free hospital, Gray's Inn-road, W.C. Sixty-eight dental chairs and electric units (50 in the main treatment room, 12 in the orthodontic department and 6 in other rooms) were ready for use. The question then arose as to the supply of cases for treatment. So large an additional centre provided the means of treating a considerable number of patients who were not immediately forthcoming. The authorities of the clinic therefore applied to the Council to be allowed to undertake the treatment of school children in the boroughs of Finsbury, Holborn, Islington and St. Pancras. At that time all the schools in the neighbourhood were being dealt with at centres which had already been provided by the Council under the dental treatment scheme, although in some cases children had to wait some time for appointments to attend the centres. Eventually, however, it was arranged that the Eastman clinic should undertake the treatment of the children in three schools—Cromer-street, Manchester-street and Prospect-terrace—provided the Council was put to no expense in the matter. During 1932 the following 13 schools were also allocated to the clinic on the same conditions :—St. Alban's, St. Peter's Italian, Barnsbury Central, Blundell-street, Gifford-street, Ring Cross, Westbourne-road, York-road, St. Pancras C.E., Thanet-street, Exmouth-street, Netley-street, and Stanhope-street.

The clinic authorities assumed entire responsibility for the inspection, treatment and following-up of the cases. At the commencement of the scheme it was the practice to take a portable dental chair to each school and for dental nurses or

hygienists to chart the mouths of all children in the schools, and at the same time carry out prophylactic work where required. In view of the disturbance to the school routine, this practice was discontinued and a simpler form of charting was introduced.

To assist in securing the attendance of the children at the clinic, which is at a considerable distance from some of the schools, arrangements have been made for a conveyance to call at these schools to collect the children to be treated and to take them to the clinic. The parents are notified in advance and are invited to be at the clinic when the treatment is being given. The work, undertaken under the direction of Mr. C. L. Endicott, L.D.S., is of a high order and, whilst a complete dental service is provided for the schools allocated to the Eastman clinic, the withdrawal of the schools from the centres to which they were previously attached has not materially affected those centres, as it has been possible to concentrate on the remaining schools and thus keep the centres fully occupied. In view of this and having regard to the work undertaken for which the Council would otherwise have ultimately had to make provision, it was decided, after renewed application for financial assistance, that for the year ended 31st March, 1936, the Council would make a grant to the Eastman clinic authorities of £500. A similar amount has been agreed to for the year ending 31st March, 1937. The work of the clinic is not confined to the treatment of children from the 16 allocated schools, but treatment is given to any children in the area served whose parents wish to apply. In addition to the 4,234 cases from the allocated schools dealt with during the year 1936, treatment was given to 11,007 children from unallocated schools who attended of their own volition.

Orthodontics.

An experimental orthodontic scheme was inaugurated in September, 1934, by Mr. Bertram Samuel, who was then the Council's consulting dental surgeon, at five centres in different districts of London. The centres selected were Battersea, Deptford, Hammersmith, Prunella and St. Mary Newington. The construction of appliances for orthodontic cases was undertaken at the Council's dental laboratory then at St. James's hospital, Balham, and provision was also made for X-ray photographs to be taken when necessary at certain of the Council's general hospitals. Owing, however, to the great pressure of work at the small dental laboratory in connection with the provision of dentures for patients at the general hospitals, it became impossible to obtain within reasonable time the increased number of appliances required by the orthodontic centres. The scheme consequently was held in abeyance in March, 1936, so far as the five centres referred to were concerned, but about the same time Major-General J. P. Helliwell, the Council's consulting dental surgeon, ascertained that the dental surgeon at the Bermondsey Medical Mission hospital dental centre (Miss E. M. Still, L.D.S.), who had considerable experience in orthodontic work, was able to undertake orthodontic treatment by means, to a large extent, of the fixed type of appliance which did not necessarily require the services of a dental mechanic and which she was usually able to make in her own laboratory. Arrangements were therefore made for suitable cases in the district to be dealt with at the centre, and the first session was held at the Bermondsey Medical Mission hospital on 22nd April, 1936. One session a week was at first allowed for this work, but from 1st September, 1936, two sessions a week have been necessary. During the period from April to 31st December, 1936, 44 special sessions were held, the number of new cases seen was 88, and 574 attendances were made. Fifteen children have been discharged, treatment having been completed, one lapsed, and 72 were still under treatment at the end of the year. In 7 cases treatment by extraction only was needed, in 69 fixed appliances were made and in 3 removable appliances were provided. With regard to the work undertaken, the subjoined report has been received from Miss Still:—

The types of cases treated may be sub-divided as follows:—

(*a*) Angle's class I (the most frequent type).—Normal molar occlusion, with crowding and/or irregularity of the incisor teeth; usually one incisor in the upper jaw locked inside the lower incisors. Under treatment: 40 cases. Treated by a fixed appliance in one jaw only. Nine of the discharged cases were simple examples of this type, the treatment having taken from one to six months.

(*b*) Angle's class II.—Postnormal molar occlusion. Appliances in both jaws usually needed; treated by fixed appliances and intermaxillary traction. In these cases it has to be ascertained before treatment is commenced that the parents are sufficiently interested to allow the patients to attend for a considerable time. Under treatment: 17 cases.

(*c*) Angle's class III.—Prenormal molar occlusion. Under treatment: 6 cases.

(*d*) Cases where there is insufficient room in the arch for all premolars and consequent displacement of the canine teeth. These have been treated by extraction only, the patients being recalled every three months for examination. Under supervision: 7 cases.

(*e*) Space retainers, rendered necessary by the early extraction of a permanent incisor, as for example after fracture, have been inserted in 2 cases.

Two orthodontic sessions a week are held. A maximum of three new cases and ten old cases is arranged when possible, but, with the growth of the clinic, the attendance of old cases had to be considerably increased on most occasions. Attendance is excellent, and isolated failures to attend, when investigated, have always proved to be due to illness.

Impressions for reference models are taken at the first visit, and again when the patient is about to be dismissed with treatment completed. In cases of protracted treatment, where the work is done in more than one stage, reference models are also taken at the completion of each phase, before a new appliance is designed.

Toothbrush drill is always given at the first visit and a toothbrush supplied if necessary. When a fixed appliance is inserted the patient cleans his teeth before leaving the clinic, to remove any fear that brushing will dislodge the appliance. Co-operation of patients and parents is gratifying.

Aural centres.

The Council maintains 15 special aural clinics which are under the direction of Mr. A. G. Wells. Two additional part-time assistant aurists were appointed in April, 1936, making 10 in all. Particulars of the work carried on at these centres are given in the subjoined tables:—

TABLE 13.—*Ear, nose and throat, excluding pure defect of hearing*

Classification	Patients	Ears
Total number of examinations made	16,136	20,219
New cases	1,454	1,846
Cases carried over from 1935	784	978
Old cases returned	988	1,170
Cases examined but no treatment required ...	371	508
Cases completely relieved...	1,674	2,030
Lost sight of	191	224
Carried forward to 1937	990	1,232

TABLE 14.—*Deaf cases. Organisers' returns from special ear, nose and throat clinics*

Classification	Patients	Ears
Total number of examinations made	3,934	6,620
New cases	1,172	1,720
Cases carried over from 1935	186	298
Old cases returned	27	49
Cases completely relieved...	462	676
Cases partially relieved	258	497
Cases unrelieved	114	171
Cases requiring no treatment	32	53
Lost sight of	52	81
Carried forward to 1937	467	589

In addition to the above there were:—

Throat cases	85
Nasal cases—New	109
,, Carried over from 1935	123
,, Old cases returned	133

The subjoined table gives a detailed analysis of all cases of otorrhœa treated, showing number of acute conditions, cause of the persistence of discharge in chronic cases, the number cured, the number referred for operation, those lost sight of and the numbers still under treatment on 31st December, 1936. This table includes otorrhœa cases among children from residential schools (not included in table 13 above).

TABLE 15.—*Special ear clinics—totals for all clinics*

Cause of suppuration	Total ears	Cured	Referred for mastoid operation	Lapsed	Still under treatment
Acute otitis media suppurativa	211	176	9	6	20
Chronic otitis media suppurativa due to					
(I) TYMPANIC CONDITIONS					
(*a*) Tympanic sepsis (T.S.)	1,455	1,060	3	91	301
(*b*) T.S. + granulations	288	162	14	23	89
(*c*) T.S. + polypi	31	10	9	5	7
(*d*) T.S. + caries	20	10	4	4	2
(*e*) T.S. + other conditions	3	1	—	—	2
(II) TYMPANIC CONDITIONS +					
(*a*) Tonsils and adenoids	241	172	—	12	57
(*b*) Nose conditions	354	254	—	15	85
(*c*) Mouth conditions	—	—	—	—	—
(III) TYMPANIC CONDITIONS +					
(*a*) Attic disease	68	24	24	6	14
(*b*) Mastoid disease (no operation yet done)	162	19	122	8	13
(*c*) Mastoid disease (operation already done)	510	273	23	32	182
(IV) TYMPANIC CONDITIONS +					
(*a*) External otitis	50	42	—	1	7
(*b*) Stricture of meatus	—	—	—	—	—
External otitis	122	111	—	—	11
Cause undetermined	—	—	—	—	—
Total	3,515	2,314	208	203	790

From these figures it will be seen that the percentage of "cases cured" is 69·8.

Diastolisation in connection with audiometric work.

Among 3,755 children who failed the audiometric test in school 591 were given diastolisation treatment, and 269 of these benefited sufficiently to enable them to pass their final test after the completion of their treatment.

An analysis of the results obtained from diastolisation treatment is appended :—

Defective hearing in 591 children

Hearing completely restored	193	
„ restored sufficiently to pass test...	76	
„ partially restored	155	
„ unrelieved	101	
Lapsed or left school before final test ...	66	
	—	591

Rhinitis in 551 children

Condition completely relieved	342	
„ markedly improved	67	
„ improved	95	
„ not improved	26	
Lapsed or left school before final test ...	21	
	—	551

Middle ear defects in 423 children		
Condition relieved	154	
„ much improved	58	
„ improved	111	
„ not improved	57	
Lapsed or left school before final test ...	43	
	—	423
Otorrhœa in 67 children		
Dry ears	35	
Much improved	1	
Improved	11	
Not improved	13	
Lapsed or left school before final test ...	7	
	—	67

In all 7,605 diastolisation administrations were given to 591 children, *i.e.*, approximately 13 administrations per child treated.

After-care clinic, St. George's dispensary.

At the St. George's dispensary a special aural centre is maintained where children suffering from otorrhœa from the Council's residential schools are treated, and where also the after-care of children who have returned home from the Downs hospital after mastoid operations is carried out.

The number of "ears" dealt with in children from the residential schools was 174, and the percentage of cure 82·4. The total number of children attending, including after-care cases, was 584, and the number of attendances made was 8,317.

Spectacles.

Spectacles for children in the elementary schools are not provided from the rates, but parents are assisted by the voluntary London Central Spectacles Committee. In 1936, 27,744 children were prescribed spectacles at the treatment centres and hospitals, and of these 26,594 or 95·8 per cent. obtained them. This excellent result is far the best hitherto attained.

Table 16

Year	No. of spectacles ordered	No. of spectacles obtained	Percentage
1931	30,151	27,939	92·6
1932	29,548	26,200	88·6
1933	29,382	27,292	92·9
1934	29,599	27,497	92·8
1935	28,827	26,569	92·2
1936	27,744	26,594	95·8

Orthopædic treatment.

The provision for orthopædic treatment in London generally is extensive and adequate. As local education authority, the Council has established 32 day schools for the physically defective with accommodation for 3,537 children. These schools are regularly visited by an orthopædic surgeon and the care and education of cripples are maintained at these schools until they reach the age of 16, and a scheme of after-care of all children subsequent to their leaving has long been in existence.

There are 11 visiting orthopædic surgeons employed in connection with the Council's general and special hospitals. There are 3 special children's hospitals maintained by the Council to which children suffering from orthopædic defects are admitted; these include Queen Mary's hospital, Carshalton, at which there are 1,284 beds and where special facilities are provided for the treatment of orthopædic cases. There is no difficulty in finding accommodation immediately for all orthopædic cases. These special hospitals are now recognised as hospital schools.

The number of children suffering from orthopædic defects discharged after treatment as in-patients in the Council's hospital schools during 1935 was 652, of whom 296 were non-tuberculous and 356 tuberculous.

London is a great centre for medical education and there are many voluntary hospitals, which maintain orthopædic departments, engaged in the teaching of medical students. These are all eager to undertake the orthopædic care of children. There are also special voluntary orthopædic hospitals at which orthopædic surgeons of the highest repute hold appointments. At some of these hospitals the Council's organisers of children's care work attend in the orthopædic departments as liaison officers.

The Woolwich area stands in a category by itself owing to the lack of local orthopædic out-patient provision, and the distance parents must travel with their crippled children for advice. In this area the Council subsidises the remedial clinic which is provided by the Invalid Children's Aid Association. The number of children treated at this centre in 1936 was 221.

The three main causes of crippling in London are tuberculosis, infantile paralysis and congenital malformation. The first two conditions are notifiable, and schemes are in operation on the general public health side of the Council's activities for dealing with children under both these headings. A special unit for the treatment of congenital malformation has been established at Queen Mary's hospital, Carshalton.

The principal causes of crippling operate before school life begins, at which period of their lives the children in London are under the care of the public health departments of the Borough Councils, on behalf of whom the Council provides institutional treatment whenever required.

Stammering children

At the ten centres for the treatment of stammerers from elementary schools a total of 413 children attended during the year; of these, 148 were discharged as cured, while 49, many of whom had greatly improved, left for various reasons.

The arrangements are on the following lines: (i) each child attends twice weekly for periods of 50 minutes each; (ii) each group of children is limited to 9; and (iii) three groups are dealt with by the same speech therapist on each half day.

The two centres for secondary school pupils at the Henry Thornton school (south London) and the North-Western polytechnic (north London) were continued, 53 pupils attended, of whom 10 were discharged cured and 7 left.

At Salter's Hill school 48 children from the residential schools of the Council attended a special centre. Of these 17 were cured and 9 left.

Dr. E. J. Boome communicated with 66 former pupils who attended stammering classes and had left school for five years and upwards. Thirty-one replies were received, which are summarised below :—

In regular employment	29
Not in employment	1
Still studying	1
No speech difficulty	13
Slight speech difficulty	15
Severe speech difficulty	3

Most of the replies received express the gratitude and appreciation of the writers for the efforts made on their behalf by the speech therapists and teachers. That these efforts have been rewarded may be judged by the progress made by the pupils. Nearly all are in regular employment. One pupil is now a general grade clerk in the Council's service, another is a qualified architect.

Rheumatism scheme

During 1936 the rheumatism scheme remained under the supervision of Dr. C. E. Thornton. The number of children nominated for institutional treatment showed an increase of 383 over the number of such applications received during 1935. The actual number of nominations received was 2,397

but 55 were subsequently withdrawn, reducing the total to 2,342. Happily this increased number need not be regarded as indicating a proportionate increase in rheumatic disease in children, but is chiefly due to the fact that 1936 was the first complete year during which the scheme was made available for rheumatic children in the Council's general hospitals. To compare the 1936 figures with those of the previous three years is therefore misleading, unless the number of nominations received from Council hospitals is first deducted. When this is done a total of 1,674 nominations received from sources other than Council hospitals remains, and this shows a slight decrease on the average yearly number (approximately 1,700) received during 1933, 1934 and 1935. The number of applications for treatment under the scheme cannot, of course, be regarded as a measure of the incidence of rheumatism in children of school age, but it supplies an index of the fluctuations in prevalence from year to year, and as such indicates that, even allowing for the decrease of the school population during the last few years, no sensible increase of rheumatic disease is occurring. Nor, unfortunately, is it possible to point to a decrease, and, since at the present time the immediate causation of juvenile rheumatism and the factors conducive to its occurrence are more matters of speculation than ascertained fact, no advance in the direction of prevention seems at present possible. It is clearly of the utmost importance that skilled research workers in bacteriology, biochemistry and cardiology should concentrate on the problem. The absence of definite knowledge regarding the causation of the disease inevitably reflects itself on the question of treatment. The real danger of rheumatic disease in childhood is of course the danger of cardiac involvement with the possibility of permanent cardiac crippling. All statistical evidence tends to show that prolonged rest in the early stages of the disease reduces this risk. Herein lies the value of the Council's rheumatism scheme.

But juvenile rheumatism frequently takes the form of an insidious carditis which gives rise to few or no symptoms in its early stages. This partly accounts for the fact that evidence of cardiac involvement was already present in 37·7 per cent. of the 2,039 children admitted to the rheumatism units in 1936. In a certain proportion of these cases of carditis, where the children had been fortunate enough to be admitted at the very onset of the disease, its progress was arrested and no permanent cardiac damage resulted, but in a much larger proportion of cases cardiac valvular disease was definitely established, and, of the 1,900 discharges from the units in 1936, 21 per cent. were, owing to this cause, regarded as unsuitable for normal school life or unfitted to undertake without risk any but the lightest employment. Except for a short period in the early part of the year, when part of the Southern hospital convalescent unit had to be used to provide additional accommodation for children suffering from measles, the number of beds (910) allocated proved to be adequate, and no delay occurred in the admission of children to the units. The number of children under supervision at the rheumatism supervisory centres has remained approximately stationary during the last three years. On the other hand, there has been a distinct tendency for the number under supervision by the school doctors to increase. The number this year (2,596) shows an increase of about 800 over the number thus supervised in 1934. Much help has again been given by the children's care organisation in connection with the work of the rheumatism scheme. In addition to making many special enquiries regarding children out of school owing to rheumatism, care committee visitors have made reports on the home conditions of all children admitted to the units. Amongst these, 442 reports showed that the home conditions were unsatisfactory and appropriate action was taken with a view to their amelioration.

TABLE 17

Particulars	1934	1935	1936
Nominations for institutional treatment.			
Number received from the Council's hospitals	—	256	678
" " " voluntary hospitals	804	750	619
" " " rheumatism supervisory centres	313	526	576
" " " school doctors	320	214	303
" " " other sources (chiefly private practitioners and welfare organisations)	134	213	221
Total number received	1,571	1,959	2,397
Subsequently withdrawn	Not recorded		55
Final total	—	—	2,342
Examinations by medical referees of children nominated.			
Examined in the Council's hospitals	—	248	674
" voluntary hospitals	348	315	251
" their homes	561	541	473
" rheumatism supervisory centres	329	534	581
" at County Hall	248	256	361
	1,486	1,894	2,340
Awaiting examination at end of year ...	Not recorded		2
" admission from previous year ...	"	"	72
Total	—	—	2,414
Admissions to beds in rheumatism units	1,096	1,639	2,039
Removed from list as unsuitable	Not recorded		117
Refusals by parents	"	"	210
Died before admission	—	—	1
Awaiting admission at end of year	—	72	47
Total	—	—	2,414
Children seen at County Hall on discharge	867	957	873
Number of children under supervision by school doctors at end of year	1,803	2,129	2,596
Reports made by care committees on home conditions	995	1,365	1,664
Number of rheumatism supervisory centres	17	20	20
Number of sessions at rheumatism supervisory centres	1,051	1,067	1,088
Number of children attending rheumatism supervisory centres for first time	2,187	2,047	1,921
Total number of attendances at rheumatism supervisory centres...	15,340	15,420	15,913
Number of cases reported to medical officers of health *re* dampness, etc., or to valuer for better accommodation	159	225	442

TABLE 18.—*Admissions to special hospitals and convalescent homes during* 1936

Hospital or home	Boys			Girls			Grand total
	Rheumatism and/or chorea with no apparent cardiac involvement	Rheumatism and/or chorea with cardiac disease	Total	Rheumatism and/or chorea with no apparent cardiac involvement	Rheumatism and/or chorea with cardiac disease	Total	
Queen Mary's hospital, Carshalton	150	145	295	205	207	412	707
High Wood hospital	80	69	149	130	84	214	363
Downs hospital	183	105	288	222	94	316	604
Lower Southern hospital	105	17	122	162	17	179	301
Norwood children's hospital	22	24	46	11	7	18	64
Total	540	360	900	730	409	1,139	2,039

The condition of children on discharge as regards fitness for education, or, if over school age, fitness for work, is set out below :—

	Boys	*Girls*	*Total*
Fit for elementary schools	635	822	1,457
Fit for any employment	18	24	42
Suitable for school for the physically defective ...	99	131	230
Suitable for light work only	48	67	115
Unfit for any type of school or work...	20	36	56
Grand total ...			1,900

Personal hygiene scheme

For the purpose of assisting at medical inspections, each school nurse is allocated to a group of schools. Each school in the group is also visited by the school nurse on a rota, in order that she can carry out the inspection of the personal hygiene of the children. At each rota visit all the children in the school are so inspected ; each school is visited at least once a term, the schools where conditions are below normal receiving two or more such rota visits each term. Thus every child is seen at least three times a year.

