[Report of the Medical Officer of Health for Kensington Borough].

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The Royal Borough of Kensington.

THE

ANNUAL REPORT

ON THE

HEALTH OF THE BOROUGH

FOR THE YEAR

1930

BY

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Medical Officer of Health.

Vail & Co., Printers and Stationers, 170, Farringdon Road, E.C.

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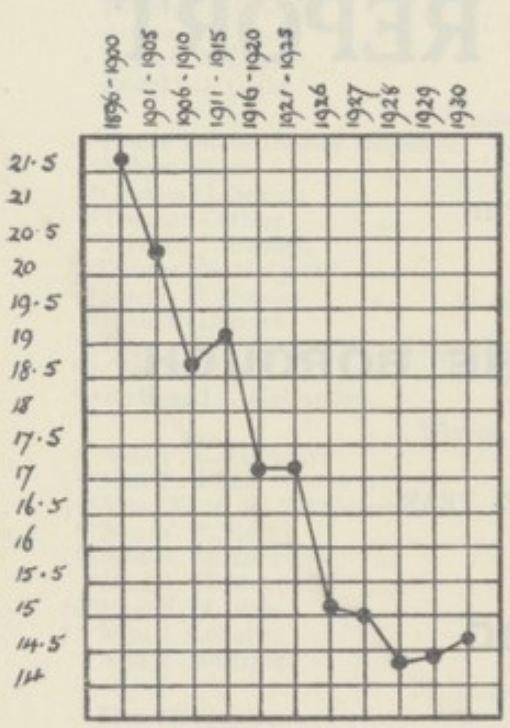
SUMMARY OF STATISTICS
For the year 1930.

Population				176,000		Area of borough in acres		2,291
Density of population per acre ...				77		Number of marriages		2,004
Rateable value				£2,998,232		Product of a 1d. rate		£12,492
			Total.	M.	F.			
Live births	legitimate ...		2,351	1,180	1,171	Birth rate		14·6
	illegitimate ...		229	115	114			
Still births			87	41	46	Rate per 1,000 total births ...		34
Deaths			2,242	1,002	1,240	Death rate		12·7
Percentage of total deaths occurring in public institutions								43 %
Number of women dying in, or in consequence of, childbirth						from sepsis		6
						„ other causes		—
Maternal death rate			2·3					

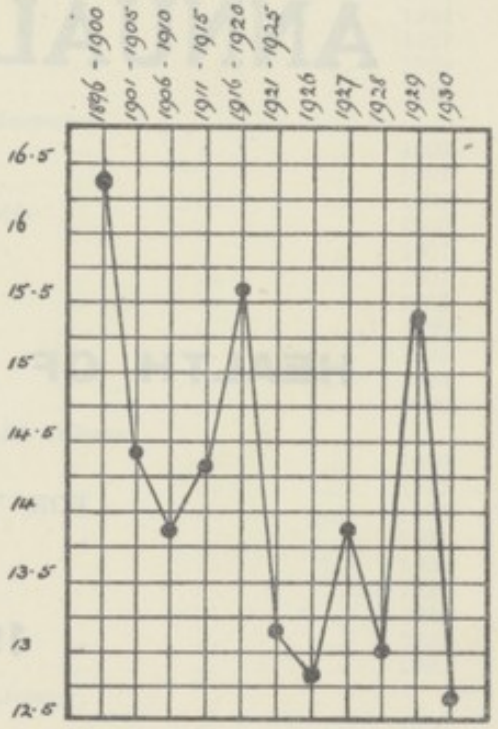
Death-rate of infants under one year of age per 1,000 live births :—
legitimate, 63; illegitimate, 118; total, 69.

Deaths from measles (all ages), 39.
„ whooping cough (all ages), 4.
„ diarrhœa (under 2 years of age), 38.

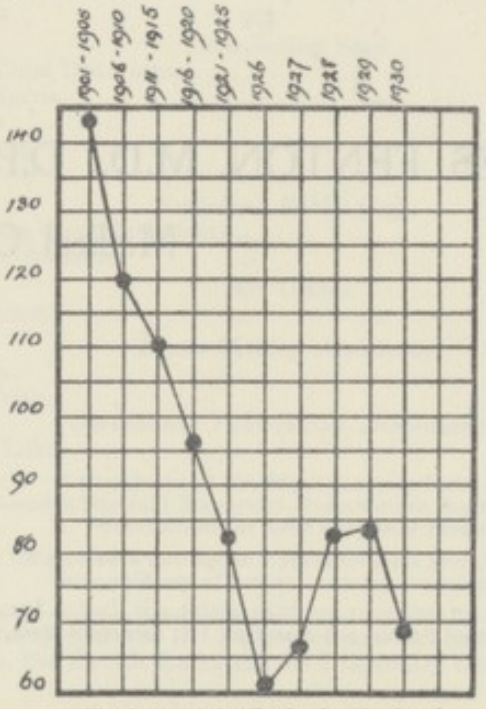
Deaths from phthisis	140	Phthisis death rate	0·78
Deaths from all forms of tuberculosis ...	165	Tuberculosis death rate	0·92
Deaths from the zymotic diseases ...	106	Zymotic death rate	0·62



Kensington births per 1,000 population.



Kensington deaths per 1,000 population.



Kensington infantile deaths (deaths of children under the age of 12 months) per 1,000 births.

TOWN HALL,

KENSINGTON, W. 8.

15*th June*, 1931.

To the Mayor, Aldermen and Councillors of the Royal Borough of Kensington.

MY LORD, LADIES AND GENTLEMEN,

I have the honour to submit my annual report for 1930 upon the state of the public health in Kensington.

The year has been a very satisfactory one. The statistics show that there has been a slight increase in the birth rate, a material fall in the death rate and a considerable decrease in the infantile mortality rate. There has been no epidemic of note during the year and the general health of the inhabitants of the borough as a whole appears to have been good.

There has been an increase in the number of deaths from phthisis; but, as is explained in the section dealing with that disease, there is no cause for alarm in this respect, and it is confidently hoped that the decrease in the mortality rate from this disease which has been so marked in recent years will continue.

The three years' trial in Kensington of compulsory notification of acute rheumatism terminated on the 30th September, 1930, but the Minister of Health has extended this trial for a further three years. The third annual report on the Council's rheumatism scheme will be found as "Appendix 1" to this Report.

During the year, the Council further extended their service in regard to the prevention and treatment of infectious disease, and arrangements have been made to establish whooping cough clinics at the Kenley Street Minor Ailment Centre and the Baby Clinic in Tavistock Road during epidemic periods.

The Council also made arrangements for an extension of their maternity and child welfare service by the establishment of an infant welfare centre on the Sutton Trust Estate in Dalgarno Gardens.

The presentation of this report affords me an opportunity of expressing my appreciation of the full measure of support which has been accorded to me by the Mayor, Aldermen and members of the Council, the Chairmen and Vice-Chairmen of the various Committees, and of thanking the chief officers of other departments for their willing help and the provision of much information contained in this report. In conclusion, I desire to thank the staff of the Public Health Department for their loyal and very efficient service throughout the year.

VITAL STATISTICS.

The Royal Borough of Kensington as constituted under the London Government Act, 1899, covers an area of 2,291 acres, and is co-extensive with the civil parish and registration district of the same name. The line of demarcation formed by Holland Park Avenue, High Street, Notting Hill Gate, and the Bayswater Road divides the borough into approximately equal halves described in previous years and in this report as North and South Kensington respectively. Each of these areas is co-terminous with the parliamentary division of the same name. The borough is further sub-divided into nine wards. North Kensington includes the wards of St. Charles, Golborne, Norland and Pembridge, whilst South Kensington is made up of the five other wards, namely, Holland, Earl's Court, Queen's Gate, Redcliffe and Brompton.

POPULATION.

The population of the borough as ascertained at the census in 1921 was 175,859, but for 1930 the Registrar-General has estimated it to be 176,000. From this latter figure the inhabitants in the different wards of the borough have been estimated to be as shown in the following table :—

The Borough	176,000
North Kensington	93,362
South Kensington	82,638
WARDS.	
St. Charles	26,303
Golborne	25,731
Norland	21,630
Pembridge	19,698
Holland	18,781
Earl's Court	17,725
Queen's Gate	13,676
Redcliffe	19,782
Brompton	12,674

In regard to the social status of the population, it may be said that the majority of the inhabitants in North Kensington belong to the poor class, whilst in South Kensington persons of that class constitute only a small proportion of the population.

The borough is peculiar in that there is no one occupation which absorbs a very large proportion of the male workers as is commonly found in many of the industrial areas.

MARRIAGES.

During the year, 2,004 marriages were registered, representing a rate of 22·8 per 1,000 of the population. The place of marriage is set out in the following table :—

Church of England	819
Roman Catholic Church..	251
Nonconformist Church	37
Jewish Church	8
Register Office	889
Total	2,004

BIRTHS.

The number of births registered was 2,580, after correction for inward and outward transfers ; and the birth rate for the borough was 14·6 per 1,000 population. Distributed according to sex and legitimacy the births were as follow :—

	Male.	Female.	Total.
Legitimate	1,180	1,171	2,351
Illegitimate	115	114	229
Totals	1,295	1,285	2,580

Table showing the number of births and the birth rates in England and Wales, London, Kensington, and the various districts in the borough in 1930, and the rates for the previous five years:—

District.	1930.		Birth-rates in previous years.				
	No. of births.	Birth-rate.	1929.	1928.	1927.	1926.	1925.
England and Wales ...	649,430	16·3	16·3	16·7	16·7	17·8	18·3
London	69,449	15·7	15·7	15·7	16·1	17·1	18·0
The Borough	2,580	14·6	14·4	14·3	15·0	15·1	15·8
North Kensington	1,777	19·0	19·3	18·7	19·8	18·7	20·6
South Kensington	677	8·2	7·7	8·0	7·9	8·9	8·3
WARDS.							
St. Charles	472	17·9	19·3	20·2	15·6	18·4	18·8
Golborne	554	21·5	21·8	20·8	23·7	21·8	22·2
Norland	482	22·0	21·5	19·3	22·9	21·1	26·0
Pembridge	269	13·6	13·3	13·5	16·5	12·2	14·5
Holland	177	9·4	8·2	10·1	10·5	9·6	8·8
Earl's Court	175	9·8	8·7	8·7	6·9	10·7	8·2
Queen's Gate...	70	5·2	6·2	5·7	5·7	7·8	8·5
Redcliffe	187	9·4	9·2	8·1	8·1	9·2	9·2
Brompton	63	5·3	5·0	6·3	7·7	5·9	6·3
Ward unknown	126	...	...	...	...	...	...

The effects of social status on the birth rate are illustrated by the fact that the rate for South Kensington is usually less than half the rate for North Kensington, whilst in 1930 the birth rate in each of the two wards in which the poorest inhabitants of the borough reside was more than four times as great as the rate for the ward of Brompton in the south.

The decline in the birth rate in Kensington since 1881, which is similar to that taking place throughout the country, is shown in the following table:—

Period.	Birth-rate per 1,000 population.
1881-1885	26·1
1886-1890	23·5
1891-1895	22·0
1896-1900	21·6
1901-1905	20·4
1906-1910	18·7
1911-1915	19·1
1916-1920	17·2
1921-1925	17·2
1926	15·1
1927	15·0
1928	14·3
1929	14·4
1930	14·6

Notification of Births Act, 1907.—Parents are allowed a period of six weeks within which to register the birth of a child, but the fulfilment of this duty is so frequently postponed until the last few days of this period that the records of the registrars of births do not enable public health authorities to gain that early knowledge of the birth of children in their districts which is so essential to the success of the work of health visitors. This disadvantage arising from delay in birth registration has been met by the Notification of Births Act, which requires all live births and all still births occurring after the twenty-eighth week of pregnancy to be notified within thirty-six hours to the medical officer of health of the district in which they occur.

During the year, 2,580 births to Kensington mothers were registered, and of this number 2,526 or 97 per cent. were notified in accordance with the requirements of the Act. The number of stillbirths notified was 52, and the number of births notified as having occurred in Kensington but belonging to other districts was 94.

The following table indicates the source of notification and the kinds of births notified.

Source of notification.	Number of births notified.		
	Still births.	Live births.	Total births.
Number notified by midwives	17	1,059	1,076
,, ,, ,, parents	1	55	56
,, ,, ,, medical practitioners ...	9	326	335
,, ,, ,, other persons	10	485	495
Births in the borough	37	1,925	1,962
Notified from institutions outside the borough	15	549	564
Totals	52	2,474	2,526

Percentage of births in Kensington notified during the past five years, in accordance with the Notification of Births Act, 1907.

Year.	Percentage
1926	96
1927	96
1928	94
1929	95
1930	97

The importance of securing due compliance with the Notification of Births Act cannot be over-estimated, for the information obtained constitutes the starting point of the work of health visitors.

DEATHS.

The number of deaths registered in the borough during the year was 2,401, but this does not represent the true mortality among the population and, in order to obtain the corrected number of deaths which does so represent the true mortality, it is necessary to add the deaths of Kensington "residents" occurring beyond the district to the number registered as actually occurring in the borough, and to subtract from the total thus arrived at the deaths of "non-residents" taking place in the institutions provided in Kensington for the reception of sick or infirm persons.

Total deaths registered in the borough	2,401
Deaths of residents in public institutions, etc., beyond the borough	590
	2,991
Deaths of non-residents in public institutions, etc., within the borough	749
Corrected number of deaths belonging to the borough	2,242

The corrected number of deaths gives a death-rate of 12·7 per 1,000 living.

The following table shows the number of deaths and the death-rates in England and Wales, London, Kensington and the various districts in the borough in 1930, and the rates for the previous five years:—

District.	1930.		Death-rates in previous years.				
	No. of deaths.	Death-rate.	1929.	1928.	1927.	1926.	1925.
England and Wales	455,397	11·4	13·4	11·7	12·3	11·6	12·2
London	51,184	11·4	13·8	11·6	11·9	11·4	11·7
The Borough...	2,242	12·7	15·4	13·0	13·8	12·8	13·2
North Kensington	1,174	12·6	15·4	13·4	13·8	12·9	13·4
South Kensington	1,032	12·5	14·5	12·1	13·4	11·8	12·2
WARDS.							
St. Charles	309	11·7	13·9	12·0	12·9	10·7	13·7
Golborne	316	12·3	16·0	13·2	13·8	13·0	12·6
Norland	311	14·4	17·5	15·3	14·5	15·0	14·7
Pembridge	238	12·1	14·1	13·4	14·1	12·8	12·7
Holland	239	12·7	14·4	13·2	13·4	13·5	14·1
Earl's Court	266	15·0	15·9	13·5	13·7	13·1	13·8
Queen's Gate...	153	11·2	12·7	10·0	13·2	8·5	9·4
Redcliffe	230	11·1	15·7	12·9	14·5	11·6	12·2
Brompton	144	11·4	12·5	9·5	11·3	11·5	10·1
Ward Unknown	36	...	...	...	...	...	...

From the above table, it will be seen that the 1930 death rates in England and Wales, London and in the borough show a considerable decrease over the rates for the preceding year. The following table shows the Kensington death-rates since 1896:—

Period.	Death-rate per 1,000 living.
1896-1900	16·4
1901-1905	14·4
1906-1910	13·8
1911-1915	14·3
1916-1920	15·6
1921-1925	13·2
1926	12·8
1927	13·8
1928	13·0
1929	15·4
1930	12·7

Causes of Death.—The following list shows certain causes of death which are important in themselves or from the fact that they contributed a considerable share to the total mortality for the year:—

Cause of death.	Number of deaths.
Principal zymotic (or epidemic) diseases ...	106
Epidemic influenza	31
Phthisis	140
Other tuberculous diseases	25
Cancer	311
Bronchitis	103
Pneumonia	176
Heart disease	460
Bright's disease	76
Puerperal fever	6
Premature birth	34
Accidents	83
Old age	75
All other causes	616
	2,242

It will be seen that over one-third of the deaths, or 879, were due to diseases of the heart or the organs of respiration. Phthisis, an infectious or preventable disease, caused 140 deaths.

The diseases described in the above list as the " principal zymotic diseases " are small-pox, measles, scarlet fever, diphtheria, whooping-cough, enteric fever (including fever not otherwise defined) and diarrhoea.

The following table shows the zymotic death rate for Kensington and London in each of the last five years.

Period.	Deaths from principal zymotic diseases per 1,000 persons living. Kensington.	London.
1926 ...	0·61 ...	0·63
1927 ...	0·36 ...	0·41
1928 ...	0·64 ...	0·69
1929 ...	0·78 ...	0·57
1930 ...	0·62 ...	0·58

Cancer.—Cancer caused 311 deaths, and of this number 281 occurred in persons over the age of 45 years. Carcinoma was the form of cancer to which 264 deaths were attributed ; sarcoma and epithelioma were the assigned causes of 14 deaths; 33 deaths were certified as due to cancer or malignant disease without further definition.

The parts of the body which were affected in each case are shown in the following table :—

DEATHS FROM CANCER, 1930.

Parts affected.	Sex.		Total.
	Male.	Female.	
Buccal cavity - - -	4	1	5
Lungs - - - -	10	4	14
Stomach, liver, etc. - -	65	54	119
Peritoneum, intestines, rectum -	25	43	68
Female genital organs - -	...	46	46
Breast - - - -	...	36	36
Skin - - - -	2	1	3
Other and unspecified organs -	10	10	20
Totals -	116	195	311

The deaths in the several wards, etc., are set out in the following table :—

The Borough	311
North Kensington	137
South Kensington	165
Wards.	
St. Charles	40
Golborne	36
Norland	37
Pembridge	24
Holland	32
Earl's Court	49
Queen's Gate	24
Redcliffe	32
Brompton	28
Ward unknown	9

The number of deaths from this disease was 29 more than in the previous year.

Heart Disease.—Heart disease is still the commonest cause of death, and last year 460 persons died from this complaint, this number being 19 fewer than the figure for 1929.

It has been estimated that probably about half the deaths from heart disease result from rheumatic fever contracted in the early years of life. This malady, which is common in children, has a great tendency to damage the valves of the heart and thus to handicap the patient throughout life, in addition to causing death from heart disease at a comparatively early age.

It is with a view to reducing the large amount of heart disease and the invalidity following rheumatic fever and to preventing many of the deaths from heart disease following rheumatic fever that the Council have established their Rheumatism Supervisory Centre at the Princess Louise Kensington Hospital for Children.

TABLE SHOWING THE NUMBER OF DEATHS IN 1930 FROM CERTAIN DISEASES OF PUBLIC HEALTH IMPORTANCE, ARRANGED IN FOUR WEEKLY PERIODS.

Four weeks ending	Measles.	Scarlet fever.	Whooping-cough.	Diphtheria.	Influenza.	Phthisis.	Cancer.	Bronchitis.	Pneumonia.	Diarrhœa and enteritis.
January 25 -	1	—	—	—	3	13	20	14	17	5
February 22 -	2	—	1	1	6	11	26	14	18	2
March 22 -	4	2	—	2	5	14	18	13	11	3
April 19 -	10	—	—	—	4	12	22	11	14	4
May 17 -	8	—	—	2	2	13	34	7	11	—
June 14 -	4	1	—	2	2	4	26	4	17	7
July 12 -	6	—	—	—	—	7	21	2	13	3
August 9 -	2	—	—	2	—	9	24	3	4	5
September 6 -	1	—	—	1	—	8	26	4	9	6
October 4 -	1	—	3	—	—	9	23	4	9	3
November 1 -	—	—	—	—	3	10	25	3	14	3
„ 29 -	—	—	—	1	3	15	20	5	17	2
January 3 (5 weeks)	—	—	—	2	3	15	26	19	22	3
Totals -	39	3	4	13	31	140	311	103	176	46

Infantile Mortality.

During the year 1930, there were 2,580 births and 177 deaths of children under the age of twelve months in the borough. These figures give an infantile mortality rate (deaths of infants under twelve months to each 1,000 births) of 69.

The following table gives the births and the infantile deaths and death rates in England and Wales, London, Kensington and the various wards of the borough for the year 1930, and the infantile death rates for the previous four years.

District.	1930.			Infantile mortality rates in previous four years.			
	No. of births.	No. of deaths of children under 1 year of age.	Infantile mortality rate.	1929	1928	1927	1926
England and Wales	649,430	38,790	60	74	65	69	70
London	69,449	4,191	64	70	67	59	64
The Borough	2,242	177	69	84	83	66	60
North Kensington	1,777	135	76	93	93	73	68
South Kensington	677	37	55	71	66	53	54
WARDS.							
St. Charles	472	30	64	59	58	86	55
Golborne	554	45	81	121	111	73	85
Norland	482	34	70	88	115	62	50
Pembridge	269	26	96	101	87	72	88
Holland	177	15	84	96	62	65	81
Earl's Court	175	8	46	70	75	31	41
Queen's Gate	70	4	57	46	87	25	54
Redcliffe	187	8	43	54	67	79	37
Brompton...	68	2	30	94	24	31	64
Ward unknown	126	5	—	—	—	—	—

In considering the above and subsequent tables it must be remembered that the deaths of infants at any temporary address (institution or private house) to which the mother went for her confinement, and deaths of infants in institutions to which they were transferred for treatment from the place of birth, are allocated to the district of the usual residence of the mother.

INFANTILE MORTALITY RATES, 1896-1930.

Period.	England and Wales.	London.	Kensington.
1896-1900	156	162	176
1901-1905	138	139	144
1906-1910	117	114	120
1911-1915	109	110	110
1916-1920	90	90	96
1921-1925	76	71	83
1926	70	64	60
1927	69	59	66
1928	65	67	83
1929	74	70	84
1930	60	64	69

THE NUMBER OF DEATHS OF KENSINGTON INFANTS OCCURRING IN EACH MONTH DURING 1930.

January	17
February	16
March	23
April	14
May	19
June	14
July	11
August	12
September	11
October	10
November	13
December	17

CAUSES OF, AND AGES AT, DEATH OF INFANTS UNDER ONE YEAR OF AGE IN KENSINGTON DURING 1930.

Causes of death.	Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total 4 weeks.	1—3 months.	3—6 months.	6—9 months.	9—12 months.	Total infant deaths under 1 year.
1. Common infectious diseases (Whooping cough 4) (Diphtheria 2) (Measles 7) (Erysipelas 3)	—	—	—	—	—	3	3	5	5	16
2. Tuberculosis	—	—	—	—	—	3	1	—	1	5
3. Pneumonia, bronchitis and other respiratory diseases	—	2	1	—	3	10	12	6	2	33
4. Enteritis	—	—	—	—	—	5	15	8	6	34
5. Complications of birth (Injury 5) (Atelectasis 4)	9	—	—	—	9	—	—	—	—	9
6. Congenital malformation	6	1	2	2	11	3	1	1	—	16
7. Premature birth ...	25	3	1	2	31	3	—	—	—	34
8. Atrophy, debility and marasmus	—	—	—	—	—	15	4	2	—	21
9. Other diseases (Meningitis 2) (Convulsions 1) (Influenza 3) (Other conditions 3)	2	—	1	—	3	1	1	2	2	9
TOTALS	42	6	5	4	57	43	37	24	16	177
Death-rate in each age period per 1,000 births	16·3	2·3	1·9	1·5	22·1	16·7	14·3	9·3	6·2	69
Percentage of total infant deaths occurring in each age period	23·7	3·4	2·8	2·3	32·2	24·3	20·9	13·5	9·0	

The Council have, with the assistance of the various voluntary organisations, provided a satisfactory maternity and child welfare service and have never failed to adopt any report submitted by myself in regard to developments of the service. Nevertheless, for some time I have been searching my mind to find if there is any avenue along which the Borough Council could affect improvement in the local infantile mortality rate which is generally above the average for London and England and Wales. The problem caused me some anxiety in 1929 and it occurred to me that it might be well to consult the general practitioners in the borough to ascertain whether they could offer any solution to the question of this high death rate.

I asked permission to address a meeting of the North Kensington Medical Society and was gratified to find that the members were most anxious to help in the matter. They appointed a sub-committee for the purpose and there were frequent conferences between this sub-committee and the officers of the Public Health Department.

After eighteen months of study, the doctors have published a report which appears as Appendix II. of this annual report.

The report gives the unbiassed views of private medical men and women with a wide experience amongst the poor and in that respect it is a most valuable document. I believe it is the first of its kind to be published and in itself demonstrates the close co-operation and harmony existing between the local medical practitioners on the one hand and the Public Health Department on the other.

ABOVE STANDARD DEATHS.

In almost every area there is a number of infant births and deaths occurring in those better-class homes where it is reasonable to assume that the children receive every care and all requisite medical and nursing assistance. These are called "above standard" cases and, although it is difficult to make certain that none is included under this heading in which the attention of a woman health officer might prove beneficial, they are not generally visited because, in the first place, the health officer may not be welcomed and, in the second place, she can occupy her time more profitably in visiting homes in the poorer quarters.

In 1930 the "above standard" notified births numbered 380 and the deaths 20, giving an infantile mortality rate of 53.

The 2,146 notified births and 157 deaths not "above standard" in 1930 give an infantile mortality rate of 73.

The causes of death in the "above standard" cases were as follow :—

Premature birth	8
Congenital heart disease	5
Inanition	1
Septic meningitis	1
Influenza	1
Marasmus	1
Broncho pneumonia	1
Diarrhoea	1
Injury at birth	1
Total	20

The wards to which the children belonged are :—

Norland	1
Pembridge	7
Holland	6
Earl's Court	3
Redcliffe	3
Total	20

Maternal Mortality.

In 1930 there were six deaths of Kensington women from diseases or accidents directly connected with child-birth, and this figure represents a death rate of 2·3 mothers per 1,000 births. The rate for London for 1929, the last year for which figures are available, was 3·61, and for England and Wales 4·33.

The actual causes of death were :—

Puerperal fever	6
Accidents of pregnancy and parturition ...	–
Total ...	6

In 1930, there were 2,580 births in Kensington and of these 380 may be said to have occurred in families which are regarded as "above standard" financially and do not come within the scope of the Council's maternity and child welfare scheme. In respect of 1,453 of the 2,200 births in families regarded as coming within the scope of the Council's scheme, the expectant mothers received ante-natal advice at the special clinics held at the Queen Charlotte's Nurses' Home or the infant welfare institutions. The women who gave birth to the remaining 747 children may have received professional ante-natal attention from private medical men or at hospitals, but it is probable that the majority did not secure for themselves the advantages of that skilled advice which is now generally recognised to be of the greatest value.

It is gratifying to note the considerable decrease in the maternal mortality rate. The fact that 66 per cent. of the expectant women in Kensington received some form of ante-natal advice and care either at ante-natal clinics, hospitals, or from their own private practitioners must have had some bearing on this satisfactory result; nevertheless, a death rate of 2.3 is too high and efforts must be made to secure that every working-class expectant woman in Kensington receives the advantage of that skilled advice which can be obtained from private medical practitioners or at any of the nine ante-natal clinics in the borough.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

STAFF OF THE COUNCIL'S PUBLIC HEALTH DEPARTMENT.

Medical Officers.—In addition to the Medical Officer of Health and the Tuberculosis Officer, who are whole-time officers, the Council retain the part-time services of several medical men. Dr. Remington Hobbs, Medical Superintendent of St. Mary Abbots Hospital, acts as consultant gynaecologist in cases of puerperal fever and puerperal pyrexia; and Dr. Ronald Carter serves the Council during the Summer months in connection with their scheme for the treatment of zymotic enteritis.

Dr. T. S. Keith is bacteriologist to the Council; he is also pathologist to the London County Council and honorary pathologist to the Princess Louise Kensington Hospital for Children.

In October, 1930, Dr. Reginald C. Lightwood resigned his appointment as physician-in-charge of the Borough Council's Rheumatism Supervisory Centre, and Dr. Janet Aitken was appointed to the position. In December, Dr. Hilda Stoessiger was appointed as honorary assistant to Dr. Aitken.

Officers engaged on Vaccination.—The Local Government Act transferred to the Borough Council on the 1st of April, 1930, all those functions hitherto performed by the Guardians in relation to vaccination, and the Council resolved that the transferred officers should be allocated to the Public Health Department.

Mr. A. H. Hinton is the vaccination officer for the borough and has his offices at No. 85a, Ladbroke Grove, W.10, where he also carries out his duties as registrar of births and deaths for North Kensington.

Dr. O. W. Roberts, of No. 79, Cambridge Gardens, W.10, is the public vaccinator for North Kensington (surgery hours: 9.30 to 11 a.m., and 6 to 8.30 p.m.), and Dr. G. A. Henderson, of No. 14a, Cromwell Crescent, S.W.5, is the public vaccinator for South Kensington (surgery hours: 10 to 11 a.m., and 6 to 7 p.m.).

Dr. Remington Hobbs has been appointed public vaccinator for the St. Mary Abbots Hospital, Marloes Road, W.8, and Dr. B. Hood the public vaccinator for the St. Charles Hospital, Rackham Street, W.10.

The record of work performed by these officers will be found in Table VI. of Appendix III.

Male Sanitary Inspectors.—The normal staff is ten district inspectors. For the purposes of sanitary inspection, the borough is divided into ten districts, one of which is allotted to each of the ten inspectors, who carry out duties under the Public Health Acts, the Housing Acts, the London County Council (General Powers) Acts and, so far as men's factories and workshops are concerned, under the Factory and Workshop Act.

Mr. Henry Dawes, who is the sanitary inspector for No. 10 District (Brompton area), holds the position of senior sanitary inspector in accordance with the requirements of Section 7 of the Public Health (Officers) Act, 1921.

In March, 1930, one of the permanent sanitary inspectors was detailed for special housing inspections under Section 3 of the Housing Act, 1925, which has now been replaced by Section 17 of the Housing Act, 1930, and a temporary sanitary inspector has been employed to take charge of one of the districts.

Food Inspector.—Mr. H. W. Walters, who holds the certificate of the London Sanitary Inspectors' Examination Board and the certificate for Meat and Other Foods, carries out the duties under the Food and Drugs (Adulteration) Act, 1928, the Rag Flock Acts, 1911 and 1927, the Public Health (Meat) Regulations, 1924, and the various Acts and Orders dealing with milk. Mr. Walters has also been appointed to enforce the requirements of the several Orders issued under the Agricultural Produce (Grading and Marking) Act, 1928, and the Merchandise Marks Act, 1926.

Canal Boats Inspector.—Mr. R. J. McCarthy, one of the sanitary inspectors on the Council's staff, was appointed in 1929 to carry out the inspection and supervision of canal boats in that length of the Grand Junction Canal running through the northern portion of the borough.

Women Health Officers.—There are nine ladies appointed as women health officers. Seven are engaged in the work of visiting mothers of the poorer classes and advising them in the care and management of their infants, and in assisting with the work of the nine infant welfare centres. They also devote a portion of their time to the inspection of factories and workshops where women are employed, and in visiting cases of ophthalmia, enteritis, measles, whooping cough and consumption. Two women health officers (Miss Hargrave and Miss Haycock) are employed on in-door work at the Tuberculosis Dispensary.

Health Lecturer.—Mrs. Hayman commenced her duties as health lecturer in June, 1926. She is a fully trained hospital nurse. Her office is a part-time one occupying approximately five half-days a week.

Clerical Staff.—In addition to Mr. J. H. Wilson, the chief clerk of the Department, there are eight clerks, one of whom is attached to the Tuberculosis Dispensary.

Other Staff.—There are :—

(*a*) Five disinfectors, including a man who acts as engineer.
(*b*) A mortuary keeper.
(*c*) Two sanitary labourers who assist in drain testing.
(*d*) A superintendent and matron of the Medicinal Baths.
(*e*) A rat officer.
(*f*) A caretaker and wife at the Tuberculosis Dispensary.

Particulars of the staff, as required by the Ministry of Health Circular No. 359, appear in Table VII of Appendix III.

PROFESSIONAL NURSING IN THE HOME.

The Borough is fortunate in having within its boundaries an excellent District Nursing Association which employs a superintendent and twelve nurses to carry out nursing in the homes of the poor. The number of cases nursed during 1930 was 2,096 and the number of visits paid, 38,983.

By an agreement between the Council and the Association, nurses of the latter body undertake, when requested by the Medical Officer of Health, the home nursing of measles, german measles, whooping cough, zymotic enteritis, tuberculosis and any other disease for which nursing assistance is required. In addition, the Association retain a trained nurse who is also a qualified midwife and who is available for the nursing of certain maternity and ophthalmia cases in which it is inadvisable, from the point of view of the spread of infection, for the usual midwife, to continue in attendance.

The nurses carry out their work with enthusiasm and ability, and those doctors who are called upon to attend the poor in the borough appreciate very much the splendid assistance they get from these trained women. They are always willing to attend at any time they are called upon and throughout the whole year the officers of the Public Health Department have not had one case where a request for nursing assistance has not been met promptly, even in times of pressure

The very important part the nurses take in connection with the Council's schemes for the treatment of ophthalmia neonatorum and zymotic enteritis is referred to on pages 70 and 72 of this report.

The following is a table of cases attended and visits paid by nurses of the Kensington District Nursing Association on behalf of the Council from January 1st to December 31st, 1930 :—

	Cases.	Visits.
Maternity cases	31	374
Miscarriages	37	393
Pneumonia (5 years of age and over)	86	1,042
,, (under 5 years of age)	94	1,372
Ophthalmia neonatorum and other inflammations of the eyes of newly-born children	21	491
Influenza (5 years of age and over)	23	210
,, (under 5 years of age)	2	12
Zymotic enteritis	86	617
Tuberculosis (5 years of age and over)	17	537
,, (under 5 years of age)	1	119
Measles (5 years of age and over)	49	387
,, (under 5 years of age)	86	852
Measles & Pneumonia (5 years of age and over)	5	108
,, ,, (under 5 years of age)	48	601
Whooping cough (under 5 years of age)	2	13
Erysipelas	4	88
Scarlet fever	2	40
Pemphigus	3	42
Acute rheumatism	12	223
Totals	603	7,521

For the splendid services rendered, the Council paid to the Association in 1930 a grant of £200.

A trained nurse is employed by the Golborne infant welfare centre to undertake home nursing of expectant and nursing mothers and infants in the very poor area allocated to that centre. In order to avoid overlapping with the nurses of the Kensington District Nursing Association, the work of the Golborne home nurse has been mapped out by the honorary secretary of the Golborne centre, the superintendent of the Nursing Association and myself, and the rules laid down have been found to work quite satisfactorily. Certain types of cases have been attended by the Golborne nurse and others by the nurses of the Association, and as a result of close co-operation and consultation, there has been no trouble whatever in deciding the sphere of work for the staff of each organisation.

The cases attended and visits paid by the Golborne home nurse during the year are given in the following table :—

	Cases attended.	Visits paid.
Adults	53	236
Children under 5 years of age	262	1,755
Totals ...	315	1,991
Bronchitis	34	229
Ear discharges	14	253
Minor ailments	146	989
Measles	42	284
Totals ...	236	1,755

MIDWIFERY ARRANGEMENTS.

The borough is well served in this respect. The Queen Charlotte's Hospital authorities maintain a District Nurses' Home in Ladbroke Grove, North Kensington, and during the year members of the staff thereat conducted 828 confinements, of which 696 were in Kensington homes. The Borough Council maintain a maternity home with ten beds and the London County Council also have at St. Mary Abbots Hospital a ward of ten beds for the confinement of poor women.

The number of confinements dealt with by these three organisations, together with those taking place in outlying hospitals, leaves but a comparatively small number to be attended by private doctors and midwives in the homes.

LONDON COUNTY COUNCIL INSTITUTIONS.

On the 1st April, when the Local Government Act, 1929, came into operation, the Kensington Institution and St. Mary Abbots Hospital were taken over by the London County Council from the Board of Guardians, and I am indebted to the Clerk of the late Board of Guardians and to the Medical Officer of the London County Council for the following particulars of work done at these institutions during the year 1930 :—

The Kensington Institution.—This Institution, which is situated in Marloes Road, provides indoor relief for the destitute and infirm.

Number of beds available for male adults ...	362
Number of beds available for female adults ...	434
Number of adult admissions during the year ended 31st December, 1930	1,710
(Elderly male casuals, were also admitted to the Institution during the year, the total number of these admissions amounting to 1,794).	
Average daily number of adult admissions during the year ended 31st December, 1930	4·6
Average daily number of admissions of casuals during the year ended 31st December, 1930	4·9
Number of beds available for children	45
Types of cases (children) admitted	(*a*) Remand children. (*b*) Children admitted with parents (*c*) Children for transfer to schools, etc.
Number of children's admissions during the year ended 31st December, 1930	509
Average daily number of children's admissions ...	1·3
Last ascertained cost per head at the Institution	2s. 11·24d. per day

St. Mary Abbots Hospital.—This Institution, which is also situated in Marloes Road, provides medical and surgical treatment for the sick and disabled.

Number of beds available for male adults ...	188	
Number of beds available for female adults ...	306	
Number of adult admissions during the year ended 31st December, 1930 (including 144 admissions under the Borough Council maternity scheme)	3,969	
Average daily number of adult admissions ...	10·8	
Number of beds available for children	115	
Types of cases (children) admitted	All types, except infectious cases which are passed on to the fever hospitals.	
Number of children's admissions during the year ended 31st December, 1930	1,080	
Births (including 142 births in the Borough Council maternity ward)	480	
		1,560
Average daily number of children's admissions ...	4·27	
Last ascertained cost per head at St. Mary Abbots Hospital	6s. 2·24d. per day.	

Out-door Relief.

Number of cases receiving out-door medical treatment during the year ended 31st December, 1930	North District (North of Notting Hill Gate and Holland Park Avenue)	1,044
	South District (South of Notting Hill Gate and Holland Park Avenue)	175
	Total	1,219

LEGISLATION IN FORCE LOCALLY.

Notification of Zymotic Enteritis.

At a meeting of the Council on the 15th April, 1924, it was resolved :—

> "That this Council do, under and pursuant to the provisions of Section 56 of the Public Health (London) Act, 1891, hereby order that Section 55 of the said Act, with respect to the notification of infectious disease, shall apply in their district to epidemic diarrhoea or zymotic enteritis in the case of infants up to 5 years of age."

The order was approved by the Minister of Health on the 22nd April, 1924, and came into operation on the 1st July of that year.

With the information secured by compulsory notification it was possible to take effective steps in regard to prevention and treatment of the disease, and in 1924 the Council approved of a scheme for this purpose.

A detailed report on notification and treatment of zymotic enteritis will be found on page 72.

Notification of Acute Rheumatism.

The Kensington (Acute Rheumatism) Regulations, 1927, came into force on the 1st October, of that year and operated for a period of three years. During the year 1930, the Minister of Health renewed the regulations for a further period of three years.

In 1927, the Council established a Rheumatism Supervisory Centre and details of the work conducted thereat will be found on page 18 and in Appendix I. of this report.

Bye-law Prohibiting the Fouling of Footpaths by Dogs.

In 1921, the Council made a bye-law, which was sanctioned by the Home Office, prohibiting the fouling of footpaths by dogs.

Particulars in regard to the enforcement of this bye-law will be found on page 30

GENERAL HOSPITAL.

Although Kensington may be regarded as a central London borough, it is curious that there is only one general hospital within the borough boundary, namely, the Kensington, Fulham and Chelsea General Hospital. There are, however, the West London Hospital, St. Mary's Hospital and St. George's Hospital just outside the borough.

The Kensington, Fulham and Chelsea General Hospital was closed to in-patients throughout the year owing to rebuilding operations being in progress. It is anticipated that the first two sections of the hospital will be completed by July, 1931, and these will comprise an in-patient department of 76 beds. Although lack of funds has prevented the erection of the third section, the first two will constitute a complete hospital unit.

The work performed at the hospital during the year 1930 is as follows :—

I.—Out-Patients.

(*a*) NUMBERS.

Total number of new out-patients	7,200
Total number of out-patient attendances	35,788
Number of casualty patients	2,561

II.—Other Treatments.

Number of operations	365
,, ,, dental cases	1,678
,, ,, massages	1,475

THE PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN.

The year 1930 witnessed considerable progress in the efforts of the Board and the staff to meet the medical and surgical needs of the children in North Kensington and adjacent districts. In addition to a large out-patient department, there is an in-patient department which had, at the beginning of the year, 42 beds in two ward units. As the year progressed, so imperative was the need for extra accommodation that the open-air balconies attached to the wards were brought into use, and the number of beds raised to 50. As the in-patient department has been increased in size, the hospital is now a recognised training school for nurses.

There are X-ray, dental, ophthalmic and massage departments and a fully equipped operating theatre.

The beds are allocated as follow :—

General medical	21
General surgical	13
Ear, nose and throat	10
Rheumatism	4
Ophthalmia	1
Skin	1
Total	50

The fact that the public appreciate the services rendered by the hospital may be gathered from the following figures of work done during the year 1930.

(a)—IN-PATIENTS.

1.	Total number of available beds on 31st December, 1930 ...	50
2.	Average number of available beds during year	45·08
3.	Average number of patients resident daily throughout year ...	40·76
4.	Number of in-patients in the hospital at beginning of year ...	34
5.	Number of in-patients admitted during year	1,156
6.	Number of in-patients in the hospital at the end of year ...	31
7.	Average number of days each patient was resident	12·84
8.	Number of patients admitted and discharged during year who were resident for (i) only 1 day	22
	(ii) 2 and 3 days	465

(b)—OUT-PATIENTS.

1.	Total number of new out-patients	11,770
2.	Total number of out-patient attendances	77,564
	(*a*) Number of patients on books at beginning of the year	1,307
	(*b*) Number of casualty patients included in No. 1 above ...	1,592

RHEUMATUSM SUPERVISORY CENTRE.

In October, 1927, the Borough Council established a Rheumatism Supervisory Centre at the Princess Louise Kensington Hospital for Children for the supervision and treatment of children suffering from acute rheumatism. Further information in regard to this centre will be found in Appendix I of this report.

The record of work carried out at the centre during the year 1930 is as follows :—

Number of sessions held	49
Number of individual patients examined—	
Kensington	282
Hammersmith	53
Other boroughs	16
Total attendances of patients—	
Kensington	690
Hammersmith	114
Other boroughs	33

AMBULANCE FACILITIES.

On the introduction of the Local Government Act, 1929, on the 1st April, 1930, the County Council took over the control of the ambulance services hitherto maintained by the late Metropolitan Asylums Board and Metropolitan Boards of Guardians. These two ambulance services are now combined with that previously maintained by the London County Council for accidents and constitute one large service under the direction of the County Council, who provide ambulances, free of cost, for the conveyance to—

(*a*) Hospitals or private residences of :—

(i) persons meeting with accidents or suffering from sudden illnesses ;

(ii) parturient women, if the case is one of urgency, on the application of a qualified medical practitioner or certified midwife, and

(iii) non-urgent cases of parturition, between the hours of 11 p.m. and 8 a.m. if letters of admission to maternity hospitals are produced.

(*b*) The Council's fever hospitals of patients suffering from infectious disease.

(*c*) The Council's general hospitals and institutions of non-infectious cases when application is made through the Council's Public Assistance Department.

The Borough Council have entered into an agreement with the County Council under which the latter have agreed to remove, between the hours of 8 a.m. and 11 p.m., non-urgent Kensington maternity cases to hospitals at the request of the Borough Medical Officer of Health and the former have agreed to pay the cost.

SCHOOL TREATMENT CENTRES.

There is in Notting Dale a School Treatment Centre managed by a sub-committee of the Princess Louise Hospital Board of Management Committee and the work performed thereat during 1930 was as follows :—

	New cases.	Total attendances.
Eye cases	475	1,211
Aural cases	530	1,097
Minor ailment cases	1,891	20,417
Dental cases	1,250	2,070

The work of this centre has been slightly restricted during the last two or three years owing to the transfer to the Princess Louise Hospital of patients requiring operations for tonsils and adenoids and other surgical conditions. As the figures show, there is still plenty of work to be carried out at the centre which is of great convenience to mothers of North Kensington who are spared a long journey to the out-patient department of a hospital.

A School Treatment Centre has also been established at the Baby Clinic premises in Tavistock Road and the record of work for the year 1930 is as follows :—

	New cases.	Total attendances.
Minor ailment cases	3,585	28,404
Dental cases	1,726	3,074

In addition there is a School Treatment Centre at the Princess Louise Kensington Hospital for Children and the particulars of the cases treated thereat during 1930 are as follows :—

Tonsils and Adenoids	444
Eyes (new cases)	388
Dental cases : (Gas, 324 ; Fillings, 79)	403
X-Ray cases	23

SCHOOL MEDICAL SERVICE.

Dr. Menzies, the County Medical Officer, has kindly made it possible for me to give the following particulars of the routine medical examination of elementary school children carried out in 1930 in Kensington.

TABLE SHOWING NUMBER EXAMINED AND DEFECTS FOUND.

	Boys.								Girls.							
	Entrants.		Age 8.		Age 12.		Age 14.		Entrants.		Age 8.		Age 12.		Age 14.	
Number examined ...	955		758		519		527		875		772		525		614	
Defect.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.	Cases.	Cases referred for treatment.
Malnutrition	4	1	2	1	2	2	1	...	4	...	4	1	3	1	...	...
Skin Disease	14	13	10	7	4	3	3	3	17	14	13	13	7	5	7	5
Defective Teeth ...	...	388	...	226	...	111	...	119	...	341	...	239	...	126	...	126
Enlarged Tonsils ...	123	42	71	17	43	8	24	3	126	44	77	21	37	12	35	11
Adenoids	9	5	5	4	1	...	2	2	4	3	3	3	1	...	1	...
Tonsils & Adenoids ...	52	40	25	19	12	10	4	4	42	32	25	21	15	12	13	9
Other Nose & Throat ...	12	6	7	4	4	3	5	4	6	3	5	5	3	3	7	3
Enlarged Glands ...	125	20	75	6	46	2	35	1	97	9	66	3	24	...	27	1
Eye Disease	38	27	16	7	6	4	12	6	45	27	25	10	9	5	13	5
Defective Vision ...	...	...	...	55	...	85	...	61	...	...	...	82	...	64	...	73
Otorrhoea	16	9	7	5	14	8	12	8	17	9	11	4	15	10	7	5
Other Ear Disease ...	5	2	2	1	2	2	1	1	10	5	8	6	2	...	5	3
Defective Hearing ...	...	...	1	...	1	...	3	...	1	1	2	...	1	...	1	...
Speech Defects ...	5	...	3	...	4	1	2	...	2	...	...	...	...	...	...	...
Heart Defects	27	2	27	2	18	2	12	2	15	3	24	2	16	2	18	...
Anaemia	20	4	13	4	9	1	16	8	15	7	13	4	8	2	10	2
Lung Defects	30	13	11	9	4	2	4	1	19	14	8	7	6	1	...	...
Nervous System ...	8	1	10	6	5	2	5	1	10	3	6	2	3	...	5	1
Phthisis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tubercular Disease	...	...	1	1	...	...	...	...	1	1	1	...	...	...	...	...
Rickets	6	...	3	...	4	...	1	...	7	2	2	...	2	...	...	...
Spinal Deformities ...	...	...	1	...	4	4	5	4	...	...	3	2	14	12	13	8
Other Deformities ...	4	...	1	...	6	2	6	3	5	3	2	1	3	2	7	6
Other Defects	24	11	13	6	8	3	8	3	16	12	25	17	17	8	17	8
Number of children noted for treatment	479		317		213		205		445		363		212		235	

TABLE SHOWING THE CONDITIONS IN REGARD TO CLOTHING, NUTRITION, CLEANLINESS, TEETH AND VISION OF THE CHILDREN EXAMINED.

Age Group.	Number examined.	Clothing and Boots.			Nutrition.				Cleanliness of Head.			Cleanliness of Body			Teeth.			Vision.		
		Good.	Fair.	Poor.	Good.	Average.	Below normal.	Bad.	Clean.	Nits	Pediculi.	Clean.	Dirty.	Pediculi.	All sound.	Less than 4 decayed.	Four or more decayed.	6/6 in both eyes.	6/9 in either or both eyes.	6/12 or worse in either eye
Entrants																				
Boys ...	955	290	659	6	166	765	24	–	918	32	5	907	47	1	479	302	174	—	—	—
Girls ...	875	284	583	8	102	764	9	–	817	54	4	842	33	—	461	275	139	—	—	—
Age 8.																				
Boys ...	758	204	546	8	75	662	21	–	721	32	5	709	49	—	480	201	77	469	170	99
Girls ...	772	216	553	3	76	681	15	–	706	57	9	741	31	—	482	235	55	449	193	122
Age 12																				
Boys ...	519	153	361	5	60	444	15	–	506	12	1	507	12	—	389	118	12	321	84	109
Girls ...	525	161	362	2	89	424	12	–	485	37	3	505	20	—	381	127	17	352	88	83
Age 14																				
Boys ...	527	173	353	1	79	438	10	–	508	18	1	499	28	—	390	128	9	350	73	104
Girls ...	614	236	376	2	109	499	6	–	589	22	3	587	27	—	465	139	10	399	99	112
Total	5,545	1,717	3,793	35	756	4,677	112		5,250	264	31	5,297	247	1	3,527	1,525	493	2,340	707	629
Kensington percentages		31·0	68·4	0·6	13·6	84·4	2·0		94·7	4·8	0·5	95·5	4·5	0·0	63·6	27·5	8·9	63·7	19·2	17·1
London percentages		57·9	39·5	0·8	20·5	75·0	4·5		94·9	4·5	0·6	97·4	2·5	0·1	65·2	27·7	7·1	56·6	24·9	18·5

HEALTH PROPAGANDA, 1926-1930.

Health Exhibition.

In 1926, a maternity and child welfare exhibition was held for three days at the Argyll Hall. This form of health propaganda was so successful that it was decided to repeat it, on a larger scale, and in 1928 a general public health exhibition was held for a similar period at the Town Hall. This exhibition included a maternity and child welfare section organised by the Advisory Committee, and proved a conspicuous success, over 14,000 people attending. A further exhibition is being organised for 1931.

Health Concerts.

A new kind of health propaganda was introduced in the year 1928 by the Public Health Department in the form of health concerts. These are held at various halls in the borough and consist of musical items and pageants illustrating health laws. In 1930, two health concerts were given, one at The Venture in Portobello Road, and the other at the Town Hall. Both were well attended. There is no doubt that this form of health propaganda is very popular, audiences of from 300 to 800 having attended these concerts.

Health Magazine.

In 1928, the Public Health Department commenced the publication of a periodical named "Better Health," which dealt with propaganda. It was published monthly, and its general purpose was to set before the public information in regard to health matters in short and interesting articles. Each subject was dealt with by experts and technical details were carefully avoided. A special issue of this paper was printed for Kensington, and a section reserved for articles of local interest. Topical photographs were also inserted and various means used to stimulate local interest.

Two thousand copies of the magazine were issued monthly through the following channels of distribution :—

(*a*) The infant welfare centres.

(*b*) London County Council schools in the borough.

(*c*) Various clubs and institutions.

(*d*) Public libraries.

(*e*) Women health officers'.

This publication involved no charge on the rates. Unfortunately, in October last, the circulation of "Better Health" in Kensington was discontinued owing to the fact that the printers were unable to secure sufficient advertisements to warrant the free issue of the journal. It is hoped that it will be possible to recommence the publication of this magazine in the near future.

Competitions.

During the year 1930, three health competitions were organised by the health lecturer, (*a*) one in connection with the London County Council schools, and (*b*) two in connection with women's clubs. The school competition took the form of a "clean hands" campaign, and practically every London County Council school in the borough took part. The competitions at the women's clubs took the form of essays on health subjects.

The Health and Cleanliness Council kindly contributed the prizes for these competitions.

OTHER HEALTH SERVICES.

There are no fever hospitals within the borough, but several provided by the London County Council are within easy reach.

The arrangements for the treatment of tuberculosis and the organisation for maternity and child welfare work are discussed further on in this report.

Kensington enjoys a great advantage in possessing a large number of ladies and gentlemen who give freely of their time and money to voluntary bodies interested in the health and welfare of the poorer members of the community. Not only are all the maternity and child welfare institutions in Kensington organised on a voluntary basis, but there are at work in the borough a branch of the Charity Organisation Society, a branch of the Invalid Children's Aid Association, a branch of the British Red Cross Society, the Kensington Council of Social Service, School Care Committees, a Tuberculosis Care Committee and a number of other bodies managed and financed on voluntary lines by Kensington residents. The Council have endeavoured with marked success to work in close co-operation with these organisations and the relationship between them has always been a happy one.

SUBSCRIPTIONS BY THE BOROUGH COUNCIL TO VOLUNTARY HEALTH ORGANISATIONS DURING 1930.

Subscriptions to Hospitals, etc.

	£	s.	d.
Cancer Hospital	5	5	0
Chelsea Hospital for Women	5	5	0
Kensington District Nursing Association	5	5	0
Kensington, Fulham and Chelsea General Hospital	10	10	0
Kensal Gospel and Medical Mission	5	5	0
National Hospital for Diseases of the Heart	5	5	0
Paddington Green Children's Hospital	5	5	0
St. Mary's Hospital	10	10	0
West London Hospital	10	10	0
Western Ophthalmic Hospital	5	5	0
Princess Louise Hospital (Rheumatism Supervisory Centre)	300	0	0
Charity Organization Society	5	0	0
Invalid Children's Aid Association	5	0	0

Payments to Maternity and Child Welfare Institutions.

	£	s.	d.
*Archer Street Infant Welfare Centre	378	0	0
*Bramley Road " " "	400	0	0
*Campden Hill " " "	255	0	0
*Earl's Court " " "	398	0	0
*Golborne " " "	662	0	0
*Kenley Street " " "	247	0	0
*Lancaster Road " " "	511	0	0
*Raymede " " "	466	0	0
*Golborne Day Nursery	197	0	0
*Lancaster Road Day Nursery	323	0	0
*St. Clement's Day Nursery	261	0	0
*Notting Hill Day Nursery	429	0	0
*Baby Clinic	656	0	0
†*Baby Hospital	1257	0	0
Queen Charlotte's Hospital Ante-Natal Clinic	45	0	0
Princess Louise Hospital	400	0	0
Kensington District Nursing Association	200	0	0
Evelyn Convalescent Home	16	16	0
Hambledon Convalescent Home	8	8	0
St. Mary's Convalescent Home	13	0	0
George Whitlaw Convalescent Home	31	10	0
Mutual Registration of Assistance Society	10	0	0
Association of Infant Welfare and Maternity Centres	8	8	0
¶ Kensington Board of Guardians and London County Council (Maternity Home)	676	4	0

* Payments made to infant welfare institutions under the Scheme made by the Minister of Health in accordance with the provisions of Section 101(6) of the Local Government Act, 1929.

† The grant to this institution fixed by the Minister of Health is £1,057, the addition of £200 being a contribution paid by the Borough Council in respect of which no Government grant is received.

¶ When the Local Government Act came into operation on the 1st April, 1930, the Board of Guardians ceased to exist and St Mary Abbots Hospital, in which the Borough Council Maternity Home is situated, was taken over by the London County Council.

SANITARY CIRCUMSTANCES OF THE AREA.

REFUSE COLLECTION.

In 1929, the Council approved of a re-organisation scheme which comprised the supply of new motor vehicles, portable refuse containers and standardised bins, the fitting of a new type of cover, designed by the Council's Cleansing Superintendent, to the motor vehicles and horse-drawn vans, the conversion of horse-drawn vans from high-loading to low-loading bodies and the discarding of other vans for motor vehicles.

As a result of the introduction of these changes, which were completed in 1930, it has been possible to secure a more frequent collection of house refuse and at the present time the collection is not less than twice weekly throughout the entire borough.

There is an improved daily collection in eight main streets where there is congestion of traffic, and a daily collection is undertaken before 9 a.m. in certain other streets and blocks of flats. In other cases there is a thrice-weekly collection.

Residents of the borough have very quickly noted the improved system of house refuse collection and expressions of appreciation have come to my hearing from all quarters. The changes should have a distinctly beneficial effect on the health of the inhabitants of the borough, but it is too early yet to measure this. It is very gratifying to be able to record this progress especially in view of the fact that it is understood that the changes have involved comparatively little additional expenditure.

Twenty-two per cent. of the Kensington refuse is barged away from Kensal Wharf to dumps at Yeading and Harefield, Middlesex; thirty-four per cent. is disposed of in the refuse destructor installation at Wood Lane; and forty-four per cent. is barged away from the Chelsea Wharf to a dump beyond Tilbury, Essex.

Trade refuse is removed by the Council on payment of a fee in accordance with the provisions of Section 33 of the Public Health (London) Act, 1891. Fish offal and other offensive trade products, which could be removed on application as trade refuse, are for the most part removed and sold by the persons to whom this class of refuse belongs.

REFUSE REMOVAL FROM MEWS.

The common dustbins installed by the Council in 1921, in 20 mewsways in North Kensington at the expense of the owners, have continued to prove a satisfactory arrangement for storing house refuse in these particular mews in which there are a number of dwellings, stables and costermongers' stores.

The problem of securing hygienic conditions in mewsways has been tackled with considerable success during past years as a result of close co-operation between the officers in the Public Health Department and the Borough Engineer's Department.

SEWERAGE AND DRAINAGE.

Every house in the borough is connected with the water carriage system for the disposal of sewage and, generally speaking, house drainage in Kensington is very satisfactory.

The total number of house drains inspected during the year, including those inspections which may be described as routine and those made on complaint or after infectious disease, totalled 946, and in 176 cases notices under the Public Health Act were served for either reconstruction or repairs. In many of these the repairs were slight in nature and the owners were not required to submit plans and applications. In addition to the above drainage work, 358 new water closets were provided in order to supplement the accommodation already existing.