In 1936, 1,796,323 examinations of children were made at these rota visits ; 170,000 more than in 1935. In 144,965 cases the child was noted as verminous, *i.e.*, in 8·1 per cent. of the examinations, compared with 8·6 for 1935 and for 1934.

In accordance with the desire of the Board of Education, arrangements were made in 1933, by means of a small index card, to determine the number of *individual* children found unclean during the year, thus eliminating the possibility of counting separately the second or third record of uncleanliness in respect of any one child. The number of individual children so recorded was 85,300 (compared with 79,557 in 1935, and 83,207 in 1934), figures which represent all those children who were noted to be infested with live vermin or their ova. About 52 per cent. of the cases in which verminous conditions were recorded at the rota visits are stated to be infested with nits only.

There are 10 Council centres for cleansing, 20 Borough Council centres, and 9 centres organised by voluntary committees ; but, as the last named are limited to head cleansings, these are not equipped with sterilisers or baths.

The following particulars for 1935 and 1936 are in respect of the cleansing scheme operated from the Council's and Borough Councils' centres (as distinct from the " head " cleansing centres) :—

	1935	*1936*
Number of advice cards issued to parents from bathing centres ...	80,682	84,116
Number of children attending voluntarily at bathing centres after advice cards	41,603	44,583
Number of statutory notices served in accordance with section 87 of the Education Act, 1921	20,513	20,716
Number attending bathing centres after statutory notices :—		
(*a*) voluntarily	4,565	4,726
(*b*) compulsorily	14,661	15,641
Number of cases in which police court proceedings were taken ...	321	300

At the head cleansing centres 22,138 children attended during the year compared with 24,390 in 1935.

The figures in the above tabular statement are obtained from records kept on a terminal basis at each of the centres, and, as is the case with the rota inspection figures, a child may be recorded more than once in the same year. The *individual* record cards at the centres show that in 1936 a total of 66,464 children attended the bathing and head cleansing centres. Not all these children were, however, referred under various stages of the cleansing scheme, but a certain number attended voluntarily before their departure for the residential schools, country holidays, etc., or at the request of parents, teachers and others.

Children taken for compulsory cleansing are either accompanied to the centre by the school nurse or, in the case of outlying schools, taken by ambulances. In 1936, 12,284 children were conveyed in the ambulances.

Children suffering from scabies and impetigo are treated at the bathing centres. The total of such cases was 8,389 for the year, a considerable increase on the number for the previous year (6,435). Scabies and impetigo.

Co-operation with the medical officers of the City of London and the metropolitan boroughs in remedying verminous conditions in the homes of children has been continued.

The high incidence of scabies which shows further increase gives cause for concern. The difficulties in dealing with this scourge are great. While school children can be, and are, inspected, the disease, which is very contagious, affects older and younger members of the family who cannot be inspected; and, although they are offered facilities for treatment by the local sanitary authority, there is no means, other than persuasion, of ascertaining their condition or of bringing pressure upon them to take advantage of the facilities. The school children who have been treated return to homes where other members of the family are untreated and reinfection is frequent.

The co-operation of the sanitary departments of the Borough Councils in respect of simultaneous disinfection of homes is gratefully acknowledged.

In view of the increasing incidence of scabies, studies have been made, in three divisions, of the method by which the disease is spread. These studies are too detailed for reproduction in full in this part of the report. Dr. A. B. Francklyn has investigated all the records of children at two bathing centres in Paddington and Kensington during the years 1934–36. The number of histories investigated was 517. A summary of the results of the investigation is contained in the following paragraphs.

Girls were in excess of boys in the ratio of 57 to 43. The age incidence shows the disease mounting to age 6, remaining steady from 6 to 9, and decreasing from 10 onwards.

A case scrutiny of the source of contagion enabled a conclusion to be reached in about 50 per cent.; of these, were: scabies arising in the home and affecting older members of the family first, 26 per cent.; the purchase of second-hand clothing, 10 per cent.; playing with friends or relations outside the home who are known to have had scabies, 6 per cent.; visit on country holiday, hopping, etc., 6 per cent. Although many schools suffer to a greater degree than others, the evidence of spread in school is weak and inconclusive.

Spread of disease to separate families living in the same house does occur, but on analysis affects only a small proportion of the whole. It is not the rule and only occurs when the relation between the families is closer than usual.

Reinfection of cured children is a very disheartening problem. "Return" cases amounted to 20 per cent. of the children treated in 1936 at the Paddington centre. Of the return cases 27 per cent. are reinfected within one month, 30 per cent. between one and two months, 20 per cent. between two and three months, 11 per cent. between three and four months, 9 per cent. between four and five months and 2 per cent. between five and six months. Enquiry was made into the probable source of reinfection, and the following list of causes was drawn up on the information received:—

(*a*) Children of family not all treated simultaneously;
(*b*) Adult members of the family suffering from scabies;
(*c*) Bedding not disinfected or not disinfected during treatment;
(*d*) All articles of clothing, woollen toys, etc., not sent for disinfection;
(*e*) Chronically dirty families;
(*f*) Irregular attendance at the baths.

Dr. Francklyn draws the following conclusions from her survey: Overcrowding accounts for only a very small percentage of cases; the schools cannot be held responsible for any serious increase; a factor which seems to be at work in the recent increase of the plague is immigration from certain localities where this disease appears to be prevalent.

With a view to further control, Dr. Francklyn suggests that greater efforts should be made at early detection; special attention should be paid to "black" area schools by the school nurses; an educational leaflet to parents might be drawn up and distributed at the bathing centres; finally, greater and better facilities should be provided for the treatment of adult workers.

Dr. W. A. Scott, in a survey of scabies in the northern division, draws attention to the lateness with which many children come under adequate treatment. Such late cases are attended with severe sores and dermatitis and prove difficult to cure, whereas early uncomplicated cases are easy to cure. He finds that many cases have attended voluntary agencies for treatment, which has been quite inadequate, and has failed because simultaneous disinfection in the homes and sterilisation of clothes has not been carried out.

Ultimately such children arrive at the bathing stations in a debilitated condition, with a combination of corrosive burns, scabies, sulphur dermatitis and pyogenic infection.

Dr. Scott advises that the voluntary hospitals be asked to refer all cases of scabies immediately upon diagnosis to the Council's bathing centres. Regular visiting of all scabies children at the homes by the school nurses is urged, and the attention of teachers should be drawn to the necessity of referring immediately to the school nurse or doctor every case where rashes or broken skin are noticed on the children's hands or other exposed parts.

Warm baths.

A scheme by which children attend certain public baths of the Borough Councils for warm baths has existed for several years. Parties are formed with the consent of the parents and are accompanied by the school nurse, who excludes any suffering from contagious disease.

The number of children attending for warm baths during school hours in 1936 was 30,263, compared with 32,007 in 1935.

Chronic invalidity

The school attendance department reports each month the names of children who have been absent from school for three months or more on account of illness. Each year the cases on the list for the month of November are analysed, and the result gives the only index available of the causes of chronic invalidity in childhood.

The subjoined table shows the number of children reported to have been out of school for more than three months in November, 1936, and comparative figures for the four preceding years. The reduction in the numbers between 1933 and 1934 is due to the fact that the majority of the children who are ill for long periods are dealt with at the Council's special children's hospitals. In 1933 these were recognised by the Board of Education as hospital schools. The children who are at these hospitals are therefore no longer accounted "out of school," and no longer appear as in former years in the returns. This has special reference to tuberculosis and rheumatism.

The number of children (153) absent on account of rheumatism, chorea and heart disease still forms a very high proportion of the total, and proves how largely this group of diseases is responsible for ill-health in childhood, especially among girls, who account for half as many cases again compared with boys. These include children who are being nursed at home, are in voluntary hospitals or institutions, and in the Council's general hospitals. Since July, 1935, steps have been taken to expedite the removal of such children as were in the Council's general hospitals, where education is not provided, into the hospital schools.

The effect of this is seen both in the reduction of the numbers of rheumatic children who are not under instruction and the continued decline in the percentage of chronic invalids suffering from rheumatism compared with other diseases.

The very considerable decline in the last two years cannot, however, be wholly ascribed to the larger numbers brought under instruction in hospital schools, but is due to an appreciable extent to the preventive measures now undertaken to limit the ravages of acute rheumatism in the elementary school population.

Nervous disorders (including 19 cases of epilepsy and 2 of encephalitis lethargica) accounted for 58 children. Ringworm, formerly a chief cause of prolonged absence from school, accounted for only 2 cases, compared with 129 in 1919. Since the introduction of X-ray treatment for ringworm, the average length of absence has steadily declined, and consequent upon the shorter period of infectivity the danger of the spread of the disease has likewise diminished. Tuberculosis was the cause in 39 cases.

Among other ailments, respiratory diseases, other than tuberculosis, accounted for 37 cases, and ear disease for 19.

The total invalidity amongst girls is greater during 1936 than that amongst boys (309 to 264). There were 4 boy cripples and 4 girl cripples. These are children with spinal or lower limb disease who are either unable to walk or require assistance in walking, and are returned by the attendance officers simply as "cripples."

Amongst the "other defects" are certain numbers of deaf, blind and mentally defective children, who, after ascertainment, at the moment of taking the census had not been placed in special schools.

TABLE 19.—*Census of chronic invalids, November, 1936, and the four preceding years*

Ailment	Cases					Percentage of total				
	1932	1933	1934	1935	1936	1932	1933	1934	1935	1936
Rheumatism, heart disease and chorea	550	608	320	232	153	31·87	33·40	36·00	30·9	26·7
Nervous disorders	65	95	59	61	58	3·76	5·20	6·64	8·1	10·0
Tuberculosis (all forms)	219	209	79	67	39	12·68	11·50	8·90	8·9	6·8
Anæmia and debility	77	75	40	41	37	4·46	4·10	4·53	5·5	6·4
Ringworm	5	4	5	2	2	0·29	0·22	0·56	0·3	0·3
Skin complaints (excluding ringworm)	45	51	25	35	24	2·61	2·80	2·82	4·7	4·2
Eye disease	63	76	8	9	12	3·65	4·10	0·91	1·2	2·1
Infectious diseases	90	70	45	35	23	5·22	3·80	5·07	4·7	4·0
Other defects	612	632	307	268	225	35·46	34·88	34·57	35·7	39·5
Total	1,726	1,820	888	750	573	100	100	100	100	100

Infectious diseases in schools

Elementary schools

The numbers of cases of infectious illness reported by head teachers as occurring among children on the rolls of the day elementary schools during 1936, compared with similar figures reported during the preceding six years, are shown below :—

TABLE 20

Year	Diphtheria	Scarlet fever	Measles and German measles	Whooping-cough	Chicken-pox	Mumps	Ophthalmia
1930	5,297	7,558	34,251	3,239	13,573	9,439	506
1931	3,202	5,626	3,811	9,019	13,598	5,685	889
1932	3,338	6,832	34,922	7,624	11,440	8,016	649
1933	4,446	11,357	14,130	8,373	10,863	9,591	427
1934	5,439	8,850	37,701	5,029	10,283	6,354	554
1935	4,337	5,078	3,079	7,500	10,146	12,199	354
1936	3,268	4,852	32,089	7,303	8,659	7,844	473

The figures for ringworm are given later in this section of the report (page 40).

A reference to the numbers of cases of scabies and impetigo and the treatment of these diseases is made on page 35.

No case of smallpox was notified in London during the year. The last confirmed case occurred in June, 1934.

Special investigations into the occurrence of the infectious diseases specified in the following table were carried out by the school medical staff during the year :—

TABLE 21

Division	Diphtheria			Scarlet fever		
	Number of visits	Number of depts. visited	Number of children examined	Number of visits	Number of depts. visited	Number of children examined
N.E.	29	25	2,576	41	33	5,786
N.	46	36	3,324	26	21	2,302
N.W.	18	14	1,487	19	15	1,762
S.W.	39	31	2,625	34	20	3,307
S.E.	27	24	1,877	71	55	5,489
Total	159	130	11,889	191	144	18,646

The children in one school were specially examined from time to time on account of outbreaks of ophthalmia.

In addition to investigations by medical officers, valuable work was done by the school nursing staff in following up in the schools the medical officers' visits in connection with the occurrence of scarlet fever, diphtheria and ophthalmia, as well as in the special visitation of the schools under the measles scheme and of the schools where there were outbreaks of whooping-cough, chickenpox, mumps, measles, scabies and influenza.

Diphtheria

In the course of 159 visits paid by the school medical staff to 130 departments in elementary schools, 11,889 children were inspected and swabbings from the throat and nose of 3,596 selected children were taken for bacteriological examination ; 3,402 proved negative. In 194 (or 5·4 per cent.) bacilli morphologically resembling diphtheria were found in culture, and were isolated for virulence testing from 174 cases, 132 (or 75 per cent.) proving virulent and 42 non-virulent. In addition, 364 crippled or debilitated but otherwise normal children were swabbed, as a precautionary measure, prior to going to convalescent homes ; diphtheria bacilli were isolated in pure culture in five, one proving virulent and four non-virulent. Included among these two groups were 27 children from whose ears swabs were taken ; in two of them diphtheria bacilli were obtained but both proved non-virulent.

In 91 subsequent reswabbings of those previously positive, 40 still showed the presence of diphtheria bacilli ; virulence tests applied to 13 isolated cultures showed 9 virulent and 4 non-virulent.

Diphtheria "carriers" out-patient clinics.

The arrangements made with Guy's and St. Mary's, Paddington, hospitals for the treatment of diphtheria carriers at special out-patient clinics were continued during 1936, and similar arrangements were made for the treatment of carriers at the immunology department of the Hospital for Sick Children, Great Ormond-street. Carriers were first referred to this last-named clinic in July. The clinic at the London hospital was closed in May.

During 1936, 29 children from the Council's schools who were found to be harbouring virulent diphtheria bacilli were sent to these clinics. The medical officers in charge of the clinics have furnished reports on the methods of treatment employed and the results obtained. Some of the cases were found to have lost their carrying propensity by the time they reached the clinics. The persistent carriers all cleared up after intensive treatment.

Active immunisation against diphtheria.

Arrangements for immunisation against diphtheria are now made by all the Metropolitan Borough Councils, the work being carried out at infant welfare or special centres, or by arrangement with medical practitioners or voluntary hospitals.

The Council has assisted in propaganda in connection with this work by authorising the use of the school organisation for the distribution of leaflets issued by the Borough Councils.

A reference to the active immunisation against diphtheria of children in the Council's residential schools and homes appears later in this section of the report.

Scarlet fever.

The incidence of scarlet fever amongst the children on the school rolls was unusually low, 4,852 cases being reported, compared with an average of 7,550 for the preceding six years. There was an even distribution of the cases throughout the year, approximately 100 being reported during each school week.

A reference to immunisation against scarlet fever which is being carried out in three of the residential establishments for children appears later in this report.

Passive immunisation against scarlet fever and diphtheria at treatment centres.

References have been made in previous annual reports to the practice which has been carried out since 1933 at the Cyril Henry treatment centre of passively immunising children against scarlet fever and diphtheria with a combined antitoxin consisting of streptococcus and diphtheria antitoxins before tonsil and adenoid operations, with a view to the prevention of the occurrence of those diseases after the operations are performed. Owing to the occurrence of cases of post-operative scarlet fever at the Hanover Park centre, a similar procedure was begun there in October this year. Parental consent is obtained in each case.

The following is an extract from a report which has been received from Dr. H. R. Kidner, divisional medical officer :—

Particulars in regard to the Cyril Henry treatment centre, Woolwich, are set out below :—

Children attended	1,541
Operation deferred	223
Serum given	1,158
Serum not given because of—	
Recent attack of scarlet fever or diphtheria ...	5
Recent immunisation	6
Recent asthma	2
Parents refused consent	147

The sister in charge reported that four children had a slight serum rash during their stay at the centre, but were not detained.

Only one case of allergic shock has occurred. The child concerned was kept at the centre for a period of three days instead of the usual two days, and quickly recovered.

There were 408 children reported by nurses, after home visits, to have shown, in some degree, signs of serum reaction. Only two of these had severe reactions and these occurred three and six days, respectively, after the operations ; both children recovered in a few days.

No case of scarlet fever was reported to have occurred amongst any of the children who attended the centre.

At Hanover Park treatment centre, Peckham, immunisation commenced on 29th October, and the following particulars relate to the period from 29th October to 31st December, 1936 :—

Children attended	206
Operations deferred	47
Serum given	74
Serum not given because of recent immunisation ...	19
Parents refused consent	66

One child had a rash on the day after operation which disappeared before the evening, and 21 children had some degree of reaction but in none at all marked. One child was diagnosed as suffering from scarlet fever and chickenpox after the operation, but this child had not been injected.

Measles.

Reference was made in the last annual report to the epidemic of measles which began in London in the autumn of 1935. The epidemic continued until the schools closed in July for the summer holidays. During the period of the epidemic (9 months) 32,690 cases were reported from the schools, the attack rate per 1,000 children on the school rolls being 63, compared with 67 during the epidemic (9 months) of 1933–34.

A special report dealing with various aspects of the epidemic, such as incidence, mortality, treatment, and the use of serum for prophylaxis, is being prepared for publication.

Ringworm.

Cases of ringworm of the scalp occurring amongst children in the Council's schools are followed up by the school nurses and, if any difficulty is experienced in treatment by ointments and lotions, the parents are offered X-ray treatment under agreements made by the Council with certain voluntary hospitals and treatment centres.

The following table shows the number of cases of ringworm of the scalp among the children in the Council's schools reported during 1936 compared with preceding years :—

TABLE 22

Year	New cases	Cured cases	Cases outstanding at the end of the year	Percentage of cures effected by X-ray treatment
1926	1,029	1,141	228	76
1931	419	420	107	62
1934	265	281	65	73
1935	196	211	43	77
1936	190	187	44	67

During the year, 453 specimens of hair from school children were examined for ringworm at the laboratory at the County Hall. Ringworm fungus was found in 121 of these (84 small spore and 37 large spore).

Favus.

One case of favus was discovered after microscopical examination.

Play centres.

Close co-operation has been maintained with the Play Centres Committee, who were notified with regard to all schools where infectious illness was prevalent. The Committee have continued the scheme for the distribution of notices warning parents against sending children to the centres if they are unwell or are home contacts of infectious illness.

School journeys.

The special arrangements were continued for the medical examination of children before departure for school journeys. Particulars of the general arrangements made for school journeys during 1936 are set out on page 48.

Hop picking —infectious disease.

The measures taken in co-operation with the public health authorities in the home counties to prevent the introduction of infectious diseases amongst workers in the hop-fields, which have been described in previous annual reports, were continued in 1936.

Residential establishments for children

Approved schools and remand home.

Reference is made later to the cases of body ringworm which occurred amongst boys at two of the approved schools during the year. With this exception, the few cases of infectious diseases in these schools do not call for any comment.

Active immunisation against diphtheria was begun at Mayford and Gisburne House during 1936, and this preventive measure is now in operation at all the five approved schools.

Active immunisation against scarlet fever was continued at Mayford and a reference to the results obtained appears later.

Small groups of cases of scarlet fever occurred during the year at the remand home, and some cases of diphtheria developed in February. The inmates were kept under careful observation and swabbed where necessary. References to the occurrence of cases of vulvo-vaginitis at this home are made later in this report.

Residential special and open-air schools.

The few cases of infectious illness which occurred amongst the children at the residential special and open-air schools do not call for any special comment.

A reference to active immunisation against diphtheria at the residential special schools is made later in this report.

Residential schools, children's homes, and children's receiving homes.

The infectious diseases which occurred in anything approaching epidemic form in the residential schools, children's homes and children's receiving homes were measles at 3 schools and 1 receiving home during the epidemic period, German measles at 4 schools, chickenpox at 3 schools and mumps at 4 schools. Cases of infectious disease occurring in these establishments were immediately removed to one or other of the Council's hospitals, and all practicable steps were taken to control the spread of infection in the establishments.

The arrangements described in previous annual reports for sending infectious disease "contacts" to Earlsfield House children's receiving home have been continued. During the year, 129 children were admitted to the "contact" block at Earlsfield House. Of these, 22 developed the disease to which they had been stated to have been exposed, and 5 developed other diseases.

Active immunisation against diphtheria.

References have been made in previous annual reports to the scheme for active immunisation against diphtheria in the Council's residential establishments for children.

Although Schick-testing and diphtheria immunisation had for some years been applied at some of the residential schools and children's homes whilst they were under the control of the late metropolitan boards of guardians and at the training ship " Exmouth " which was under the control of the late Metropolitan Asylums Board, it was not until the " transferred " schools came under the Council's control that this preventive measure began in 1931 to be systematically put into operation in the 24 establishments under the care of the Council where children are permanently in residence, including the residential special schools and the approved schools. Immunisation has not been applied in the 2 receiving homes, the 3 residential open-air schools and the remand home, because the children do not stay in these establishments for sufficient length of time.

The materials employed for this prophylactic work, *i.e.*, the diphtheria toxin for Schick-testing and the formol toxoid used as immunising agent, are prepared at the Council's antitoxin establishment at Belmont, Surrey, under the supervision of Dr. R. G. White, the director.

The following analysis has been made of the numbers dealt with, and the results obtained, etc., during the period 1932–1935 :—

Among a total of 24 establishments, *viz.* 15 residential and approved schools, 8 children's homes and the training ship " Exmouth," between 1932 and 1935 there was an annual average of 5,864 children in residence.

During the four years, with the consent of parents, where necessary, a total of 7,567 were Schick-tested, *viz.* 4,554 boys and 3,013 girls, of whom 3,062 boys (67·2 per cent.) and 1,863 (61·8 per cent.) girls, proved Schick negative or naturally immune against diphtheria, whilst 1,492 (32·8 per cent.) boys and 1,150 (38·2 per cent.) girls were found Schick positive or susceptible to diphtheria.

In the various age groups of those tested from 2 to 16 years, among the total of 4,925 Schick negative (65·1 per cent.) the dates of birth were recorded in all but one, and among the total of 2,642 Schick positive (34·9 per cent.), the dates of birth were wanting in 7.

The percentage proportion in each year of age of Schick negative and positive cases tabulated according to sex was found to be as follows :—

TABLE 23

Age	Total tested		Percentage			
	Male	Female	Schick negative		Schick positive	
			Male	Female	Male	Female
2–3 years	164	111	30·0	24·4	70·0	75·6
3–4 ,,	249	202	39·8	39·1	60·2	60·9
4–5 ,,	219	211	47·1	45·0	52·9	55·0
5–6 ,,	225	196	56·5	51·5	43·5	48·5
6–7 ,,	254	198	60·5	58·1	39·5	41·9
7–8 ,,	258	216	68·5	63·0	31·5	37·0
8–9 ,,	310	218	73·3	68·4	26·7	31·6
9–10 ,,	375	226	75·4	68·0	24·6	32·0
10–11 ,,	409	268	78·3	71·7	21·7	28·3
11–12 ,,	400	245	72·0	66·5	28·0	33·5
12–13 ,,	528	259	72·7	76·0	27·3	24·0
13–14 ,,	580	303	74·8	66·7	25·2	33·3
14–15 ,,	412	199	72·0	68·5	28·0	31·5
15–16 ,,	144	138	73·6	74·7	26·4	25·3
16–17 ,,	22	20	72·8	70·0	27·2	30·0
		Age groups				
2– 5 ,,	857	720	44·2	42·0	55·8	58·0
6–10 ,,	1,606	1,126	72·2	66·3	27·8	33·7
11–16 ,,	2,086	1,164	73·2	70·0	26·8	30·0
No details of birth	5	3	—	—	—	—
Total	4,554	3,013	67·2	61·8	32·8	38·2

Active immunisation.

As the result of Schick-testing, it was possible to separate the total of 7,567 into two groups, a naturally immune group of 4,925, and the unprotected minority, numbering 2,642 (approximately 35 per cent. of the total), whom it was desirable to protect by means of active immunisation through inoculation with anti-diphtheria prophylactic. Formol toxoid was employed for this purpose in three subcutaneous injections of 0·2, 0·4 and 0·6 c.c. at intervals of 3 weeks between the first and second and 2 weeks between the second and third doses. Reactions following inoculations have proved negligible. Out of the total of 2,642 found Schick positive and later inoculated, 2,332 or 88·3 per cent. proved to be Schick negative or immune on subsequent Schick-testing about 4 to 6 weeks after completion of the course of three inoculations. Of those remaining Schick positive and therefore not yet protected, 78 were found to have become immune after receiving a further course of formol toxoid, yielding a total of 2,410 immunised. There was a balance of 232 children whose protection could not be completed by reason of their having left school.

During the years 1932–35 there was, therefore, a total of 7,335 individuals, who, for the time being, were known to be either naturally immune or who had become protected by active immunisation.

Incidence of diphtheria where immunisation has been introduced.

During the four years under review, which include the various periods since immunisation was begun in the individual schools, 274 children from the 24 residential institutions where immunisation has been introduced were removed to hospital as actual or suspected cases of diphtheria. As the result of subsequent findings these cases may be classified in the following three groups: (1) in 36, or 13·1 per cent., the infection subsequently proved not to be diphtheria; (2) 84 yielded bacteriological, but no clinical, evidence of diphtheria (of these 46 had not been Schick-tested while 38 had been tested, 25 proving negative and 13 positive; 9 of the latter had been immunised and later proved Schick negative; in the remaining 4, immunisation had not been completed); (3) 154 were recognised as suffering from clinical diphtheria, 108 of whom had not, for various reasons, been Schick-tested or immunised. In 66 the parents had either refused or not given consent, and four proved fatal; in 9 consent had been given, but the attacks developed before there had been time to immunise the children; in 33, other illness had prevented their immunisation.

Of the 154 clinical cases 46 had been Schick-tested or had received prophylactic inoculation. Nineteen had been found Schick negative at the time of testing, these times ranging from as long as 7 years previously to as short a period as 1 week prior to the attack of diphtheria developing. The intervals were: in one case 7 years, in 8 cases 1 to 3 years, in 6 cases 6 to 9 months, in 2 cases 1 and 3 months, and in two cases only a week. The clinical type of diphtheria which occurred in these 19 previously Schick negative cases was described as severe faucial in 2 cases, faucial in 7, mild or modified faucial in 5, and nasal in 5 cases. None of the 19 Schick negative cases proved fatal.

Diphtheria in "immunised" individuals.

Of the clinical cases, 27 had proved Schick positive, and 15 of them had received the full immunising course of formol toxoid inoculation, and, after evidence of successful immunisation, had subsequently been found Schick negative, at intervals ranging from 4 years in 7 cases; 1 to 3 years in 3 cases; 11, 9 and 3 months in 3 cases; and 1 month in 2 cases. The type of case was described as faucial or clinical, but not severe, in 13 cases, and mild or modified diphtheria in 2 cases. In the remaining 12 Schick positives, the immunising course had not been completed before the onset of the attacks; the type of case in 10 of these was described as mild 1, moderate 1, severe 1, nasal 4, faucial 3. None of the 27 cases originally Schick positive proved fatal.

The following is a summary of the progress of the work during 1936 :—

TABLE 24

Classification	Residential schools and children's homes	Residential special schools	Approved schools
Number tested for susceptibility to diphtheria ...	1,138	200	445
Number found to be immune	488	133	330
Number found to be susceptible...	650	67	115
Number who completed the full immunising course and gave negative reactions on re-test	342	46	45
Number who left the schools before course of injections had been completed	130	2	11
Number outstanding on 31st December, 1936, who had received one or more injections and whose course of immunisation was to be completed in 1937 ...	178	19	59

During the year 1936, 27 children were removed to hospital as actual or suspected cases of diphtheria. Of these, 9 subsequently proved not to be diphtheria, 15 were recognised as suffering from clinical diphtheria and 3 were carriers.

The following is an analysis of the 15 clinical cases :—

Classification	*Hospital diagnosis*		
Schick negative on preliminary test	Faucial	1	
	Mild faucial	1	
		–	2
Schick negative after course of prophylactic injections	Severe faucial (onset was 16 months after course of prophylactic injections)		1
Course of prophylactic injections not completed	Diphtheria and scarlet fever	1	
	Moderate tonsillar... ...	1	
	Severe (child died) ...	1	
		–	3
Not Schick-tested	Acute nasal	1	
	Mild faucial	4	
	Faucial	2	
	Mild	1	
	Tonsillar	1	
		–	9

Duration of immunity conferred by prophylaxis.

To ascertain the duration of immunity conferred by prophylaxis, 316 children who were stated to have been Schick negative after receiving a course of prophylactic injections were again re-tested during 1936. The intervals which had elapsed between the time of active immunisation and the re-test ranged from 9 months to 12 years and the results obtained were as follows :—

Interval after post-immunisation Schick negative test	*Result of later Schick test*	
	Negative	*Positive*
10–12 years	3	0
5–10 „	14	1
3– 5 „	41	0
2– 3 „	133	7
9 months to 2 years	112	5
Total	303	13

It will be noted that, of the total of 316, 303, or 95 per cent., proved to be still Schick negative, and only 13, or 4·2 per cent., had reverted to Schick positive.

Immunisation against diphtheria of members of the staff.

During the year 1936 out of a total of 1,571 staff, whose ages ranged from 18 to 65, 360, or nearly 23 per cent., asked to be Schick-tested, and immunised if necessary. Of these, 153, or 42·5 per cent., proved to be Schick positive and underwent the immunisation course.

Although, in the case of children, reactions following inoculation have been negligible with scarcely any exception, some instances have been reported among

the adult staff of occasionally somewhat severe local reactions, insufficient, however, to necessitate absence from duty.

Active immunisation against scarlet fever.

Active immunisation against scarlet fever was continued during 1936 at both Mayford approved school and Shirley residential school.

The results of the work at the two establishments during 1934 and 1935 were recorded in the last annual report. On account of the occurrence of a number of cases of scarlet fever amongst the children at Ongar residential school, immunisation against the disease was commenced at that school in December, 1936. The results obtained at Mayford and Shirley during the year, and at Ongar during the final 3 weeks of the year, are shown below :—

	Mayford	*Shirley*	*Ongar**
Average number in residence	159	500	240
Tested for susceptibility	89	152	49
Parental refusals	25	2	–
Number (and percentage) of susceptibles found	34 (38·2)	75 (49·3)	8 (16·3)
Negative after normal course of injections	12	26	–
Negative after further injections	3	–	–
Left school before normal course of injections had been completed	1	13	–
Uncompleted at end of the year	18	36	8
Cases of scarlet fever—			
Among those not tested or immunised	1	1	–
Among those tested or immunised—			
Before completion of course of injections	–	–	–
After completion of course of injections	–	1†	–
Negative after preliminary test	–	–	–

* Immunisation commenced 8.12.36
† 4 months after completion of course of injections

Vincent's angina.

During the early part of the year 5 children from Leytonstone children's home who were transferred to the Eastern hospital with measles were found to have Vincent's angina. The medical officer of the home thereupon took swabs from all those children who had unhealthy gums. Of these, 26, presenting varying degrees of gingivitis or inflammation of the buccal mucosa, were found to show on microscopical examination the organisms associated with Vincent's angina, *i.e.*, spirilla (Borrelia Vincent's) and B. fusiformis, some more abundant than others. In 4 other clinical cases no specimens were submitted for bacteriological examination. In all, there were 30 children, in addition to those certified after removal to hospital, who were reported to be suffering from Vincent's angina ; 23 of these were treated in the infirmary of the home ; and 7 were removed to the Eastern hospital. Major-Gen. Helliwell, the Council's consulting dental surgeon, carried out an investigation at the home, and arrangements were made for treatment daily by a visiting dentist of those children who were retained at the home. The cases came from 5 different houses and some of them, though not showing any clinical symptoms, continued to be bacteriologically positive until late in the summer.

It is interesting to note that 4 children at Hutton residential school developed Vincent's angina (throat), that one of these had been transferred from Leytonstone and that the other three children were contacts of this child.

Vulvo-vaginitis.

During the year 28 cases of vulvo-vaginitis were reported amongst the girls in the residential establishments (excluding the remand home). Of these 28 girls, 14 were sent to hospital for observation, and 6 of the other cases were detected after admission to hospital for other conditions. No evidence of gonococcal infection was found in any of the cases. There were 59 cases of vulvo-vaginitis reported from the remand home, all of which were removed to hospital. Bacteriological or clinical examination revealed evidence of gonococcal infection in 19 of these cases.

A number of cases of body ringworm were reported during the summer from Ardale approved school and later in the year from Mayford approved school, and a visit was paid to the former school by the consulting physician for skin diseases (Dr. A. M. H. Gray). The following are extracts from his report :— Body ringworm.

The boys were suffering from varying degrees of infection mostly confined to the groin, but in a few cases affecting the axillæ or showing small patches in other parts of the body. In about two-thirds of the cases definite evidence of tinea infection between the toes was present, varying from slight scaling up to a considerable eczematous reaction. Sporadic cases of tinea cruris are generally direct infections from a pre-existing tinea of the toes, the patient infecting himself with his own towel. Cases of tinea of the toes are almost universal in institutions containing boys of the ages found at Ardale. Anything up to three-quarters of the boys in such an institution may be infected. The symptoms are usually slight and it is very rarely that anybody worries about them, although they are clearly a potential source of danger. When, however, tinea cruris occurs in epidemic form it is almost certain that the infection is from individual to individual and is not a case of each boy infecting himself from the toes, even though the majority of the cases may have had toe infection for a considerable time. A source of infection of these cases is nearly always the clothes. When the disease was first described it was called "dhobie itch," as it was supposed to be transmitted by washermen, a view which has a good deal to support it. The ringworm fungus responsible for this condition is extremely viable, and will survive outside the body in scales almost indefinitely. It has been cultured from scales a year after they have been shed. Boiling for a quarter of an hour should certainly destroy all the fungus (Weidman has stated that the fungus is destroyed in 10 minutes at a temperature of 48° C.), but it is possible that in some of the laundry machines the required heat does not sufficiently penetrate the whole thickness of the clothes. Nor am I convinced that the infection is likely to spread in baths. The ordinary swilling down of the bath or half bath by a general flush of water almost invariably takes away any loose scales, and I know of no infection of this kind being transmitted from the bath itself. On the other hand, there is no question that infection of the toes is mainly transmitted from the floors of bathrooms and swimming baths, and this risk is, of course, equally great with a shower bath, so that in some American institutions nobody is allowed to walk barefoot on any floor and must always wear rubber shoes when in the bathing establishments, or, alternatively, they are made to walk through an antiseptic solution. I think in any case it is extremely difficult to stop the spread of toe infection in this way, and the only reasonable line is to see that treatment is constantly applied to any infected areas so as to prevent the spread of infecting material. It is doubtful if toe ringworm can be entirely eradicated in such institutions, as there will always be cases in new boys and in many cases the nails are affected. These are difficult or almost impossible to diagnose, and when diagnosed require the most drastic treatment, such as evulsion of the nail. The disease is in itself not a serious one, and I believe that if the cases were systematically treated infection would die out. I note that a similar epidemic is occurring at the Mayford approved school, and I am inclined to think that climatic factors may have enhanced the activity of the fungus that so many of these boys harbour in their feet. If this is the case the virulence may again subside.

Dr. Gray suggests that the most effective method of dealing with the cases is to paint each patch with Castellani's fuchsin paint. He states :—

In my experience this has many advantages over iodine and ammoniated mercury. It is less irritating than iodine, it is in liquid form and can be painted on, which is more efficient than rubbing in an ointment, and it has a bright colour so that it can be seen that each patch is treated. Also in my experience it is one of the most rapid methods of curing the patches.

Open-air education

Lively interest has been shown during 1936 in methods of open-air education. Agencies active in stimulating this renewed interest have been the London Open Air Schools Association and the meeting of the Third International Open Air Schools Congress at Bielefeld, Hanover (18th–23rd July).

Provision for education in the open air includes nine day open-air schools (non-tuberculosis) with accommodation for 1,460 children, and six day open-air schools (tuberculosis) accommodating 515 children. There are also seven country and seaside convalescent camp schools, accommodating 520 children for periods varying from one to three months, through which 4,337 children pass annually ; and 224 open-air classes in playgrounds and parks providing for upwards of 6,000 children. Provision.

Open-air schools for non-tuberculous children.

The nine day open-air schools for non-tuberculous children maintained by the Council have continued their excellent work. The following table gives the roll of these schools in December, 1936 :—

	Boys	*Girls*	*Total*
Aspen House ...	90	61	151
Bow Road ...	97	86	183
Brent Knoll ...	75	21	96
Charlton Park ...	94	53	147
Downham ...	92	59	151
Holly Court ...	187	106	293
Stowey House ...	170	101	271
Upton House ...	95	52	147
Wood Lane ...	93	60	153
Total ...	993	599	1,592*

**Note*—The roll of an open-air school may be 20 per cent. above the nominal accommodation.

Plans have been approved for the rebuilding of Bow-road school.

Open-air schools for tuberculous children.

In addition to the provision of treatment for tuberculous children in residential institutions, the Council has the use of the open-air schools (Type T) specifically for children with quiescent tuberculosis and for those suspected to be suffering from tuberculosis or living in conditions rendering them particularly liable to the disease. The tuberculosis officers of the areas in which the schools are situated serve as medical officers of the schools and pay weekly visits to them.

The six schools—Elizabethan (Fulham), Geere House (Stepney), Kensal House (Paddington), Springwell House (Battersea), Stormont House (Hackney), and Nightingale House (Bermondsey)—have a total nominal roll of 618. The number on the roll on 31st December, 1936, was 546, and the average attendance for the year was 467.

Admission to these schools is granted on a certificate of the medical officer of the Council, and children returning home after a period of residential treatment in sanatoria are given preference. During the year 1936, 187 children were admitted and 174 discharged. Of the latter, 54 were transferred as fit to attend elementary schools, 82 were fit for work, 32 moved away, 4 were transferred to other special schools, and 2 were discharged for other reasons (*e.g.*, the distance was found to be too great for the children). During the year 65 children were also transferred to institutions for residential treatment for tuberculosis or admitted to hospitals for various reasons.

Efforts were made to secure that, during 1936, every child in attendance at these schools should have a holiday out of London either by means of private arrangements or through the school journey organisation.