The following table deals with (a) drainage work undertaken voluntarily by owners and supervised by the officers of the Public Health Department from January 1st to December 31st, and (b) all drainage work required by notices served under the Public Health (London) Act, and carried out under the supervision of the sanitary inspectors—

	Voluntary work.	Work under notice.
Plans submitted	168	53
Plans approved by the Council	167	53
Plans not approved by the Council	1	...
Total reconstruction of drains of premises	35	28
Partial reconstruction of drains of premises ...	67	13
Repairs to drains by "Economic Method" ...	22	10
Other sanitary works, such as new soil pipes, baths, sinks and lavatory basins	1,932	910

PUBLIC CONVENIENCES.

The Council provide fourteen public lavatories containing water closets; three are for men only, two for women, two for boys and two for girls, and in five, accommodation is provided for both sexes. Part of this accommodation is provided in Avondale Park and the Barlby Road Recreation Ground. In addition, there are eleven urinals for men under the charge of the Council. Free accommodation is provided in the men's and women's lavatories for those who are unable to pay. At eleven railway stations in the borough there are also conveniences for men and women, and at 75 public houses there are urinals entered from the street and available to the public. The public conveniences for men in the borough have been regularly inspected throughout the year by the male sanitary inspectors, and those for women in the railway stations and elsewhere have been kept under observation by the women health officers.

SANITARY INSPECTION.

The following table shows a summary of the inspections, etc., carried out by the male sanitary inspectors during the year:—

DESCRIPTION OF INSPECTIONS, &c.	NUMBER OF DISTRICT										GRAND TOTAL
	1	2	3	4	5	6	7	8	9	10	
Total Complaints Received	326	284	146	313	203	254	199	229	235	215	2,404
Public Health (London) Act, 1891.											
Complaints received	174	84	123	170	160	191	168	223	213	206	1,692
Houses inspected on complaint	174	100	143	177	160	302	200	225	215	207	1,903
,, after Infectious Disease	169	156	94	122	136	67	59	105	50	45	1,003
Re-inspections	1061	179	1306	1193	1629	1199	1182	715	857	1181	10,502
By-Laws *re* Houses Let in Lodgings											
Complaints received	152	200	23	143	43	63	31	6	22	9	692
Houses Inspected on Complaint	152	200	22	148	29	62	29	5	21	7	675
First Annual Inspection (Furnished Houses)	—	—	4	10	1	—	—	—	—	—	15
Re-inspections ,, ,,	—	—	—	6	—	—	—	—	—	—	6
First Annual Inspection (Unfurnished Houses)	66	279	118	237	409	105	209	86	279	42	1,830
Re-inspections ,, ,,	498	1706	1281	825	1020	843	466	54	302	162	7,157
Housing Act, 1925.											
Initial Inspections (including preparation or revision of House to House Card)	31	62	64	118	82	8	224	115	270	96	1,070
Re-inspections	6	294	6	478	323	377	218	8	8	34	1,747
Underground Living Rooms.											
Primary Inspections	8	5	7	—	9	6	8	2	8	13	66
Re-inspections	17	58	13	—	2	42	2	—	5	56	195
Drainage.											
House Drains Tested and Inspected	30	82	139	38	113	64	56	75	120	229	946
Voluntary Drainage Work											
Applications made	37	5	10	24	24	6	44	97	60	143	450
Plans submitted	6	0	4	10	15	17	35	21	20	40	168
Inspections of Workshops	20	25	69	42	54	10	38	130	36	68	492
,, Factories	37	18	26	20	22	3	15	19	—	6	166
,, Bakehouses	51	33	44	14	20	6	7	37	23	2	237
,, Ice Cream Premises	41	2	26	2	16	5	—	14	—	6	112
,, other Food Premises	75	25	93	47	272	197	26	117	61	104	1,017
,, Mews	179	178	490	65	57	200	81	303	292	129	1,974
Smoke Observations	37	5	10	6	3	—	—	75	—	21	157
Other Inspections	960	580	624	805	658	468	318	1141	338	425	6,317
Canal Boats Inspections	—	16	—	--	--	—	—	—	—	—	16
,, ,, Re-inspections	—	56	—	—	—	—	—	—	—	—	56

The following table shows the number of notices which have been issued in respect of nuisances, defects, etc., found in the various districts during the year :—

	NUMBER OF DISTRICT.										GRAND TOTAL
	1	2	3	4	5	6	7	8	9	10	
Kind of Notices Issued.											
Public Health (London) Act, 1891.											
Intimations	230	417	277	518	474	170	153	105	231	126	2,701
Statutory Notices	56	172	36	100	133	55	47	13	27	26	665
Final Notices	12	39	2	27	42	6	15	2	2	6	153
Summonses issued	2	5	1	11	9	—	—	—	—	1	29
Housing Acts, 1925 and 1930.											
Sect. 3 (1925) & Sect. 17 (1930)	31	18	8	39	51	26	12	2	1	—	188
Sec. 127 (Entry)	188	114	54	178	209	85	43	4	6	—	881
Underground Room Habitation	—	—	—	—	—	—	—	—	2	—	2
Removal of Manure	2	—	—	—	—	—	—	—	9	7	18
Smoke Nuisance Notices	3	—	—	2	—	—	—	—	—	—	5
Rent Restrictions Act Certificates	—	—	1	—	—	—	2	—	2	—	5
Special Notices included under Public Health (London) Act, 1891, relating to Factories	—	—	1	—	—	—	—	—	—	—	1
,, Workshops	—	—	1	5	—	—	—	—	1	—	7
,, Bakehouses	2	1	1	1	—	—	—	—	2	—	7
Other Notices	19	1	—	10	—	1	—	—	—	1	32
Report of Waste of Water to M.W.B.	14	17	5	10	10	5	—	21	12	3	97
,, Dangerous Structures to L.C.C.	7	11	3	24	6	7	1	1	—	2	62
Canal Boats	—	3	—	—	—	—	—	—	—	—	3

Summary of Works completed under the supervision of the Sanitary Inspectors during the Year.

DESCRIPTION OF WORK, &c.	NUMBER OF DISTRICT.										GRAND TOTAL.
	1	2	3	4	5	6	7	8	9	10	
House Drains re-constructed	2	1	7	13	26	5	10	13	8	18	103
Defective Drains repaired	18	4	18	15	27	14	11	26	5	37	175
House Drains cleansed	27	28	16	19	28	12	9	40	16	91	286
Water-Closets re-constructed	24	4	11	31	67	7	23	23	16	37	243
,, repaired	168	29	29	11	96	14	16	7	13	57	440
,, supplied with water	1	16	8	38	53	3	1	6	17	119	262
,, new provided	19	7	3	19	57	33	60	47	14	99	358
Soil Pipes ventilated, repaired, &c.	4	3	3	8	17	13	7	15	15	55	140
,, new provided	11	11	4	14	42	15	21	12	11	47	188
Baths, new provided	13	—	10	14	9	33	58	61	27	83	308
Sinks, ,, ,,	27	37	17	64	48	26	58	37	25	63	402
Lavatory Basins, new provided	17	—	15	16	17	132	136	272	39	281	925
Cisterns cleansed	3	6	—	2	36	4	2	8	7	12	80
,, covered	—	4	—	2	30	—	1	2	2	1	42
,, abolished	—	—	—	—	2	—	—	—	—	5	7
Taps fixed on rising main	3	1	2	—	10	1	2	7	3	89	118
Yards, areas paved, drained, repaired	58	71	18	42	82	9	7	15	10	58	370
Dustbins provided	111	73	42	20	106	29	11	66	37	43	538
Ashpits abolished	3	3	6	—	8	1	—	—	1	5	27
Accumulations of filth, &c., removed	15	39	12	22	33	8	1	41	14	165	350
Animals removed	4	3	1	1	6	—	—	—	2	2	19
Overcrowding abated	10	4	2	3	1	5	1	—	1	—	27
Underground Rooms, illegal occupation discontinued	—	12	1	—	1	4	—	7	1	7	33
Roofs repaired	112	130	91	51	133	35	29	43	34	83	741
Houses provided with water above basement floor	6	7	6	2	12	4	3	2	1	19	62
Dampness in Dwellings remedied	113	90	26	26	51	7	6	18	31	26	394
Closing Orders made under Sect. 11, Housing Act, 1925	—	—	—	—	—	—	—	—	—	—	—
Closing Orders made under Sect. 18, Housing Act, 1925	—	—	—	—	—	2	—	—	—	—	2
Closing Orders determined	—	—	—	—	—	—	—	—	—	—	—
Repairs of Houses completed under the Housing Act, 1925 and 1930	7	50	4	48	27	23	18	2	1	—	180
Infectious Disease Cases removed	160	66	79	168	100	47	44	42	67	13	786
Houses disinfected after Infectious Diseases (including Bedding, Clothing, &c.)	157	95	100	163	160	79	101	48	67	58	1028
Rooms in such Houses disinfected after Infectious Disease	227	95	108	173	179	166	114	71	102	70	1305
Houses cleansed under Houses Let in Lodgings By-laws	59	263	113	98	270	74	96	11	9	38	1031
Verminous Houses cleansed (including Bedding, Clothing, &c.)	59	53	89	31	35	1	26	5	24	26	349
Verminous Rooms cleansed in such Houses	178	77	221	40	43	3	36	5	52	33	688
Dirty Bedding cleansed	—	4	1	10	37	2	1	—	—	7	62
Dirty Bedding destroyed	—	—	—	—	2	—	—	—	—	—	2
Other Sanitary Works executed	66	104	171	67	130	81	125	54	51	158	1007

SUMMARY OF LEGAL PROCEEDINGS.

Nature of Offence.	Number of Summonses heard before the Magistrates.	Magistrates' Decisions.
Failure to carry out sanitary repairs	19	Order made for work to be carried out within 7 days in 1 case, within 14 days in 9 cases and within 21 days in 1 case. Fined £5 and order made for work to be carried out within 14 days in 1 case, fined £2 and order made for work to be carried out within 14 days in 1 case, and fined £5 in 1 case. Summonses withdrawn, work having been carried out in 4 cases, and summons withdrawn defendant not being the owner within the meaning of the Act in 1 case.
Failure to comply with by-laws for Houses Let in Lodgings.	1	Summons withdrawn, the by-laws having been complied with.
Failure to abate overcrowding.	4	Fined £5 in 1 case, £2 or 21 days' imprisonment in 1 case, 10s. in 1 case, and order made for overcrowding to be abated within 21 days in 1 case.
Permitting overcrowding	4	Order made for overcrowding to be abated in 1 case, and summonses adjourned in 3 cases.
Failure to abate overcrowding and indecent occupation.	1	Summons withdrawn, overcrowding and indecent occupation having been abated.
Permitting overcrowding and indecent occupation.	1	Summons withdrawn, overcrowding and indecent occupation having been abated.
Failure to comply with the order made by the Justices requiring the execution of sanitary repairs.	2	Fined £10 in 1 case, and £1 in 1 case.
Failure to comply with further order made by the Justices requiring the execution of sanitary repairs.	1	Fined £1.
Failure to provide sufficient water-closet accommodation.	1	Summons withdrawn, the accommodation having been provided.
Letting underground room as a sleeping apartment.	1	Order made prohibiting the use of the said room.
Illegal occupation of underground rooms.	2	Fined £2 in 1 case, and order made prohibiting the use of the said room in 1 case.
Failure to pay expenses incurred under Section 3 of the Housing Act, 1925.	7	Orders for payment of expenses with interest and costs in 7 cases.
Failure to deposit plans and notify alteration to drainage system.	1	Fined £2.
Emission of smoke.	1	Order made prohibiting recurrence of nuisance and fined £1.
Allowing a dog to deposit its excrement on the public footway.	7	Fined 10s. 6d. in 3 cases, 10s. in 3 cases, and 5s in 1 case.
Total	53	

In addition to the above, there were issued under the various Acts and Regulations dealing with milk, food, drugs, etc., 15 summonses, particulars of which are given on page 64.

SMOKE ABATEMENT.

The borough contains but few factories or other work-places where there is a considerable fuel consumption, and thus the problem of smoke abatement is not a very large one. Nevertheless, in a borough which is essentially residential in character, it is very desirable that the nuisance from smoke should be reduced to a minimum, and during the year the Council's sanitary inspectors made 157 special observations with a view to ascertaining whether there were any breaches of the smoke provisions of the Public Health Acts. Four nuisances were discovered and written intimation notices were served. In three instances, these resulted in the abatement of the nuisance; but in one case, in view of the fact that previous serious emissions of black smoke had been observed, the Public Health Committee authorised the service of statutory notices and the institution of legal proceedings. The Magistrates imposed a fine of £1, and made an order prohibiting the recurrence of the nuisance.

MORTUARY AND CHAPEL OF REST.

During the year 250 bodies were deposited in the Public Mortuary under the following circumstances:—

At the request of relatives or friends of the deceased	38
At the request of undertakers	0
At the request of Coroner	201
By the police	11
	250

In 146 cases, post-mortem examinations were made under the Coroner's warrant.

Forty-six bodies were deposited in the Chapel of Rest, Avondale Park. This building is of considerable convenience to those poor persons in Notting Dale who live in perhaps one or two rooms and have no satisfactory accommodation for the bodies of dead relatives pending the day of the funeral.

PUBLIC BATHS AND WASH-HOUSES.

There are at the Public Baths, a Men's First Class Swimming Bath with a capacity of 120,000 gallons, a Woman's First Class Swimming Bath with a capacity of 45,000 gallons, and a Second Class Men's Bath and Second Class Women's Bath each of which holds 45,000 gallons.

The water in the four swimming baths is filtered and ærated by pulsometer filters. In the two first-class baths all the water passes through the filters every 6 hours and in the second-class baths every 4 hours. During the year the water in the four baths was subjected to bacteriological tests and the results proved satisfactory.

The charge for admission to the First Class Baths is 8d., and for children under 14 years of age 4d. except on mixed bathing days; 3d. is charged for admission to the Second Class Baths, chilldren being admitted at half price.

There are 13 Men's and 7 Women's First Class Slipper Baths and 34 Men's and 20 Women s Second Class Slipper Baths. The charge for a First Class Warm Slipper Bath is 8d. and for a Second Class, 3d., whilst the charges for a First Class Cold Slipper Bath and for a Second Class Cold Slipper Bath are 4d. and 1½d. respectively. There are 6 special Warm Baths for the use of which a charge of 1/- is made.

The number of bathers using the swimming baths and slipper baths in the last five years is shown in the following table:—

Year.	Washers.
1926	241,349
1927	249,838
1928	257,703
1929	246,085
1930	238,262

In the wash-house or laundry department, there were 88 wash-tubs in use in 1930. In order to prevent the wash-tubs being used by professional laundry-women to the exclusion of women doing their own family washing, the prices to be paid by a user of a wash-tub are as follows:—

2d. for each of the first four hours on any one day.
4d. for the fifth hour on any one day, and
6d. for the sixth and every succeeding hour on any one day.

The number of women using the wash-tubs in the last five years is shown in the following table:—

Year.	Washers.
1926	106,568
1927	103,657
1928	97,110
1929	96,192
1930	92,381

There are 8 washing machines and the charge for the use of one of these machines is 6d. for a period not exceeding half-an-hour, or 9d. per wash not exceeding a period of one hour with a fee of 6d. for every additional half-hour or less period. The number of women using these machines in 1930 was 18,381.

RAG FLOCK ACTS, 1911-1928.

These Acts prohibit the sale or use, for the purpose of making any article of upholstery, cushions or bedding, of unclean flock manufactured from rags. The expression " flock manufactured from rags " is defined as flock which has been produced wholly or partly by tearing up woven or knitted or felted materials, whether old or new, but does not include flock obtained wholly in the processes of scouring and finishing of newly-woven or newly-knitted or newly-felted fabrics.

Four samples of rag flock were analysed and reported upon during the year. They contained 5, 6, 7, and 10 parts of chlorine per 100,000, the limit set by the above acts being 30 parts per 100,000.

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACTS, 1920-23.

Applications made to the Council in 1930 for certificates under the Acts totalled 9, and five certificates were granted.

The comparative failure by tenants to attempt to make use of the provisions of the Acts is probably due to the fact that most houses in a defective state of repair come under the notice of the sanitary inspectors, who put the Public Health Acts into operation.

CANAL BOATS ACTS, 1877 AND 1884.

The Grand Junction Canal runs through the extreme northern portion of the borough for about half-a-mile of its length. There are three docks connected with this portion of the canal, in which there is accommodation for twenty to thirty boats. As is well known, many of these boats are used for dwelling purposes by the boatmen and their families.

The Kensington Borough Council are vested with authority to enforce the Canal Boats Acts and Regulations on all boats entering that portion of the Grand Junction Canal which is within the boundaries of the borough.

Many years ago, an arrangement was made with the Paddington Authority, which received the approval of the Local Government Board, for the Paddington Canal Boats Inspector to undertake the small amount of work entailed in the borough, Paddington having a much larger length of canal and greater dock accommodation.

In 1929 it was discovered that this arrangement was not working very well, and in October of that year the Council appointed Mr. R. J. McCarthy, one of the district sanitary inspectors, to be canal boats inspector and authorised him to carry out the necessary duties under the Canal Boats Acts, 1877 and 1884, and the Regulations made thereunder.

During the year 1930, the inspector made 72 inspections, 16 of which were initial inspections, and 56 re-inspections. In one instance children of school age were found living on the boat. In the majority of cases the vessels were in a clean condition, and no structural or other defects were found.

Three notices were served upon the owners or occupiers, one for repainting of the cabin, and two for improper mixing of sexes and absence of the copy of the certificate of registration.

No births or deaths occurred on boats lying at the wharves in Kensington, and no cases of infectious disease were reported.

THE RATS AND MICE (DESTRUCTION) ACT, 1919.

The Council have delegated their powers under the Act to the Public Health Committee, and each sanitary inspector makes inspections in his district for the purpose of detecting rat-infected premises and reports to the Medical Officer of Health cases in which the occupiers are not taking all practical steps to destroy the rats or to prevent their premises becoming infested.

A rat officer is employed to assist in the work of rat destruction under the supervision of the sanitary inspectors. He has carried out good work during the year as is evidenced by the following table :—

Number of individual premises visited by the rat officer on receipt of complaint	206
Total number of visits paid	2,822
Number of poison baits laid during the year	110,120
" " disappeared	100,540
" " removed by the rat officer	9,580
Number of premises where concreting of basement floors has been carried out under the direction of sanitary inspectors to prevent the ingress of rats	21
Number of premises where other repairs have been carried out under the direction of sanitary inspectors to prevent the ingress of rats	85
Number of sewer defects allowing egress of rats made good	6
Number of Statutory Notices served under the Rats and Mice (Destruction) Act, 1919	—
Number of premises cleared of rats	197

An account of the methods adopted by the rat officer appears in the report for 1923.

During the National Rat Week Campaign, held in November, the following special measures were adopted.

Sewers.

The Borough Engineer placed 14 flushers at the disposal of the Public Health Department, and these assisted by laying bait (equivalent to 30,000 barium baits) in the entrances to sewers. In North Kensington, 108 entrances were baited daily, and in the southern half of the borough, 119 entrances. The baits disappeared in the majority of cases between the daily visits of the flushers.

Wood Lane.

The rubbish tips were given special attention and bait (equivalent to 12,000 barium baits) was laid in the metal and other dumps. Wire cage traps were also set and baited daily, with the result that about 20 rats were destroyed. Others were found dead along the railway banks adjoining the depot.

Railways.

The railway companies whose lines run through the borough are always pleased to co-operate during Rat Week, and special efforts are made by them to carry out an intensive campaign. During the week, the Great Western Rilway heavily baited their lines between Westbourne Park Station and Kensal Wharf. (The line runs at the rear of Southam Street, Wornington Road, the Gas Works in Barlby Road, Ladbroke Grove Bridge, Tavistock Hay Bank, St. Ervans Road and Acklam Road.) All huts, banks and dumps along the line were dealt with. The Uxbridge Road Depot and the Kensington Coal Yard in Warwick Road were also baited.

Sidings in Warwick Road.

The coal depots of the Great Western Railway and the London, Midland and Scottish Railway and other firms were inspected, and were reported free from rats. The London, Midland and Scottish Railway Company baited their premises, but no baits disappeared. About 20 cats are kept on the site and apparently keep the sidings free from rodents.

Canal and River Wharves.

The Council's wharf at Lots Road, Chelsea, was inspected, but no evidence of rats was found. The jetty has recently been repaired with wood and granite chippings, and no rats were seen by the workmen. The depot at Kensal Road was also inspected, and here again no evidence of rats was found. The dogs on the barges apparently help to keep the premises free from rats.

Private Premises.

The number of private houses and business premises visited during the week was 77, and 18 rats were killed therein on ratlime and by breakback traps.

Handbills.

Handbills were printed and distributed to the public at the public libraries, infant welfare centres, London County Council Schools, etc., during Rat Week.

Cinema Theatres.

Lantern slides calling the attention of the public to Rat Week were shown at the Imperial Playhouse, Portobello Road, and at the Bolton Cinema, Drayton Gardens.

Press.

An advertisement was inserted in the local press to attract the attention of the public to Rat Week.

FOULING OF FOOTPATHS BY DOGS.

Towards the end of 1921, the Council succeeded in obtaining the approval of the following by-law for the good rule and government of the Royal Borough:—

"No person being in charge of a dog in any street or public place and having the dog on a lead shall allow or permit such dog to deposit its excrement upon the public footway.

"Any person offending against this by-law shall be liable to a penalty not exceeding 40s.

"This by-law shall cease to be in force after the 31st day of December, 1923, unless a by-law confirming and continuing its provisions has been duly made and come into force before that date."

This by-law was made in pursuance of Section 23 of the Municipal Corporations Act, 1882, Section 16 of the Local Government Act, 1888, and Section 5 of the London Government Act, 1889. In 1923 the by-law was sanctioned without limit of time and the Council now have a permanent measure by which they can secure a considerable improvement in the cleanliness of the public footways.

The Council have issued leaflets which have been posted on lamp-posts and in various places in the borough, and delivered by hand to a large number of dog-owners. Attention has been called to the by-law by slips attached to the rate demand notices and the matter has received notice in the local press. Two officers in the Public Health Department make observations and during 1930 they reported seven breaches of the by-law to the Public Health Committee. Summonses were taken out and fines of 10s. 6d. on three occasions and 10s. in three cases and 5s. in one were imposed.

The number of convictions under this by-law during the past nine years is 56.

NUISANCES FROM PIGEONS.

Section 52 of the London County Council (General Powers) Act, 1927, provides that, for the purpose of abating or mitigating any nuisance, annoyance or damage caused by the congregation at any place in the borough of house doves or pigeons having, or believed by the Council to have no owner, or of preventing or minimising any such nuisance, annoyance or damage which might, in the opinion of the Council, be so caused, the Council may seize and destroy or sell any such house doves or pigeons in excess of such number as the Council may consider reasonable, and take such steps as they may deem necessary for such purpose. It is necessary, however, in the first place for the Council to obtain consent to the measures adopted by them from the person or body in whom the building or land upon which the birds congregate is vested.

In, June, 1928, the Council authorised the destruction of 500 Pigeons, and by May, 1930, this number had been disposed of. The Council thereupon ordered the destruction of a further 300 birds.

In 1930, 136 pigeons were destroyed, making a total of 598 since Section 52 of the London County Council (General Powers) Act, 1927, came into operation.

Much difficulty has been experienced in carrying out pigeon destruction, owing to the opposition of the public. Indeed, it has been found almost useless to attempt to catch pigeons on a public highway owing to interference from neighbouring residents and other persons, and the obstruction caused to traffic by the fixing of pigeon traps.

The best results have been obtained at churches and other institutions where there are enclosed spaces in which the man can operate and to which the public cannot gain admission.

ENQUIRY INTO CONDITIONS PREVAILING IN SHOPS

For the purpose of supplying information to a Select Committee of the House of Commons, I was asked to make an inspection of shops in the borough in eighteen different classes of business. On receiving the sanction of the Council, this inspection was commenced during the Summer and a report was submitted to the Home Office before the end of the year. This report was circulated to the members of the Council's Public Health Committee, and it will be sufficient here to say that the investigation did not disclose conditions calling for drastic action, although there was found to be room for improvements in certain respects.

INSPECTION OF PUBLIC HOUSES.

It has not hitherto been the custom for officers of the Public Health Department to enter licensed premises except for the purpose of supervising drainage work, making investigations on the occurrence of cases of infectious disease on the premises, or purchasing samples under the Food and Drugs Acts. When visits have been paid to public houses, the only examinations made have been those arising in connection with the special enquiry. Thus, there has been no definite routine supervision undertaken by the local authority in respect of the sanitary conditions in the cellars of public houses or behind the bars, these being places where the public do not have access and where possibly insanitary conditions might exist.

This matter received the consideration of the Public Health Committee during the year and they gave instructions for a number of public houses to be inspected and a report prepared. This report was circulated to the members of the Council, and instructions were subsequently given to me for a routine inspection to be made of all public houses in the borough with a view to securing such improvements in the sanitary conditions as seemed desirable.

At the time of writing this report, the total number of public houses inspected has been 23.

FACTORIES AND WORKSHOPS.

The following table shows the various trades and occupations carried on in registered workshops and factories where men are employed :—

Trade or Business.	Workshops.	Factories.	Total.
Aerated water manufacturers ...	—	2	2
Bakers	68	31	99
Basket makers	2	1	3
Blacksmiths	7	—	7
Blind makers	—	—	—
Boot makers and repairers ...	69	16	85
Builders	42	9	51
Cabinet makers	13	4	17
Cigarette makers	2	1	3
Coach builders	9	3	12
Coal wharves	2	—	2
Cooked meat dealers	1	2	3
Cycle repairers...	6	1	7
Dyers	2	2	4
Electricity generating stations ...	—	4	4
Electric light fitting makers ...	2	3	5
Firewood choppers	3	2	5
Furriers	4	—	4
Gas works	—	2	2
Ice cream manufacturers ...	1	—	1
Instrument makers	—	3	3
Ironmongers	2	—	2
Ladder makers..	1	1	2
Lampshade makers	2	—	2
Laundries	6	16	22
Marine stores	3	—	3
Masons	2	1	3
Metal workers	8	7	15
Motor engineers and garages ...	36	29	65
Motor spirit dealers	3	—	3
Photographers	3	—	3
Piano makers	—	1	1
Picture frame makers	10	—	10
Pipe makers	—	2	2
Printers	3	7	10
Saddlers	2	—	2
Sausage makers	4	4	8
Sign writers	5	—	5
Steam pressers...	1	1	2
Sundry businesses	27	14	41
Sweet manufacturers	2	1	3
Tailors	72	2	74
Timber merchants	1	1	2
Trunk makers	3	—	3
Undertakers	11	1	12
Upholsterers	20	1	21
Washing machine manufacturers...	—	2	2
Watch makers	6	—	6
Wax figure manufacturers ...	1	1	2
Wheelwrights	7	1	8
Total	474	179	653

Factories and Workshops where women are employed.—The following table shows the various trades and occupations carried on in registered workshops and factories where women are employed :—

Trade or Business.	Workshops.	Factories.	Total.
Bakers	1	—	1
Blind makers	1	—	1
Blouse makers	3	—	3
Boot makers and repairers	5	1	6
Corset makers	9	—	9
Dressmakers and ladies' tailors	287	1	288
Dyers	7	1	8
Embroidery workers	6	—	6
Florists	12	—	12
Furriers	14	1	15
Hairdressers	18	—	18
Invisible menders	3	—	3
Jewellers	3	2	5
Knitted goods	2	—	2
Lace workers	3	—	3
Lampshade makers	4	—	4
Laundries	39	44	83
Milliners	39	—	39
Outfitters	5	—	5
Photographers	7	—	7
Picture frame makers	3	1	4
Restaurants	4	—	4
Sundry businesses	21	8	29
Toy makers	2	—	2
Umbrella makers	1	—	1
Upholsterers	10	—	10
Weavers	2	—	2
Total	511	59	570

Home Work.—Of the 198 outworkers registered, some are employed on premises which are factories or workshops within the meaning of the Factory and Workshop Act, 1901, others work in domestic workshops, whilst the remainder are the genuine "Home Workers" engaged in their homes on the work given out to them by various firms and contractors in Kensington and other districts.

The number of outworkers belonging to each of these three classes is shown in the following table :—

Outworkers in workshops or factories	54
Outworkers in domestic workshops	18
Outworkers in their own homes	126
Total number of outworkers	198

The factories and workshops referred to in the above list are included in the tables which show the trades carried on in the factories and workshops on the Council's register.

The nature of the work given out to the 126 home workers on the register is as follows :—

Tailoring	68
Dressmaking	29
Bootmaking	11
Outfitting	4
Drapery	3
Linen working	3
Fancy goods	2
Blouse making	1
Underwear	1
Collar making	1
Confectionery	1
Embroidery	1
Box making	1
	126

No instance of infectious disease occurring in premises where home work is carried on was reported during the year.

The appended table summarises the work for the year of the women health officers under the Factory and Workshop Acts, so far as it is capable of being expressed in this form :—

1.	No. of factory inspections	98
2.	„ workshop „	718
3.	„ home workers' inspections	332
4.	„ work place „	12

Home Office Tables.

The following tables contain a summary of the inspections made and the defects found and remedied in workshops and factories within the Borough, where men, women, or young persons are employed :—

I.—Inspections.