The following school journeys were made during the year, through the ordinary school journey organisation :—

TABLE 25

School	Period		Place visited	No. of children
	From	To		
Elizabethan open-air school	5.6.36	19.6.36	St. Leonards	47
Geere House (Mixed)	6.6.36	20.6.36	Ewhurst	20
,, ,, (,,)	30.6.36	14.7.36	St. Albans	20
Kensal House	3.7.36	17.7.36	Broadstairs	73
Nightingale House (Mixed)	19.6.36	3.7.36	Margate	64
,, ,, (,,)	4.9.36	18.9.36	Tankerton	29
Springwell House	28.8.36	11.9.36	Broadstairs	94
Stormont House (Mixed)	22.5.36	5.6.36	Tankerton	30
,, ,, (Boys)	3.7.36	17.7.36	,,	25

In addition, provision was made for a further 49 children in accommodation specially set aside for the purpose at Millfield convalescent hospital, Rustington.

They went in two parties for a fortnight each, from 3rd to 17th July and 4th to 18th September. The accommodation thus utilised was designated for the period, "The Holiday School."

Only a very small residue of children failed to receive a holiday for various reasons, such as removal from district, private arrangements for holiday failing to materialise, etc.

Convalescent camp schools.

The numbers of children spending a period of stay at the residential convalescent camp schools during 1936 were : boys, 2,863 ; girls, 1,678 ; total, 4,541.

In detail the numbers were :—

Provided schools :—	*Boys*	*Girls*
King's Canadian school, Bushy Park ...	2,778	—
George Rainey, St. Leonards	—	517
Wanstead House. Margate	—	533
Total	2,778	1,050

Non-provided schools :—	*Boys*	*Girls*
Fairfield House, Broadstairs	—	80
Russell Cotes school, Bournemouth ...	—	264
St. Vincent's, Hastings	—	152
Sandon Home, Chelmsford	85	132
Total	85	628

The actual number of children away at these schools *at one time* in 1936 was : Bushy Park, 249 ; Margate, 63 ; St. Leonards, 63 ; Bournemouth, 30 ; Broadstairs, 20 ; Hastings, 10 ; Sandon, 20. Total, 455 children, of whom 206 were girls and 249 boys.

The small home at Sandon accommodates the children needing a country holiday from the various types of special schools.

The report of an interdepartmental committee on "Length of stay at residential open-air schools" was issued in June, 1936. Amongst the recommendations were : increase in the provision for girls, and a uniform stay of six weeks at the ordinary residential open-air schools for both boys and girls. Separate provision for children under eight years was also recommended.

As a result of the Education Committee's consideration of the report, the length of stay of boys at the King's Canadian camp school, which was limited during the summer months to four weeks, is to be increased to six weeks throughout the year. This will result in reducing the number of boys who will be sent during the year, but will, it is believed, give more lasting benefit.

Open-air classes in parks and playgrounds.

The number of open-air classes held in connection with the elementary schools in 1936 was 224. Of these, 12 were of type A (children selected on medical grounds from a group of schools) ; 106 were of type B (children selected on medical grounds from the various classes of a single school) ; 25 were of type C (consisting of a single class from one school, educated continuously at one open-air station) ; and 81 of type D (consisting in a rotation of classes from one school occupying one open-air station).

Ten classes are permanent, that is to say they are outside the yearly programme and do not need re-authorisation each year. In addition, 79 of the 224 classes were continued throughout the winter, where the suitability of the sites had been approved by the school medical officer. Of the 224 classes, 75 were held in parks, gardens, playing-fields and other open sites, while 149 were held in school playgrounds, of which 34 were roof-playgrounds.

Remarkably fine work has been done, among other schools, at the Columbia-road junior boys' school in Bethnal Green, where the headmaster and his assistants have shown great enthusiasm. The open-air class conducted on Hackney marshes

between October, 1935, and October, 1936, consisted of 38 boys who made an average gain of 12·32 kilograms, while a control class working under ordinary conditions but otherwise as nearly comparable as possible made an average gain of 9·35 kilograms only.

Convalescence

In addition to the provision for children at residential open-air schools, there is now a large provision for convalescence in institutions of the Council's special hospitals service.

This is one of the benefits of inestimable value which the Local Government Act, 1929, has bestowed upon the school children of London. The institutions were formerly maintained by the Metropolitan Asylums Board and were restricted in their use. Now they are open to children referred through the school medical service. Full advantage is being taken of them by the elementary school children, and the resources of the service for promoting the welfare of the school population are thus immensely increased. In the year 1936, 4,509 children were discharged from convalescence at the undermentioned Council's hospitals.

Institution	*No. of children discharged from convalescence in* 1936
St. Anne's home	1,339
Goldie Leigh hospital	231
Downs hospital for children	515
Lower Southern hospital	1,829
Princess Mary's hospital for children ...	188
Millfield convalescent hospital	407
Total	4,509

Except at the Lower Southern hospital, education is provided for the convalescent children and the institutions are recognised by the Board of Education as hospital schools. Princess Mary's hospital was closed during the latter part of the year.

In addition to the provision detailed above, the Council has agreed to pay grants to the Invalid Children's Aid Association on account of certain children convalesced by the Association. This provision came into operation in May, 1935, and in 1936 grants to the Association in respect of a maximum period of eight weeks' convalescence were authorised for each of 1,315 children.

Lower Southern hospital is primarily an infectious diseases hospital, and the continuance of convalescent arrangements here cannot be counted upon all the year round.

The opening-out of this provision for convalescence has indeed been a boon to London children, and it has greatly mitigated the sense of frustration which afflicted social workers and officers alike when faced with the long delays and checks, which formerly so frequently occurred and so hampered the work of children's care.

In the words of the Annual Report of the Social Service Department of St. Thomas's hospital: "No longer is there the heart-breaking experience of a child waiting and waiting to go away for the treatment which is urgently required, and losing ground because of the delay; but, on the contrary, it seems always possible in London for something to be arranged with great speed, either through the London County Council or through some voluntary organisation."

School journeys

The teachers in many schools voluntarily organise arrangements by which children are taken during term time to hostels and camps in the country or by the seaside, for periods generally of two or three weeks. The Council has directed that the school medical service shall assist so far as is possible with this excellent work.

In 1936, 460 school journeys were projected, of which 430 were to homeland and 30 to continental resorts. The children taking part were medically examined

in 397 cases before departure. In all 13,133 children were examined, and of these 66 were excluded as unfit to take part in the journeys on various grounds, of which ear discharge, impetigo, scabies and dental unfitness accounted for most. Several children were provisionally rejected on grounds connected with personal hygiene but were subsequently passed after visiting a bathing centre. Separate figures are given on page 46 respecting the school journeys from open-air schools for tuberculous children.

Physical education

Attention has been concentrated in 1936 on the interlocking problems of nutrition and physical education. Pronouncements by members of the Government, the impending issue of the Government's scheme and debates in the Houses of Parliament all contributed to this welcome interest in the physical condition of the people, the improvement of which is the aim and object of the school medical service.

In April, 1936, was issued the report of the Physical Education Committee of the British Medical Association. This report strongly recommended that research into the physiology of physical training should be undertaken. In the Government's scheme it is proposed that among the activities of the National College shall be the investigation of such problems. The British Medical Association also stressed the desirableness of a far closer relation than has hitherto obtained being established between physical education and the work of the medical profession.

It seems most desirable that school medical officers should be given greater opportunities to identify themselves with the physical activities of the schools. Physiologists have hastened to stress the dependence of physical fitness upon proper nutrition, and this dependence makes the correlation of physical education and work of the school medical service of great importance.

The habitual postures shown by the children in school, when unaware that observation is being made, give important indications of the efficacy of the scheme for physical education. Many school doctors have reported that considerable differences in this respect are found between school and school, for which no cause can be found other than the varying importance attached to physical education and the thoroughness with which it is carried out.

Posture of children in elementary schools.

The following is a brief account of observations made by Dr. Batten in the course of routine medical inspections on the posture of children in eight elementary schools, mostly in Paddington.

These observations have accumulated during the course of several months, and are now summarised here. They relate to 674 children, each of whom has been placed in one or other of the four categories defined below.

Posture 1.—The ideal posture, as illustrated in any good book on physical culture. Head erect, mouth closed, chest expanding well in inspiration. The appearance of a "straight back and flat belly" in profile, *i.e.*, normal dorsal and lumbar curves and normal abdominal contours; arms hanging easily between the anterior and posterior axillary lines, shoulder blades lying flat on the back without conscious effort. An appearance of good muscle tone. Almost invariably a facial expression of alertness and confidence was also present.

Posture 2.—Neutrals rather than normals. They show no actual fault, but definitely lack the positive good qualities of class 1.

Posture 4.—The posture of an asthenic, hypotonic or thoroughly unathletic child, almost always displaying facial or other evidence of either apathy or timidity, or an excessive shyness or lack of confidence or of personal pride. In detail: head poked forward or hanging, dorsal and lumbar curves exaggerated with appearance of round back and shoulders, flat or hollow chest and prominent belly. Scapulæ widely separated with shoulders forward and sometimes hunched up; shallow breathing and often mouth breathing are frequent accompaniments.

Posture 3.—Some or perhaps all of the above faults, definitely present but in slight degree.

The distribution of the children in these categories is as follows:—

	No.	*Percentage*
Class 1	296	43·9
,, 2	277	41·1
,, 3	96	14·3
,, 4	5	0·7
Total	674	100·0

The age and sex of 490 of them have been noted, and can be related to their posture in tabular form :—

TABLE 26

Age group	Total	Number in class				Percentage in class		
		1	2	3	4	1	2	3 and 4
Boys.								
Leavers	52	26	20	6	0	50·0	38·5	11·5
11 years	48	18	21	9	0	37·5	43·7	18·8
7 and 8 years	38	14	16	7	1	36·8	42·1	21·1
Entrants	81	26	42	13	0	32·1	51·9	16·0
Total	219	84	99	35	1	38·4	45·2	16·4
Girls.								
Leavers	56	28	21	7	0	50·0	37·5	12·5
11 years	83	36	40	7	0	43·4	48·2	8·4
7 and 8 years	27	14	9	4	0	51·9	33·3	14·8
Entrants	105	48	40	15	2	45·7	38·1	16·2
Total	271	126	110	33	2	46·5	40·6	12·9
Boys and Girls.								
Leavers	108	54	41	13	0	50·0	38·0	12·0
11 years	131	54	61	16	0	41·2	46·6	12·2
7 and 8 years	65	28	25	11	1	43·1	38·5	18·4
Entrants	186	74	82	28	2	39·8	44·1	16·1
Total	490	210	209	68	3	42·8	42·7	14·5

Observations such as these are necessarily open to criticism in that the standards employed cannot be defined precisely, and that the comparison of the children depends on the judgment of a single observer. None the less, they have a definite value as representing the considered opinion of an experienced school doctor. They show several points which are of interest :—

(1) Some 40 per cent. of the children have really good posture.

(2) In this respect the girls are rather better than the boys. The advantage is apparent in each of the age groups examined except the leavers, of whom 50 per cent. of both boys and girls are in class 1.

(3) Definite defects of posture are also less prevalent among the girls than among the boys. They have been found in 15 per cent. of the total.

(4) Taking boys and girls together, it may be said that posture improves as age increases, the entrants making the worst showing and the leavers the best.

By way of comparison, it is interesting to recall that Bywaters and Wood,* after examining 1,600 12-year-old children, reported to the Board of Education that 75 per cent. of them showed a greater or less deviation from the standard posture, and that only 11·4 per cent. were passed as having good posture. In this inquiry the boys were found to be better than the girls.

Report of the organisers of physical education.

The biennial report of the organisers of physical education (Mr. A. H. A. Gem and Miss Grant S. Clark) for the two years ended September, 1933, was summarised in my annual report for 1933. The organisers' report for two years ended September, 1935, was presented to the Education Committee in May, 1936. Mr. Gem and Miss Clark have kindly supplied me with the following brief survey :—

Owing to the limitation of space it is impossible to review the progress of physical education in all types of school, and this brief survey will therefore concentrate on certain aspects of the work in elementary and secondary schools.

Elementary schools

The 1933 syllabus.

The feature which has dominated the work in the elementary schools has been the issue, by the Board of Education, of the 1933 syllabus of physical training. The release of this publication was foreshadowed in the last report, and details were given as to the position of the schools in relation to the newer type of work.

The first task which faced the organising staff was to disseminate, throughout London, information with regard to the main features of the syllabus. The area to be covered was large and the staff available all too small. The problem was how to spread the information quickly. Teachers wanted to know about the "new syllabus" before it became an "old syllabus."

* *The Posture of School Children. The Health of the School Child*, 1932, p. 92 *et seq.*

Propagation of information by means of teachers' classes must inevitably be a slow process, whilst for this purpose school to school visiting was out of the question with the existing staff.

Abnormal methods had, therefore, to be adopted in an attempt to get an immediate result. Firstly, the Council supplied a free copy of the new syllabus to every teacher responsible for conducting physical training. Secondly, conferences of head teachers were held in every district in London, each under the chairmanship of the district inspector, and the head teachers of infant, junior, senior, unreorganised and central schools attended. At these conferences the organisers of physical education explained the general plan of the syllabus, illustrated many of the newer features, and then points of general interest were discussed. In this way, all head teachers had the opportunity of obtaining immediate information with regard to the new publication.

In addition to these conferences for head teachers, the programme of teachers' classes was extended to the greatest possible extent, and the enrolment for these courses has been exceptionally large; in fact, many teachers have failed to obtain admission. The number of courses which can be held must be strictly limited, whilst the number admitted to any given course can never be large.

Various teachers' associations and other bodies interested in education have shown much initiative in arranging special conferences to hear about the new syllabus. The organisers of physical education have addressed many such meetings.

A demonstration was also arranged for the Council's school medical staff in order to give the doctors an opportunity of seeing the newer type of work which is gradually being spread throughout the schools. Approximately 60 school doctors attended in addition to senior medical officers of the service.

Members of the Education Committee were also invited to witness demonstrations of infant, junior and senior work at the Council's College of Physical Education.

As many schools as possible have been visited, and such visits generally conclude with a staff conference and a demonstration of work.

These in brief are the steps which have been taken to introduce the 1933 syllabus of physical training, and there are signs that the newer type of work is already being successfully tackled in many of the Council's schools.

In regard to the syllabus itself, the importance of good posture has been stressed, and there are three main features which contribute to this desirable end :—

(1) In an endeavour to obtain reasonably supple bodies, a wide variety of movements performed with a rhythmical swing have been introduced.

(2) The importance of the hip and abdominal muscles has been emphasised and many abdominal exercises have been included in the syllabus.

(3) There is a fuller realisation that it is essential for the teacher to see the body of the child on which he is working, and with this end in view a far more sensible dress is suggested. One of the problems for the future is to provide the necessary shoes and clothing.

Turning to the general activity side of the lesson, it is found that wider use of group and individual practices is suggested.

Accommodation.

A most progressive policy has recently been adopted so far as accommodation for physical training is concerned. In the past the work has had to be conducted either in the playground or else in the school hall, and this practice is bound to continue in the great majority of the existing schools. In all new senior schools, however, and in those senior schools due for modernising or rebuilding a much more liberal provision is being made. Such schools will, in future, have a gymnasium. Changing rooms fitted with a limited number of shower baths, together with a changing room for the teacher and an apparatus store, are also being constructed. This provision marks an important advance on the standard planning previously in force, and several of these new gymnasia have already been completed, whilst many are in the course of construction.

In future the size of playgrounds will also be increased and pits for long and high jumping will be provided.

It is urged that the problem of the new junior school shall not be overlooked. The need for a physical training room in such departments is also great, particularly in the case of mixed schools. In wet weather they are faced with a real difficulty. The boys and girls usually separate for their physical training: one group works in the hall and there is thus no accommodation for the other. The result is that either the boys or the girls miss their physical training when the weather is bad. A physical training room would obviate this defect.

Allocation of time.

A considerable advance has been made with regard to the amount of time devoted to physical education. A circular has been issued by the Education Committee to all elementary schools urging the head teachers to provide a daily period of organised physical activity for all children. It will be appreciated that many schools had already made such provision, and it is hoped that every department, where staff and premises permit, will now allocate a daily lesson.

Swimming.

Increasing advantage is being taken of the facilities provided for swimming, and the construction of several new baths has proved of inestimable benefit to a large number of schools. At the start of reorganisation, there was a real danger of junior schools ceasing to take swimming owing to the age rule governing the attendance of children at the baths. This rule was, however, relaxed, and the response on the part of the junior schools was immediate. Enthusiasm has been well maintained, and some excellent swimming lessons have been seen during the past two years.

Improvement is most noticeable in respect of the organisation of the lessons. There is far less tendency to allow children to teach themselves to swim, and a greater appreciation of the

fact that the first essential is to concentrate on the non-swimmers. Instruction is thus planned on class rather than on individual lines. Far better use is being made of the cleansing and lavatory facilities, and it is quite usual now to find the teacher requiring every child to use the footbath and lavatory before entering the pool.

Games.

For years past the question of giving the elementary school children adequate games has been a most difficult problem. At one time, the pitches provided in the parks were the only ones available for this purpose, and the games played were almost entirely confined to football and cricket for the boys, and netball for the girls. It was, however, evident that only the fringe of the problem could be touched in this way, and in fact the proportion of classes visiting the parks has remained more or less constant for many years.

The declared aim of the Council is to ensure that every child from 10 to 14 years of age shall be able to play a game on a grass pitch once a week, and with a view to establishing this ideal the " classroom playing field " scheme, which began some years ago, is being rapidly developed. Under this scheme the children spend a whole day on the field, dividing the time between games and ordinary work in the classrooms, which have been built on the site. Since the scheme was started playing fields of this type have been provided at Streatham Vale, Downham, Honor Oak, Hackney Marsh, Kidbrooke and Friern Barnet, whilst similar facilities have been rented at Bellingham. It is anticipated that a considerable extension of these facilities will take place in the near future.

Secondary schools

Accommodation.

Considerable progress has been made recently, and whereas for some years past many schools had been inadequately provided with accommodation, the position promises to be much improved in the near future. New fully equipped gymnasia, together with adequate changing rooms, shower baths, apparatus stores and teachers' changing rooms are scheduled to be constructed at 14 schools. When these gymnasia are completed they will prove of enormous value to the schools concerned, and a definite increase in the efficiency of the work may be confidently anticipated.

The playing-field problem has also received close attention and extended facilities have been provided for nine schools, whilst further very considerable extensions are scheduled. The question of providing adequate pavilions fitted with " trough " baths and showers is also receiving close attention.

Marked progress has been made with regard to the playing of games, and it is noticeable that the schools generally are trying to ensure that every boy has the opportunity of taking part in the games as frequently as available facilities permit.

Allocation of time.

Whilst some improvement is noticeable so far as the allocation of time for physical education is concerned, the present position still leaves a great deal to be desired. It is rare to find more than two periods a week allowed for physical training, in addition to the time devoted to games, whilst some fail to give even this moderate allowance : especially is this the case so far as the senior forms are concerned.

In the Board of Education circular 1445, it was urged that three periods a week should be devoted to gymnastic training in addition to the time set aside for games and swimming. It should be pointed out, however, that many schools are anxious to make more liberal provision, but are unable to do so owing to the lack of staff and accommodation. It has to be realised that, speaking in general terms, one specialist teacher (or the equivalent) is necessary for every 30 physical training periods a week. Thus every school of over 10 classes will need some additional staff if the full programme is to be adopted. Similarly, extended accommodation would be required, as a gymnasium can only be used for some 35 periods a week ; in the course of time it would appear necessary to provide the larger schools with a second gymnasium.

On the other hand, some schools state that the increased time cannot be given owing to the pressure of examinations. It is presumably held that if more time is devoted to physical training the general academic work will suffer. Even if this were the case, the undoubted advantages which should result from the physical angle might be considered an adequate offset to such loss.

It is, however, a question whether such a loss would occur, and it is submitted that the contrary might be the case. The Board of Education have recently been carrying out an experiment with a view to deciding this issue and, although the full results are not available as yet, there are some indications that this increase of physical training time may not lead to a loss.

Provision of meals

Dinners are provided for necessitous children attending school, and follow menus which have been approved by the school medical officer.

Samples of meals provided are taken from time to time and submitted for analysis by the Council's chemist, the required standard being that each complete meal should contain 25 grammes protein and have a heat value of 750 calories.

From a return made by the education officer for one particular day, 11th December, 1936, the following information is obtained :—

TABLE 27

Type of school	Number of children receiving dinners				
	Free	Full payment	Part payment	Paid for by P.A.C.	Total
Ordinary elementary	4,779	1,179	812	539	7,309
Central	88	*	—	19	—
Special (excluding open-air)	1,088	2,451	1,368	325	5,232
Open-air (O)	202	131	999	116	1,448
Open-air (T)	101	151	236	39	527
Total	6,258	—	3,415	1,038	—

* Many children at central schools who obtain dinners at self-supporting canteens are excluded.

TABLE 28

Type of school	Number of children receiving milk (doctor's cases) excluding voluntary clubs under the milk marketing scheme			
	Free	Full payment	Part payment	Total
Ordinary elementary	24,091	20,744	5,703	50,538
Central	281	—	—	281
Special (excluding open-air)	1,291	1,198	68	2,557
Open-air (O)	107	29	140	276
Open-air (T)	157	126	170	453
Total	25,927	22,097	6,081	54,105

TABLE 29

Type of school	Number of children receiving oil and malt (doctor's cases)			
	Free	Full payment	Part payment	Total
Ordinary elementary	2,729	7,108	257	10,094
Central	4	—	—	4
Special (excluding open-air)	251	358	25	634
Open-air (O)	105	22	—	127
Open-air (T)	23	—	—	23
Total	3,112	7,488	282	10,882

Since the commencement of 1936 all children receiving dinners free or on part-payment have been brought before the school doctor at the earliest opportunity, and thereafter kept under observation by examination at 3 monthly intervals.

The children on milk and oil and malt enumerated above are placed upon the list on the recommendation of the school doctor. Those on the milk list receive two bottles of milk daily, and they are kept under observation by the school doctor regularly. Not counting the dinner children (many of whom may be receiving also "doctor's" milk or cod-liver oil and malt), there are therefore 64,987 children under regular observation by the school doctor and school nurse for their nutritional condition.

Milk Marketing Board's scheme, voluntary milk clubs.

In addition to the 54,105 children receiving milk in school on the school doctors' advice, there is a large number of children taking advantage of the Milk Marketing Board's scheme through voluntary school milk clubs organised by the head teachers.

In October, 1936, the total number of children receiving milk in the London schools was estimated to be 315,000.

The scheme of the Milk Marketing Board provided originally that only one bottle should be allowed daily at the reduced price to children other than those who were certified by the school doctors to require milk on medical grounds. At the instance of the representative groups of teachers, however, it was agreed in October, 1936, by the Milk Marketing Board that all children in the London schools who desired it might have two bottles daily at the reduced price.

Defective children

Examinations with a view to the admission of children to special schools, were made in 4,299 cases. The following table shows the number of children nominated for examination and the recommendations made :—

TABLE 30

Defect	Number nominated		Suitable for admission to						Returned to elementary school		Invalided as for the time unfit for any school		Notified under M.D. Acts	
	Boys	Girls	Blind school		Partially sighted		Swanley		Boys	Girls	Boys	Girls	Boys	Girls
			Boys	Girls	Boys	Girls	Boys	Girls						
Ocular	588	750	7	5	80	92	197	202	296	446	8	5	—	—
			Deaf school				Partially deaf school							
			Boys	Girls			Boys	Girls						
Aural	186	185	26	27			21	27	137	127	2	4	—	—
			P.D. school		Day open-air school		Residential P.D and hospital school							
			Boys	Girls	Boys	Girls	Boys	Girls						
Physically defective	656	525	408	348	42	17	86	58	97	83	23	19	—	—
			M.D. school											
			Boys		Girls									
Mentally defective	749	514	282		205				378	235	45	39	*44	*35
			Epileptic colony											
			Boys		Girls									
Epileptic	81	65	20		13				45	33	16	19	—	—
Total	2,260	2,039	1,169		994				953	924	94	86	44	35
	4,299		2,163						1,877		180		79	

*Of these 34 boys and 21 girls were imbeciles; 2 boys and 6 girls were idiots; and 8 boys and 8 girls were feeble-minded.

The numbers of children actually attending special schools will be found in table III of the statistical tables at the end of this report.

The following statement shows the nature of the conditions found among the children certified as suitable for admission to schools for the physically defective at the admission examinations during the year :—

TABLE 31

Morbid conditions	Boys	Girls	Total
Infantile paralysis	29	24	53
Cerebral paralysis	15	12	27
Various paralyses	13	7	20
Tuberculosis of bones and joints	60	40	100
Osteomyelitis	19	21	40
Rickets and resulting deformities	3	8	11
Congenital deformities	14	17	31
Scoliosis	6	4	10
Traumata and amputations	25	10	35
Non-tuberculous arthritis and synovitis	24	3	27
Rheumatism and chorea	24	28	52
Various chest conditions—fibrosis, bronchitis, asthma	72	46	118
Heart diseases—			
Congenital	19	34*	53
Acquired valvular—With history of rheumatism	128†	121	249
Acquired valvular—Without history of rheumatism	6	6	12
Non-valvular—Rheumatic	4	6	10
Non-valvular—Non-rheumatic	—	2	2
Anæmia	10	8	18
Pseudo-hypertrophic muscular dystrophy	4	–	4
Various nervous conditions, ataxia, etc.	3	4	7
Other diseases—chiefly medical	16	5	21
Total	494	406	900

* 4 with superimposed rheumatic infection. † 1 rheumatic heart with healed septic arthritis R. knee.

Children returned to elementary schools or invalided.

The following statement gives an analysis of the 222 cases examined for admission to special schools for the physically defective, as a result of which the children were either returned to elementary schools or were invalided as for the time unfit for any school :—

TABLE 32

Morbid conditions	Elementary school	Invalided
Infantile paralysis	4	—
Cerebral paralysis	2	7
Various paralyses	3	1
Tuberculosis of bones and joints	10	1
Osteomyelitis	9	5
Rickets and resulting deformities	2	—
Congenital deformities	13	1
Scoliosis	2	—
Traumata and amputations	6	1
Non-tuberculous arthritis and synovitis	1	—
Rheumatism and chorea	15	3
Various chest conditions—fibrosis, bronchitis, asthma	27	4
Heart diseases—		
Congenital	13	1
Acquired valvular—		
Rheumatic	22	7
Non-rheumatic	7	—
Non-valvular—		
Rheumatic	6	—
Non-rheumatic	—	—
Anæmia	13	—
Pseudo-hypertrophic muscular dystrophy	1	5
Various nervous conditions, ataxia, etc.	3	1
Other diseases—chiefly medical	21	5
Total	180	42

Rota visits to the schools.

The special schools were visited at least once a quarter, and every child present was seen at least once during the year. The total number of examinations made was 15,781, and in addition 699 special examinations were made of children already on the rolls of special schools in connection with applications for non-enforcement of

attendance and for similar reasons. As a result of the rota examinations the following re-classifications took place :—

TABLE 33

Transferred from schools for	Re-classified for transfer to—								
	P.D. school	M.D. school	Partially sighted school	Blind school	Deaf school	Partially deaf school	Open-air school	Epileptic colony	Swanley eye hospital
Physically defective	–	14	–	–	–	–	3	–	–
Mentally defective	2	–	–	–	1	–	–	1	–
Partially sighted	–	1	–	11	–	–	–	–	1
Blind	–	1	1	–	–	–	–	–	–
Deaf	–	–	–	–	–	1	–	–	–
Partially deaf	–	–	1	–	2	–	–	–	–

After trial in a special school, 91 children were excluded (28 as imbecile, 28 as feeble-minded ineducable, 4 as "special circumstances," and 4 as feeble-minded "detrimental," and 27 invalided on medical grounds).

There were also 468 cases returned, on improvement, to elementary schools, or, when over 14 years of age, deemed to be no longer certifiable. The details are as follow :—

TABLE 34

Action taken	Special school classification						
	P.D.	M.D.	Blind	Partially sighted	Deaf	Partially deaf	Total
Returned, on improvement, to elementary schools	129	13	–	–	–	–	142
Over 14 years of age and excluded as no longer certifiable	214	44	–	67	1	–	326
Total	343	57	–	67	1	–	468

Decertification of physically defective children.

The following table classifies the children who improved to such an extent that they were able to return from the schools for physically defective children to the ordinary elementary schools, or were "no longer certifiable" as defective between the ages of 14 and 16 years :—

TABLE 35

Morbid conditions	Cases deemed no longer certifiable	Cases deemed fit to return to elementary schools
Infantile paralysis	24	5
Cerebral paralysis	—	1
Various paralyses	3	2
Tuberculosis of bones and joints	32	21
Osteomyelitis	7	4
Rickets and resulting deformities	7	14
Congenital deformities	2	5
Scoliosis	1	2
Traumata and amputations	3	10
Non-tuberculous arthritis and synovitis	1	2
Rheumatism and chorea	43	25
Various chest conditions—fibrosis, bronchitis, asthma	1	3
Heart diseases—		
Congenital	9	7
Acquired valvular	62	16
Non-valvular	16	8
Anæmia	—	1
Various nervous conditions—ataxia, etc.	—	1
Other diseases—chiefly medical	3	2
Total	214	129

Deaf children.

During the year Mr. Wells examined 385 children with defective hearing, the decisions regarding whom are set out on page 54. Of these, 14 were cases already attending special classes, which left 371 new cases. Below is an analysis of the hearing defects and the educational grading of these cases, excluding those specially referred. Grade I includes children who can benefit educationally at an ordinary school without any form of special facility; grade IIa includes those children who can benefit educationally at an ordinary school, but require special facilities such as favourable position in class, mechanical hearing aid, etc.; grade IIb includes children who need educational training in a partially deaf class; and grade III includes those children who can only benefit by education provided in a school for the deaf.

Acquired cases.—Hearing defect due to :—				
Post suppurative otitis media	Grade	I	20	
	„	IIa	7	
	„	IIb	2	
			—	29
Suppurative otitis media (unknown origin) ...	„	I	45	
	„	IIa	15	
	„	IIb	10	
	„	III	4	
			—	74
Suppurative otitis media (due to infectious disease)	„	I	18	
	„	IIa	8	
	„	IIb	18	
	„	III	2	
	„		—	46
Suppurative otitis media (due to other conditions)	„	I	2	
	„	IIb	3	
			—	5
Middle ear catarrh (due to various causes)	„	I	53	
	„	IIa	9	
	„	IIb	10	
	„	III	1	
			—	73
Suppurative otitis media and middle-ear catarrh ...	„	I	8	
	„	IIa	1	
	„	IIb	1	
			—	10
Otosclerosis	„	I		1
Wax	„	I		1
Meningitis	„	III		5
Nerve deafness due to injury	„	I	1	
	„	IIb	1	
	„	III	3	
			—	5
Nerve deafness due to infectious fevers	„	IIb	2	
	„	III	3	
			—	5
Maldevelopment	„	I		1
Congenital syphilis	„	I	1	
	„	IIb	2	
	„	III	1	
			—	4
Congenital cases.				
True hereditary deafness	„	III		6
Sporadic deaf birth	„	III		24
Uncertain origin	„	I	6	
	„	IIa	1	
	„	IIb	8	
	„	III	2	
			—	17

There are 318 children in schools for the deaf, and 197 in those for the partially deaf. During the year Mr. Wells made 751 examinations at these schools. As a result, 1 child in a school for the deaf was found to be no longer certifiable as deaf, and being over 14 years of age was allowed to leave school. Table 33 on page 56 gives particulars of the re-allocation of children already in attendance at special schools.

Mental Deficiency Acts. Cases notified to the local authority.

The following table shows the number of cases notified by the education authority under section 2 (2) of the Mental Deficiency Act, 1913, as amended by the Mental Deficiency Act, 1927, during the year 1936 (the figures in brackets being those for the previous year):—

	Boys		*Girls*	
(*a*) Feeble-minded—				
(1) Leavers	295	(126)	268	(149)
(2) Detrimental	5	(3)	—	(5)
(3) Special circumstances ...	–	(2)	5	(—)
(4) Ineducable	22	(10)	14	(12)
(*b*) Imbeciles	47	(55)	28	(48)
(*c*) Idiots	2	(3)	5	(4)
(*d*) In addition to being mentally defective, were blind or deaf ...	1	(1)	2	(1)
	372	(200)	322	(219)
Total ...	694 (419)			

After-careers.

The chief officer of the mental hospitals department has furnished the following return for the year 1936 on after-care of children formerly attending special schools for the mentally defective, but whose names were not notified to the Mental Hospitals Committee as being cases in which the Education Committee were of opinion that further aid in the form of supervision, guardianship or institutional care under the Mental Deficiency Acts was necessary:—

TABLE 36

Classification	Male	Female	Total	Grand total under headings
(1) Number of children born in or subsequent to 1918 who have left special schools and who were on the books of the supervision section on 31st December, 1936	355	160	515	515
(2) Number who after trial have proved themselves to be incapable by reason of mental or physical defect of undertaking remunerative employment	2	4	6	6
(3) Number employed as under:—				
(*a*) Industrial or manual occupations (*i.e.*, factory work, trade or any part of a trade)	246	114	360	
(*b*) Agricultural or rural occupations	—	—	—	
(*c*) Domestic occupations—				
M. F. Total				
(1) Receiving remuneration 2 13 15				
(2) Required for work at home – 6 6				
	2	19	21	
(*d*) Commercial, shop assistant, or selling behind a counter, office boys or girls	1	1	2	
(*e*) Gone into army, navy or merchant service	1	—	1	
(*f*) Blind alley or other precarious occupations (*i.e.*, vanboys, newsboys, errand boys and girls, selling from a barrow)	75	6	81	465
(4) Number judged to be employable but out of work	12	6	18	18
(5) Number whose careers have not been traced:—				
(*a*) Not visited and not seen at bureaux ...	10	11	21	
(*b*) Visited but no information obtainable ...	4	1	5	26
(6) Cases dealt with in addition to above including those who have since:—				
(*a*) died	—	1	1	
(*b*) attained the age of 18 years	117	58	175	
(*c*) been dealt with under M.D. Acts	36	27	63	
(*d*) been lost sight of, or have left London ...	5	6	11	250

N.B.—In addition to the 515 after-care cases shown in the above return there were 694 boys and girls between 16 and 18 years of age who had left special schools and were under statutory supervision on 31st December, 1936. These also were on the books of the supervision section for placing in employment.

Stamford House remand home

The following report has been received from Dr. John D. W. Pearce, part-time medico-psychologist at Stamford House remand home :—

The period under review is one of transition. The remand home was transferred from Ponton-road to Stamford House on 6th January, 1936. Greatly improved facilities were thereby provided for the care and investigation of delinquent children and young persons.

The total number of admissions during the year was 2,608, of whom 2,132 were boys and 476 were girls. The numbers admitted each year since 1930 have been :—

1930	*1931*	*1932*	*1933*	*1934*	*1935*	*1936*
785	1,065	1,157	1,504	2,184	2,420	2,608

The courts dealing with these children and young persons, and the number dealt with at each court are as follows :—

Name of court	*Number dealt with*		*Name of court*	*Number dealt with*	
	1936	*1935*		*1936*	*1935*
Caxton Hall	169	129	Hertfordshire	30	36
Toynbee Hall	333	303	Kent	50	47
Stamford House	308	248	Middlesex	273	468
Islington	340	141	Surrey	57	22
Hampstead	10	6	East Ham	30	57
Springfield Hall	295	252	West Ham	78	87
Southwark	255	214	Southend-on-Sea	17	33
Adult courts	117	80	Lodgers, etc.	70	35
City of London	21	39	Education Act, petty sessions	31	24
Buckinghamshire	1	–			
Berkshire	1	–	Total	2,608	2,420
Essex	122	199			

The large number of cases admitted from Islington (340) should be noted. The decrease later in the year in the number of admissions from out-county authorities is accounted for by the fact that the accommodation at the remand home was needed for London cases and also that in the autumn Middlesex County Council provided its own remand home.

The reasons for admission are shown in the subjoined table.

Offences	*1936*	*Offences*	*1936*
Stealing	1,181	Sex offences	30
Breaking, entering and stealing	162	Soliciting	1
Breaking and entering ...	124	Absconding from approved school	7
Burglary	13	Wandering	9
Shopbreaking	46	Breach of recognisances ...	77
Sacrilege	1	Beyond control	270
Embezzlement	28	Care or protection	300
Forgery	7	Education Act	31
Demanding money by menaces	1	"Place of safety" and "lodgers"	70
False pretences	6	Motor-car stealing	80
Travelling without ticket ...	11	Obstruction	2
Suspected person	102	Alien's Order	1
Trespassing	1	Stowaway	1
Begging	2	Poisoning	2
Insulting conduct	6	Misconduct at approved school	4
Wilful damage	16	Other offences	–
Assault	6		
Malicious wounding and grievous bodily harm	7	Total ...	2,608
Murder and manslaughter ...	1		
Attempted suicide	2		

A large increase in "beyond control" cases was observed (270 in 1936 compared with 196 in 1935). It will also be noted that 80 cases, all males, were charged with stealing motor-cars. Most of these boys were in their 16th or 17th year and were of good average intelligence. In the majority of cases the cars were taken from parking places, and the offenders were rarely alone. This offence is especially prevalent in the summer months. A seasonal incidence is shown in certain other offences ; for example, cases of shopbreaking, entering and stealing, and suspected persons are more common in the months of early nightfall.

During the year, 1,414 cases of illness and accident were dealt with. The following table shows their general nature :—

Condition	*Number of cases*	*Condition*	*Number of cases*
Diphtheria	6	Diseases of the heart ...	36
Scarlet fever	16	Rheumatic disease	37
Mumps	4	Epilepsy	10
Rubella	1	Vaginal discharge (including recurrent cases)	62
Diseases of the eye	31	Male gonorrhœa	2
Diseases of the ear	63	Fracture	2
Scabies	21	Diabetes mellitus	1
Ringworm of the body ...	8	Other conditions	666
Other diseases of the skin ...	221		
Tonsillitis and pharyngitis ...	221		
Influenza	5	Total	1,414
Pulmonary tuberculosis ...	1		

The more serious cases were admitted to hospital, the remainder were treated in the remand home. The majority of the conditions treated, such as diseases of the skin, were present on admission. Pharyngeal infection has been frequent, but it has been of a mild type, and sequelæ have been uncommon. Cases of vaginal discharge have presented a more difficult problem. In all the 62 cases (59 new cases, 3 recurrences) it has been necessary to admit the girls to hospital for investigation. In the majority of cases the condition has proved to be non-specific, venereal disease being diagnosed in 19 cases.

The physique and general health of those admitted showed little variation from those of previous years. The motivating factors in delinquency are so variable and complex that valid inferences about causal relationships, if any, between physique and delinquency can be made only after careful correlation of physical factors with all the other factors in a large number of individual cases. It is improbable that physical make-up plays any important part in delinquency.

The second important change during the year was the re-organisation of the personnel investigating the children and young persons.

Until 10th July, the physical examination and the medical treatment were undertaken by a full-time medical officer of the Council. All cases on remand were examined later by a psychologist of the London child guidance clinic who estimated the intelligence and educational levels by tests. In many cases the Court asked for a special psychiatric examination ; such cases were referred to a child guidance clinic.