Premises.	Number of		
	Inspections.	Written notices.	Prosecutions.
Factories (including Factory Laundries) ...	431	19	—
Workshops (including Workshop Laundries) ...	1091	61	—
Workplaces (other than Outworkers' premises) ...	129	13	—
Total	1651	93	—

II.—Defects Found.

Particulars.	Number of Defects.			Number of prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
*Nuisances under the Public Health Acts :—**				
Want of cleanliness	72	72	—	—
Want of ventilation	5	5	—	—
Overcrowding	3	3	—	—
Want of drainage of floors	5	5	—	—
Other nuisances	34	34	—	—
Sanitary accommodation — insufficient	4	4	—	—
Sanitary accommodation — unsuitable or defective ...	23	23	—	—
Sanitary accommodation — not separate for sexes ...	6	6	—	—
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (S. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	—	—	—	—
Other offences ... ... (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)	3	3	—	—
Total	155	155	—	—

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

III.—Outwork in Unwholesome Premises (Section 108).

No case came to my notice during the year of outwork being carried on in unwholesome premises.

MATERNITY AND CHILD WELFARE.

The Borough Council's Scheme of maternity and child welfare work includes the following amongst other activities :—

(*a*) Home visiting of expectant and nursing mothers and children by the Council's staff of women health officers.

(*b*) Co-ordination of the work of the voluntary maternity and child welfare institutions in the borough.

(*c*) The subsidisation of the voluntary infant welfare institutions.

(*d*) The provision of " home helps."

(*e*) The provision of hospital accommodation for infants.

(*f*) The provision of convalescent home accommodation for mothers and infants.

(*g*) The provision of home nursing for sick mothers and infants.

(*h*) The supply of milk and meals free or at a reduced price to necessitous mothers and infants.

(*i*) The provision of a maternity home.

(*j*) The payment of travelling expenses of mothers attending hospitals to breast feed their infants.

(*k*) Arrangements for the treatment of ophthalmia neonatorum and zymotic enteritis.

(*l*) The subsidisation of a massage and electrical treatment centre for cases of infantile paralysis, etc.

(*m*) Addresses on health and the prevention of disease by a health lecturer.

(*n*) The distribution of pamphlets and booklets giving advice on various matters concerning the welfare of mothers and infants.

LOCAL GOVERNMENT ACT, 1929.

The introduction of the Local Government Act, 1929, effected a radical alteration of the system under which the Government grant financial aid to local authorities in respect of certain health and other services and to approved voluntary organisations undertaking maternity and child welfare work.

Before the 1st April, 1930, 50 per cent. of the Borough Council's expenditure approved by the Minister of Health in respect of maternity and child welfare work was refunded by the Government. Likewise, 50 per cent. of the approved expenditure of voluntary maternity and child welfare organisations was refunded to them by the Government. These so-called percentage grants were abolished by the Act as from the 1st April, 1930, and have been replaced by a block grant which is calculated on a formula depending on population, rateable value and other factors.

The block grant paid to the Borough Council not only replaces the percentage grant hitherto paid to them in respect of their maternity and child welfare expenditure, but it also replaces the percentage grant previously paid in regard to tuberculosis work, road repairs, etc. ; it also takes the place of the percentage grant paid to certain Kensington voluntary maternity and child welfare organisations.

Section 101(6) of the Local Government Act, 1929, reads as follows :—

> " As respects the County of London, the Minister shall, before the beginning of each fixed grant period, after consultation with the Councils concerned, make a scheme determining, in relation to voluntary associations providing maternity and child welfare services, which of those services are to be treated as services in respect of which the London County Council are to contribute and which are services in respect of which the common Council of the City of London and the councils of the metropolitan boroughs are to contribute ; and the scheme shall provide for the payment during the fixed grant period to the association by the several councils of contributions of such amounts as may be specified in the scheme."

Under this section the Minister of Health has prepared a scheme which provides that the Borough Council shall pay to certain voluntary institutions within the borough a fixed minimum grant in each of the three years commencing the 1st April, 1930. The total annual grant to be paid in this way is £6,285, and is included in the figures shown on page 21 of this report.

The amount of contribution specified for each institution represents roughly the amount of grant paid to that institution by the Minister of Health in respect of the " standard " financial year ended the 31st March, 1929, plus the amount of any grant paid thereto for that year by the Borough Council Thus, it will be seen that the scheme guarantees to each voluntary institution a grant not less than that which was received for the " standard " year.

The Minister's Scheme provides that it shall be a condition of the payment of the contribution to a voluntary organisation :—

(1) that the Borough Council are satisfied as to the efficiency of the maternity and child welfare service provided by the voluntary organisations 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 ;

(2) that no reduction or alteration of such service is made without the consent of the Borough Council ;

(3) that such service, and any premises in which it is carried on, are open to inspection at all reasonable times by any duly authorised officer of the Borough Council or of the Ministry of Health ;

(4) that the voluntary organisation send to the Borough Council each year a copy of their annual report on the work of the previous year, together with a statement of accounts for that year and a copy of the auditor's certificate thereon, and furnish the Borough Council from time to time with such other information relating to the maternity and child welfare services and the expenditure thereon as the Council may reasonably require.

A principle underlying the Local Government Act, 1929, is that local authorities shall have as much freedom as possible in administering maternity and child welfare services, and accordingly the provisions of the Minister's Scheme under Section 101 (6) transfer to local authorities the local supervision of the maternity and child welfare work of voluntary organisations.

Looking at the matter from the point of view of the Borough Council and its own services, it may be said that the sum result of the changes brought about by the new legislation is that the Council can proceed with their maternity and child welfare work in any reasonable direction they may think fit, without having to approach the Minister for sanction ; but, on the other hand, the amount of grant they will receive in respect of such work is fixed and any new additional expenditure will have to be borne entirely by the ratepayers. At the end of three years the Minister will review the position, take into account the Council's expenditure and then fix the block grant for the succeeding four years.

The introduction of the Act did not call for any alteration or amendment of those branches of maternity and child welfare work which are carried out directly by the Borough Council ; but certain adjustments in the system of co-operation which has grown up between the voluntary organisations and the Council in the last ten years were needed as a result of the changes in the system of payment of grant and the introduction of a new form of supervision.

Towards the end of the year, the Council reviewed their relationship to the voluntary organisations and adopted proposals in regard to future arrangements which were circulated in November to the institutions concerned.

MATERNITY AND CHILD WELFARE COMMITTEE.

The duties and responsibilities of the Maternity and Child Welfare Committee have been greatly increased as a result of the Local Government Act, 1929 ; and the Council gave consideration to this Committee's status in the latter part of the year, when it was decided that it should be made a permanent Committee of the Council with power to recommend the expenditure of money. Hitherto the Committee had been required to submit all proposals in the first place to the Public Health Committee, but now the Committee will be able to report on expenditure direct to the Finance Committee or the Council, as the case may be.

ADVISORY COMMITTEE TO THE MATERNITY AND CHILD WELFARE COMMITTEE.

In 1920 it was felt that, as the Kensington maternity and child welfare scheme was so largely organised on a voluntary basis, it was desirable to establish a special committee composed of ladies representing voluntary maternity and child welfare organisations, in order to secure uniform working arrangements and to exercise supervision on behalf of the Maternity and Child Welfare Committee in regard to the work of the voluntary institutions. This Advisory Committee has been of great value in maintaining the high standard of voluntary work carried out in Kensington. Since its establishment it has exercised control in regard to the eight infant welfare centres and the Baby Clinic, and it has been composed of two members from each of these institutions.

The importance of this Committee and its value in the Council's scheme have been enhanced as a result of the changes introduced by the Local Government Act, 1929, but some alteration in its constitution appeared to be necessary as from the 1st April, 1930. Not only will the eight infant welfare centres and the Baby Clinic receive grant from, and be subject to the supervision of, the Borough

Council, but six other institutions, namely, the Queen Charlotte's Ante-natal Clinic, the Baby Hospital and the Golborne, Lancaster Road, St. Clement's and Notting Hill Day Nurseries, are placed in the same category. It was obviously desirable that each of these should be represented on the Advisory Committee. Of these six institutions, two (the Golborne Day Nursery and the Lancaster Road Day Nursery) are attached to their respective infant welfare centres and are controlled by the same voluntary committees, and one (the Baby Hospital) is an institution controlled by the same committee as the Baby Clinic. Thus these three institutions were already adequately represented on the Advisory Committee, and the Council decided to invite the remaining three to nominate representatives to serve on that Committee.

On the re-election of the Committee in January, 1931, the membership was as follows :—

Archer Street Infant Welfare Centre.

Miss Packe, 41, Charles Street, W.1.
Mrs. Jacob, 25, Ladbroke Gardens, W.11.

Bramley Road Infant Welfare Centre.

Mrs. Carnegie, 14, Church Row, N.W.3.
Mrs. Graham Campbell, 11, Cleveland Gardens, W.2. (Vice-Chairman).

Campden Hill Infant Welfare Centre.

Mrs. Nisbet, 7, Bedford Gardens, W.8.
Mrs. Arnold, 85, Bedford Gardens, W.8.

Earl's Court Infant Welfare Centre.

Lady Trustram Eve, J.P., 42, Bramham Gardens, S.W.5.
Mrs. Leveson, 2, Edwardes Place, W.8.

Golborne Infant Welfare Centre Day Nursery.

Mrs. Swan, 13, Holland Park, W.11.
Miss Fraser, 338, King's Road, S.W.3.

Kenley Street Infant Welfare Centre.

Mrs. Pott, 69, Victoria Road, W.8.
Miss Brooke, 34, Craven Hill Gardens, W.2.

Lancaster Road Infant Welfare Centre and Day Nursery.

Mrs. Burne, 3, Stafford Terrace, W.8.
Mrs. Clauson, 25, Lansdowne Crescent, W.11.

Raymede Infant Welfare Centre.

Mrs. Sedgwick, 11, Moore's Gardens, S.W.3.
Mrs. Oppe, 18, Cheyne Gardens, S.W.3.

The Baby Clinic and Hospital.

Lady Maurice, 44, Kensington Park Gardens, W.11. (Chairman).
Miss M. Davis, 2, Campden House Chambers, W.8.

Notting Hill Day Nursery.

Mrs. Coit, 30, Hyde Park Gate, S.W.
Mrs. Grant, 19, Chisholm Road, Richmond, Surrey.

St. Clement's Day Nursery.

Mrs. Vassiliadi, 64, Westbourne Terrace, W.2.
Mrs. Sharman-Crawford, 4, Hans Place, S.W.1.

WOMEN HEALTH OFFICERS.

The maternity and child welfare duties allotted to the Council's women health officers are as follows :—

1. To visit the homes of all newly-born children among the working classes within 21 days after birth, and subsequently as circumstances indicate.
2. To visit the homes and make investigations in regard to still-births and infantile deaths.
3. To visit and give advice to parents in cases of ophthalmia, zymotic enteritis and other diseases causing deaths amongst infants.
4. To visit and report upon all cases of puerperal fever and pyrexia.
5. To investigate applications under the Council's scheme for the supply of milk and meals free or below cost price, admissions to the maternity home and convalescent homes.

These officers also attend at the infant welfare centres in their respective areas on doctors' consultation days in order to assist in the work and to co-ordinate their efforts with those of the voluntary and salaried workers attached to these institutions.

The work performed by the women health officers in 1930 in regard to maternity and child welfare is summarised in the following table :—

Description of Work.	Health Officers.							
	No. 1.	No. 2.	No. 3.	No. 4.	No. 5	No. 6.	No. 7.	Total.
Visits to infants under the age of 21 days. (First visits)	323	277	288	333	328	107	230	1,886
Re-visits to infants under the age of 12 months	890	557	412	750	956	434	482	4,481
Visits to children between 1 and 5 years	1,656	1,419	1,392	1,132	646	873	712	7,830
Still-birth enquiries	7	9	7	4	14	4	7	52
Visits to Ophthalmia cases	2	4	8	6	4	2	4	30
Return visits to Ophthalmia cases	—	6	8	18	32	14	9	87
Visits to Measles cases	311	272	276	32	308	164	148	1511
Visits to Whooping Cough cases	7	2	5	3	58	15	9	99
Visits to Puerperal Fever cases	—	—	2	—	1	1	—	4
Visits to Puerperal Pyrexia cases	3	2	3	7	6	1	4	26
Visits to Enteritis cases	38	16	43	11	29	4	1	142
Infantile death enquiries	21	20	14	25	39	10	24	153
Investigations *re* milk applications	86	16	59	110	173	16	43	503
Ante-natal visits	48	38	87	113	124	126	173	709
Half-days at welfare centres	145	143	143	130	196	99	101	957
Special visits	133	129	109	236	282	362	374	1,625

The visiting in connection with tuberculosis and factories and workshops is dealt with in the sections of this report dealing with those subjects, and a complete record of the work performed by each woman health officer during the year appears in Table V of Appendix III.

INFANT WELFARE CENTRES.

For some years past The Princess Louise, Duchess of Argyll, has been the Patroness of one of the infant welfare centres in the borough, but during the course of the year Her Royal Highness graciously consented to be Patroness of each centre not already under Royal Patronage. The voluntary committees in the borough have expressed their appreciation of this further mark of the great interest which The Princess displays in the health and welfare of Kensington residents.

In 1930, there were eight voluntary infant welfare centres in Kensington, and the borough has been divided into a similar number of areas with one centre in each, an attempt having been made to place each home in the area of that centre which is most accessible to the mother.

Owing to the housing activities of the Borough Council, the Sutton Trust and private individuals, many dwellings have been erected on the vacant land in the neighbourhood of and on the St. Quintin Park Estate, which is situated in the north-west part of the borough. The Council have built several hundred houses and flats in that district. The Sutton Trust have erected large blocks of flats which comprise 540 separate tenements, with an approximate population of 2,900, of whom 870 are under 5 years of age.

The Committee of the Raymede infant welfare centre, which served the area in which the new buildings have been erected, found that many of the women living in these homes complained of the distance they had to travel to the Raymede Centre in Ladbroke Grove, and that there were others for whom the distance was too great to permit them to attend at all. The voluntary committee therefore approached the Borough Council and the Sutton Trustees with regard to the establishment of a branch infant welfare centre in the neighbourhood of the new buildings. Both bodies were sympathetic, and the Sutton Trustees at once expressed their willingness to provide a suitable building for an infant welfare centre, if the cost of its maintenance were borne by the Raymede Centre Committee and the Borough Council. The building has been completed, and was opened by the Mayoress (Mrs. Gordon Bird) in March, 1931.

The work done at the infant welfare centres during the year 1930 is shown in the following table :—

Particulars of Work done.	Archer Street.	Bramley Road	Camp-den Hill.	Earl's Court.	Gol-borne.	Kenley Street.	Lan-caster Road.	Ray-mede.	Totals.
1—No. of births occurring in the area of the centre suitable for welfare attention...	100	313	94	272	284	228	386	334	2011
2—No. of sessions at which doctor attended for infant consultations	97	153	92	99	149	101	134	144	969
3—No. of sessions at which doctor attended for special ante-natal consultations ...	22	51	12	23	22	45	22	50	247
4—Total number of individual mothers who attended during the year ...	322	473	200	146	505	233	698	676	3253
5—Number of individual mothers who attended ante-natal sessions during the year	39	93	48	96	52	32	101	92	553
6—Total number of individual children who attended during the year... (Old)	209	232	99	221	363	141	382	236	1883
„ „ „ (New)	199	264	103	203	287	158	358	256	1828
7—Total attendances at centre of mothers for all purposes. (Excluding the accompanying of children and for the purpose of buying dried milk or other article)	1166	1507	1087	2061	1712	2296	3280	2610	15719
8—Total attendances at centre of children for all purposes	4070	5745	2401	4767	7123	2796	8251	8524	43677
9—Total attendances at dinners (Included in Nos. 7 and 8 above)—									
1. Mothers	—	—	—	—	525	—	1077	—	1602
2. Children	—	—	—	—	—	—	1054	—	1054
10—Total attendances at doctors' consultations—									
1. Ante-natal mothers	110	456	140	291	111	178	284	260	1830
2. Post-natal mothers	149	139	—	537	521	248	127	197	1918
3. Children	2153	3941	1822	3223	4151	1892	3705	4294	25181
11—Average attendances at doctors' consultations—									
1. Ante-natal mothers	5	9	12	13	5	4	13	7	9
2. Post-natal mothers	1	—	—	5	3	3	1	1	2
3. Children	22	25	20	32	28	19	27	28	29
12—Number of individual children weighed during the year	408	494	202	402	650	299	735	462	3652
13—Total weighings	3470	5568	2016	4444	6648	2673	7097	8032	39978
14—Number of first visits paid by salaried workers to—									
1. Expectant mothers	37	57	33	52	112	183	120	118	712
2. Children	—	—	—	—	—	—	—	—	—
15—Total number of home visits paid by salaried workers to—									
1. Expectant mothers	103	137	45	73	201	387	148	193	1287
2. Children	1531	1149	473	1948	3467	1010	1006	2954	13538
16—Number of home visits paid to children by voluntary workers –									
1. First visits	—	—	—	—	—	—	—	—	—
2. Total visits	—	180	—	—	—	—	1154	—	1334

GENERAL OBSERVATIONS ON THE WORK OF THE INFANT WELFARE CENTRE.

Infant Consultation Sessions are normally held by medical officers in the afternoons from 2 to 4 o'clock. At four of the centres two sessions per week are held, and at the remaining four centres there are three sessions each week. At the Lancaster Road Centre there is an infant consultation session on Thursday mornings from 10 o'clock to noon. The centres are very fortunate in having exceptionally keen and able medical officers who show considerable interest in their work.

Ante-natal Clinics.—Special ante-natal clinics are held at every centre, and during the past year 247 sessions were conducted. During the year representations were made to the Advisory Committee that many expectant mothers were not able to attend ante-natal sessions during the afternoons, but would be willing to visit the clinics if sessions were held in the evenings. Enquiries were made at the appropriate institutions in the borough and, after very careful consideration of the answers received, the Advisory Committee came to the conclusion that there was no occasion to hold evening sessions.

In 1921 the Advisory Committee prepared a scheme for promoting closer co-operation between midwives and the infant welfare centres, under which arrangements were made for the doctors at the centres to give ante-natal advice at the request of the midwives to women who had booked with them. Under this scheme, when the doctor has made the examination and given adequate advice, the expectant mother is told to return to the midwife, and the doctor forwards a report on the case. In order to bring this scheme again to the notice of the midwives, the Advisory Committee invited the Mayoress (Mrs. Gordon Bird) in 1930 to convene a special meeting to which Kensington midwives, medical officers and workers at the various maternity and child welfare institutions, and the Council's health officers could be invited. The Mayoress showed a keen interest in the proposal and a very successful meeting was held in January, 1931. It is hoped that, as a result, much closer co-operation will be established between the infant welfare institutions and the midwives practising in the borough.

The work of ante-natal consultations must grow as it becomes better known and, in view of the excellent arrangements made by the voluntary committees, it is to be hoped that more expectant mothers will take full advantage of them, and thus remove as far as possible all danger of disease and accident in their confinements.

Home Visiting.—The Council's women health officers receive all notifications of birth, and these are transferred to history cards. They pay " first visits " to infants in order to ascertain certain information required by the Council in respect of births. If the mother of the child is in regular attendance at an infant welfare centre, the health officer transfers the history card to the welfare sister, who pays the subsequent home visits. Apart from " first visits," the Council's health officer confines her attention to cases not in attendance at welfare centres or to difficult cases referred back to her by the welfare sister.

Dental Treatment.—All the infant welfare centres now provide dental treatment. Each endeavours, as far as possible, to make the scheme of treatment self-supporting by charging such fees as the mothers can pay and by obtaining the dentures at a very low rate.

Although the dentures are generally not more than £4 to £5 for a complete set, they are very well made and give considerable satisfaction.

TABLE SHOWING THE DENTAL TREATMENT PERFORMED AT THE VARIOUS CENTRES IN 1930.

Centre.	No. of patients.	No. of attendances.	Extractions.	Fillings.	Dentures.	Other Treatments.
Archer Street	97	258	96	29	24	12
Bramley Rd. & Kenley St.	74	214	66	11	7	2
Campden Hill	—	—	—	—	—	—
Earl's Court	69	180	73	6	8	94
Golborne	17	23	13	2	1	11
Lancaster Road	161	417	174	47	11	107
Raymede	218	527	213	48	27	235
Totals ...	636	1619	635	143	78	461

THE BABY CLINIC, No. 92, TAVISTOCK ROAD.

The Baby Clinic acts both as a treatment centre and infant welfare centre, but it is not an infant welfare centre in the same sense as the other eight; nevertheless, much valuable work is performed.

The following are the records for the year ending December 31st, 1930:—

Number of sessions at which doctors attended for infant consultations ...	151
Number of sessions at which doctors attended for special ante-natal and post-natal consultations	50
Total number of individual mothers who attended during year ...	223
Total number of individual children who attended during year (Old) ...	696
" " " (New) ...	594
Total attendances at centre of mothers for all purposes (excluding the accompanying of children)	813
Total attendances of children at centre for all purposes	15,898
Number seen by doctor at consultations:—	
1. Ante-natal mothers	250
2. Post-natal mothers	450
3. Children	5,889
Average number seen by doctor at consultations:—	
1. Ante-natal mothers	5
2. Post-natal mothers	9
3. Children	39
Number of individual children weighed	1,290
Total weighings	5,889

Collective instruction by lectures is undertaken at Tavistock Road by the Council's health lecturer, but there is little home visiting.

Under an arrangement with the County Council, certain minor defects and ailments discovered in children at the school medical examinations are treated at this Clinic and much useful work in this direction is being carried out

BABY IN-PATIENT HOSPITAL.

This institution commenced its activities in 1919 at No. 127. Ladbroke Road. These premises rapidly proved inadequate in size, and in October, 1929, the hospital was transferred to larger and more suitable premises at No. 1, Ladbroke Square, which had recently been purchased at a cost of £9,000. The new building is particularly suitable for a hospital, as it was previously a nursing home. It is a large, non-basement, corner house, and is detached on three sides; it provides an isolation ward, good staff rooms, a kitchen on each floor, an operating theatre, and sunny wards which are capable of accommodating 34 beds.

Records for the year 1930:—

Number of infants in residence at commencement of the year ...	18
Number of admissions during the year	215
Number of discharges during the year	183
Number of deaths during the year	21
Number in residence at end of the year	29
Average duration of stay in hospital	72 days.

Prior to 1930 the Council had made an annual grant of £200 to the committee of the hospital towards the maintenance of two beds therein, to be placed at the disposal of the infant welfare centres serving the borough, the grant being subject to the following conditions:—That provision shall be made for the doctors in attendance at the centres to continue in the Hopsital, if they so desire, the supervision of the cases recommended by them, and that the Medical Officer of Health shall continue a representative of the Council on the Committee of Management, and shall be furnished with the names and addresses of patients admitted from within the borough, together with the dates of their admission and discharge. Although two beds were reserved in the old hospital for children recommended from the various Kensington welfare centres, all the beds were available for children belonging to the borough.

Following the transfer to the new premises the voluntary committee approached the Council for further financial assistance and, in the early part of 1930, it was decided to increase the annual grant to £400 on the condition that four beds will be placed at the disposal of the infant welfare centres.

ARTIFICIAL SUNLIGHT TREATMENT

(The Baby Clinic and Hospital).

Dr. W. A. Hislop, one of the Medical Officers of the Hospital, has kindly supplied me with this report in regard to Light Treatment.

During the past year, 4,911 treatments were conducted in the Light Department of the Baby Clinic and Hospital, and the average weekly attendance was 95. One hundred and sixty-one children were treated during the year.

In the Department, there are two mercury vapour lamps, two radiant heat lamps and one long-ray red lamp.

It has been found in most cases beneficial to have massage and rhythmic exercises carried out together with the light treatment, and in a number of cases electrical treatment is given with definite remedial exercises.

Several children, resident in Kensington, have been referred from Great Ormond Street Children's Hospital, and from the Orthopaedic Department of Westminster Hospital for light treatment and exercises, as well as a considerable number of children from the infant welfare centres serving the borough.

Instruction to the mothers on the value of sunlight in general has been given throughout the year, and during the summer months effective use was made of the excellent roof garden at the clinic.

The children treated have been mostly those suffering from rickets, bronchitis, abdominal tuberculosis, under-nourishment and general debility following measles and whooping-cough.

The cases of rickets and debility following measles and whooping-cough have shown marked improvement.

During the year, the clinic commenced to give light treatment to mothers. So far, however, only a few women have received it, but it is hoped in the future to find more time for the treatment of a large number of ante-natal and post-natal women who are in need of it.

QUEEN CHARLOTTE'S HOSPITAL ANTE-NATAL CLINIC.

Up to May, 1930, this clinic was conducted weekly at No. 176, Ladbroke Grove, which house is the residence of the Queen Charlotte's Hospital nurses who carry on district midwifery in North Kensington. The accommodation provided for the clinic was inadequate and unsuitable, and the Borough-Council proposed to the Hospital authorities that the latter should rent the light and airy basement at No. 240, Ladbroke Grove, which is a large corner house recently acquired by the Council to enable the work of the Raymede infant welfare centre to be continued on the ground and upper floors.

These new premises make it possible to hold two ante-natal sessions weekly, and in 1930 the total number of sessions held was 75. Nine hundred and five women attended, and of this number 755 were Kensington women.

MASSAGE AND ELECTRICAL TREATMENT CENTRE.

Massage and electrical treatment is undertaken at the Princess Louise Kensington Hospital for Children and the following is a record of the work conducted thereat during the year 1930:—

New Cases—	
Under 5 years of age	36
Over 5 years of age	131
	167
Discharged—	
Under 5 years of age	23
Over 5 years of age	129
	152
Transferred to other hospitals because over age ...	8
Total cases treated	226
Total treatments given...	4,493

The Borough Council make an annual grant to the authorities of the hospital for this treatment.

Massage treatment for children is also provided at the Archer Street and Campden Hill infant welfare centres.

KENSINGTON MATERNITY HOME.

The Kensington Maternity Home was opened in 1924 and consists of a detached ward of ten beds in the southern portion of the grounds of St. Mary Abbots Hospital. The home is available for married women of all classes whose home conditions are not suitable for their confinement and who cannot afford to pay the fees charged in private nursing homes.

Statement of Work done during last five years.

	1926.	1927.	1928.	1929.	1930.
No. of applications for admission	135	143	185	177	164
No. of applications accepted	134	137	170	162	158
No. of applications withdrawn after acceptance	4	10	14	17	14
No. of women confined during the year ...	123	126	143	141	142

The gross cost of the scheme to the Council during 1930 was £683 14s. 0d.

The assessments made in respect of patients whose applications were accepted and not withdrawn during the year amounted to £470 10s. 0d. Payments made by patients totalled £457 9s. 7d.

Ambulance facilities are available for the transfer of expectant mothers to the maternity home, and to secure an ambulance it is necessary to telephone City 7200. For details of the ambulance service, see page 18 of this report.

As a result of the changes introduced at St. Mary Abbots Hospital following the transfer of that institution to the London County Council, it is doubtful whether it will be convenient to continue the borough maternity home there in the future. During 1930 the matter was receiving the consideration of both the County Council and the Borough Council, and at the present time it is proposed that the agreement under which the borough maternity home has been housed at the hospital since 1924 will be terminated in September, 1931.

The Borough Council have, therefore, entered into a provisional agreement with the Queen Charlotte's Hospital authorities for two wards (with five beds in each) in that institution to be used as the Kensington maternity home. The rules which have been issued for the conduct of the present home and for the guidance of patients will require very little alteration under the new arrangements, which are expected to operate from the 1st October, 1931.

DAY NURSERIES.

There are four day nurseries in the borough, namely :—

The Golborne Day Nursery.
The Lancaster Road Day Nursery.
The Notting Hill Day Nursery.
The St. Clement's Day Nursery.

The following table shows a record of children's attendances at the day nurseries in the year 1930 :—

	Golborne.	Lancaster Road.	Notting Hill.	St. Clement's.	Totals.
1. Whole day attendances of children under 3 years of age	5312	3335	8080	2307	19034
2. Whole day attendances of children over 3 years of age	2639	1896	2809	1301	8645
3. Total whole day attendances	7951	5231	10889	3608	27679
4. Charges made for each attendance of a child	10d.	9d.	8d.	1/-	—
5. Half-day attendances of children under 3 years of age	—	—	428	315	743
6. Half-day attendances of children over 3 years of age	—	—	90	188	278
7. Total half-day attendances	—	—	518	503	1021
8. Charges made for each attendance of a child	—	—	4d.	6d.	—
9. Average daily attendance of children ...	35	23	50	20	—

CONVALESCENT HOMES.

The Council, under their Maternity and Child Welfare scheme, provide convalescent home treatment for mothers with babies under the age of six months. The following table shows the institutions to which mothers and infants were sent during 1930, together with the number of cases admitted. Each mother and baby stays in the home for a period of fourteen days.

St. Mary's Convalescent Home, Birchington-on-Sea, Kent.

No. of mothers admitted with babies	3
No. of mothers admitted without babies	1

Evelyn Convalescent Cottage Home, Wargrave, Berkshire.

No. of mothers admitted with babies	6
No. of mothers admitted without babies	7

Hambledon Cottage Home, Surrey.

No. of mothers admitted with babies	3
No. of mothers admitted without babies	2

George Whitlaw Convalescent Home, Taplow, Bucks.

No. of mothers admitted with babies	12
No. of mothers admitted without babies	3

The St. Mary's Convalescent Home is open for the reception of patients throughout the year, but the Evelyn, Hambledon, and George Whitlaw Homes are closed during the Winter months.

The total cost to the Council for convalescent treatment during the year was £69 14s. 0d.

HEALTH LECTURER.

School medical inspections and maternity and child welfare work have revealed that large numbers of children are suffering from preventable ailments and defects which are likely to impair their development, and which are in a large degree attributable to insufficient knowledge of the simple rules of health on the part of the mothers.

In 1926 the Council appointed a qualified health lecturer to organise and conduct a continuous educational campaign in public and personal hygiene amongst those members of the community who most need enlightenment in the interests of themselves, their families, and those with whom they come in contact. The officer appointed is now lecturing at infant welfare centres on consultation days, at ante-natal clinics, women's and girls' clubs, etc.

The Kensington Borough Council were the first local authority to appoint a municipal health lecturer. Her work is thoroughly appreciated by the committees of the welfare institutions and other bodies, and the number of applications for her services shows that she fills an important place in the public health service.

The promotion of knowledge of hygiene amongst the poor will give better and more lasting results than can be obtained in an endeavour to force the public to observe Acts of Parliament on simple health which they may not fully comprehend.

The following is a record of the work of the health lecturer during the year 1930 :—

	Number of lectures.	Number attending.	Average attendance at lecture.
Archer Street I. W. C. ...	37	476	12.0
Bramley Road ,, ...	44	436	10.0
Campden Hill ,, ...	34	519	15.3
Earl's Court ,, ...	46	584	12.7
Golborne ,, ...	17	188	11.0
Kenley Street ,, ...	33	532	16.1
Lancaster Road ,, ...	39	1,106	28.4
Raymede ,, ...	37	646	17.5
Baby Clinic ,, ...	42	537	12.8
Other Institutions	55	8,298	151.0
Totals	384	13,322	34.7

HOME HELPS.

Eight applications were received during the year for the provision of home helps under the Council's Scheme. The assistance requested was granted in seven cases for a period of fourteen days each ; the remaining application was granted for 28 days. The gross cost of the scheme to the Council during the year was £13 10s. 0d

SUPPLY OF EXTRA NOURISHMENT FOR EXPECTANT AND NURSING MOTHERS AND FOR INFANTS.

In the year 1930 there were 591 grants of milk made by the Council's Milk Sub-Committee. One hundred and eighty-four of the grants were in response to new applications, and the remaining 407 were renewals of grant.

Fourteen applications for dinners were granted ; 8 of these were new applications, and 6 were renewals.

Particulars of Fresh Milk supplied under the Council's Scheme.

No. of pints of milk granted.	Price per pint paid by recipients.	Estimated cost to Council.
		£ s. d.
13,783	Free	190 15 10

Particulars of Dried Milk supplied Free or below Cost Price under the Council's Scheme.

No. of packets of milk granted.	Price per 1 lb. packet paid by recipients.	Estimated cost to Council.
		£ s. d.
432	Free	32 8 0

Particulars of Dried Milk supplied at Cost Price under the Council's Scheme.

Name of welfare centre at which the dried milk was distributed.	No. of 1lb. packets sold.	Value of milk sold.
		£ s. d.
Archer Street - -	1,646	123 9 0
Bramley Road -	1,149	86 3 6
Campden Hill - -	530	39 15 0
Golborne - -	437	32 15 6
Kenley Street - -	535	40 2 6
Lancaster Road -	5,078	380 17 0
Raymede - -	2,729	204 13 6
—	12,104	907 16 0

Particulars of Dinners supplied under the Council's Scheme.

No. of dinners granted.	Price per dinner paid by recipients.	Estimated cost to Council.
		£ s. d.
240	Free	6 0 0

The Mutual Registration of Assistance Society (a branch of the Charity Organization Society) has been of considerable help to the Council's Milk Sub-Committee in providing information of the assistance being given by other bodies to applicants for milk at a reduced price or free of cost, and the Council acknowledge the value of the work by making an annual grant of £10 to the Society.

In former years the late Board of Guardians granted relief in the form of dinners to expectant and nursing mothers when circumstances appeared suitable and an infant welfare centre was sufficiently near the woman's home. This form of assistance was very valuable in cases specially selected by the relieving officers, but on the transfer of powers on the 1st April, 1930, it was discontinued.

HOUSING.

Owing to the large amount of inward and outward migration of people, both in regard to the borough and the various wards, which has taken place since the Census year of 1921, the old figures of population which have been used for the last ten years cannot be relied upon and any deduction therefrom may be erroneous.

In these circumstances, it may be wise to defer a comprehensive survey of the housing position until the figures of the 1931 Census are available. The Minister of Health has, however, required that certain information shall be given in this annual report and I now beg to submit particulars requested by him in Circular 119.

Number of new houses erected in Kensington during the year :—

(*a*) Total (including numbers given separately under (*b*))—

(1) By the Borough Council	24 flats.
(2) By other local authorities	—
(3) By other bodies and persons	One set of 540 flats.
	„ „ „ 21 „
	„ „ „ 18 „

(*b*) With state assistance under the Housing Acts—

(1) By the Borough Council—	
(i) For the purpose of Part II of the Act of 1925	—
(ii) For the purpose of Part III of the Act of 1925 ...	—
(iii) For other purposes	—
(2) By other bodies or persons	One set of 540 flats.
	„ „ „ 21 „
	„ „ „ 18 „

1.—Inspection of dwelling houses during the year.

	No. Inspected.	*Inspections.*
(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) and the number of inspections made	6,496	19,412
(2) Number of dwelling houses (included under sub-heading (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made	1,070	1,747
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	—	—
(4) Number of dwelling houses (exclusive of those referred to under the preceding heading) found not to be in all respects reasonably fit for human habitation	3,278	—

2.—Remedy of Defects during the Year without Service of Formal Notices.

No. of defective dwelling houses rendered fit in consequence of informal action by the local authority or their officers ...	389

3.—Action under Statutory Powers during the Year.

A.—Proceedings under Section 3 of the Housing Act, 1925, and Section 17 of the Housing Act, 1930.

(1) Number of dwelling houses in respect of which notices were served requiring repairs	188

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By owners	180
(*b*) By local authority in default of owners	9

(3) Number of dwelling houses in respect of which closing orders became operative in pursuance of declarations by owners of intention to close ... ... —

B.—Proceedings under Public Health Acts.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied 2,701

(2) Number of dwelling houses in which defects were remedied :—

(*a*) By owners	2,614
(*b*) By local authority in default of owners	—

C.—Proceedings under Sections 11, 14, 15 and 18 of the Housing Act, 1925.

(1) Number of representations made with a view to the making of closing orders—

Dwelling-houses	—
Underground rooms	34

(2) (*a*) Number of dwelling houses in respect of which closing orders were made ... ... —

(*b*) Number of underground rooms in respect of which closing orders were made 2

(3) (*a*) Number of dwelling houses in respect of which closing orders were determined, the dwelling houses having been rendered fit ... ... —

(*b*) Number of underground rooms in respect of which closing orders were determined, the rooms having been rendered fit ... ... —

(4) Number of dwelling houses in respect of which demolition orders were made ... ... —

(5) Number of dwelling houses demolished in pursuance of demolition orders ... ... —

NUMBER OF HOUSES OWNED BY THE LOCAL AUTHORITY.

The Council are the owners of 120 houses and flats which they built prior to the War in Kenley Street, Hesketh Place and Runcorn Place abutting on Avondale Park.

The new housing accommodation provided by the Council since the termination of the War is shown in the following table.

Situation.	Action taken.	Housing Act under which work was done.	Approximate Cost £	Accommodation provided.
Large houses in Powis Square, Colville Terrace, Elgin Crescent, Ladbroke Grove. Bassett Road, Adair Road.	Acquisition and conversion into flats.	1919	84,371	102 Flats and Maisonettes.
Avondale Park Gardens, Mary Place.	Acquired site of old Casual Wards, demolished buildings and erected cottages.	1919	42,060	32 Cottages.
St. Quintin's Park ...	Acquired 9 acres of open ground and built flats and cottages.	Part under 1919 and part under 1923.	154,785	176 Flats. 22 Cottages.
Thresher's Place ...	Acquired site of old workshops, demolished these and erected flats.	1923	9,300	14 Flats.
St. James' Place ...	Acquired site of 18 dilapidated tenements, demolished buildings and erected flats.	1890	18,528	38 Flats.
No. 33, Sirdar Road	Acquired house and converted it into four tenements.	1890	666	4 Tenements.
Nos. 50-56, Sirdar Road.	Acquired 4 dwellings and built flats.	1890	6,463	12 Flats.
Windsor House, Nos. 22-30, Sirdar Road.	Acquired dilapidated property, demolished and built flats and infant welfare centre.	Maternity & Child Welfare Act, 1918, and Housing Act, 1925.	3,355	5 Flats.
Nos. 34 & 36, Bosworth Road.	Acquired 2 dwellings and built flats.	1890	6,031	12 Flats.
Hesketh Place ...	Acquired freeholds many years ago, leases expired in 1929 and the Council demolished and rebuilt.	1925	15,674	24 Flats.
Corner of Adair Road and Southam Street	Acquired 6 houses for purpose of demolition.	1925	Cost of purchase, £2,619. Proposals for rebuilding now under consideration.	
		TOTALS	£343,852	387 Flats and 54 Cottages.

ACCOMMODATION PROVIDED BY HOUSING ASSOCIATIONS.

There are established within the borough several voluntary housing associations which are carrying out good work. The principal objects of these bodies are—

(*a*) the provision of new dwellings at reasonable rents,

(*b*) the purchase and re-conditioning of defective houses, and

(*c*) enlightened management.

(A) The Kensington Housing Trust, of which Lord Balfour of Burleigh is Chairman, held the following properties at the end of 1929—

(*a*) Wornington Road area (48 houses—leasehold),

(*b*) Thresher's Place (2 flats—freehold).

(*c*) Walmer Road (1 house—leasehold),

(*d*) Talbot Grove area (18 houses—freehold),

(*e*) Barandon Street (2 houses—leasehold),

(*f*) Crossfield House (36 flats and maisonettes).

The activities of the Trust during 1930 include the following :—

POLLOCK HOUSE (Golborne Ward.)—This block of 21 flats, "Margaret and Dighton Pollock House," was opened on 30th October, 1930, and was in full occupation by the middle of December. There are 11 dwellings with four rooms and 10 with three rooms, each with the addition of bathroom and scullery. The approximate inclusive cost of the block is £15,000. All flats qualify for the Government and L.C.C. subsidies amounting to £9 7s. 6d. per flat, per annum, for forty years. The basic rents adopted were 18s., 17s. and 15s. (including rates) for the various sized flats according to the accommodation available.

SILCHESTER ROAD SITES (St. Charles Ward).—Two blocks of flats have been erected on these freehold corner sites, and are now ready for occupation. There are 12 dwellings with four rooms and 6 with three rooms, scullery and bathroom.

17, JOHNSON STREET (HOLLAND WARD).—This freehold house, let to two families, was presented to the Pollock Trust by Lord Buckmaster and was bought from them by the Kensington Housing Trust.

MALCOLM HOUSE (Golborne Ward).—The freehold of this delicensed public house was acquired in May, 1930. Three flats, each consisting of living room, 3 bedrooms, bathroom and scullery, were constructed and were open for inspection at the end of July. This house was named in recognition of the interest in the work of this Trust taken by the late Lady Malcolm, wife of Major-General Sir Neill Malcolm, Chairman of the Kensington Housing Association.

The Trust now houses 279 families of 1,432 persons, including 403 children under 14. The rent roll is £144 13s. 9d. per week.

(B) The number of single family houses, tenement houses and flats owned by the Wilsham Housing Trust is 233.

(C) The Improved Tenements Association, on the 1st January, 1930, owned the following :—

Freehold houses	117
Leasehold houses	47
Freehold ground rents	32
Total	196

During the year, the association acquired the freeholds of seventeen houses and the leaseholds of nine.

(D) One or two small associations, closely associated in regard to management with the Wilsham Trust Company, own thirty-eight houses and nine flats.

(E) In the year 1929, the Sutton Trustees acquired a large building plot of about eight acres in Dalgarno Gardens which had been previously used as a sports playing field. Building was commenced in the same year and blocks comprising 540 flats were erected.

Particulars of the flats are as follow :—

38	one room and scullery bathroom.
127	two rooms ,, ,,
275	three rooms ,, ,,
100	four rooms ,, ,,
Total 540	flats

The rents of these flats range from 6s. to 15s. per week and, at the time of writing this report, all are occupied. The total cost of the scheme was £301,136.

The following table shows the housing accommodation (freehold and leasehold) in North Kensington owned and managed by the Kensington Borough Council and voluntary housing associations at the end of 1930 :—

	Single family houses.	Self contained flats.	Tenement houses let in lodgings.	Totals.		
				No. of houses or flats	No. of families.	No. of persons.
Kensington Borough Council.						
Owned before the War ...	—	120	—	120	120	540
Provided from 1914 to end of 1929	54	359	1	414	417	2,120
Provided during 1930 ...	—	24	—	24	24	100
Kensington Housing Trust.						
Owned before 1930	3	40	71	114	235	1,250
Provided during 1930 ...	—	42	1	43	44	182
Wilsham Trust Company.						
Owned before 1930	131	50	50	231	369	1,829
Acquired during 1930 ...	—	—	2	2	7	22
Improved Tenements Association.						
Owned before 1930	48	16	100	164	450	2,250
Acquired during 1930 ...	—	—	26	26	202	435
Sutton Dwellings Trust.						
Completed during 1930 ...	—	540	—	540	540	2,900
Others.						
Owned before 1930	2	9	34	45	120	429
Acquired during 1930 ...	2	—	—	2	2	16
Totals	240	1,200	285	1,725	2,530	12,073

The Council's properties in Kenley Street, Hesketh Place, Runcorn Place, Sirdar Road, St. James' Place and Bosworth Road, and those owned by the Kensington Housing Trust, the Wilsham Trust Company, and the Improved Tenements Association, are managed by a group of women house property managers working under the direction of Miss Dicken. These ladies manage these properties on the " Octavia Hill " system and have given considerable assistance to the Council in dealing with cases of overcrowding and indecent occupation.

HOUSING ACCOMMODATION PROVIDED OUTSIDE THE BOROUGH FOR KENSINGTON FAMILIES.

The Borough Council have made special arrangements with the London County Council by which ninety-nine Kensington families have been placed in new housing accommodation on the County Council's Wormholt estate adjacent to North Kensington, and have agreed to pay the sum of £7 per house per annum for a period of twenty years in respect of this accommodation.

It may be mentioned further that the London County Council, in connection with their large housing estates, allocate fifty per cent. of the accommodation to applicants nominated by the Borough Councils and reserve the remaining fifty per cent. for applicants on their own general list. The following table shows the number of Kensington families accommodated on the London County Council housing estates up to December, 1930.

Families nominated by the Borough Council	264
Families selected by the London County Council	533
Families accommodated as special hardship cases	17
Total	814

In the 814 families leaving Kensington, there were 4,620 persons.

In 1929, Miss R. F. Alexander, who had secured an interest in the Peabody Buildings which have been erected on the Cleverly estate at Hammersmith, obtained accommodation in these buildings for twenty-eight Kensington families.

ACCOMMODATION EXISTING IN THE BOROUGH.

The number of private dwellings, self-contained maisonettes, mansion-flats, residential hotels and boarding-houses in the borough is approximately 22,000, and they are situated chiefly in South Kensington and the Pembridge Ward of North Kensington. They are occupied by the higher social and professional and semi-professional classes and present little difficulty to the officers of the Public Health Department.

There are about 900 houses of the cottage type, that is, with three or less bedrooms. These cottages are distributed fairly evenly over all parts of the borough and generally provide satisfactory accommodation for single families.

The number of tenements in block buildings in various parts of the borough occupied by the working classes is approximately 1,000. As these are generally of fairly recent construction, they are mostly satisfactory from the sanitary point of view.

There are 2,091 mews-dwellings in the borough and the following table shows the number situated in North and South Kensington, with the number of rooms they contain :—

	North Kensington	South Kensington	The Borough
Number with 2 rooms ...	163	208	371
„ „ 3 „ ...	311	753	1,064
„ „ 4 „ ...	188	374	562
„ „ 5 „ ...	23	71	94

In recent years the general condition of mews-dwellings in the borough has been very much improved and the Council have paid a good deal of attention to the cleanliness of the mewsways. In certain of the mewsways occupied by the poorest classes, the stable accommodation is used for storage purposes by costermongers, and difficulties arise owing to the careless manner in which these street traders dispose of their unsound food-stuffs. The activities of the Council, however, in regard to this problem have done much to secure better conditions in North Kensington mewsways.

There are in the borough approximately 5,700 houses let in lodgings, and occupied by the working classes without having been specially adapted for the purpose. These houses are satisfactory from a point of view of structural and architectural planning, and except for the fact that they have in the majority of cases no bathroom, they would be regarded as providing satisfactory accommodation as single-family houses. They are large, with a basement, ground floor, first floor, second floor, and sometimes a third floor and fourth floor. There are two rooms on each floor and generally a slip room on one or two floors. With the exception of the slip rooms, the rooms are of good dimensions. Difficulties arise, however, owing to these houses, which were originally intended for one family, having been let to three, four, five or six families.

Houses let in furnished rooms constitute the most unsatisfactory and undesirable form of housing accommodation, and it is therefore pleasing to note that the number of dwellings of this type in the borough is gradually diminishing. In 1912 there were 187, and at the end of 1930 the number was reduced to 28. These 28 are situated in the following parts of the borough :—

Norland Ward	13
Pembridge Ward	5
Golborne Ward	10
	28

There are in the borough about 13,000 basements used for dwelling purposes. The number of these dwellings with ceilings at or below the street level is approximately 648, the number in which the width of the front area does not exceed three feet is 1,233, and the number in which the width of the front area exceeds three feet and does not exceed four feet is 2,087.

The following table shows details of the accommodation available in the six common lodging houses in the borough :—

Ward.	Name of registered keeper.	Address of common lodging house.	No. of lodgers for which licensed in 1930.		
			Male.	Female.	Total.
Golborne	Chesterton, Ada Elizabeth	194, Kensal Road	—	71	71
Norland	Woodhouse, Jane E. ...	10, Crescent Street	—	25	25
„	Hankins, John W. ...	28 & 30, do.	54	—	54
„	Woodhouse, Jane E. ...	40, do.	—	25	25
„	Alexander, Agnes Mary ...	25 & 27, do.	—	43	43
„	Cooper, Sagle	66, St. Ann's Road	66	—	66
		Totals	120	164	284

The population of Kensington at the Census of 1921 was 175,859, and the Registrar-General estimates the present population at 176,000. It seems probable that this will be an under-estimate but until the new Census figures are available it is the only figure on which conclusions can be based

In South Kensington, since the Census of 1921, several large blocks of flats have been erected on open sites or on sites previously occupied by single-family houses; in addition, over 1,000 houses have been converted into self-contained flats or maisonettes. There is, therefore, a considerable increase in the housing accommodation provided in South Kensington in the last ten years, and those who desire homes in that part of the borough have no difficulty in finding satisfactory accommodation. But the accommodation which has been provided in South Kensington has not been for the working classes; on the other hand there has not been the demand for such accommodation in that part of the borough as there has been elsewhere.

In North Kensington the Borough Council, the Sutton Trustees, the Kensington Housing Trust, the Improved Tenements Association and other voluntary bodies have either acquired or built houses since 1921, which provide accommodation for about 9,500 people. Not all this, however, is new accommodation; for example, many of the houses acquired by the Kensington Housing Trust and Improved Tenements Association and subsequently reconditioned are still occupied by the same people as were in occupation before the date of purchase. Further, some of the tenants in the new accommodation have come to the borough from other districts. In the same period, private owners have provided new accommodation for 445 persons, but there is no information available as to the places from which the new tenants have come. Certain derelict houses unoccupied at the last Census have been repaired by the owners and are now occupied as a result of action taken by the Borough Council. On the other hand, some houses have been demolished for business purposes, with the result that accommodation has been reduced. Approximately 4,620 Kensington persons have left the borough to occupy the 99 houses on the Wormholt Estate or houses on other County Council Estates, but it is presumed that the Registrar-General has made certain allowances for this migration. Whatever the population may be to-day it is quite clear that there is much more accommodation available than there was ten years ago, and if the Registrar-General's estimate that the population is only 141 more than in 1921 is correct, the shortage of houses in the borough must be definitely less acute than it was ten years ago.

The sanitary inspectors, the health visitors and myself, who are in daily touch with the working classes in their homes, have formed a definite impression that the congestion has been relieved considerably in recent years, but a considered judgment of the present position must be deferred until the new Census figures are available.

MEASURES TAKEN TO DEAL WITH OVERCROWDING AND INDECENT OCCUPATION.

As far as it has been possible with the existing staff of sanitary inspectors, the Council have rigidly enforced in all tenement houses (whether registered or not) the minimum air-space per person prescribed in the by-laws with respect to houses let in lodgings. In other words, they have required that in a room used exclusively for sleeping purposes there must be 300 cubic feet of air-space for each person over ten years of age and 150 cubic feet for each under ten years of age; in a room used partly for living and partly for sleeping there must be 400 and 200 cubic feet respectively.

It is true that this legal standard is a low one, and there are many families in North Kensington, particularly in basement rooms, living under conditions which are within the legal standard but in which the rooms are definitely congested: in view of the absence of alternative accommodation, it has not appeared practicable in the past to work to any higher standard.

When a sanitary inspector discovers a case of overcrowding in any house, or a case of indecent occupation (persons of the opposite sexes over twelve years of age, not living together as man and wife, occupying the same bedroom) in a house let in lodgings, an Intimation Notice is served and the facts are reported to the next meeting of the Public Health Committee.

The following table shows the number of cases of overcrowding and indecent occupation detected in the last five years and the effectiveness of the action taken can be deduced therefrom.

	1926	1927	1928	1929	1930
OVERCROWDING :—					
Intimation notices served	103	88	72	33	25
Statutory notices served where the intimation notice was not complied with	38	28	10	13	10
Summonses issued	6	9	3	3	5
INDECENT OCCUPATION :—					
Intimation notices served	79	92	84	23	27
Statutory notices served where the intimation notice was not complied with	12	2	6	1	7
Summonses issued	—	—	1	—	1

As only 26 summonses were eventually issued in 321 cases of overcrowding, and only two summonses in regard to 305 cases of indecent occupation in the five years, it will be seen that 626 families were able to improve their accommodation without the Council having to resort to extreme measures. Moreover, the figures for 1929 and 1930, when compared with those for the preceding years, suggest that those on whom notices were served for overcrowding had less difficulty in securing alternative accommodation than was experienced in previous years.

The erection of houses by local authorities and public utility societies during the past ten years must have done much to relieve the acute overcrowding which was found to exist at the end of the War, but it is doubtful whether the community has gained the full advantage from the public money which has been spent on the provision of new housing accommodation. Indeed, experience in Kensington has shown that many cases of overcrowding can be ameliorated by securing a more even distribution of the population throughout the accommodation already available, where this is reasonably practicable.

Generally speaking, tenants for new houses provided by local authorities or public utility societies have been selected not merely on the grounds that they can pay the rents fixed, but also because their existing home conditions are unsatisfactory on health grounds. But on the removal of a family to a new house, there has, in the absence of special measures, been no guarantee that the overcrowding or other unsatisfactory conditions in the vacated rooms will not immediately become as serious as before.

Whilst it is true that in many cases the unsatisfactory conditions are beyond the control of the owner, owing to the operation of the Rent Restrictions Acts, there are nevertheless other cases where the responsible person (often the tenant in occupation) has not exercised that care in the control of the houses which is essential in the management of working-class property. When tenants go to new houses, some of the superior tenants or persons in control are prepared to allow the vacated rooms to become overcrowded again or occupied by a family not in urgent need of new accommodation. Often it would be better, on health grounds, to allow the remaining families in the house to absorb the empty rooms or, if the house is not overcrowded, to allow the rooms to be occupied by a family living under congested conditions elsewhere.

It cannot be expected that every person in control of private property will take the same interest as a local authority in securing the spacing of the population with a view to obtaining the most suitable hygienic conditions for all concerned. He, like any other business man, is naturally inclined to look in the first place for the best possible return in rent for his capital outlay; but if he can be induced to co-operate with the local authority in this matter of even distribution with a view to eliminating instances of overcrowding, the community as a whole will gain greater benefit from the new housing accommodation which has been provided.

With a view to securing the greatest possible advantage from new houses provided by the Borough Council, arrangements were made in Kensington early in 1925 for officers managing the Council's houses to notify the Medical Officer of Health immediately of the name and address of any tenant selected for a new home. The information has enabled the officers of the Public Health Department to know several weeks in advance of rooms which will become vacant, with the result that they have been able to approach the persons in control (frequently before they were aware that vacancies would arise in the near future) and urge that the rooms might be let to Kensington families known to the Public Health Department to be living under overcrowded or unsatisfactory conditions. Later on in the same year, the Housing Department of the London County Council were asked to send similar information in respect of Kensington families accepted as tenants for County Council houses, in order that a similar procedure could be adopted in regard to rooms vacated by persons leaving the borough for such houses. Public utility societies and housing trusts who have built houses in or near the borough since 1925 have been invited to supply similar information, in respect of Kensington families accepted as tenants.

The results have been as follow :—

	No. of houses let and notified to M.O.H. in advance of occupation.	*No. of instances in which rooms vacated have been let to Kensington families living under unsatisfactory or overcrowded conditions.*
New houses provided by the Borough Council	67	45
New houses provided by the London County Council	220	113
New houses provided by public utility societies, etc.	300	192

Whilst overcrowding in Kensington has been dealt with rigidly under the by-laws for houses let in lodgings for some years past, the Council have been reluctant to take proceedings and the Magistrates have been loath to give full effect to the provisions of the law during the post-War period of shortage of housing accommodation. But the Public Health Committee have felt that

when tenants have gone to municipal houses or to houses owned by voluntary housing associations, the Borough Council would be justified in taking stringent measures in the event of overcrowding being allowed to arise in the vacated rooms. They therefore gave instructions in 1928 that, on receipt of information that a new house has been allocated to a Kensington family, not only should the Council's officers continue to use their efforts to secure the best possible use of the vacated rooms, but that a communication should be sent to the person in control warning him that the Council would take action at once if he allowed overcrowding to occur.

The rooms in which there has been a change of occupation are kept under close watch by the Council's sanitary inspectors and so far there has been no instance where fresh overcrowding has been noted. This is due not only to the close watch kept by the sanitary inspectors, but to the full measure of co-operation on the part of persons in control, which the officers of the Council have been able to secure.

FITNESS OF HOUSES.

Work under Section 3 of the Housing Act, 1925, and Section 17 of the Housing Act, 1930.

There is no doubt that the work which has in recent years been productive of the best results in dealing with defective houses is that which the Council have carried out under Section 3 of the Housing Act, 1925, and Section 17 of the Housing Act, 1930, (the latter section replaced Section 3 in August, 1930).

It will be remembered that in the Summer of 1929 it was resolved to employ a special clerk in the Public Health Department to enable more rapid progress to be made with this class of work. The clerk commenced work in August, 1929, and a general speeding-up in the service of Section 3 notices resulted. At the end of 1929, however, it was found that the careful checking of schedules of repairs, the numerous interviews with owners and the daily supervision of the repair work in progress had proved a greater task than had been contemplated and it appeared that the work might have to be curtailed. To prevent this, the Council, early in 1930, decided to appoint a temporary sanitary inspector to take charge of one of the districts in order to allow an experienced officer to devote the whole of his time to work under Section 3 of the Housing Act, 1925. This officer commenced work in May, 1930.