In July these methods of investigation were co-ordinated by the appointment of a part-time medico-psychologist at the remand home. The medico-psychologist examines physically every child or young person not later than the day following admission. At a later date psychometric tests are carried out on every case on remand.

Of those admitted, 58 were found to be mentally deficient. Combined with, or following, the mental testing, an examination of a psychiatric type is made. This is of the nature of a discussion with a view to ascertaining the state of mind of the child or young person and the underlying causation of the delinquency.

While the child is on remand at the home, reports are received in many cases from the probation officers and from the local education authority. It is only after reaching a definite opinion that a final report on a special case is submitted to the Court. In some cases, in which it is not possible to make a diagnosis without further personal information, *e.g.* an interview with the relatives, full investigation at a child guidance clinic is recommended. There were six such cases since the new arrangements came into operation.

It will be recognised that, in addition to specialised experience, an essential qualification of a medico-psychologist is a complete lack of preconception in his approach to each case. That the Courts are making greater use of the facilities provided is shown in the increasing demand for special reports from the medico-psychologist. Such reports were furnished during the year in the following numbers :—

First quarter	... 63
Second quarter	... 69
Third quarter	... 69
Fourth quarter	... 101
Total	302

A system of diagnostic classification on the principal bases of general intelligence, varieties of character-traits and instinct-components, and physical and physiological features, considered both for their physical and psychological significance, has been under course of development. The aim is to collect adequate data which may afford valid general conclusions with regard to various problems of delinquency.

Child guidance

During the past few years the transfer of the problem of the maladjusted or "difficult" child from the sphere of the education and social services to that of

the medical service has gradually come about through the recognition that underlying the manifestation of behaviour is very often some phobia or hidden neurosis which is not readily apparent to the lay person, and can often be brought to light by the intensive study of the child's antecedents, medical history and mental attainments and reactions by the trained psychiatrist. He is able, by the correlation of the various factors thus obtained, to draw conclusions as to the underlying causes contributory to the peculiar behaviour manifestations, and to suggest suitable therapeutic action relative to the type of case under observation. For this reason, child guidance has now become an integral part of the medical services available for the people, and many clinics have been established and in some instances special departments have been opened at voluntary hospitals to deal with cases of this type. So far as the school medical service of the Council is concerned, the only assistance hitherto given has been by allowing free exchange of information between the educational and medical services and the clinics, and the recognition of the attendances of school children at specific clinics as equivalent to attendance at school. One clinic has been established under the Council's own jurisdiction as an auxiliary to the work of the Maudsley hospital, Denmark-hill, S.E. With this exception no financial assistance had hitherto been given by the Council to child guidance clinics in respect of children attending elementary schools. During 1936, however, special circumstances arose in connection with the London child guidance clinic which led the Council to make a grant to that clinic in connection with the treatment of school children. An arrangement had previously been in operation at that clinic under which diagnostic psychiatric work had been undertaken for the Council's remand home, and payment had been made by the Council at the rate of £400 a year in respect of this service. This payment ceased, however, when the Council decided that the work should be withdrawn from the clinic and undertaken at the remand home by a psychiatrist appointed by the Council. To meet the loss of income thus sustained by the clinic the Council decided that, in view of the special circumstances and of the amount of work undertaken in connection with the treatment of children from the schools, the grant of £400 should be continued for the current year, as a contribution towards the cost of their child guidance work, conditional upon the Council being represented on the clinic committee.

Including this clinic there are at present eight child guidance clinics recognised by the Council and the Board of Education under section 80 of the Education Act, 1921, in order that the attendances may be counted as equivalent to attendance at school.

The information set out below regarding the work of the clinics has been supplied by the authorities of the clinics concerned.

Maudsley hospital child guidance clinic.

The work of the child guidance clinic at the Maudsley hospital is undertaken by the staff of this hospital, of which Dr. Mapother is the medical superintendent. Close co-operation is maintained with the school medical service and with the schools, and information regarding the cases is exchanged. During the year the number of Council school children dealt with was 374, of whom 215 were boys and 159 girls.

The sources of reference of the cases were : hospitals, 98 ; school doctors, 66 ; care committees, 58 ; private doctors, 38 ; head teachers, 16 ; various other agencies, 98.

The reasons for reference were : difficult and unmanageable, 55 ; backwardness, 54 ; nervousness, 47 ; stealing, 33 ; enuresis, 31 ; nervous movements, 24 ; temper, 23 ; night terrors and fears, 14 ; fits, 12 ; sex difficulties, 10 ; other reasons, 71.

The results obtained were : recovered, 10 ; improved, 38 ; not improved, 16 ; unsuitable, 53 ; failed to attend, 5 ; psychological tests only, 23 ; still under treatment, 229.

London child guidance clinic.

Reference has already been made in this report to the arrangements between the Council and the London child guidance clinic. The work is carried on under the direction of Dr. William Moodie. During the year 1936 certain domestic and

administrative adjustments were carried out on economic grounds, but the general work in connection with the treatment of cases has been maintained with the exception of the eurhythmic class, which was discontinued on account of the noise and consequent disturbance of other activities at the centre. The number of Council school children dealt with was 192, of which number 108 were boys and 84 girls. The sources of reference were : district organisers, 80 ; head teachers, 20 ; parents and friends, 19 ; hospitals, 15 ; care committees, 10 ; probation officers, 10 ; private doctors, 6 ; other agencies, 32. The reasons for reference were : stealing, 33 ; backwardness, 23 ; behaviour difficulties, 22 ; nervousness and fears, 15 ; enuresis, 14 ; speech difficulties and stammer, 13 ; truancy and wandering, 7 ; habit spasm and tics, 7 ; temper and screaming fits, 7 ; vocational guidance, 6 ; other reasons, 45. The results of treatment were : adjusted, 8 ; improved, 33 ; unimproved, 3 ; not co-operative, 4 ; placement, 3 ; no problem, 1 ; transferred, 2 ; special service completed, 5 ; consultations only, 29 ; still under treatment, 104.

West End hospital for nervous diseases.

The work of the child guidance clinic organised by the West End hospital for nervous diseases, 73, Welbeck-street, W.1, is under the direction of Dr. Emanuel Miller, who is also in charge of the East London child guidance clinic, to which reference is made later in this report. Considerable attention is paid at this clinic to observation of the children's reactions during play, both as a diagnostic aid and also in some cases as an actual therapeutic measure. Provision is made at the clinic for special individual coaching for educational disabilities which give rise to anxiety. During the year 209 attendances were made by children for this purpose. The number of new cases registered during the year was 67, the number of cases carried over from the preceding year was 71, and 3 cases were re-opened, making a total of 141 cases for the year. Of the 67 new cases, 37 were boys and 30 girls. The sources of reference of the cases were : other departments of West End hospital, 27 ; care committees, 16 ; other hospitals, 12 ; other agencies, 12 . The reasons for reference were : enuresis, 14 ; backwardness, 12 ; stealing,7 ; intelligence tests only, 6 ; other reasons, 28. The results obtained were : adjusted, 13 ; improved, 7 ; unadjusted, 3 ; refused, 6 ; unsuitable, 3 ; transferred to other hospitals, 6 ; consultations only, 6 ; still under treatment, 23.

Institute of Medical Psychology.

At the Institute of Medical Psychology (Tavistock clinic) the number of Council school children dealt with during the year 1936 was 94, of whom 50 were boys and 44 girls. The sources of reference were : care committees, 22 ; school doctors, 20 ; parents and friends, 13 ; head teachers, 12 ; general practitioners, 10 ; other agencies, 17. The reasons for reference were : neurosis, 20 ; behaviour difficulties, 32 ; delinquency, 16 ; backwardness, 11 ; enuresis, 7 ; other reasons, 8. The results obtained were : improved, 19 ; unsuitable, 8 ; consultations only, 12 ; transferred to other clinics, 3 ; deceased, 1 ; placement, 6 ; still under treatment, 45.

Institute of Child Psychology.

The Institute of Child Psychology at 26, Warwick-avenue, W.9, has worked in London since 1928. The Council and Board of Education decided in April, 1936, that the clinic should be recognised as a school treatment centre under section 80 of the Education Act, 1921, in order that the attendances of school children may be recognised as equivalent to attendance at school. In this way it has been possible to maintain closer contact with the school medical and educational services by the interchange of information relating to school children under treatment at the clinic and by recommendations from the clinic as to suitable methods of treatment in the schools and homes. During 1936 the number of children from Council schools dealt with at the clinic was 47, of which number 25 were boys and 22 girls. The sources of reference were : care committees, 23 ; head teachers, 8 ; medical officer of health and general hospitals, 5 ; medical practitioners and psychotherapists, 5 ; other agencies, 6. The reasons for reference were : anti-social behaviour, 22 ; neurosis, 13 ; educational difficulties, 8 ; basic factor physical, 4. The results obtained were : satisfactorily adjusted, 9 ; partially adjusted, 5 ; unsuitable, 12 ; still under treatment, 21.

East London child guidance clinic.

The work at the East London child guidance clinic at the Jews' Free school, Whitechapel, has continued during the year under the direction of Dr. Emanuel

Miller. The number of new cases dealt with from Council schools during the year was 224. In addition 80 cases were carried over from the previous year, making a total of 304 cases for the year 1936. Of this number 179 were boys and 125 girls. The sources of reference were: school doctors, 125; hospitals and clinics, 42; school care committees, 40; head teachers, 38; probation officers and children's courts, 19; parents, friends, etc., 17; private doctors, 8; other agencies, 15. The reasons for reference were: nervousness, restlessness and excitability, 61; enuresis, 43; backwardness, 42; beyond control, 27; night terrors, sleepwalking, 16; theft, pilfering, 15; aggressiveness, spitefulness, destructiveness, 14; habit spasm, 10; reading disability, 10; other reasons, 66. The results obtained were: satisfactorily adjusted, 54; partially adjusted, 29; unsuitable, 41; failed to attend, 39; advice only, 15; still under treatment, 126.

North Western child guidance clinic.

The work at the North Western child guidance clinic has continued during the year 1936. The number of Council school children dealt with was 18, of whom 8 were boys and 10 girls. The sources of reference were: school care committees, 8; private doctors, 4; probation officers, 3; other agencies, 3. The reasons for reference were: stealing, 6; truancy, 3; unmanageable and jealous, 3; other reasons, 6. The results obtained were: satisfactorily adjusted, 3; partially adjusted, 2; unadjusted or unsuitable, 6; still under treatment, 7.

Guy's hospital child guidance clinic.

The treatment of child patients as a separate entity in the department of psychological medicine at Guy's hospital was commenced in January, 1930. Up to that time they had been dealt with concurrently with adults in the out-patients' department. The work is under the direction of Dr. R. D. Gillespie, and conforms to the the generally accepted principles adopted at other child guidance clinics. With a view to assisting the clinic, the Council in March, 1936, with the consent of the Board of Education, agreed to its recognition under section 80 of the Education Act, 1921, in order that the attendances of the children might be recognised as equivalent to attendance at school. During 1936 the number of school children between the ages of 5 and 14 years dealt with at the clinic was 283, of whom 196 were boys and 87 girls. The largest source of reference of the cases was the local education authority, chiefly the London County Council, the number being 124. The chief reasons for reference may be stated as follows: behaviour disorders, personality deviations, sleep disorders, psychoneurosis, fits and attacks, and speech defects. An analysis of cases shows that about 25 per cent. were much improved by treatment, 37 per cent. showed some improvement, 9 per cent. were unchanged, and 2 per cent. were worse, the remaining 27 per cent. being disposed of in various ways, *e.g.* lapsed, insufficient information, etc.

Summary.

During the year, 1,096 children, of whom 622 were boys and 474 girls, were dealt with at the above-mentioned clinics, with the exception of Guy's hospital clinic, the work of which is set out in a different form. The following statement gives details of these cases:—

Source of reference		*Reasons for reference*	
Care committees	257	Nervous disabilities	180
School doctors	214	Behaviour difficulties	175
Hospitals	196	Backwardness	142
Head teachers	94	Enuresis	109
Private doctors	71	Stealing	94
Parents and friends	49	Tempers	30
Probation officers	32	Night terrors and fears	30
Other agencies	183	Educational difficulties	18
		Habit spasms and tics	17
Total	1,096	Delinquency	16
		Speech difficulties	13
		Fits	12
		Truancy and wandering	10
		Sex difficulties	10
		Vocational guidance	6
		Other reasons	234
		Total	1,096

Results obtained

Adjusted	121
Improved	114
Not improved	25
Unsuitable or not co-operative	176
Placement	9
Consultations only...	85
Still under treatment	555
Transferred	11
Total ...	1,096

Nursery schools and the care of infants

Much attention is being paid to the care of the infant child both in and out of school.

From the Annual Report of the Medical Officer of the Ministry of Health it appears that, in the country generally in 1935, out of 566,700 babies under one year, 270,457, or 48 per cent. were in attendance at infant welfare centres. Of 2,267,700 children aged one to five, however, only 544,838, or less than one in four, were under observation at infant welfare centres.

WHAT THE NURSERY SCHOOL DOES FOR THE CHILDREN

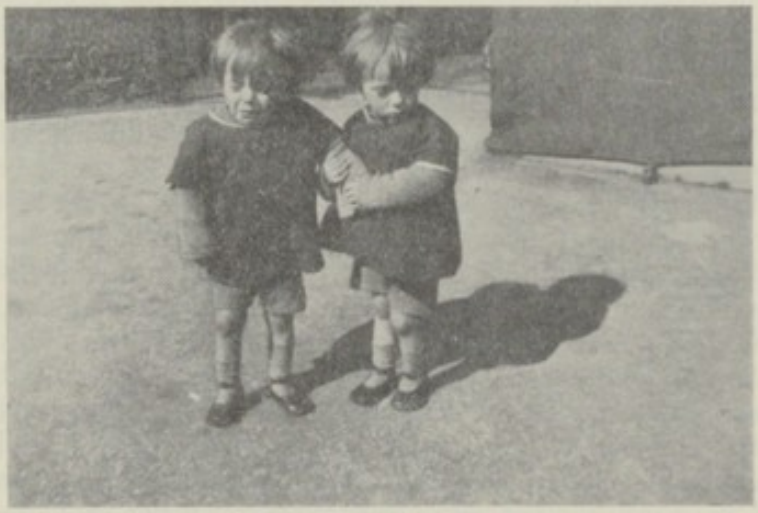

Fig. 1.—The twins first day at the nursery school

Fig. 2.—The twins after their first month's attendance at the nursery school

A large number of infants continue to arrive at school at ages 3 to 5 showing evidence of want of care and supervision. The remarkable improvement which takes place in such children when they come under daily observation in school is shown by the photographs of the twins (figs. 1 and 2).

In order to effect improvement in the pre-school care of children, particularly of those between one and five years of age who are not under supervision, the Ministry of Health issued circular 1550 in May, 1936. This circular enjoins the use of health visitors as attendance officers in connection with the " toddlers' clinics" of the maternity and child welfare centres. It also advises maternity and child welfare authorities to make, wherever possible, arrangements with local education authorities for children of pre-school age to attend for the treatment of minor ailments and dental defects at the school treatment centres.

Negotiations with the Council have been commenced in London by several of the borough authorities with a view to implementing this advice, and the Council has given a general authority for such arrangements to be made whenever practicable.

On the school side much attention has been given to improvement of the care and attention given to the infant children in the Council's schools.

Of the 97,000 children between the ages of three and five in London, some 50,000 are in attendance at babies' classes in the Council's elementary schools. The new standard planning adopted in 1934 provided for the increase by 25 per cent. of the floor space per child in classrooms for the " under fives," with a separate playground of 800 square feet or more near the babies' rooms. Classrooms for babies are now designed to have 15 square feet per child. In place of the older unconsidered furniture, babies' rooms are now provided with specially designed tables and chairs.

Sleeping accommodation is provided for all " babies," and there are no less than 60,000 beds in use. Not only are large toys, such as dolls' houses, push-carts and other wheeled toys, supplied to all babies' classes, but it is the increasing practice to supply to infants' departments apparatus such as climbing frames, jungle-gyms, chutes, swings, etc.

In view of the concern felt regarding the need for care of the young infant, it may be as well here to recount the advantages enjoyed by the infant child in school. It is sometimes objected that only one medical inspection takes place during infant school life, and that at the time of entrance. This is seriously to understate the amount of attention given to their physical development. These children are under the daily observation of skilled and kindly teachers. At the entrant medical examination all those with defects and those whose condition does not wholly satisfy the medical examiner are marked for continued reinspection at intervals of six months, and they are not discharged until their health has improved to the satisfaction of the doctor. Any child noticed by the teacher, school nurse or care committee members to be in any way flagging is brought before the doctor as a special case.

All are inspected by the school dentist annually and by the school nurse at least once in every term. They have the advantage of the Milk Marketing Board's scheme for milk in school. All those needing milk on nutritional grounds receive two bottles a day, one in the morning and one in the afternoon, whether the parents can afford to pay or not, and all these as well as those receiving school dinners are inspected every three months by the school doctor. All children are weighed by the school nurses at intervals of six months, and those not making satisfactory growth are brought before the doctor.

They have the advantage of all the Council's arrangements for medical treatment, including those for dental defects and minor ailments, treatment for ear disease, etc., observation at nutrition centres, convalescent treatment, specialist examination at the Council's general hospitals, and admission to the Council's special children's hospitals, whenever there is need.

Compared therefore with the condition of the children to whom reference is made in the beginning of this section, who are neither at school nor in attendance for regular supervision at a child welfare centre, the children attending school are " safe."

The three year programme 1935–38 provided for the establishment of experimental " nursery classes " in connection with infants' departments, two in each year.

The first nursery class under this provision was established early in 1936, at Senior-street school, Paddington, to accommodate 40 children, and two similar classes were started at the Raleigh school at Stepney later in the year.

The nursery classrooms face south and have french windows opening on to the playgrounds. There is indoor sanitation and provision for bathing. Milk, apples and rusks are provided, and cod-liver oil on medical recommendation. The babies are attended to by the school nurse daily, and all are medically examined once a term.

A study is being conducted whereby, at Senior-street school, the physical progress of the infants attending the nursery class is being compared with that of the infants of corresponding age who are attending an ordinary babies' class at the school. A similar comparison is being made between the children attending the nursery classes at the Raleigh school and those of the same age attending the Old Church-road nursery school. It may be possible as a result of these comparisons, when completed, to assess the benefits to be expected from an extension of the special nursery classes.

Nursery schools.

The three year programme made provision for an extension of the nursery schools provided by the Council. Sites have been obtained for this purpose and plans have been prepared for the erection of two nursery schools, one at Kintore-street in Bermondsey, and one on the new building estate at Honor Oak in Lewisham. In addition the Old Church-road nursery school in Stepney is to be increased in accommodation by 80 places.

One additional voluntary nursery school at Dalgarno-gardens, North Kensington, has been opened during the year and is aided by the Council. Four additional voluntary nursery schools are under consideration with a total of 180 places, and one of these at Kensal House, North Kensington, was opened on 12th January, 1937.

The nursery schools maintained and aided by the Council at the end of the year, 1936, were :—

Provided by the London County Council

		Accommodation
1.	Columbia Market, Hackney-road, E.2	120
2.	Rachel McMillan, Deptford, S.E.8	260
3.	Old Church Road, Commercial-road East, E.1	120
	Total	500

Aided by the London County Council

*1.	Children's House, Bow, E.3	35
2.	Dalgarno Gardens, W.10	80
3.	Goldsmith's college, New Cross, S.E.14	35
4.	North Islington, Tollington-park, N.4	45
*5.	North Kensington, 325, Kensal-road, W.10	60
*6.	Notting Hill, Darnley-road, W.11	80
7.	Rommany, West Norwood, S.E.27	40
*8.	Jellicoe, Rochford-street, Kentish Town	54
9.	Mary Ward, Tavistock-place, W.C.1	30
10.	St. Christopher's, Bridgewater-street, N.W.1	40
11.	St. Leonard's (St. Andrew's), 93, Guilford-street, W.C.1	60
*12.	Somers Town, Crowndale-road, N.W.1	40
*13.	Women's university settlement, Blackfriars-road, S.E.1	35
14.	Stafford Street settlement, Peckham, S.E.15	40
15.	Buck Street, Kentish Town, N.W.1	40
	Total	714

N.B.—The above list excludes the Kensal House nursery school for 60 children opened on 12th January, 1937.