The following table gives a statement of the action taken and the results obtained during the twelve months ended 31st December, 1930 :—

No. of notices served in 1929 under Section 3 of the Housing Act, 1925, which were outstanding on January 1st, 1930			75
No. of notices served under Section 3 of the Housing Act, 1925, from January to August, 1930			120
No. of notices served under Section 17 of the Housing Act, 1930, from August to December, 1930			68
No. of appeals by owners to the Minister of Health in respect of Section 3 notices			2
No. of appeals by owners to the County Court in respect of Section 17 notices			Nil.
No. of notices satisfactorily complied with by owners			180
No. of cases in which the Council carried out the repairs in default of owners			9
No. of notices in respect of which satisfactory progress was being made on the 31st December, 1930			63
No. of notices in respect of which nothing had been done at the end of the year (the time allowed had not expired in these cases)			10
No. of cases in which the Council's contractors were engaged in executing repairs in default of owners at the end of the year			1
Total expenditure incurred by the Council in executing repairs during the year	£	s.	d
	803	10	0
Amount recovered by the Council in respect of work carried out by them during the year	109	7	7
Balance owing to the Council at the end of the year in respect of work carried out by them during the year	694	2	5

The Council first commenced this class of work in 1920, but owing to the difficulties experienced in other boroughs they proceeded very cautiously, and up to the 31st December, 1929, they had dealt with only 242 houses. In the earlier years, owing to uncertainty as to the attitude the Courts would adopt on appeals, the Council hesitated to carry out the work in default of the owner, but in the last two or three years they have enforced the execution of every notice served. The total expenditure since 1920 in carrying out work in default of owners has been £3,136 10s., and the total amount (capital and interest) recovered to date has been £1,935 15s. 2d. With the exception of a small interest debt of £2 which was waived, the remaining outstanding sum continues to be a charge upon the repaired premises and, together with interest, is being collected by the Council. Thus, so far the Council have not incurred any financial loss in this work with the exception of the small item of £2 which they voluntarily cancelled.

Owners are doing a good class of work in complying with notices under Section 17 and it may be said that generally the workmanship is as high a class as that performed by those builders carrying out repairs under contract for the Council. Furthermore, the actual number of houses in regard to which the Council have served Section 17 notices is no index of the extent of the improvements being secured, because it has become known that the Council intend to enforce a reasonable state of habitability in all houses in North Kensington, and owners and builders are forestalling action by the sanitary inspectors by undertaking voluntarily first class repair work in a large number of cases.

Domestic Water Supply.

Except in a limited number of high-class flats in South Kensington which draw their water supply from artesian wells sunk in the chalk below the London clay, each house in the borough has its own supply of water from the mains of the Metropolitan Water Board. Until seven years ago, the only tap in many of the houses let in lodgings was fixed in the basement, with the result that considerable inconvenience resulted, especially to housewives on top floors. Since then, however, the Council have required improvements in this matter and to the best of my knowledge every house let in lodgings now has not less than two water supplies, one on the lowest floor and the second on one of the upper floors. Frequently the new supply has been fixed on a half-landing and a sink placed beneath it. The supply in the basement generally comes from the rising main and in the majority of cases the new tap fitted at a higher level has been fixed on the rising main.

There are no instances in Kensington where there is a public stand or tap for the common use of several houses.

Water Closet Accommodation.

Every house in Kensington is provided with at least one water closet in direct communication with the public sewers. There are no earth closets or privies within the borough.

For many years, the Council have insisted upon the provision of a second water closet in every house let in lodgings which has more than twelve persons resident therein. Instances arise from time to time where an increase in the number of persons in a house results in the water closet accommodation becoming inadequate. When such cases come to light, as a result of routine inspections or otherwise, the Council take steps to enforce the standard above mentioned.

CLEARANCE AREAS.

In November, I submitted representations to the Council to the effect that the dwelling houses in the undermentioned areas are, by reason of disrepair or sanitary defects, unfit for human habitation or are, by reason of their bad arrangement, or by the narrowness or bad arrangement of the streets, dangerous or injurious to the health of the inhabitants of the area, and that the other buildings in the area are for like reasons dangerous or injurious to the health of the inhabitants. I also expressed the opinion that the most satisfactory method of dealing with the conditions in the areas is the demolition of all the buildings therein.

	No. of occupants.
(i) Nos. 1, 3 and 5, Adair Road, and 86, 88 and 90 Southam Street	112
(ii) Nos. 36 to 52 (inclusive), Talbot Grove, 1 to 13 (inclusive), Talbot Mews, and 23 to 26 (inclusive), Talbot Mews ...	170
(iii) Wornington Mews (including No. 88, Wornington Road) ...	29

The Council concurred in the representations made and are at the present time considering proposals for dealing with these three areas.

Barker Street.

Barker Street is a bottle-shaped cul-de-sac having its entrance in Fulham Road, the extreme southern boundary of the borough. The entrance passage is formed by an archway under No. 258, Fulham Road, the width of the passage being 10 ft. 6 in. and the length 40 ft. 6 in. The street then widens to 19 ft. 6 in., where are found two parallel blocks of houses extending northwards for a distance of approximately 250 feet. The depth of each block is approximately 32 feet, and each consists of eight three-storey premises which are used as dwellings by members of the working classes. The ground floors of seven of the premises are used as stables or storage places.

The surface of the roadway is cobbled, having a fall from each side to the centre of the road, where two gulleys are provided to take the surface water. The northern end of the road is broken and defective. The roadway is bounded on each side by a pavement of approximately 2 ft. 6 in. in width running about two-thirds of the length of the street.

The existing premises are unsuitable and badly designed, having regard to the confined area of the site. There is an obvious lack of ventilation and the ground floor premises lack sufficient natural light. The very small back yards at the rear of Nos. 1, 2, 3, 4, 5, 6, 7, 8, and 10, Barker Street, backed by high walls of adjoining premises, and the absence of yards in the other premises in the street make the amount of through ventilation very small. Moreover, the high four-storey buildings in Fulham Road at the southern end of the street make the amount of sunlight very poor.

The w.c. apartments in the flats over the stable premises are badly designed, the only means of light and ventilation consisting of a shaft about a foot square leading from the ceiling of the apartment to the roof. Also the ground floor w.c. apartments in the other houses are dark, being constructed under the staircase with a ceiling height of about 6 ft. 3 in.

Ventilation under the ground floor premises is provided by means of 9 in. by 3 in. air gratings back and front, but evidence of rising dampness indicates a non-existent or defective horizontal damp course. There is also evidence of dampness in some of the back rooms on upper floors which is apparently due to defective or choked rainwater pipes and gutters.

The drainage of each premises is apparently sound and of good construction.

The sixteen premises have a total of 170 rooms and are occupied by 254 persons.

In May, 1931, I submitted an official representation in respect of Barker Street in which I expressed the opinion that all the buildings should be demolished, and this representation is now receiving the consideration of the Council.

OTHER AREAS REQUIRING ATTENTION.

Section 31 of the Housing Act, 1930, provides, *inter alia*, that the London County Council shall carry out such reviews of housing conditions and submit to the Minister of Health such proposals for the provision of new houses and such quinquennial statements and measures to be taken as are required by the Act. The County Council must consult the Metropolitan Borough Councils on this matter and this step was taken in the Autumn of last year, when the Kensington Borough Council informed the County Council that, in addition to the areas mentioned above under the heading of " Clearance Areas," the following areas called for attention :—

Gadsden Mews.

This is an area comprising fourteen mews dwellings which should be regarded as a small clearance area. It is not desirable that new houses should be erected on the site after demolition owing to the fact that it is rather closed in by surrounding buildings. In view of the difficulty of securing alternative accommodation, this is an area which might be left until the housing shortage becomes less acute.

Bolton Road.

There are in this road thirty-three houses and a short time ago the number of residents was 402. Ten of the houses have recently been acquired by a business man ; he has secured vacant possession and proposes to demolish them with a view to erecting premises for commercial purposes. The Council have frequently had before them problems in connection with Bolton Road, and the new Housing Act affords an opportunity of securing a very desirable improvement. Careful consideration will be required with a view to deciding whether the area should be dealt with as a clearance or improvement area.

Bramley Mews.

There are fourteen dwellings in this mews, with about forty-five occupants. At present they do not constitute a clearance or improvement area, but it is possible that they may call for attention during the course of the next five years.

Hayden's Place (including Tavistock Mews).

This is a site comprising eleven or twelve houses which have no yards ; the water closets are without external walls and, in some cases, have inadequate ventilation. This appears to be a small clearance or improvement area.

BY-LAWS RELATING TO HOUSES LET IN LODGINGS.

At the beginning of 1923, there were on the Council's register of houses let in lodgings 2,169 houses, and in the first month of that year it was resolved to appoint additional staff to make a routine inspection of all houses on the register, to bring them up to the standard enforceable under the by-laws then in operation, and also to inspect all other houses let in lodgings with a view to placing on the register those which it was thought desirable should be brought under periodical review.

In March, 1926, when the present code of by-laws came into operation, the number on the register had reached 3,651.

The introduction of the new by-laws, with their altered requirements, called for re-inspection, and two temporary sanitary inspectors, who had been retained for housing work, commenced to " comb through " the borough again. Owing to the altered definition of a house let in lodgings, which resulted in a house occupied by two families only or by one family with two lodgers being non-registerable, there has been a gradual decline in the number of houses on the register, and the figure at the end of December, 1930, was 3,111.

The formidable task of making detailed inspections of all houses let in lodgings in the borough, which was commenced in 1923, was completed in the early weeks of 1931, and the Council now have a valuable record of all houses inspected.

The by-laws for houses let in lodgings have been proved to be of the greatest use and, together with the work under Section 17 of the Housing Act already referred to, they are a valuable instrument in maintaining habitable conditions in houses let in lodgings in North Kensington. The following is a record of the work carried out under the by-laws during the year 1930 :—

No. of houses inspected under the by-laws	2,535
Total number of inspections	9,683
No. of instances where the houses were cleansed under the by-laws ...	1,031

FOOD SUPPLY.

MILK SUPPLY.

Milk and Dairies (Consolidation) Act, 1915.—This Act has for its main object the prevention of the sale of milk from tuberculous cows. It enables County Councils and County Borough Councils to make Orders which will prohibit the sale of infected milk in any area.

When the Act came into operation the Council decided that a number of samples of milk should be taken each year for the purpose of examination for the presence tubercle bacilli. In the year 1930, twenty-four samples were so taken, and all were certified as being free from tubercle bacilli.

Composition of Milk supplied in Kensington.—It is well known that the " limits " of 3 per cent. of fat and 8.5 per cent. of non-fatty solids, which are taken by the Ministry of Agriculture as the primary criteria of genuineness of milk, are figures very much below those found in normal cow's milk.

The following may be taken as the average composition of cow's milk :—

Water	87·4 per cent.
Fat	3·7 „ „
Non-fatty solids	8·9 „ „

Of 334 formal samples of milk taken under the Food and Drugs (Adulteration) Act in 1930, 18 were certified by the Public Analyst as adulterated, i.e., containing less than 3 per cent. of fat or 8.5 per cent. of non-fatty solids. These particulars, however, do not give any indication of the general quality of the milk supplied in Kensington, therefore, it will be interesting to note the average composition of the samples taken in the borough during the year. These figures are given in the following table :—

Average Composition of Formal Milk Samples taken in 1930.

Months.	Number of formal samples taken.	Average composition of all samples submitted, genuine and adulterated.		Average composition of genuine samples.		Ministry of Agriculture Standard.	
		Percentage of milk fat.	Percentage of solids not fat.	Percentage of milk fat.	Percentage of solids not fat	Percentage of milk fat.	Percentage of solids not fat
January	30	3·59	8·77	3·61	8·76	3·0	8·5
February... ...	18	3·54	8·86	3·58	8·85		
March	26	3·47	8·80	3·49	8·80		
April	18	3·45	8·77	3·49	8·79		
May	44	3·40	8·85	3·58	8·86		
June	36	3·43	8·81	3·47	8·81		
July	44	3·53	8·71	3·52	8·75		
September ...	39	3·72	8·79	3·72	8·79		
October	19	3·92	8·91	3·92	8·91		
November ...	24	3·89	8·90	3·89	8·90		
December ...	36	3·85	8·81	3·85	8·81		
	334	3·60	8·81	3·63	8·78	3·7	8·9

Average composition of normal cow's milk	
Percentage of milk fat.	Percentage of solids not fat.

It is interesting to note that the average fat content of Kensington samples exceeded the Ministry of Agriculture standard by approximately 20 per cent. or, in other words, the samples would have been returned as genuine by the Public Analyst even though about 20 per cent. of the fat might have been removed by a fraudulent vendor.

The table shows that the average fat and non-fatty solid content for each month of the year is well above the legal standard and makes it clear that suspicion should fall on every sample which at any time of the year shows a fat content as low as 3 per cent.

Milk and Dairies (Amendment) Act, 1922, and Milk and Dairies Order, 1926.—Section 2 of the Act empowers the Council to refuse to enter any person's name on the register of dairymen and dairies, or to remove his name from that register, if they are satisfied that the public health is, or is likely to be, endangered by any act or default of his in relation to the quality, storage or distribution of milk.

In this connection, it should be mentioned that the Council have resolved that the presence upon any premises of such articles as (1) paraffin, (2) loose pickles, (3) vinegar (except in sealed bottles), (4) meat of all forms (except when in sealed tins or glass), (5) fruit, (6) vegetables, (7) coal and coke, and (8) wood (except in bundles, provided the same be not kept in the milk store) would constitute a source of contamination rendering the said premises unsuitable for the sale of milk; and the registration of persons entitled to carry on the trade of purveyor of milk in Kensington is subject to compliance with the resolution.

In one case where there had been several convictions under the Food and Drugs Acts, the Public Health Committee considered the question of removing the retailer's name from the register of dairymen, but decided to postpone immediate action. Two samples of milk were taken from the same retailer shortly after this decision and were found to be adulterated. In January, 1930, the Council removed this dairyman's name from the register.

A summary of the alterations made in the register during the year 1930 and the number of persons and dairies registered at the end of the year is shown in the following table :—

	Purveyors of milk in sealed bottles.	Dairymen.	Dairies and milkshops.
Transfers	—	22	22
Added to register	3	2	2
Vacated and removed from register	—	1	1
Dairymen with premises outside the borough added to register	—	—	—
On register January 1st, 1930	33	159	153
On register December 31st, 1930	36	160	154
(+) Increase. (—) Decrease.	+3	+1	+1

The total number of inspections of dairies and milkshops in the borough during the year 1930 was 450.

Special attention has been given to enforce Article 31 of the Order which requires that bottling of milk shall be carried out on registered premises. In the past, it has been frequently observed that milk roundsmen have left their depots in the morning with fewer bottles on their barrows than they had customers, with the inevitable result that towards the end of their rounds some customers must be supplied with milk from bottles which had been taken by the roundsmen from houses earlier the same day. It will be appreciated that many of these bottles would be dirty and that in certain instances this practice might result in serious danger to health.

During the year 1930, proceedings were taken in respect of milk being bottled in streets in five cases. In two cases, a fine of £1 was imposed, and in three a fine of 10s.

Milk (Special Designations) Order, 1923.—Under the Order the Council are authorised to grant licences to persons other than a producer to sell milk under special designations. Every licence granted is valid for a period ending on the 31st day of December in the year in respect of which it is granted. The Order lays down a schedule of fees to be paid by applicants for licences.

The licences granted in 1930 were as follow :—

(*a*) Dealers' licences to use the designation " Certified Milk " ... 18

(*b*) Dealers' licences to use the designation " Grade A (Tuberculin Tested) Milk " 23

(*c*) Dealers' licences to use the designation " Pasteurised Milk " ... 34

In each case the licence has been granted for the purpose of authorising the dealer to sell specially designated milk from shops within the borough. No application has been made for a licence to set up a pasteurising establishment within the borough.

During the year, four samples of "Certified Milk," one of "Grade A (Tubercul n Tested) Milk," and seven of "Pasteurised Milk" were taken for the purpose of ascertaining whether they complied with the bacteriological standards laid down in the Milk (Special Designations) Order, which are as follow :—

Special class of milk.	Maximum number of bacteria permitted per c.c.	Standard for bacillus coli.
"Certified Milk"	30,000	Must not be found in one-tenth c.c.
"Grade A. (Tuberculin Tested) Milk" ...	200,000	Must not be found in one-hundredth c.c.
"Pasteurised Milk"	100,000	No standard provided.

The results of the examinations are shown in the following tables :—

Sample collected on.	Bacteria per 1 c.c.	Coli per 1/10th c.c.
"Certified Milk."		
8th April	5,300	Nil.
15th July	6,100	"
30th September	1,300	"
16th December	880	"
"Grade A. (Tuberculin Tested) Milk."		Coli per 1/100th c.c.
12th March	10,400	Nil.
"Pasteurised Milk."		
4th February	14,700	
12th February	36,000	
3rd April	17,800	
3rd April	15,200	
2nd September	19,300	
2nd September	18,200	
16th September	2,830	

All the samples of graded milks proved to be well within the bacteriological standards prescribed by the Order and indeed may be classed as very pure milks.

Investigations into Methods of Sampling Milk for Bacteriological Examination.—The Ministry of Health in February, 1929, issued a memorandum (Memo. 139/Foods) dealing with the bacteriological tests for graded milk and sampling of milk.

These suggestions, however, dealt chiefly with the precautions to be observed during the transit of samples to the laboratory and contained no rules for the guidance of sampling officers in taking samples from bulk milk. Thus the method of sampling to be adopted within their own area has been left to the discretion of medical officers of health and sampling officers.

Experience in Kensington led to doubt as to whether the sampling instruments in common use by local authorities are really suitable for taking samples under the Ministry of Health's Regulations, and during 1930 an investigation was made into the question.

The investigation was carried out by Dr. T. S. Keith, the Borough Bacteriologist and Mr. H. W. Walters, the Council's food inspector, and as a result of a number of experiments they arrived at the conclusion that the present methods of taking samples give uneven and unreliable results from the point of view of bacteriological examination.

The sampling instruments were those suggested by Delépine, or modifications thereof, none of which exceeds nine inches in length. These instruments are unsuitable for thoroughly mixing the milk in a churn and any sample collected with the aid of them would be taken from a depth in the churn not exceeding 6 inches from the surface of the milk.

Thus it will be appreciated that a sample taken in the manner indicated could only be a fair one if the bacteria in the milk were distributed evenly throughout the entire bulk. In order to ascertain if the bacteria were so distributed the following experiments were carried out.

By means of four, and later three pipettes joined together, samples of milk were collected simultaneously from four (or three) different levels in a churn. When four samples were collected they were taken from the bottom of the churn, 6 inches up, 12 inches up and 18 inches up and when only three were collected they were taken from the bottom, 9 inches up and 18 inches up.

The results obtained during these experiments showed that the variation in the bacteria count was considerable and that the higher the level in the churn from which the sample was taken the larger the count.

As the various sample collecting outfits were incapable of efficiently stirring the milk and unable to collect a sample from a greater depth than 6 inches from the surface, it became obviously desirable to evolve a method of collecting a sample which would be indicative of the milk as a whole. Two possible methods presented themselves, firstly, to sterilise and use the ordinary type of mixing plunger, or secondly, to design some new sampling apparatus.

The ordinary type of plunger is large and unwieldy and to sterilise it satisfactorily would not be easy; moreover, it would be difficult to convey it from place to place. The alternative method suggested by Mr. H. W. Walters, was to lower perpendicularly into the churn a glass tube of wider bore, gouging out equal quantities of milk from every level as the tube descended. The tube referred to in the table as Walters' tube was subsequently modified by Dr. Keith. To complete the experiments, samples were also taken from the milk after it had been plunged with the ordinary type of mixing plunger (previously sterilised). During the course of these experiments, a series of samples were taken over a period of three months.

The results obtained during the course of the investigation are shown in the following tables :—

Total Bacterial Count at 37° C.

Churn No.	Sample taken from bottom of churn.	Sample taken from 6 in. up the churn.	Sample taken from 9 in. up the churn.	Sample taken from 12 in. up the churn.	Sample taken from 18 in. up the churn.	Composite sample taken with Walters' tube.	Sample taken after mixing milk with sterilised plunger.
1	11,000	14,000	—	10,000	26,000*	—	—
2	180,000	213,000	—	356,000	2,357,000	—	—
3	4,600	16,200	—	21,900	65,000	—	—
4	1,800	—	4,100	—	19,900	6,500	—
5	11,100	—	40,000	—	62,000	50,000	—
6	3,200	—	12,200	—	53,000*	16,400*	14,100*
7	4,000	—	6,000	—	37,000*	45,000*	12,000*

Notes— * B. Coli present in 1-10th ccm.

Butter Fat Content

Churn No.	Sample taken from bottom of churn.	Sample taken from 6 in. up the churn.	Sample taken from 9 in. up the churn.	Sample taken from 18 in. up the churn.	Composite sample taken with Walters' tube.	Sample taken after mixing milk with sterilised plunger.
4	0.82%	—	1.74%	8.60%	3.52%	—
7	1.05%	—	2.10%	6.70%	3.65%	3.45%

Whilst it is not suggested that these experiments are sufficient to justify any definite conclusions, they do form a basis for further experiment because they indicate that :—

(1) Samples of bulk milk collected by the recognised methods at present used are unreliable.

(2) The bacterial content is not evenly distributed throughout the bulk of milk but increases with the height from the bottom of the churn.

London County Council (General Powers) Acts, 1902, 1908 and 1928. Control of Ice Cream.—The ice cream trade in the past has been mainly regulated under the London County Council (General Powers) Act, 1902, which makes it an offence to store ice cream in a sleeping room or in any shed or room in which there is an inlet to a drain. This Act also requires vendors to notify the occurrence of infectious disease amongst their employees or persons living on their premises, and provides further that every itinerant vendor shall exhibit on his barrow the name and address of the person from whom the ice cream has been obtained. The London County Council (General Powers) Act, 1908, lays down certain sanitary requirements for all premises used for the preparation or the sale of food, and this Act has been used for controlling ice cream shops.

The London County Council (General Powers) Act, 1928, requires that any premises used for the sale or manufacture or storage of ice cream shall be registered by the owner or occupier with the Council and prohibits any premises being used for these purposes unless they are registered. This new legislation does not apply to premises occupied as a factory or workshop or to hotels, restaurants or clubs. The number of premises entered upon the Council's register is 136.

During the past year 172 visits to ice cream premises were made by the inspectors.

Public Health (Meat) Regulations, 1924.—These Regulations provide that no person may slaughter any animal without first giving verbal or written notice to the Council of his intention. Upon receipt of such notice, the Council's food inspector attends during the slaughtering process whether by day or night, and examines all carcases immediately afterwards. During the year two hundred and fifty-five slaughterhouse inspections were made.

The following table shows the number of animals slaughtered in the borough in 1930 :—

Month.	Animals Slaughtered. Beasts.	Swine.	Sheep.
January	5	215	51
February	10	254	53
March	7	196	63
April	7	218	5
May	5	127	33
June	5	68	29
July	—	34	38
August	—	21	20
September	—	55	100
October	—	124	20
November	—	240	296
December	6	516	149
Totals	45	2,068	857

Diseased meat condemned during this period was as follows :—

Carcases (including organs)	34
Forequarters	2
Hindquarters	10
Plucks	125
Heads	137
Livers	55
Lungs	131

Slaughter Houses.—These are licensed annually by the London County Council in the month of October and of the five Kensington licences granted in 1929 only four were renewed in 1930. These premises are kept in a cleanly condition, and from a structural point of view are not open to objection.

By-laws prescribing humane slaughtering came into operation in London in 1924, and approved methods have been adopted at each of the slaughterhouses in the borough. The Council's food inspector makes frequent inspections to satisfy himself that these humane methods of slaughtering are applied satisfactorily.

Bakehouses.—There are eighty-five bakehouses in the borough, and of this number sixty-two are underground. As a result of two hundred and forty-three inspections which were made during the year, seven notices were served for the cleansing of walls and ceilings.

Other Places where Food is Prepared.—In addition to the premises dealt with above, other places in the borough where food is prepared or exposed for sale are required to be kept in accordance with the provisions of the London County Council (General Powers) Act, 1908. There were, in addition to the inspection of dairies, ice cream premises, etc., mentioned above, 1,010 inspections of food premises during the year.

Merchandise Marks Acts, 1887-1926.—Under Section 2 of the Act of 1926, Orders in Council may be made prohibiting the sale or exposure for sale in the United Kingdom of imported goods specified, unless such goods bear an indication of origin.

The Orders which have so far been made in regard to imported foodstuffs are :—

Order.	Relating to :—
Merchandise Marks (Imported Goods) No. 3 Order, 1928.	Honey and fresh apples.
Merchandise Marks (Imported Goods) No. 5 Order, 1928.	Currants, sultanas, raisins, eggs in shell, dried eggs and oat products.
Merchandise Marks (Imported Goods) No. 4 Order, 1929.	Raw tomatoes.

Frequent inspections were made throughout the year to ensure that the requirements of these Orders were observed, and cautions were served in twenty instances where infringements occurred.

Agricultural Produce (Grading and Marking) Act, 1928.—This Act empowers the Minister of Agriculture and Fisheries to make Orders for the grading and marking of agricultural produce of England and Wales. The following Regulations have been made by the Minister under the Act :—

Agricultural Produce (Grading and Marking) (General) Regulations, 1928.
Agricultural Produce (Grading and Marking) (Apples and Pears) Regulations, 1928.
Agricultural Produce (Grading and Marking) (Broccoli) Regulations, 1929.
Agricultural Produce (Grading and Marking) (Cucumbers and Tomatoes) Regulations, 1929.
Agricultural Produce (Grading and Marking) (Wheat Flour) Regulations, 1929.
Agricultural Produce (Grading and Marking) (Beef) Regulations, 1929.
Agricultural Produce (Grading and Marking) (Potatoes) Regulations, 1929.
Agricultural Produce (Grading and Marking) (Eggs) Regulations, 1930.
Agricultural Produce (Grading and Marking) (Glasshouse Grown Tomatoes and Cucumbers) Regulations, 1930.
Agricultural Produce (Grading and Marking) (Strawberries) Regulations, 1930.
Agricultural Produce (Grading and Marking) (Cherries) Regulations, 1930.
Agricultural Produce (Grading and Marking) (Dressed Poultry) Regulations, 1930.
Agricultural Produce (Grading and Marking) (Canned Fruits, Peas and Beans) Regulations, 1930.

These Regulations provide grade designations to indicate specific standard qualities of the various foodstuffs mentioned, but it is not compulsory for all such foodstuffs to be so marked. When, however, the goods are marked, they must conform with the standards laid down in the Regulations. Special provisions are contained in the Agricultural Produce (Grading and Marking) (Eggs) Regulations, which provide for the marking of eggs which have been preserved by immersion in lime-water, water-glass or oil.

Artificial Cream Act, 1929.—This Act came into operation on the 1st June, 1929, and has for its object the regulation of the manufacture and sale of artificial cream.

Under the Act it is an offence to sell, or expose for sale, artificial cream under any designation which includes the word " cream " unless that word is preceded by the word " artificial." Every vessel containing artificial cream, whether in transit or exposed for sale, must bear the words " artificial cream " in large and legible type, either on the receptacle or on a label securely attached thereto.

The Council are required to keep a register of all premises where artificial cream is manufactured, sold, exposed or kept for sale. Only one set of premises appears in the register.

Unsound Food.—Under the provisions of Section 47 of the Public Health (London) Act, 1891, any persons having in their possession food intended for sale which is diseased or unsound, or unfit for human consumption, may surrender it to the Council for destruction as trade refuse. The unsound food surrendered and destroyed during the year is shown in the following list :—

Chickens		3
Fish (canned)	(tins)	87
Fish (Lemon Soles)	(stones)	5
Fish (Plaice)	(boxes)	2
Fish (Witches)	(stones)	7
Fruit (canned)	(tins)	383
Jam (canned)	(tins)	32
Meat (canned)	(tins)	17
Milk and Cream (canned)	(tins)	43
Miscellaneous Foods (canned)	(tins)	46
Pears		36
Plums	(lbs.)	480
Prawns	(lbs.)	8
Vegetables (canned)	(tins)	185

In one instance only during the year was unsound food seized. In this case, following a complaint, five decomposed chickens found in a provisions shop were seized by the Medical Officer of Health, taken before a magistrate, and subsequently destroyed. Proceedings were taken against the owner of the shop and a conviction was recorded, a fine of £20 being imposed.

The Food and Drugs (Adulteration) Act, 1928.—This Act, which came into operation on the 1st January, 1929, has for its object the consolidation of the Sale of Food and Drugs Acts. Being a consolidating measure only, it does not alter the law relating to the sale of food and drugs, but it incorporates into one enactment, the legislation relating to the subject hitherto provided in eleven separate Acts of Parliament. This action by Parliament has very much simplified the valuable legislation for protecting the public food supply.

The Council's food inspector is the sampling officer under the Act, and he is instructed to take samples in any place within the borough. The samples procured are of two kinds, namely, formal and informal.

(*a*) *Formal Samples.*—These are samples which are taken strictly in conformity with the requirements of the Food and Drugs (Adulteration) Act, 1928, and during the year the food inspector collected 681, of which 24 or 3.5 per cent. were adulterated. Particulars of formal samples collected are as follow :—

Nature of sample.	Number taken.	Number adulterated.
Apricots, Dried	3	—
Arrowroot	5	—
Brawn	3	—
Butter	49	1
Cakes, Sponge	9	—
Cheese	11	—
Cocoa	8	—
Coffee	5	—
Cream	12	—
Fish Paste	7	—
Fruit, Dried	6	—
Gin	1	—
Ginger, Ground	2	—
Ham	6	—
Honey	7	—
Lard	12	—
Lemon Cheese	6	—
Lemon Squash	3	—
Liver	1	—
Margarine	24	—
Meat, Minced	5	2
Meat Paste	6	—
Milk	334	18
"Milk-Tops"	1	—
Mincemeat	9	—
Mustard	2	—
Mustard Mixture	4	—
Peas, Canned	2	—
Pepper	12	—
Powder, Lemonade	3	—
Prescription, Medical	10	1
Prunes	1	—
Rice	18	1
Sausages	38	1
Sweets	6	—
Syrup, Golden	3	—
Tea	19	—
Vinegar	23	—
Whisky	5	—
Totals	681	24

(*b*) *Informal samples.*—These are taken without compliance with the strict formalities of the Food and Drugs (Adulteration) Act, and serve to show the conditions obtaining without disclosing to the vendor the fact that samples are being taken for analysis. Particulars of informal samples collected are as follow :—

Nature of sample.	Number taken.	Number adulterated.
Arrowroot	1	—
Bacon	3	—
Butter	26	—
Cakes, Sponge	3	—
Cheese	3	—
Cocoa	1	—
Cream	11	—
Fish Paste	5	—
Fruit, Canned	2	—
Fruit, Dried	1	—
Ginger, Ground	3	—
Honey	2	—
Honey, Prepared	1	—
Junket Crystals	1	—
Lard	6	—
Lemon Cheese	6	—
Lime Juice	1	—
Malted Food	1	—
Margarine	12	—
Meat Paste	2	—
Milk	162	9
Milk, Condensed, Full Cream	1	—
Milk, Condensed, Machine Skimmed ...	5	—
Milk, Dried	2	—
Mustard	1	—
Mustard Mixture	2	—
Paste, Puff	1	—
Powder, Baking	3	—
Powder, Lemonade	2	—
Prawns, Canned	1	—
Prescription, Medical	2	—
Rennet, Essence of	1	—
Rennet Tablets	1	—
Rice	3	—
Sago	3	—
Sausages	19	4
Suet, Shredded	3	—
Sweets	3	—
Tea	3	—
Vinegar	10	—
Totals	319	13

The following is a summary of the results of analysis of the 37 adulterated formal and informal samples, together with a record of the action taken by the Council :—

Article analysed	Nature and amount of adulteration.	Action taken.
Butter	13.8 grains of boric acid per pound	Proceedings. Fined £2 and £1 1s. costs.
Meat, minced ...	320 parts of sulphur dioxide per million (presence of preservative not disclosed).	Vendor cautioned.
„ „ ...	85 „ „ „	„ „
Milk	72 per cent. of the required fat deficient.	Samples taken respecting a special investigation.
„	42 „ „ „	„ „ „
„	25 „ „ „	Proceedings. Fined £1 and £1 costs.
„	16 „ „ „	* „ „ £1.
„	14 „ „ „	* „ „ £1.
„	12 „ „ „	* „ „ £1.
„	10 „ „ „	Informal sample.
„	9 „ „ „	*Proceedings. Fined £1.
„	9 „ „ „	Proceedings. Summons dismissed.
„	8 „ „ „	* „ Fined £1.
„	8 „ „ „	Informal sample.
„	7 „ „ „	Proceedings. Defendant to pay £2 2s. costs
„	7 „ „ „	„ Fined £1 and £1 costs.
„	6 „ „ „	„ Defendant to pay £2 2s. costs.
„	6 „ „ „	* „ Fined £1.
„	6 „ „ „	„ Fined £1 and £1 costs.
„	5 „ „ „	Informal sample.
„	4 „ „ „	Vendor cautioned.
„	4 „ „ „	Informal sample.
„	3 „ „ „	„ „
„	3 „ „ „	Vendor cautioned.
„	2 „ „ „	„ „
„	1.5 „ „ „	Informal sample.
„	5 per cent. extraneous water.	Vendor cautioned.
„	4 „ „ „	„ „
„	3.5 „ „	„ „
„	2 „ „ „	Informal sample.
Prescription, medical	37.6 per cent. of the required sulphate of quinine deficient.	Summons withdrawn, defendant to pay £2 12s. 6d. costs.
Rice	10.5 grains per pound of extraneous mineral matter.	Vendor cautioned.
Sausages ...	288.4 parts of sulphur dioxide per million (presence of preservative not disclosed).	Informal sample.
„	260.9 „ „ „	„ „
„	233 „ „ „	Proceedings. Fined £2 and 10s. 6d. costs.
„	219.7 „ „ „	Informal sample.
„	164.8 „ „ „	„ „

* These samples were obtained from the same defendant, he was also ordered to pay £5 costs in all.

The total number of prosecutions under the Food & Drugs (Adulteration) Act was fifteen, the fines and costs amounting to £29 8s.

The Public Health (Condensed Milk) Regulations 1923-1927, and the Public Health (Dried Milk) Regulations, 1923-1927.—During the year, six samples of condensed milk and two of dried milk were taken and each was found to comply with the Regulations in every respect.

Public Health (Preservatives, etc., in Food) Regulations, 1925-1927.—Five contraventions of the Regulations occurred during the year. In each case the offence consisted of selling sausages containing preservative without disclosing its presence at the time of sale. The preservative used in each case was sulphur dioxide and the amount used in each instance was below the limit which would have been allowed if there had been a declaration.

Chemical and Bacteriological Examination of Food.—During the year a number of samples of food were submitted to the laboratory at St. Mary Abbots Hospital.

There was no outbreak of food poisoning during the year.

THE PREVENTION OF, AND CONTROL OVER, INFECTIOUS DISEASE.

NOTIFIABLE INFECTIOUS DISEASES.

The following diseases are compulsorily notifiable in Kensington :—

Acute Encephalitis Lethargica.
Acute Polio-encephalitis.
Acute Polio-myelitis.
Acute Primary Pneumonia.
Acute Rheumatism.
Anthrax.
Cerebro-spinal Fever.
Cholera.
Continued Fever.
Diphtheria.
Dysentery.
Erysipelas.
Glanders.
Hydrophobia.
Influenzal Pneumonia.
Malaria.
Membranous Croup.
Ophthalmia Neonatorum.
Plague.
Puerperal Fever.
Puerperal Pyrexia.
Relapsing Fever.
Scarlatina or Scarlet Fever.
Small-pox.
Tuberculosis.
Typhoid or Enteric Fever.
Typhus Fever.
Zymotic Enteritis.

Table showing Notifications of certain Infectious Diseases received in 1926-30.

Year.	Small Pox.	Scarlet Fever.	Diph-theria.	Enteric Fever.	Ery-sipelas.	Ophthal-mia Neo-natorum.	Puer-peral Fever.	†Puer-peral Pyrexia	Pneu-monia.	Malaria.	Encepha-litis Le-thargica.	P. M'itis & Polio-Ence-phalitis.	‡Acute Rheum-atism.	Cerebro spinal Mening-itis.	Dysent-ery.	*Enter-itis.	Total.
1926	—	264	391	28	69	15	9	11	145	2	5	4	‡	2	—	97	1042
1927	—	251	356	10	59	17	3	44	241	2	5	2	48	5	2	41	1086
1928	—	365	274	75	59	11	7	33	154	7	4	1	153	1	—	99	1221
1929	5	483	297	15	75	22	13	41	260	2	5	1	81	2	2	114	1418
1930	4	411	329	32	68	11	8	24	221	3	2	1	99	3	3	85	1304

Cases of mistaken diagnosis are excluded from the above table.

†Puerperal Pyrexia became notifiable on October 1st, 1926.

‡ Acute Rheumatism in children under 16 years of age became notifiable in Kensington on October 1st, 1927.

* Zymotic Enteritis in children under 5 years of age became notifiable in Kensington on July 1st, 1924. The other London Boroughs in which this disease is notifiable are Fulham, Finsbury, Poplar, Southwark, Deptford, Greenwich, Woolwich and Paddington.

Table showing Cases of Infectious Diseases occurring in 1930, arranged in Four-Weekly Periods (January 1st, 1930, to January 3rd, 1931).

Four Weeks ending	Small Pox.	Scarlet Fever.	Diph-theria.	Enteric Fever.	Ery-sipelas.	Ophthal-mia Neo-natorum.	Puer-peral Fever.	Puer-peral Pyrexia.	Pneu-monia.	Malaria.	Encepha-litis Le-thargica.	P. M'itis & Polio-Ence-phalitis.	Acute Rheum-atism.	Cerebro spinal Mening-itis.	Dysent-ery.	Enter-itis.	Total.
January 25	—	46	27	—	5	1	1	2	25	—	—	—	8	—	—	1	116
February 22	—	44	37	1	8	—	—	2	21	1	—	—	11	—	—	7	132
March 22	1	43	31	—	3	3	2	1	20	—	1	—	9	—	—	3	117
April 19	—	36	45	4	9	1	1	—	11	—	—	—	10	1	—	3	121
May 17	2	36	23	3	4	—	1	3	24	—	—	—	8	1	—	4	109
June 14	—	29	23	4	7	—	1	2	19	—	—	—	4	—	—	4	93
July 12	—	35	23	2	5	1	—	1	9	—	—	—	6	—	—	11	93
August 9	—	19	20	5	3	—	—	3	9	—	—	—	2	1	—	9	71
Sept. 6	—	13	21	3	1	1	1	4	11	2	—	—	8	—	—	6	71
October 4	—	25	12	4	6	1	—	1	3	—	—	—	10	—	—	21	83
November 1	—	22	19	4	1	1	—	2	10	—	—	—	5	—	—	7	71
" " 29	1	27	17	1	8	2	1	2	21	—	1	—	9	—	1	5	96
January 3 (5 weeks)	—	36	31	1	8	—	—	1	38	—	—	1	9	—	2	4	131
Totals -	4	411	329	32	68	11	8	24	221	3	2	1	99	3	3	85	1304

Cases of mistaken diagnosis are excluded from the above Table.

* Three cases of Puerperal Pyrexia were subsequently notified as Puerperal Fever and are included in this table under both headings.

Table showing the number of cases of infectious disease notified in the various age periods, the number admitted to hospitals, and the total deaths from these diseases in 1930:—

Notifiable Disease	Number of cases notified.														
	At all ages.	At ages.—Years.												Cases admitted to hospital.	Total deaths.
		Under 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 35.	35 to 45.	45 to 65.	65 and over.		
Small-pox	4	...	...	...	...	...	...	...	...	1	1	1	1	4	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	3	...	...	...	...	...	2	1	...	...	...	...	...	1	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	329	4	21	30	33	30	112	21	19	48	6	4	1	322	13
Erysipelas... ...	68	6	3	...	1	...	1	...	8	10	9	23	7	46	4
Scarlet fever ...	411	5	17	24	35	37	161	57	21	39	9	6	...	384	3
Typhus fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever ...	32	...	...	...	1	...	2	4	7	12	2	4	...	23	1
Continued fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever ...	8	...	...	...	...	...	...	...	...	8	...	...	...	5	6
Puerperal pyrexia ...	24	...	...	...	...	...	...	...	1	21	2	...	...	14	
Encephalitis Lethargica ...	2	...	...	...	...	...	...	...	...	...	...	2	...	1	4
Cerebro-spinal meningitis	3	...	...	...	1	...	...	...	...	1	1	...	...	3	1
Polio-myelitis and Polio-encephalitis	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Pulmonary Tuberculosis ...	202	1	...	1	...	2	8	19	42	89	28	7	5	149	140
Other forms of Tuberculosis	58	...	...	1	1	2	8	8	5	15	9	9	...	25	25
Ophthalmia Neonatorum	11	11	...	...	...	...	...	...	...	...	...	...	...	5	...
Primary Pneumonia...	185	15	25	14	12	7	25	4	10	24	16	23	10	106	17
Influenzal Pneumonia	36	3	2	...	1	1	2	1	1	4	10	7	4	16	18
Malaria ...	3	...	...	...	...	...	...	...	...	2	1	...	...	3	1
*Enteritis (Diarrhœa)	85	42	24	10	5	4	...	...	...	...	...	...	...	31	46
†Acute Rheumatism ...	99	...	...	...	1	...	56	37	5	...	...	...	...	47	4
Totals...	1564	88	92	80	91	83	377	152	119	274	94	86	28	1086	284

* Notifiable only in children under the age of 5 years.

† „ „ „ „ „ 16 years.

Cases of mistaken diagnosis are excluded from the above table.

The following table shows the number of cases of infectious disease notified in the various wards in 1930.

Notifiable Disease.	Total cases notified in each ward.								
	St. Charles.	Golborne.	Norland.	Pembridge.	Holland.	Earl's Court.	Queen's Gate	Redcliffe.	Brompton.
Small-pox	...	2	1	...	...	...	...	1	...
Cholera	...	...	...	...	...	...	...	...	...
Dysentery	2	...	...	1	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	61	70	49	26	31	27	27	25	13
Erysipelas	10	14	8	6	8	7	5	6	4
Scarlet fever ...	82	93	80	41	30	30	20	28	7
Typhus fever ...	...	...	...	...	...	...	...	...	...
Enteric fever ...	2	5	1	1	3	5	5	7	3
Continued fever ...	...	...	...	...	...	...	...	...	...
Puerperal fever ...	2	...	1	3	1	...	...	...	1
Puerperal pyrexia ...	9	3	2	4	1	...	1	3	1
Encephalitis Lethargica...	1	...	...	...	...	...	...	...	1
Cerebro-spinal meningitis ...	...	1	1	...	1	...	...	...	...
Polio-myelitis and Polio-encephalitis	...	1	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	44	35	30	27	17	15	7	16	11
Other forms of Tuberculosis ...	12	11	12	7	4	4	1	4	3
Ophthalmia Neonatorum... ...	1	2	4	1	1	1	...	1	...
Primary Pneumonia	34	89	31	8	6	5	4	5	3
Influenzal Pneumonia	8	14	5	5	2	1	1	...	...
Malaria	...	...	2	...	...	...	...	1	...
*Enteritis	17	21	38	4	4	1	...	...	...
†Acute Rheumatism...	18	31	35	7	5	2	...	...	1
Totals ...	303	392	300	141	114	98	71	97	48

* Notifiable only in children under the age of 5 years.

† ,, ,, ,, ,, ,, 16 years.

Cases of mistaken diagnosis are excluded from the above table.

Smallpox.—During the year 1930, there was a large increase in the number of smallpox cases notified in London. Five thousand one hundred and sixty-seven cases occurred in the Metropolitan area as compared with 1,116 in the previous year, and 12 proved fatal. Twenty-eight of the 29 Metropolitan Boroughs were affected, the only borough to remain free from smallpox being Chelsea.

Notwithstanding the large increase in the number of cases of this disease in London, there were four cases only in Kensington as compared with 5 in the previous year. These 4 occurred in private houses and were of a mild type similar to that which was prevalent in London during the year. Three of the cases occurred in North Kensington and one in South Kensington. Details of the cases are as follow :

Case A.

A male, aged 42 years, was found to be suffering from smallpox and was removed to hospital. On enquiry, it was ascertained that he had been in contact with a case of smallpox at his place of employment. The patient recovered.

Case B.

A male, aged 53 years, was found to be suffering from smallpox and was removed to hospital. No information could be obtained as to the source of infection in this case. The patient recovered.

Case C.

As a result of very careful investigation, it was discovered that a Kensington family had been hop-picking in Kent in September, where they had been in contact with a person suffering from smallpox. On the family's return to London, two of the children fell ill with what was supposed to be chicken-pox, but subsequently proved to be smallpox. These children were responsible for spreading the infection under this heading. In October the family left London to live permanently in Essex. It was not until an outbreak of smallpox developed amongst their new neighbours in Essex that it was found that the supposed attacks of chicken pox had been smallpox. The children had not, of course, been seen by a doctor in Kensington and were responsible for one case in this borough. As a result of a very thorough campaign of vaccination amongst all known susceptible contacts, the outbreak in Kensington was not allowed to develop.

Case D.

A male, aged 65 years, who lived in South Kensington, was found to be suffering from smallpox on his visit to a hospital in another Borough. No information as to the source of infection could be obtained, and the patient recovered.

In every case of smallpox, the contacts were urged to be vaccinated or revaccinated as a precautionary measure if it had not already been carried out. All vaccinations and revaccinations were performed by the Public Vaccinators.

No other case of smallpox occurred within the borough, but during the year many Kensington residents had been in contact with cases in other districts, and also several came to live in the borough who had been in contact with cases on board ships. These contacts were kept under daily observation until all possibility of developing the disease had disappeared. The object of repeatedly visiting these contacts is to secure prompt isolation before the patient becomes infectious in the event of smallpox occurring.

The total number of contacts kept under observation during the year was 386.

Scarlet Fever.—The number of cases notified during the year was 411, of which 384 were removed to hospital.

The following table shows the number of cases notified in the various wards in each four-weekly period during 1930 :—

District.	Period No. 1.	Period No. 2.	Period No. 3.	Period No. 4.	Period No. 5.	Period No. 6.	Period No. 7.	Period No. 8.	Period No. 9.	Period No. 10.	Period No. 11	Period No. 12.	Period No. 13.
London	1482	1444	1389	1393	1245	1348	1215	1151	931	1106	1343	1379	1400
The Borough ...	46	44	43	36	36	29	35	19	13	25	22	27	36
North Kensington	35	31	27	21	25	24	28	18	13	18	19	15	22
South Kensington	11	13	16	15	11	5	7	1	—	7	3	12	14
WARDS.													
St. Charles ...	13	6	7	4	4	8	9	4	3	6	6	3	9
Golborne	14	14	11	7	10	9	9	5	2	3	4	3	2
Norland	2	4	8	5	8	4	7	6	7	6	7	7	9
Pembridge ...	6	7	1	5	3	3	3	3	1	3	2	2	2
Holland	1	4	2	6	3	1	—	—	—	1	1	3	8
Earl's Court ...	3	2	8	3	3	3	2	—	—	3	—	2	1
Queen's Gate ...	4	—	—	—	1	—	1	1	—	3	—	4	4
Redcliffe	2	6	4	4	4	1	2	—	—	—	2	3	—
Brompton... ...	1	1	2	—	—	—	2	—	—	—	—	—	1

Cases of mistaken diagnosis are excluded from the above Table.

Twenty-nine patients notified as suffering from scarlet fever were found, after admission to hospital, not to be suffering from any infectious illness at all, with the result that they were returned home.

Although the number of cases in 1930 was 72 fewer than in the previous year, it is slightly higher than the average in recent years; it cannot be said that the disease existed in what might be termed epidemic form. Throughout the year, scarlet fever was mild in type, as is reflected in the fact that there were only three fatal cases. The deaths in the preceding years were none, two and one.

There were 29 instances where more than one case occurred in the same house.

Four of the 411 cases of scarlet fever were patients in the same family as a person who had within the previous 28 days returned from hospital after having been treated for this disease. Cases of this kind are called " return " cases, and a very careful investigation was made in each of the 4, with a view to ascertaining the source of infection. The following particulars are of interest in regard to these 4 " return " cases.

A girl, aged eight years, was removed to hospital suffering from scarlet fever. Ten days after her discharge two other children in the family fell ill with scarlet fever. On examination, the child who had previously suffered from the disease was found to have a nasal discharge. She was again removed to hospital, and no further cases developed.

A girl, aged three years, contracted scarlet fever and was removed to hospital. Eight days after her discharge another child in the family developed scarlet fever and was removed. On examination, the child who had previously had scarlet fever was thought to be a "carrier," and was again removed to hospital. Six days after her second discharge from hospital, a further case developed.

Diphtheria.—Three hundred and twenty-nine cases of diphtheria were notified during the year, 322 of which were removed to hospital.

The following table shows the number of cases notified in the various wards in each four-weekly period during 1930 :—

District.	Period No. 1.	Period No. 2.	Period No. 3.	Period No. 4.	Period No. 5.	Period No. 6.	Period No. 7.	Period No. 8.	Period No. 9.	Period No. 10.	Period No. 11.	Period No. 12.	Period No. 13.
London - - -	1304	1263	1200	1147	1018	875	915	925	743	953	1127	1022	1088
The Borough - -	37	37	31	45	23	23	23	20	21	12	19	17	31
North Kensington -	19	20	20	26	11	11	19	15	19	8	13	7	18
South Kensington -	8	17	11	19	12	12	4	5	2	4	6	10	13
WARDS.													
St. Charles - -	2	3	4	7	5	6	5	9	—	3	5	2	10
Golborne - -	9	6	9	10	1	3	8	1	13	2	4	1	3
Norland - - -	4	7	5	5	4	2	4	3	4	3	2	2	4
Pembridge - -	4	4	2	4	1	—	2	2	2	—	2	2	1
Holland - - -	1	2	2	4	6	8	2	2	—	—	1	1	2
Earl's Court - -	2	6	6	5	1	1	—	—	—	2	2	—	2
Queen's Gate - -	2	4	—	3	4	1	—	1	—	2	2	2	6
Redcliffe - -	2	4	1	5	1	1	2	2	2	—	1	2	2
Brompton - -	1	1	2	2	—	1	—	—	—	—	—	5	1

Cases of mistaken diagnosis are excluded from the above Table.

Twenty-seven patients notified as suffering from diphtheria were found after admission to hospital not to be suffering from any infectious disease at all, with the result that they were returned home.

The number of Kensington deaths was thirteen, representing a case mortality of 4 per cent. In the three preceding years the deaths were 11, 15 and 11.

During the year, 2,040 throat swabs were examined at the Council's laboratory at St. Mary Abbots Hospital, and of these 140 gave a positive result.

It is well established that outbreaks of diphtheria may originate from persons who have the germs of the disease in the throat or nose, but show no signs of illness. Such persons are called " carriers " and with a view to discovering the possible existence of any of these in connection with limited outbreaks where the source of infection was unknown, numerous throat and nose swabs were taken by medical men at my request or by myself. These swabs are included in the 2,040 referred to above.

There were twelve instances where more than one case occurred in the same house and the following are worthy of special mention.

A boy, aged 5 years, contracted diphtheria and was removed to hospital. Five days after his return home, his brother developed the disease.

Two boys, aged 4 and 6 years, were removed to hospital, suffering from diphtheria. On examining the remaining children in the family, a sister was found to have a nasal discharge. A swab taken from her nose proved positive, and this girl was removed to hospital. Two days later, another sister developed diphtheria.

A child, aged 5 years, had been ill for some time with " tonsillitis." She eventually lost the use of her legs and control of her speech. She was admitted to the Princess Louise Kensington Hospital for Children, and was notified as suffering from post diphtheritic paralysis. Whilst in the Princess Louise Hospital, she was discovered to be a " carrier," and removed to a fever hospital A week later, her brother developed the disease and was removed. No other case occurred.

During the year, 46 cases of diphtheria were reported from St. Mary Abbots Hospital, 13 from the Baby Hospital, No. 1, Ladbroke Square, and one from the Princess Louise Kensington Hospital for Children.

Under the Anti-toxin Order, 1910, the Council are empowered to supply diphtheria anti-toxin for administration to patients who are too poor to pay, and on signing the necessary declaration that the patient cannot afford specific treatment, a medical man can obtain a free supply from Mr. Evans, Chemist, at No. 138, Ladbroke Grove, W.11, Mr. W. Reeves, Chemist, at No. 81, Cornwall Road, W.11, or from the Public Health Department at the Town Hall. The anti-toxin is obtainable at all hours of the day and night from Mr. Evans' and Mr. Reeves' premises, and during office hours from the Town Hall. When the Town Hall is closed, applications for anti-toxin can be made to Mr. Britton, an officer of the Department, who lives at No. 1, Hornton Place, Hornton Street (only a few yards from the Town Hall).

The Council loan syringes with portable sterilizers to doctors for the purpose of administering the anti-toxin. Medical men administering the Council's anti-toxin to poor persons are, on application to the Medical Officer of Health, paid a fee of 5s. per patient treated.

In 1930, the Borough Council supplied 219,000 units of anti-toxin for 37 patients at a cost of £15 10s. 0d.

In 1922, the Borough Council undertook to supply toxin-antitoxin for the Schick test and immunisation to any medical practitioner in the borough who may be co-operating with the Medical Officer of Health in an attempt to limit the spread of diphtheria in any institution, provided that the consent of the authorities of the institution and of the parents or guardians of the children concerned be obtained.

During 1930, the medical officer of one institution availed himself of the facilities provided by the Council, and the total cost of carrying out the test and immunisation at this institution was £1 12s. 1d.

Enteric Fever.—Thirty-two cases of this disease were notified, twenty-three being removed to hospital and one to a nursing home. The cases notified in the three preceding years were 17, 80 and 17. There was one death from this disease against 0, 1 and 0 in the preceding years.

Two of the notified cases were afterwards certified not to be suffering from enteric fever or any other notifiable disease. Of the remaining thirty cases twenty-three were notified from the southern division of the borough and seven came from North Kensington. This heavier incidence in South Kensington is not usual with other infectious diseases, and it is probably accounted for by the facts that the water supply and sanitary arrangements in London generally are very good and that a large number of persons contracting typhoid fever are infected outside the Metropolis. It will be admitted that the residents in the southern portion of the borough leave the London area more frequently than those in the north and, consequently, are more exposed to infection by reason of the fact that many districts outside London do not enjoy the same sanitary efficiency.

In seven cases there was evidence that the disease had been contracted abroad ; nine patients had paid visits to the country a short time before the date of attack ; two had contracted the disease aboard a ship whilst on a voyage to England ; but the remaining twelve had not been out of London for some time prior to their illness.

Erysipelas.—Sixty-eight cases were notified during the year, 46 of which were removed to hospital. There were 4 deaths from this cause, the deaths in the three preceding years being 4, 4 and 2.

Ophthalmia Neonatorum.—The following table gives particulars of ophthalmia cases notified in 1930 and the results of treatment.

Case No.	Cases.			Vision unimpaired.	Vision impaired.	Total blindness.	Death.
	Notified.	Treated.					
		At home.	In hospital.				
1	Jan. 24	—	Yes	Yes	—	—	—
2	Feb. 27	Yes	—	Yes	—	—	—
3	March 10	Yes	—	?	—	—	Mother took child to Switzerland
4	March 11	—	Yes	Yes	—	—	—
5	April 18	—	Yes	Yes	—	—	—
6	June 27	—	Yes	Yes	—	—	Removed to another borough
7	August 15	—	Yes	Yes	—	—	—
8	Sept. 9	Yes	—	Yes	—	—	—
9	Oct. 17	Yes	—	Yes	—	—	—
10	Nov. 4	Yes	—	Yes	—	—	—
11	Nov. 15	Yes	—	Yes	—	—	—

From the above table it will be seen that ten cases recovered without any injury to sight, and the one other case was a child removed to Switzerland before the disease had terminated.

Since the year 1920 there has occurred only one case resulting in blindness. This very gratifying result is largely due to the efforts made by the Council's health officers to secure hospital treatment, and to the excellent arrangements which the Borough Council have entered into with the Kensington District Nursing Association for the home treatment.

It is the duty of midwives to report all forms of inflammation of the eye, even when the condition is not ophthalmia neonatorum, and these cases, in addition to pure ophthalmia cases, are dealt with by the Kensington District Nursing Association. In 1930, the ophthalmia neonatorum and inflammation of the eye cases attended by the nurses numbered 21 and the number of home visits paid in connection with these cases was 491. These visits average 23 to each of the 21 patients, and indicate the great amount of trouble taken with this disease. The visits paid by the Council's women health officers are not included in the 491.

Puerperal Fever.—During the year, eight cases of this disease were notified. Five were admitted to St. Mary Abbots Hospital after confinement; two of these died and three recovered. One woman was confined in that institution and made a satisfactory recovery. Two women were confined in their own homes and were attended by private medical practitioners; both recovered.

Puerperal Pyrexia.—Twenty-four cases of puerperal pyrexia were notified during the year. One occurred in a nursing home, seven in hospitals to which the patients had been removed prior to their confinements, and sixteen in the homes of the patients; of these sixteen, seven were subsequently removed to hospital for treatment, whilst the remaining nine received medical attention in their own homes.

Four of the notified cases of puerperal pyrexia proved fatal; three of these were confined at home and subsequently removed to St. Mary Abbots Hospital. The fourth case was also confined at home and was removed to Queen Charlotte's Hospital.

During the year, the Council retained the services of Dr. Remington Hobbs as their consultant gynaecologist under the Public Health (Puerperal Fever and Puerperal Pyrexia) Regulations, 1926. Dr. Hobbs was consulted by local practitioners in twenty-five cases and visited three patients in their homes. Thirty-five cases of puerperal sepsis were admitted from their homes to St. Mary Abbots Hospital for treatment by him. For these services, Dr. Hobbs receives a remuneration of fifty guineas per annum. Owing to the large amount of excellent work being carried out at St. Mary Abbots Hospital by Dr. Hobbs for the benefit of Kensington women in connection with the prevention of disability following puerperal sepsis, the Council have made a grant to him of £30 per annum, in addition to his remuneration as consultant gynaecologist, in order that he may obtain medical assistance in the treatment of these patients.

Malaria.—Three cases of this disease were notified during the year. Investigations revealed that in one case the disease was contracted on the Gold Coast, West Africa, and two were cases of induced malaria, the patients being inmates of mental hospitals.

Encephalitis Lethargica.—In 1930, there were only two cases reported in Kensington and the following table gives details :—

No.	Sex.	Age.	Date of Notification.	Result.
1	F.	53	March 15th	Still under doctor—recovering.
2	F.	59	November 6th.	Died.