The medical oversight of the nursery schools is under the direction of Dr. E. M. McVail, divisional medical officer. One of the Council's medical officers visits all

the schools, except those marked with an asterisk in the above list which provide their own medical officer.

School nurses visit daily all the schools except that of the Women's University Settlement, Blackfriars, where other arrangements of a satisfactory character are made.

Accommodation in aided nursery schools was increased by 85 places during the year 1936. Dalgarno-gardens nursery school with 40 places, subsequently increased to 80, was opened in January, 1936, and accommodation at the North Islington nursery school was increased by 5 places.

The following is a statistical summary of medical examinations and treatment at the 18 nursery schools :—

Total average roll (all schools)	1,223
Total average attendance (all schools)	987
Total number of visits made by medical officers	231
Total number of examinations of children	3,414
Total number of individual children seen	1,757
Total number of individual children with defects	1,088

TABLE 37

†Defects	For observation	Referred for treatment	*Treated	Percentage treated of those referred
Rickets	45	42	38	90
Nose and throat	214	176	125	71
Eyes and eyelids	9	42	40	95
Vision and squint	10	26	26	100
Ears	17	52	48	92
Lungs	41	58	55	95
Heart	65	2	2	100
Skin	10	107	105	98
Teeth	33	410	326	80
Other defects	121	106	92	87
Total	565	1,021	857	84

* *i.e.*, known to have had treatment. A number of cases were awaiting appointments.
† Many cases of minor ailments arising between medical inspections were treated by the school nurses.

Average number of medical examinations per child	1·94
Average number of defects per child	1·46
Percentage of children examined found to be suffering from one or more defect	61·4

Heliotherapy in nursery schools.

The question of the exposure of the children in nursery schools to the direct rays of the sun has been under consideration by the medical department, and Dr. McVail has written the following report :—

It should be understood that, to avoid dangerous reactions, definite sunlight treatment must be carefully carried out under skilled supervision. Where sufficient care has not been taken, the indiscriminate exposure of young children to direct sunlight has resulted in symptoms of great lassitude, although there have not been reported in London the severe burns which similar exposure at the sea-side is apt to produce.

Dr. Rollier, in his textbook on " Heliotherapy," page 44, says :—

> " A little child requires light just as a plant or a young animal does ; it basks in the sun with comfort and joy. The old people seek the sun in order to warm their stiffened limbs and to raise their failing vitality. For both, the sun cure is valuable, but we must act in these extreme cases with a double amount of caution, since they are particularly sensitive towards ' solar reactions.' "

Dr. Rollier's plan was to expose first the feet alone and for short periods, then gradually the lower limbs and later the trunk and arms. After the third week a full sun bath might be given.

At the nursery schools a doctor visits from once a week to once a term depending on the size and nature of the school. At most schools a nurse visits for an hour or so at the beginning of each morning session. At only two of the eighteen schools (Old Church-road and Columbia

Market, each with 120 children) does she remain for the whole of the morning. General supervision of the children is mainly lay and the staff is limited. Careful graduation of area of exposure and time of exposure of individual children to sunlight is generally impracticable.

Owing to the action of London smoke in diminishing the ultra-violet rays and to the fact that children are not outside for long periods in great heat, few schools have noted ill effects from exposure even where school knickers alone have been worn. The opinion of the superintendents of the oldest schools is, however, that children are more comfortable and feel the heat less when a cotton overall and short knickers are worn, to which is added a woollen vest or jersey when the temperature falls. At the Rachel McMillan nursery school it was found that the wearing of sun suits exposing most of the trunk as well as the limbs caused lassitude and diarrhœa, particularly amongst the most delicate, and thin cotton overalls and knickers have been substituted both there and at the Country House at Wrotham. At Notting-hill and Somers Town similar clothing is worn in hot weather. At the Rommany nursery school, where the school overall of thin cotton is worn with knickers or loose trousers, the superintendent has found that the children are cooler and happier when clothed in that manner than in sun-suits with more complete exposure. At some of the newer schools, including North Kensington and Dalgarno Gardens, similar garments are worn. Circumstances vary, however, at different schools. Some, for instance, North Islington, the women's university settlement and St. Leonard's nursery schools, have the advantage of playgrounds with trees, in the shade of which the most sketchy of sun-suits may safely be worn on hot days. Other playgrounds are without such advantages and children, when outside, are exposed to the full glare and heat of the sun.

Speaking generally, it is advised that nursery school children should wear in hot weather loose overalls or vests, covering the trunk, and short knickers.

Cotton hats protecting the head and the back of the neck should always be worn in strong sunshine.

It is necessary that children should put on woollen vests or jerseys as well as the cotton garments if the temperature falls.

Medical inspection and treatment—Day continuation schools, evening institutes and junior instruction centres

With a view to closing to some extent the "gap" which exists between the medical care of children in school and the operation of the health service of the National Health Insurance scheme, the Council authorised in 1934 as an experiment the voluntary medical inspection of pupils attending day continuation schools and certain selected evening institutes.

In addition, in order that juveniles attending junior instruction centres could, when so certified, be able to obtain milk as medical treatment, a weekly visit of one of the Council's medical officers to these centres was made. These arrangements have been continued in 1936.

In 1935 and 1936, at the eleven day continuation schools 1,326 pupils submitted themselves to medical inspection. Thirty pupils were found subnormal in nutrition, in none were pediculi found, 1,003 had sound teeth, 989 had normal vision (219 were wearing glasses), and 223 various defects including nose and throat ailments, circulatory troubles, skin diseases and postural deformities were found; 391 in all were advised to obtain treatment. At four selected evening institutes 413 pupils desired medical inspection. Of these, 38 were subnormal in nutrition, in 6 pediculi were present, 279 had sound teeth, 244 passed the test for normal vision (28 were wearing spectacles), and 232 various ailments were found to be needing observation or treatment, 173 in all were referred for treatment.

At junior instruction centres during 1936, 895 juveniles were interviewed by the doctors, 211 were recommended for milk on physical grounds, and a complete medical overhaul was made in 160 cases. Of this number, 40 were subnormal in nutrition, none was verminous, 71 had carious teeth, 75 failed to pass the vision test (38 were wearing glasses), and 107 other defects were discovered.

Medical treatment at the school treatment centres was available for juveniles under 16 years or those who, being over 16 years of age, were not entitled to medical benefit under the National Health Insurance scheme.

Medical inspection at secondary and trade schools.

In the maintained secondary and trade schools medical inspection has been carried out by the school medical staff over a very long period of years.

The pupils are, in accordance with the instructions of the Board of Education, inspected in detail on entrance, again at the age of 12, and at the age of 15; in all other years the records of all pupils are reviewed, but a detailed examination is only carried out when there is some special indication or request.

So far as the aided schools are concerned, medical inspection of all the pupils by members of the Council's medical staff is carried out at 22 schools. At 22 other aided schools these inspections are conducted by doctors appointed by the respective governors. The holders of Council's scholarships at 8 aided schools are seen by the Council's staff at County Hall, the governors' doctors in those schools confining themselves in the main to fee-payers, trust-fund scholars, etc.

In one non-aided school, the medical inspection of pupils is carried out by one of the Council's medical officers at the request of the governors.

The figures subsequently analysed are derived only from the schools where the medical inspections are carried out by the Council's own staff. No detailed reports of medical inspections are received from those aided schools at which the pupils are examined by the doctor appointed by the governors, but the record cards of all the Council's scholarship children examined are sent for the school medical officer's information at the end of each term.

Excluding students in training colleges, 14,899 pupils were examined during the year by the Council's medical officers. Details of the distribution of these students in the various institutions are given in the Appendix (table VII). In addition to the above, the records of 3,525 pupils not in the age groups were reviewed, but detailed examinations were not deemed necessary. As might be expected, the children in the secondary schools show a general superiority in freedom from physical defect over children in the elementary schools, in no instance was the clothing found to be poor, but in 6 cases infestation with vermin was noted.

Dental condition.

The percentage of children, aged 12, with sound teeth was: boys, 88·1; girls, 79·3; but at the age of 15 this percentage had decreased by 4·2 per cent. among boys and by 0·6 per cent. among girls. Of cases of widespread dental decay where 4 or more teeth were affected, the percentage among boys and girls of 12 years old was 1·8 and 1·3, respectively, compared with 1·1 in boys and 0·9 girls in leaving elementary schools.

Vision.

At the age of 12, 81·2 per cent. of the boys and 77·1 per cent. of the girls were able to pass the vision test, compared with 68·3 and 66·6 in elementary school leavers. In secondary schools 17·5 per cent. of the boys and 14·9 per cent. of girls were wearing glasses at the age of 12, but at the age of 15 the percentages were 20·9 boys and 21·9 girls.

In spite of the greater percentage wearing glasses at the age of 15, the percentage of pupils passing the vision test was considerably less, *viz.*, 76·1 per cent. among boys and 72·2 per cent. among girls, suggesting that the more serious strain in reading has a detrimental effect upon the eyesight.

Care of eyesight in secondary schools.

In September, 1926, sight-saving education for myopic pupils was begun at Clapton and Peckham (now Honor Oak) county secondary schools for girls and at the Raine's foundation school for boys, and still continues.

Three central schools, Regent's Park, the Hugh Myddelton and the Ensham also provide special education for the partially sighted. The Regent's Park class was opened in January, 1936. These schools do excellent work and many scholastic successes have been scored by the pupils.

Nutrition.

The nutritional state of the pupils in the secondary schools, as returned by the school doctors, reverses the sex incidence of subnutrition found in elementary schools. In the elementary schools, girls at each age are better nourished than boys, but in the secondary schools, while only 3·4 per cent. of the boys are reported as sub-normal, amongst girls, 7·0 per cent. are so returned.

Apart from the reversal in sex incidence, the figures for nutrition are very similar to those of the elementary school children.

Defects.

During the year, 3,124 pupils (20·9 per cent.) were referred for treatment for various defects. Heart defect was noted in 1·6 per cent. boys and 3·3 per cent. girls; defects of nose and throat in 1·7 per cent. boys and 3·8 per cent. girls; ear disease in ·4 per cent. boys and ·5 per cent. girls; anæmia and debility in 1·5 per cent. boys and 1·6 per cent. girls.

In the secondary schools there are more cases than in the elementary schools of postural defects, especially in girls, such as curvature of the spine. Such postural defect of the spine was noted in 0·5 per cent. of boys at 12 and 1·2 per cent. at 15, but in girls the amount of this defect was much greater, *viz.*, 8·2 per cent. at 12 and 8·1 at 15.

The increase, between ages 12 and 15 in institutions of higher education, of defect of vision and dental caries is disturbing.

Re-inspection

The re-inspection of 3,416 pupils in higher education institutions was carried out; 1,469 defects had been satisfactorily treated, 475 were under treatment, 769 had had treatment but needed further treatment, and in 710 cases no treatment had been obtained.

The following-up of defects discovered at secondary schools is left to the head masters and mistresses. When the parent is not present, a letter recommending treatment is sent, generally in the name of the head master or mistress.

Scholarship children attending secondary and trade schools are given the same facilities for medical treatment under the Council's arrangements as children in elementary schools, provided that they are entitled to either partial or full remission of educational fees.

For fee-paying pupils at secondary schools who have been inspected by the Council's medical officers or doctors appointed by the governors, arrangements are made when necessary for medical treatment to be received under the Council's scheme provided that (i) the parents cannot afford to make private arrangements and (ii) payment is made therefor.

Training colleges.

Of the 993 students examined in training colleges, six were found to be suffering from extensive dental caries; 76·6 per cent. of the men and 82·4 of the women passed the vision test, but 31·1 per cent. of the men and 32·2 per cent. of the women were wearing glasses.

Residential schools and children's homes

The eleven children's homes which formerly belonged to the metropolitan boards of guardians, and which are still used for this purpose by the Council, *viz.*, Anerley, Ashford, Banstead, Grays, Hornchurch, Hutton, Lamorbey, Leytonstone, Norwood, Ongar and Shirley, have been visited regularly by Dr. Mabel Russell. Rules regarding the storage of poisons in educational institutions have been adopted by the Education Committee, and regular inspection of the arrangements has been provided for.

An outbreak of Vincent's infection was discovered at the Leytonstone home, and 35 children were found to have severe stomatitis. Energetic measures, including daily dental treatment, were undertaken, and after about six weeks the cases were finally cleared up. Later four cases of Vincent's angina occurred at Hutton homes. One of these was a transfer from Leytonstone, and the other three were contacts of this child.

Enuresis.

The special enuresis unit at Anerley, which had been formed for the special inquiry into the condition conducted by Dr. W. A. Scott, was closed during the autumn. Dr. Scott in a final report summed up the results of the inquiry as follows:—

The Anerley unit has shown that in the treatment of established enuretics—

(i) They are best treated in their own schools.

(ii) Association in a unit is undesirable.

(iii) Medical supervision of the individual cases is not essential.

(iv) Drugs are only necessary in a small number of cases that do not respond to other methods of treatment.

(v) (a) Waking at night, (b) limited fluid intake over 24 hours, and (c) prevention of tiredness by excessive exertion are all helpful in dealing with cases.

(vi) Results are not to be expected too quickly.

(vii) The gaining of the patient's interest and confidence are essential before cure.

Diet.

During February the dietetic intake of a small group of children at the Leytonstone children's homes was studied in the biochemical department of King's College hospital, and the following averages were calculated :—

	Boys of 14	*Girls of* 13
Calories per diem ...	3,109	2,516
Grammes per diem—		
Animal protein ...	53	42
Protein	91	72
Fat	115	101
Carbohydrate ...	406	313
Milligrams per diem—		
Calcium	766	682
Phosphates... ...	1,435	1,094
Iron	17·9	12·7

The intake of both boys and girls is well above the intake of other children of the same age investigated elsewhere, and the mineral intake is exceptionally good.

The children were on the ordinary diet supplied for all the residential schools.

Hospital schools

Reference has been made in various sections of this report to the manifold benefits conferred upon the general school population of London by the appropriation of the special children's hospitals previously maintained by the former poor-law authorities, in particular the Metropolitan Asylums Board.

These hospitals are under the direction of the Hospitals and Medical Services Committee, and full details of the year's work will be found in Vol. IV., Part I, of the Annual Report of the Council.

The special children's hospitals are, however, now recognised by the Board of Education as hospital schools, and education is now being provided in eleven of these establishments. The following is a list of the hospitals at which schools are conducted, with their classification and nominal accommodation :—

Table 38

Hospital school	Classification	Nominal accommodation
Downs, Sutton	Mastoiditis, otitis media, rheumatism and convalescence	360
Goldie Leigh, Abbey Wood...	Skin diseases and convalescence	248
Heatherwood, Ascot... ...	Surgical tuberculosis	244
High Wood, Brentwood ...	Pulmonary tuberculosis, rheumatism	482
Millfield, Littlehampton ...	Convalescent tuberculosis and other convalescents	98
Northern, Winchmore Hill ...	Post-encephalitis lethargica	84
Norwood children's	Severe crippling, rheumatism	210
Queen Mary's, Carshalton ...	Rheumatism, tuberculosis (non-pulmonary), poliomyelitis, osteomyelitis and congenital malformations	1,284
St. Anne's home, Herne Bay	Convalescence	127
St. Faith's, Brentwood ...	Epilepsy	A small number.
White Oak, Swanley... ...	Trachoma, interstitial keratitis, and other acute eye diseases	364

Special inquiries and reports

Abstracts of special inquiries and reports will be found in their appropriate sections. Attention may be directed to the reports by Dr. A. G. Wells on the audiometer (p. 18), and the aural work (p. 28); by Dr. E. M. McVail on nursery schools (p. 67); and by Dr. C. E. Thornton on rheumatism (p. 31).

Short accounts of special inquiries made by members of the staff during the year will be found as follows: on the incidence of scabies by Dr. Francklyn and Dr. W. E. Scott (p. 35); on posture in elementary schools by Dr. L. Batten (p. 49); on studies in malnutrition by Dr. L. Batten and Dr. Elman (p. 21).

During the past two years a special inquiry into the incidence of certain rare congenital conditions has been carried on in London by the school medical staff at the request of the Medical Research Council. Of 48,000 children in the eleven-year-old group during 1936, three were reported with congenital hip disease, one with tylosis palmarum, two with atrichia, three with albinism, fifteen with hare lip or cleft palate, three with transposition of the viscera, one with hæmophilia, three with microphthalmos, four with congenital cataract, one with ectopia lentis and one with Friedreich's ataxia.

Medical causes of backwardness.

Drs. Williams and Morgan have conducted an inquiry into the medical causes of backwardness. For this purpose 159 children, aged about 11, in the western area of London, were investigated, all of whom had shown marked educational failure as measured by bad results in the scholarship examination at that age.

In every case an assessment was made of the mental age, reading, calculation and vocabulary age, and a performance test level briefly established. Each child received a complete medical examination with special reference to the sense organs and nervous system. An estimate of the child's stability or instability was made from the psycho-physical standpoint.

The following table shows the distribution of the children in terms of their intelligence quotients, the average educational level and the incidence of unstable children. The high incidence of instability among the more intelligent children is noticeable.

TABLE 39.—*Summary of the 159 children*

Intelligence quotient	Sex	Mental age	Reading age	Calculation age	Number of children	Number of unstables
Over 100 per cent.	M.	11·1	8·3	7·4	14	9
85—99 ,,	M.	10·0	9·0	8·0	59	25
	F.	9·8	8·8	8·7	15	9
70—84 ,,	M.	8·8	7·0	7·1	55	14
	F.	8·9	8·7	7·1	11	4
Below 70 ,,	M.	7·3	5·5	6·3	4	0
	F.	7·3	4·0	5·5	1	0
Total ...	—	—	—	—	159	61

It will be seen that in these children the educational level is not dependent merely on intelligence, since 14 children had above average intelligence, and the great majority had educational levels much below their intelligence. The medical factors explaining this divergence were: (1) slight defects of vision, 9 children; hearing, 5; nutrition, 3; poor general health, 10; nearly all of these were not severe enough to excite comment in an ordinary routine examination; and (2) physiological deviation from the normal (these have been placed under the heading of instability).

In the majority of cases these factors were combined with some other, such as poor intelligence, educational and social handicaps, to make a problem which must be dealt with from several aspects.

Wage-earning employment of school children

In the year 1936, 3,954 applications (3,911 boys and 43 girls) were dealt with under the by-laws for medical certificates in connection with the employment of

school children out of school hours. In the subjoined statement the numbers first given are in respect of boys, the figures for girls being given in brackets

Certificates were granted unconditionally in the following cases: delivery of milk, 305 (—); delivery of newspapers, 2,131 (15); carrying or delivery of goods or parcels, 682 (6); in or in connection with a shop, 313 (5); in a coal yard, 11 (—); industrial work at home, 3 (1); house work away from home, 15 (3); as a messenger, 52 (1); miscellaneous, 18 (—).

In 254 other cases (247 boys and 7 girls) the certificates were granted subject to medical treatment being obtained, or special conditions being observed. The number of ailments or other reasons relating to the issue of these certificates were as follows: medical grounds, 231 (6); non-medical grounds, 28 (1). Certificates on medical or other grounds were refused to 134 boys and 5 girls for the following reasons: rheumatism, 2 (—); dental condition, 2 (—); defective vision, 6 (1); heart condition, 10 (—); scoliosis, — (1); poor general condition, 11 (—); nephritis, 1 (—); personal hygiene, 1 (—); anæmia and malnutrition, 4 (2); glands, 1 (—); and for non-medical reasons such as "withdrawn," illegal hours, failed to attend, work unsuitable, under or over age, etc., 99 (1).

Employment of children in entertainments.

The number of individual children who held licences in 1936 was 488, of these 447 were girls and 41 boys. The number is greater than during 1935, in which year 447 children held licences. The number of individual licences granted was 657. Of these licensed children, 412 belonged to troupes or took part in pantomimes and fairy plays; 54 took part in stage plays, concerts, recitals, etc., and 22 performed variety turns. There were 422 children from elementary schools, 9 from secondary schools, and 57 attended private schools or had private tutors.

During the year 684 children were medically examined at the County Hall, comprising 626 girls and 58 boys. Of these 128 were referred for treatment, including: refraction error, 24; dental decay, 75; throat affections, 3; skin disease, 11; personal hygiene, 6; anæmia, 3; bronchitis, 1; discharging ears, 3.

Seven were refused certificates on account of the presence of the following conditions: heart disease, 2; high myopia, 1; throat trouble, 1; bronchitis, 1; anæmia, 1; discharging ears, 1.

Examination of employees in the education service and scholars

In the year 9,642 entrants to the permanent education service, and candidates for teaching awards, scholarships, and local special places, presented themselves for examination. The following table indicates the numbers submitted for each grade and the results of the examinations:—

TABLE 40

Status	Number examined		Number fit		Number rejected		Number who withdrew after being referred for remediable defects or were not due for re-examination until 1937	
	Male	Female	Male	Female	Male	Female	Male	Female
Permanent service	239	338	224	331	5	3	10	4
Teaching awards	144	371	143	344	1	6	—	21
Scholarships	4,352	4,245	4,143	4,083	29	25	180	137
	4,735	4,954	4,510	4,758	35	34	190	162
Total	*9,689		9,268		†69		352	

* Including 6 permanent service cases (3 male, 3 female), 11 teaching awards (female) and 30 scholarships (18 male, 12 female) referred from 1935.

† The causes of rejection were mainly defects of vision, unsatisfactory general health and morbid conditions of the heart.

In addition to the above, 172 examinations were made of scholars (78 male, 94 female) with a view to determining their fitness to continue to hold awards, and of these 8 (3 male, 5 female) were found to be unfit.

Re-examinations totalling 2,391 were made of entrants, scholars, etc., who were referred at the first examination for treatment for one or more remediable defects.

The total number of examinations was 12,252, an increase of 1,705 on the total for 1935.

Cases specially referred.

There were also referred to the public health department 3,181 special cases in which medical advice was required. This figure includes 2,484 teachers (602 men, 1,882 women) and 697 schoolkeepers, cleaners, etc. (184 men, 513 women).

In regard to recommendations governing sick leave to teachers, 1,722 or 69·3 per cent. concerned teachers over 40 years of age.

Teachers of physical education.

During the year, 283 applicants for admission to the Council's course of physical education were examined. Of these, 19 were deemed to be either temporarily or permanently unfit to undergo the training on the following grounds: poor general condition, 6; varicose veins, 6; injury, 2; hernia, 1; renal calculus, 1; post-operative disability, 2; myopia, 1.

In July it was agreed that, for a limited period, teachers taking the six-weeks course in physical education should be invited to present themselves for medical examination at the conclusion of the course.

In September, 76 teachers (38 male, 38 female) attended this course and of these, 9 (5 male, 4 female) presented themselves for voluntary re-examination at the conclusion of the course. It was found that the teachers had suffered no physical ill-effects as a result of taking the course.

STATISTICAL TABLES

TABLE I.—*Medical Inspection*, 1936

(a) Routine Inspections

Group	Boys	Girls	Total
Entrants	25,439	25,069	50,508
Age 7	18,802	18,462	37,264
Age 8 (preliminary survey only)	4,074	4,207	8,281
Age 8 (detailed examination)...	1,046	931	1,977
Age 11	24,222	23,844	48,066
Leavers	24,393	24,502	48,895
Total elementary schools ...	97,976	97,015	194,991
,, special schools	733	493	1,226

(b) Other Inspections

Special inspections ...	60,474	62,489	122,963
Infectious disease enquiries	—	—	30,535
Re-inspections	—	—	129,867

(c) Children found at routine medical inspection to require treatment (excluding uncleanliness and dental disease)

Age group	Inspected	Found to require treatment	Percentage requiring treatment
Entrants	50,508	7,476	14·8
Age 7	37,264	6,187	16·6
Age 8 (preliminary survey only) ...	8,281	1,499	18·1
Age 8 (detailed examination) ...	1,977	374	18·9
Age 11	48,066	7,828	16·3
Leavers—age 13¾	48,895	7,594	15·5
Total, elementary schools ...	194,991	30,958	15·9
,, special schools	1,226	170	13·9

TABLE II

(a) (1) *Defects found at medical inspections of all children except those aged 8 years. Elementary and special schools*

Disease or defect	Routine inspections—Defects				Special inspections—Defects	
	Requiring treatment		Requiring observation.		Requiring treatment	Requiring observation
	Elementary schools	Special schools	Elementary schools	Special schools		
Malnutrition	2,103	9	925	6	700	190
Skin—Ringworm, head	1	—	—	—	16	—
„ „ body	26	—	1	—	12	3
Scabies	157	1	2	—	2,461	9
Impetigo	121	2	3	—	680	10
Other disease (non-tubercular)	745	5	68	1	701	61
Eye— Blepharitis	589	3	58	—	187	14
Conjunctivitis	86	2	6	—	155	10
Keratitis	1	—	—	—	2	1
Corneal opacities	2	—	—	—	6	1
Defective vision, excluding squint	12,768	98	5,551	93	3,072	359
Squint	946	3	391	2	420	44
Other conditions	137	1	31	—	192	21
Ear— Defective hearing	155	4	84	2	180	39
Otitis media	676	10	214	—	456	91
Other ear disease or defect ...	341	1	76	2	194	55
Nose and throat—						
Chronic tonsillitis	5,168	6	4,939	2	1,251	323
Adenoids	437	1	236	—	181	20
Chronic tonsillitis and adenoids	1,786	1	594	—	585	28
Other conditions	559	2	206	2	458	107
Enlarged cervical glands	336	—	1,098	—	177	167
Defective speech	106	1	156	1	119	55
Teeth—Dental disease or defect ...	50,783	247	1,256	5	4,196	81
Heart and circulation, heart disease—						
Organic	25	—	56	—	—	2
Functional	18	—	117	—	14	15
Not stated	179	1	1,604	14	178	550
Anæmia	427	2	260	2	226	172
Lungs—Bronchitis	925	6	705	4	161	60
Other non-tubercular ...	240	3	373	—	159	116
Tuberculosis—						
Pulmonary definite	1	—	—	—	2	—
„ suspected ...	22	—	48	1	15	23
Glands	4	—	5	—	7	5
Spine	—	—	—	—	1	1
Hip	—	—	1	—	—	1
Bones and joints	2	—	4	—	1	1
Skin	3	—	—	—	—	—
Other forms	3	—	—	—	1	1
Nervous—Epilepsy	12	—	16	1	44	21
Chorea	50	1	48	—	149	73
Other conditions	166	5	167	—	122	65
Deformities—						
Rickets	73	—	20	1	18	5
Spinal curvature	456	4	145	1	69	43
Other	694	5	382	1	216	69
Other conditions	2,329	17	907	3	3,078	1,119
Total ...	83,658	441	20,753	144	20,862	4,031

TABLE II (*cont.*)

(*a*) (2). *Defects found at medical inspections of children aged 8 years at elementary schools*

Disease or defect	Routine inspections—	
	Requiring treatment	Requiring observation
Malnutrition	109	31
Skin—Ringworm, head	—	—
,, body	—	—
Scabies	3	—
Impetigo	9	—
Other disease (non-tubercular)	26	2
Eye—Blepharitis	27	—
Conjunctivitis	8	—
Keratitis	—	—
Corneal opacities	—	—
Defective vision, excluding squint ...	845	237
Squint	37	10
Other conditions	4	—
Ear— Defective hearing	8	2
Otitis media	29	2
Other ear disease or defect	18	2
Nose and throat—		
Chronic tonsillitis	262	113
Adenoids	30	6
Chronic tonsillitis and adenoids ...	115	6
Other conditions	36	6
Enlarged cervical glands	24	40
Defective speech	10	4
Teeth—Dental disease or defect	2,870	26
Heart and circulation, heart disease—		
Organic	2	1
Functional	1	2
Not stated	10	41
Anæmia	28	15
Lungs—Bronchitis	25	7
Other non-tubercular	6	12
Tuberculosis—		
Pulmonary definite	—	—
,, suspected	2	2
Glands	2	—
Spine	—	—
Hip	—	—
Bones and joints	—	—
Skin	—	—
Other forms	—	—
Nervous—Epilepsy	—	2
Chorea	3	1
Other conditions	3	4
Deformities—		
Rickets	5	—
Spinal curvature	5	2
Other	10	4
Other conditions	78	34
Total ...	4,650	614

TABLE II (*cont.*)

(*b*) *Classification of the nutrition of children inspected during the year in the routine age groups*

Age Group	Number of children inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad.)	
		No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage
Entrants	50,508	7,618	15·08	39,725	78·65	3,123	6·19	42	0·08
Age 7 years	37,264	5,283	14·18	28,968	77·74	2,991	8·02	22	0·06
,, 8 (prelim.)	—	—	—	—	—	—	—	—	—
,, 8 (detailed)	1,977	282	14·26	1,512	76·48	180	9·11	3	0·15
,, 11	48,066	7,718	16·06	37,309	77·62	2,992	6·22	47	0·10
,, 13¾ (leavers)	48,895	10,153	20·76	36,902	75·48	1,829	3·74	11	0·20
Total, elementary	186,710	31,054	16·63	144,416	77·35	11,115	5·95	125	0·07
,, special sch.	1,226	125	10·20	993	80·99	108	8·81	—	—

TABLE III

(*a*) *Exceptional children in London in* 1936

Classification	At certified special schools	At public elementary schools	At other institutions*	At no school or institution	Total	Per 1,000 on Roll.
Blind children	111	—	3	3†	117	·2
Partially sighted children	574	15	26	—	615	1·2
Deaf children	460	—	3	4‡	467	·9
Partially deaf children	128	5	6	—	139	·3
Mentally defective children—						
Feeble-minded children	3,327	5§	16	11**	3,359	6·6
Epileptic children—						
Children suffering from severe epilepsy	117	—	4	4¶	125	·2
Physically defective children—						
Tuberculous children—						
Pulmonary	352	—	18	—	370	·7
Non-pulmonary...	639	—	12	—	651	1·2
Delicate children	2,811	7,132‖	7	—	9,950	19·6
Crippled children	1,900††	—	16	—	1,916	3·8
Children with heart disease ...	2,008	—	23	—	2,031	4·0

* Undergoing treatment in general hospitals, etc.
† At time of report were awaiting admission to schools for the blind.
‡ Under enforceable age.
§ At time of report were awaiting admission to M.D. schools.
¶ Awaiting admission to certified schools.
†† Includes 20 children at Northern hospital (post-encephalitis lethargica).
‖ Of these 85 children were suitable for admission to open-air schools (O) but their parents refused to allow their transfer to such schools or the children were awaiting admission. The remainder could not be certified as incapable by reason of physical defect of receiving proper benefit from instruction in the ordinary public elementary schools, but they might have benefited from a period of open-air treatment.
** Four under instruction at home and seven under enforceable age.

(*b*) *Return of children suffering from more than one defect*, 1936

Defect.	Type of School								At other institutions (Gen. hosp., etc.)	At no schl.	Total
	Day M.D.	Residential P.D.	Residential blind	Day deaf	Residential deaf	Epileptic colony	Day P.D.	Certified hospital schls.			
M.D. and deaf	3	–	–	–	14	–	–	–	–	–	17
M.D. and crippled	32	1	–	–	–	–	2	8	–	–	43
M.D. and heart	25	–	–	–	–	–	2	–	–	–	27
M.D. and epileptic	12	–	–	–	–	22	–	–	1	–	35
M.D. and T.B.	–	–	–	–	–	–	–	2	–	–	2
M.D., crippled and deaf	–	–	–	–	8	–	–	–	–	–	8
Blind and deaf	–	–	–	–	–	–	–	1	–	–	1
Blind and epileptic	–	–	1	–	–	–	–	–	–	–	1
Blind and M.D.	–	–	2	–	–	–	–	–	1	–	3
Deaf and crippled	–	–	–	1	4	–	–	–	–	–	5
Deaf and heart	–	–	–	–	1	–	–	–	–	–	1
Epileptic and crippled	–	–	–	–	–	1	1	–	–	–	2
Epileptic and heart	–	–	–	–	–	2	–	–	–	–	2
Heart and crippled	–	1	–	–	–	–	34	–	–	–	35
T.B. and deaf	–	–	–	–	–	–	–	1	–	–	1
Total	72	2	3	1	27	25	39	12	2	–	183

Table IV

Treatment table

(*a*) Group I.—*Minor ailments, excluding uncleanliness, for which see group V*

Disease or defect	Defects treated or under treatment		
	Under Council's scheme	Otherwise	Total
Skin—			
Scabies	5,211	—	8,389
Impetigo	3,178	—	
Ringworm, head	89*	142	231†
„ body			
Other skin disease			
Eye disease (external) and other (but excluding cases falling in group II)			
Ear disease (cases in which operative treatment, *e.g.*, mastoid operations, etc., is given, are excluded)	122,305	801	123,106
Miscellaneous (minor injuries, bruises, sores, chilblains, etc.)			
	130,783	943	131,726

* 80 by X-ray. † 151 by X-ray.

(*b*) Group II.—*Defective vision and squint (excluding eye defects treated as minor ailments, for which see group I).*

Disease or defect	Defects dealt with		
	Under Council's scheme	Otherwise	Total
Errors of refraction (including squint, but excluding operations for squint)	37,570	1,006	40,576
Other defect or disease of the eyes (excluding those in group I)	2,000 (estimated)	*	

Children for whom glasses were prescribed—under the Council's scheme, 27,744; otherwise 740 (estimated).

Children who obtained or received glasses—under the Council's scheme, 26,594 = 95·9 per cent.; otherwise 844.

* Included in group I minor ailments.

(c) GROUP III.—*Treatment of defects of the throat and nose. Number of defects*

Defect	Received operative treatment		Total	Received other forms of treatment	Total number treated
	Under Council's scheme	Private practitioner or hospital			
Tonsils ...	742	503	1,245	4,074	14,156
Adenoids ...	386	68	454		
Tonsils and adenoids ...	7,973	265	8,238		
Other	15	130	145		
Total ...	9,116	966	10,082	4,074	14,156

(d) GROUP IV.—*Dental defects*

1.	Number of children who were :—		
	(a) Inspected by the dentist—Age groups 5 years and under ...	22,996	306,969
	6 ,, ...	30,490	
	7 ,, ...	31,843	
	8 ,, ...	30,528	
	9 ,, ...	35,588	
	10 ,, ...	37,896	
	11 ,, ...	32,342	
	12 ,, ...	33,317	
	13 ,, ...	32,832	
	14 ,, and over ...	19,137	
	(b) Found to require treatment	193,990	
	(c) Actually treated	144,416	
2.	Half-days devoted to inspection	2,810	22,725
	,, ,, ,, treatment	19,915	
3.	Attendances by children for treatment	249,788	
4.	Fillings—permanent teeth	124,881	144,420
	,, temporary teeth	19,539	
5.	Extractions—permanent teeth	60,377	317,480
	,, temporary teeth	257,103	
6.	Administration of general anæsthetics for extractions	70,441	
7.	Other operations—permanent teeth ,, ,, temporary teeth	25,767	

(e) GROUP V.—*Uncleanliness and verminous conditions.*

(a)	Average number of visits per school made by school nurse during the year 1936	6
(b)	Examinations of children in the schools by school nurses	1,796,323
(c)	Number of verminous children noted	85,300
(d)	Children cleansed under Council's arrangements	*66,464
(e)	Cases in which legal proceedings were taken under the Education Act, 1921 (section 87)	300

* Includes 14,289 compulsory cleansings.

TABLE V

Medical inspection.—Number of children examined, 1926–1936

Year	Routine examinations	Special examinations	Re-inspections	Examinations at special enquiries into outbreaks of infectious disease	Special ear inspection centre attendances	Rheumatism supervisory centre attendances
1926	248,820	81,575	191,182	87,009	11,065	—
1927	256,123	82,394	193,260	95,147	12,091	—
1928	268,592	88,832	187,480	50,439	14,921	1,409
1929	248,036	91,012	185,989	39,711	14,588	5,125
1930	218,458	86,162	186,615	44,609	15,423	6,670
1931	220,600	90,248	169,029	25,596	17,252	9,767
1932	221,895	95,855	163,491	58,870	18,154	12,833
1933	218,654	85,360	165,048	71,600	18,023	14,880
1934	250,781	91,880	146,620	44,197	17,331	15,340
1935	208,077	125,199	158,686	21,713	18,051	15,420
1936	196,217	122,963	129,867	30,535	28,387	15,913

TABLE VI

Medical treatment.—Number of cases treated under the Council's scheme and by other agencies, 1926–1936

Year	Minor ailments†		Vision		Nose and throat		Dental	
	Under the Council's scheme	Otherwise	Under the Council's scheme	Otherwise	Under the Council's scheme	Otherwise	Under the Council's scheme	Otherwise*
1926	92,683	1,961	37,985	1,687	15,168	1,615	113,932	4,321
1927	103,019	1,796	40,293	1,593	18,176	1,797	124,992	4,689
1928	101,254	1,772	40,984	1,837	20,162	2,336	129,255	4,758
1929	101,666	1,615	41,620	1,905	19,903	2,282	129,952	4,473
1930	105,118	1,435	43,579	1,961	19,760	1,904	138,280	5,849
1931	106,072	1,492	44,686	2,082	20,703	1,935	139,723	5,282
1932	105,624	2,726	44,172	1,811	17,364	1,793	134,769	5,195
1933	116,089	1,322	40,434	1,827	14,145	1,312	133,835	4,806
1934	‡120,549	880	40,284	1,653	12,622	1,116	138,140	4,805
1935	§123,695	882	39,450	1,217	12,766	1,094	144,383	5,149
1936	‖122,305	801	39,570	1,006	13,190	966	144,416	5,862

* It is not possible to give complete figures, but those given are the result of following up of medical inspections. Other children receive dental treatment outside the Council's scheme as a result of dental inspection.

† Includes skin and head ringworm cases.
‡ Includes 13,087 "nurses' cases."
§ Includes 14,537 "nurses' cases."
‖ Includes 16,548 "nurses' cases."

TABLE VII

Medical inspection of students in higher education institutions, 1936

Classification	Council secondary schools		Other secondary schools		Council and other junior tech. schools		Training colleges		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Male	Female	Male	Female
Number of institutions	12	16	14	11	18	16	1	4	45	47
I. Routine detailed examination at—										
(1) age 12	1,242	909	1,045	597	126	8	—	—	2,413	1,514
(2) age 15	852	1,012	1,061	482	975	918	—	—	2,888	2,412
II. Examination (not necessarily detailed) at other ages (*i.e.*, specials)	1,053	1,377	1,189	752	708	593	64	929	3,014	3,651
III. Reviewals	216	1,658	812	558	123	158	—	4	1,151	2,378
IV. Re-inspections	506	1,296	318	481	349	466	—	15	1,173	2,258

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