Poliomyelitis and Polio-Encephalitis.—One case of poliomyelitis was notified on December 26th to the Public Health Department. The patient was a boy of one year, who is still in hospital.

Cerebro-Spinal Meningitis.—There were three cases of this disease notified during the year; particulars are subjoined :—

No.	Sex.	Age.	Date of notification.	Result.
1	F.	3¼	April 10th	Recovered
2	M.	40	do. 28th	do.
3	F.	26	July 24th	Died.

Pneumonia and Influenzal Pneumonia.—There are many forms of pneumonia but the only kinds notifiable are acute primary pneumonia and influenzal pneumonia. Two hundred and twenty-one notifications were received, one hundred and eighty-five patients being certified as suffering from acute primary pneumonia and thirty-six from influenzal pneumonia. It is certain that many cases escaped notification.

The number of deaths from pneumonia during the year was 176, and 31 deaths were certified to be due to influenza.

Zymotic Enteritis or Summer Diarrhoea.—In 1924, the Borough Council adopted a scheme for the control and treatment of zymotic enteritis or Summer diarrhoea. The scheme has operated during the Summer months—in 1924, from the 1st July to the 30th September ; in 1925-1929 from the 1st June to the 30th September ; and in 1930, from the 1st July to the 31st October.

The Council retain the part-time services of Dr. Ronald Carter, who has made a special study of zymotic enteritis. Dr. Carter pays periodical visits to the various infant welfare centres, where he is consulted in reference to difficult cases. He also sees cases in their homes which are not attended by other doctors.

In 1924, Dr. Carter prepared for routine use a scheme of treatment, which included intestinal lavage, and in the Spring of each year he gives addresses to health officers, voluntary workers and sisters of the infant welfare centres, nurses of the Kensington District Nursing Association and others who co-operate with him in the Council's scheme for dealing with this disease. He works in close co-operation with the voluntary agencies in Kensington and with the Medical Superintendent of St. Mary Abbots Hospital.

The following is a report by Dr. Carter giving particulars of cases of enteritis dealt with during the last five years, and also in the year under review.

DIARRHOEA AND ENTERITIS, 1926-1930.

During the last 5 years, 437 notifications have been received in the Public Health Department. In 374 cases, the patient was the only member of the family to contract the disease, and in 28 families more than one case occurred. The total number of cases occurring in children under one year of age was 258, and over one year of age 179.

Food on which the children were fed.

Mixed diet	167
Breast only	49
Cows' milk	103
Condensed milk	34
Dried milk	35
Breast and cows' milk	19
Breast and condensed milk	30

"Mixed diet" means gravy and bread, or gravy and potatoes or vegetable soup, with custard pudding at the mid-day meal. The other meals usually consist of cows' milk.

Deaths from Diarrhoea and Enteritis in the Borough.

1926	30
1827	27
1928	18
1929	43
1930	28
	146

Deaths in cases attended by nurses of the Kensington District Nursing Association.

1926. One death whilst nurses attending. Two cases sent to hospital and both died.
1927. No death whilst nurses attending. Six cases sent to hospital and five died.
1928. No death whilst nurses attending. Thirteen cases sent to hospital and four died.
1929. One death whilst nurses attending. Sixteen cases sent to hospital and three died.
1930. One death whilst nurses attending. Two cases sent to hospital and one died.

Out of a total of 472 cases of diarrhoea attended by the District Nurses during the last 5 years, 3 died whilst the nurses were in attendance, and 15 died after removal to hospital. Total number of deaths, 18. The nurses attended a number of cases of diarrhoea which were not notified.

During the last five years, I have attended 90 cases in their own homes and no death occurred. I sent six very severe cases into hospital and three of these died.

I saw five cases of dysentery due to the Flexner bacillus, and one due to the Shiga bacillus. Morgan No. 1 was present in a number of cases.

The great majority of cases of diarrhoea and vomiting was due to acute dyspepsia and gastro-enteritis caused by an excess of either proteins, carbohydrates or fats in the diet. A considerable number could be traced to contamination of the cows' milk by micro-organisms. Four cases were due to eating ice cream.

In the mild cases there was usually no rise of temperature, and only a short degree of dehydration. It was, however, quite impossible to say if these cases were going to remain mild or not. I have repeatedly seen the mild case merge into a severe gastro-enteritis, particularly when treatment was deferred to the third day of illness.

The severe cases usually began with high fever—temperatures of 102 degrees to 104 degrees being frequently present, with dehydration and in some cases accompanied by toxaemia.

A considerable number of breast-fed infants suffered from diarrhoea and vomiting. I did not see any cases of toxaemia amongst these infants, but some were very definitely dehydrated and collapsed. It was necessary to discontinue breast-feeding for two or three days, the mother in the meantime expressing her breast milk and taking care not to lose it. After the third or fourth day, all these infants were put back on the breast and did reasonably well.

I attended a number of children with chronic diarrhoea and vomiting. They were pale, flabby, and wasted, and their temperatures were subnormal. They were not suffering from dehydration or toxaemia. Their condition was due to what is known as a deficiency disease, that is to say, they had been brought up on a wrong balance of the principal foods such as protein, carbohydrates and fats, and they also had had no vitamins in their food. For instance, I saw children between the ages of seven and nine months who had been fed on condensed milk, two or three teaspoonsful in 5 ounces of water, with the addition of white bread and margarine and tea to satisfy their hunger. This diet had gone on for months. The diarrhoea in these cases was not due to enteritis, but to faulty metabolic changes. On a properly balanced diet suitable to their age with three or five drops of cod liver oil given three times a day, and also one teaspoonful of orange juice, these children did well, provided they had sufficient power of recuperation. Several of these cases, however, died in hospital, and no signs of enteritis were found, and no fatty degeneration of the liver. They died because the normal processes of the body ceased to operate. It is a functional rather than a pathological condition.

I also saw cases of marasmus due to food disorders where the children had lost more than 20% of their expected body weight for their age. An attack of enteritis in these cases is particularly serious.

Amongst older children there were some ten cases of chronic diarrhoea with a good deal of mucus in the stools. These children had no vomiting, had no appetite, were losing flesh, and in some instances were said to be suffering from tuberculosis. Routine treatment was most successful in these cases. After a week with daily washing out of the bowels, rest in bed, with malted milk diet, the diarrhoea soon subsided, and ordinary food was taken with relish.

I saw four cases of very acute diarrhoea and vomiting, sometimes called "fulminations," where the routine treatment was not successful. These children all died in hospital within two days. These cases are fortunately very rare at the present time.

From an examination of the notes at the commencement of the report, it will be noticed that Summer diarrhoea does not appear to be often infective from person to person. The child dies from an infective condition produced in its own body. Cows' milk seems to be more responsible in the causation of this disease than any other form of food; and over-feeding in Summer time or at any other time is a frequent cause of digestive disturbance.

I have shown that notification has brought to light a great variety of cases which would formerly have received no treatment. Of course, diarrhoea is sometimes a symptom of diseases outside the intestinal tract, and is secondary to, for instance, measles, pneumonia, etc. These secondary symptoms have not been included in my description, but I should like to mention one exception, namely, otitis media, or middle ear disease. In five cases where this was the cause, directly the pus escaped from the ear, the diarrhoea began to subside. If this "first aid" method or routine treatment is more generally adopted, enteritis caused by digestive disturbances should considerably diminish.

It has been possible to trace all the 472 cases attended by the district nurses, and of these only 18 proved fatal; 3 died in their own homes and 15 in hospital.

SUMMER DIARRHOEA, 1930.

The weather during last summer was not very hot except for a heat wave in August. I attended 29 cases in their own homes and paid 94 visits, and am pleased to report that none of the cases treated by me outside hospital proved fatal. No complaints have been received with reference to the working of the Council's scheme, and the parents were in many instances grateful for the prompt assistance they received.

Health Visitor's Notes.

The number of cases notified was 85; of these, 60 were under one year of age, and 25 one year and over.

The number of families in which the patient was the only case was 73, and the number of families where more than one case occurred was 5.

Food on which the children were fed.

Mixed diet	...	...	34 cases.
Cows' milk...	...	...	17 ,,
Dried milk	...	...	17 ,,
Breast only	...	...	5 ,,
Condensed milk	...	...	5 ,,
Unknown ...	...	...	7 ,,

"Mixed diet" means gravy and bread, or gravy and potatoes, with custard or milk pudding at the mid-day meal. The other meals usually consist of cows' milk.

Amongst the notified cases, 48 were severe, and 37 were mild. Amongst the severe cases which recovered, 27 received routine treatment and 12 did not. It is satisfactory to be able to record that in every cases where routine treatment was provided within two days after the onset of the disease, the child recovered.

Kensington District Nursing Association.

The Kensington District Nurses under Miss Eales continue to show great enthusiasm in their work. They attended 39 notified cases and 47 cases of diarrhoea and vomiting, which had not been notified, making a total of 86 cases in all. They paid 617 visits. Two cases were admitted to hospital, of which one proved fatal. One death occurred in the home whilst the nurses were attending. There have, therefore, been only two deaths amongst the 86 cases attended by the nurses.

Deaths from Diarrhoea.

There were 34 deaths of children under one year of age from diarrhoea or enteritis during the year. Thirty-two deaths occurred amongst cases which were not notified or not attended by the nurses. Only two deaths occurred in cases which were notified and attended by the nurses.

It will thus be seen that 32 deaths occurred amongst children who had not received routine treatment in their own homes or prior to removal to hospital.

St. Mary Abbots Hospital.

With regard to the treatment of cases in hospital, there is nothing further to be said than that which was described in last year's report. No cases of paratyphoid or Flexner bacillus were found amongst the children treated. Most of the cases which proved fatal were extremely ill on admission, suffering from dehydration and collapse.

Thirty-one cases of diarrhoea and vomiting were admitted to the hospital during the year, and there were 13 deaths.

I attended most of the post-mortem examinations, and my observations only confirm the findings in my report of last year.

RONALD CARTER.

Dysentery.—Two sisters in the St. Charles ward were infected with the Sonne organism and a girl of six in the Pembridge ward suffered from the Flexner variety of the disease. No evidence as to how the disease was contracted could be obtained.

Acute Rheumatism.—Under the Kensington (Acute Rheumatism) Regulations, 1927, acute rheumatism, as defined in these regulations, was made a notifiable disease for three years from 1st October, 1927. The regulations define acute rheumatism as denoting the following conditions, occurring separately or together in a child under the age of sixteen years.

(*a*) Rheumatic pains and arthritis, if accompanied by a rise of temperature ;

(*b*) Rheumatic chorea ;

(*c*) Rheumatic carditis.

Before sanctioning these regulations, the Ministry of Health required to be satisfied that :—

(1) Efficient machinery existed for investigating the cases notified.

(2) There was accommodation for institutional treatment.

(3) The local authority was well organised in regard to health administration and had good housing records.

The first of these conditions was provided by setting up a Rheumatism Supervisory Centre and by arranging that on the receipt of a notification a health visitor should visit the home of the rheumatic child to make certain enquiries and observations. The second was complied with by making special arrangements with the Poor Law Authorities of Kensington, whereby in-patient accommodation was set aside at St. Mary Abbots Hospital, and by making a grant towards the provision of convalescent treatment. The third condition was already satisfied.

In September, 1930, the Minister of Health issued the Kensington (Acute Rheumatism) Regulations, 1930, thereby continuing to make acute rheumatism, in children under 16 years of age a notifiable infectious disease for a further period of three years from 1st October, 1930.

During the year under review, 99 cases of this disease were notified, 47 of which were removed to hospital for treatment.

The Third Annual Report on the working of the Rheumatism Scheme during the period 1st October, 1929, to 30th September, 1930, prepared by the physician in charge of the Centre and the Medical officer of Health, appears as Appendix I to this Report.

Other Notifiable Diseases.—With the exception of tuberculosis, which is dealt with in a separate section, no notifiable infectious diseases, other than those to which reference has been made, were notified during the year.

Non-Notifiable Diseases.

Measles.—There were thirty-nine deaths from measles in Kensington during the year. The women health officers paid 1,511 visits to measles patients ; two hundred and five cases were removed to the Metropolitan Asylums Board and London County Council hospitals.

With the object of reducing the mortality and mitigating the complications associated with measles epidemics by the prompt removal of cases to hospital, the London County Council, in conjunction with the several metropolitan borough councils, have drawn up the following scheme to operate during epidemic periods.

Action by the School Medical Service.—The school medical officer will inform the divisional medical officers daily of the schools in which the scheme should be put into operation and the divisional medical officer will instruct the school nurses to visit such schools daily with a view to carrying out the following procedure :—

(1) The school nurse will obtain from the head teachers of infants' departments the names and addresses of all absentees in affected classes and of absentees under 5 years of age, where the cause of absence is due to suspicious illness or to unknown causes, and (*a*) will enter the particulars on special slips to be provided by the divisional officer (education department). If the divisional office is within reasonable distance the nurse will deliver these slips in person to the divisional officer on the day of her visit, but otherwise she will despatch them at once in an envelope marked " urgent " or (*b*), in boroughs where special agreement has been reached, involving the appointment of special officers to deal with measles, instead of informing the divisional officer, the school nurse will furnish the names and addresses directly to the health visiting officer of the borough council.

(2) The nurse will make special enquiry as to children up to and including 5 years of age, and as to children in any classes in which cases of measles have occurred, with a view to detecting any children who may have come to school with possible early symptoms of measles.

(3) Children discovered in school to present signs indicating the possible onset of measles, such as coryza or with definite symptoms of measles, must be sent home at once in charge of an elder brother or sister or some other responsible person. The borough medical officer will be informed at once and the head teacher will be asked to send particulars of such cases immediately to the three officers concerned.

In addition to the action taken by the school medical service special instructions have been issued to head teachers and the school attendance staff to report immediately any cases or suspicious cases coming to their knowledge.

For the purpose of obtaining the co-operation of the parents the head teachers of schools in the areas affected will be supplied by the borough medical officers of health with advice leaflets for distribution through the school organisation.

Under the scheme it has also been arranged that borough medical officers of health will report to the head teachers any cases of measles occurring in houses occupied by children attending the County Council's schools, which are discovered by health visitors, etc., or at infant welfare centres, Sunday schools, etc., particulars of which have not been received and the existence of which is, therefore, presumably not known at the schools concerned.

In addition, the school nurses will confer with the health visitors of the borough council who will undertake the visitation of suspicious absentees reported by the school nurses.

The scheme was put into operation during the early part of 1930, and worked very satisfactorily.

Whooping Cough.—There were four deaths from this cause. The deaths in the three preceding years were 20, 10 and 65. The women health officers paid 99 visits to cases of this disease during the year. The number of cases admitted to hospitals from Kensington was 8.

On the 7th October, 1930, the Council approved of a scheme to be put into operation on the appearance of an epidemic of whooping cough, and they resolved to establish two clinics for the treatment of the disease, one at the School Treatment Centre in Kenley Street and the other at the Baby Clinic and School Treatment Centre at No. 92, Tavistock Road.

The School Treatment Centres are established under the authority of the London County Council, but it was ascertained that no objection to the establishment of whooping cough clinics thereat would be raised provided that the holding of the clinics was so arranged that the sessions held at the centres for other purposes were not interfered with, and that there was no possibility of whooping cough patients mixing in any way with those waiting for treatment in other departments.

As whooping cough did not appear in epidemic form during the year 1930, there was no occasion to put the scheme into operation.

London County Council School Intimations of Infectious Disease.

As in past years, exclusions from school owing to the occurrence of infectious disease in the homes of scholars have been notified daily by the head teachers of the London County Council schools. These are checked by the register of notifiable infectious diseases in the Public Health Department and the sanitary inspector immediately visits all cases in his district which have not been previously notified.

The intimations of infectious disease from the head teachers are particularly helpful in regard to non-notifiable diseases such as measles, whooping cough, chicken pox, etc., as early information enables these cases to be visited either by the sanitary inspectors or women health officers and allows prompt measures to be taken for proper treatment and isolation.

Disinfection.

Bedding, clothing, etc., are disinfected at the Council's Disinfecting Station at Wood Lane by exposure to steam under a pressure varying between 15 and 20 lbs. above atmospheric pressure for fifteen minutes. Soiled linen is disinfected by boiling under a pressure of 10 lbs. above atmospheric pressure for ten minutes in a rotary washing machine. A formalin cupboard is used for the disinfection by formalin of leather, furs and other articles which cannot be exposed to high temperatures.

Rooms vacated by persons suffering from infectious disease are disinfected by gaseous formaldehyde, which is generated by the votalisation of paraform tablets, 20 tablets being used for each 1,000 cubic feet of room space. Verminous rooms are disinfected by the burning of 3 lbs. of sulphur for each 1,000 cubic feet.

*SUMMARY OF WORK CARRIED OUT BY THE DISINFECTING STAFF DURING 1930.

Nature of Infection.	Premises Disinfected.	Rooms Disinfected.	Disinfections at Wood Lane.	No. of Articles Disinfected.
Small Pox	11	25	29	2,815
Scarlet Fever	409	476	455	8,081
Diphtheria	328	418	320	4,308
Enteric Fever	16	19	34	415
Paratyphoid Fever	21	22	74	582
Measles	292	347	54	711
Consumption	182	224	184	1,561
Cancer	61	76	92	920
Vermin	222	316	109	1,219
Other Diseases	254	311	257	234
TOTALS	1,796	2,234	1,608	23,005

* *This table does not include the work carried out at Wood Lane on behalf of the Paddington Borough Council.*

The total weight of the bedding, clothing, etc., of Kensington residents disinfected was 47 tons 14 cwts. 3 qrs. 18 lbs. The number of articles disinfected only was 22,044 and the number disinfected and washed, 961.

The laundry work for the Medicinal Baths is performed at the Disinfecting Station and this work involved in 1930 the washing of 10,775 towels, 250 sheets and 38 other articles.

The Paddington Authority have entered into an agreement with the Council for the disinfection of all articles removed from Paddington homes to be performed at the Kensington Disinfecting Station. As the Paddington Council require certain of the articles to be washed after disinfection, the charge was fixed at 20s. 0d. per cwt. of articles dealt with, but there is a proviso in the agreement that the minimum payment per annum is to be £600.

The weight of Paddington articles disinfected in 1930 was 29 tons. 17 cwts. 1 qr. 24 lbs. The number of articles disinfected was 7,416 and the number disinfected and washed was 2,689.

Disinfection of Library Books.

In view of the difficulty of securing efficient disinfection of books, the Libraries Committee authorise the Medical Officer of Health to destroy all Public Library volumes removed from infected houses; this gives Kensington borrowers protection from infection from the Council's books.

The number of books from the Kensington Public Libraries destroyed during the year by the officers of the Public Health Department was 61. The number of private subscribing library books destroyed was 23, and the number disinfected by formalin and returned to the householders was 12.

Bacteriological Work.

In order to secure a linking-up of the work of pathology and bacteriology in the borough generally, and to obtain close co-operation between St. Mary Abbots Hospital, the Princess Louise Hospital and the Borough Council, the Council, in 1928, appointed the pathologist at St. Mary Abbots Hospital as their bacteriologist on condition that he became honorary pathologist at the Princess Louise Kensington Hospital for Children. Dr. Keith, the present pathologist, commenced his duties under the Council on the 1st November, 1928.

At the present time, the Council have a full bacteriological service and are able to assist local medical practitioners in any branch of bacteriology and pathology. In fact, all medical men attending poor patients in the borough may receive for these patients the same advantages in regard to bacteriology and pathology as may be obtained in the best private practices and at the general hospitals.

The work performed by the bacteriologist for the Council during the year 1930 was as follows :—

Disease suspected.	*Examinations.*	*Positive.*
Diphtheria	2,040	140
„ (virulence test) ...	4	-
Tuberculosis (sputum)	280	27
„ (faeces)	1	-
„ (microscopical)	1	-
„ (cultural)	1	-
Typhoid fever (blood)	22	2
„ (faeces)	12	-
„ (urine)	6	-
Dysentery (faeces)	7	-
Gonorrhoea	14	4
Food poisoning (faeces)	4	-
„ „ (urine)	6	-
„ „ (meat store, plates) ...	4	-
„ „ (milk bottle washings)	2	-
Ringworm	1	-
Cerebro-spinal meningitis	1	-

The following examinations were also carried out :—

Milk (bacterial count)	40
„ (tubercle bacilli)	24
„ (fat estimation)	6
Beer (cultures)	7
Slime (cultures)	3
Waste-pipe (cultures)	2

In addition to these examinations at the Kensington Laboratory, 503 specimens of sputum were examined at the Tuberculosis Dispensary.

Cleansing of Verminous Persons.

The cleansing of verminous persons is carried out at the Medicinal Baths, Blechynden Mews.

In 1920 an agreement was entered into with the London County Council, which provided for the use of the Medicinal Baths by the County Council for the cleansing of children attending elementary schools in and around Kensington. This agreement has been modified from time to time and at present the London County Council guarantee the Borough Council a minimum payment of £400 per annum. Technically, in accordance with the provisions of the Children Act, 1908, children sent from the elementary schools are cleansed by the School Nurse in the employ of the London County Council, who attends at the Station for the purpose, and is responsible to her employers for the effective use of the apparatus provided. In practice, the actual work of bathing and disinfecting garments is executed by the Borough Council's servants under the supervision of the school nurse.

A further agreement in regard to the cleansing of verminous inmates of common lodging houses was made with the County Council in 1920, in which the Borough Council have agreed to cleanse verminous inmates from Kensington common lodging houses free of charge and to bath those sent by the London County Council officers from common lodging houses in neighbouring boroughs at a rate of 1/- per bath.

The cleansing of Kensington persons not sent by officers of the County Council is performed free of charge under the direction of the Medical Officer of Health.

Arrangements have been made with the Councils of the neighbouring boroughs of Paddington and Fulham for the cleansing of residents (other than school children and common lodging-house cases) of those boroughs at the Medicinal Baths, on the recommendation and under the responsibility of the Medical Officer of Health of the borough in which the persons reside.

The Councils of these two boroughs have agreed to pay 1s. per bath and to indemnify the Council of the Royal Borough against any claim which a Paddington or Fulham person may bring in respect of any treatment given at the Medicinal Baths.

The record of work done at the Medicinal Baths during the year 1930 is as follows :—

Scabies—	*Total Cleansings.*
Adults	228
School-children	372
Children under five years	43

VERMINOUS CONDITIONS—	
Adults	28
School-children	3,187
Children under five years	4
Common Lodging House cases ...	28
OTHER CONDITIONS—	
Adults	9
School-children	150
Children under five years	6
TOTAL ...	4,055

The clothing worn by persons on their visit to the Medicinal Baths is disinfected, together with such other articles of clothing as the patients may bring. Altogether 7,627 articles were so dealt with and, in addition, 584 blankets and sheets, and 345 articles of night clothing.

Of the 3,187 school children cleansed at the Medicinal Baths in 1930, 214 only were compulsory cases; the remainder attended voluntarily.

VERMINOUS PREMISES CLEANSED.

Three hundred and forty-nine verminous houses were cleansed during the year by landlords in response to notices served under the powers conferred by the London County Council (General Powers) Act, 1922. The Council's rat officer, in addition to his duties under the Rats and Mice (Destruction) Act, carries out disinfection of verminous premises in certain cases. The following is a summary of his activities in this direction:—

Number of premises visited	71
Number of rooms sprayed	92

TUBERCULOSIS.

During the year 202 cases of pulmonary tuberculosis and 58 cases of non-pulmonary tuberculosis were notified.

The following table shows the number of cases of both forms of the disease notified in the borough and the several wards therein during each year since 1921.

District.	Years.									
	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
The Borough ...	374	339	403	314	292	317	252	276	241	260
North Kensington	272	233	267	228	207	227	166	179	156	178
South Kensington	102	106	136	86	85	90	86	97	85	82
WARDS.										
St. Charles ...	66	48	61	45	52	50	39	48	39	56
Golborne	89	80	86	65	56	69	53	57	41	46
Norland	80	76	85	75	67	59	44	49	43	42
Pembridge ...	37	29	35	43	32	49	30	25	33	34
Holland	29	28	26	30	27	20	11	25	20	21
Earl's Court ...	24	24	28	13	18	25	25	20	21	19
Queen's Gate ...	15	20	22	17	13	15	10	11	7	8
Redcliffe	19	23	41	15	18	22	25	26	25	20
Brompton ...	15	11	19	11	9	8	15	15	12	14

It will be seen that the number of notifications in 1930 was higher than in the preceding year. It is a little difficult to give a precise opinion as to how this may be accounted for. The increase occurs mainly in the St. Charles ward in which it is known there was a considerable increase in the population during the year owing to the erection of new dwellings; but it is also probable that the outbreak of influenza in 1929, which caused a considerable rise in the number of deaths from bronchitis and pneumonia during that year, may have had some influence on the increased number of notifications of tuberculosis in 1930. In view of these two factors, which would both operate to cause the increased number of notifications, there is no need for undue concern at this slight interruption in the very steady decrease in the incidence of tuberculosis which has been noted in the last twelve years.

Medical practitioners are reporting cases at an earlier stage of the disease than was the case several years ago, but the following figures show that some improvement in this respect is still desirable in order that the Council's machinery for the prevention of the spread of infection may be put into operation at the earliest possible moment:—

(1) No. of deaths in Kensington from all forms of tuberculosis in 1930 165
(2) No. of persons dying unnotified or notified at death 41
(3) No. notified within one month before death 12
(4) No. notified within three months before death (excluding those under heading 3) 16
(5) No. notified within six months before death (excluding those under headings 3 and 4) 13

The following summary shows the age and sex distribution of the cases notified and the deaths from this disease during the year :—

Age Periods. (Years).	New Cases†				Deaths.				
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.		
	M.	F.	M.	F.	M.	F.	M.	F.	
0—1	—	1	—	—	1	—	2	1	
1—5	2	1	2	2	—	—	3	1	
5—10	6	2	2	6	1	—	3	2	
10—15	10	9	3	5	2	1	2	1	
15—20	20	22	1	4	3	8	—	—	
20—25	21	24	2	3	6	8	2	1	
25—35	29	15	4	6	18	16	1	2	
35—45	12	16	3	6	17	11	1	—	
45—55	2	2	4	2	17	10	2	—	
55—65	1	2	2	1	5	3	—	1	
65 and upwards	2	3	—	—	11	2	—	—	
TOTALS	105	97	23	35	81	59	16	9	=165

† Primary notifications of persons notified during life to be suffering from tuberculosis.

From the above table it will be seen that the disease commonly attacks people at the period of their maximum value to the home, the family and the nation. Apart from causing deaths of persons in the prime of life, it handicaps many by reducing their working capacity for several years before death.

The following table shows the number of notifications of pulmonary and non-pulmonary tuberculosis received since 1920, together with the number of deaths and death-rates in each year.

Year.	Pulmonary Tuberculosis.			Other forms of Tuberculosis.			Tuberculosis (all forms).	
	No. of notifications.	No. of deaths.	Deaths per 100,000 persons living.	No. of notifications.	No. of deaths.	Deaths per 100,000 persons living.	No. of deaths.	Deaths per 100,000 persons living.
1920	293	135	82	114	44	27	179	109
1921	288	153	87	86	32	18	185	105
1922	252	139	78	87	30	17	169	95
1923	280	117	66	123	35	19	152	85
1924	236	120	67	78	29	16	149	83
1925	235	134	75	57	25	14	159	89
1926	248	130	72	69	30	17	160	89
1927	178	114	65	74	26	15	140	80
1928	212	107	60	64	25	14	132	74
1929	188	120	68	53	17	10	137	78
1930	202	140	78	58	25	14	165	92

DEATHS FROM TUBERCULOSIS IN 1930 ALLOCATED TO DISTRICT OF USUAL RESIDENCE OF PATIENTS.

	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.
The Borough	140	25
North Kensington ...	92	18
South Kensington ...	48	7
WARDS.		
St. Charles	16	5
Golborne	28	5
Norland	30	5
Pembridge	18	3
Holland	11	2
Earl's Court	10	3
Queen's Gate	2	—
Redcliffe	20	1
Brompton	5	1

The places where deaths from tuberculosis occurred are set forth in the following list :—

	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.
Patient's home	42	6
St. Mary Abbots Hospital	60	11
Princess Louise Kensington Hospital for Children	—	2
Outlying Hospitals	23	4
Other places outside the borough	15	2

Public Health (Prevention of Tuberculosis) Regulations, 1925.—These Regulations were introduced with a view to :—

(1) preventing persons suffering from respiratory tuberculosis entering upon an occupation involving the handling of milk ; and

(2) enabling local authorities, in proper cases and with suitable safeguards, to require persons engaged in such occupation to discontinue their work when found to be suffering from the disease in an infective stage.

During the year no case occurred which required the attention of the Council under these Regulations.

THE COUNCIL'S SCHEME FOR THE PREVENTION AND TREATMENT OF TUBERCULOSIS.

The Staff Engaged on Tuberculosis Work.

The staff at the dispensary consists of a Tuberculosis Officer ; two indoor nurses, one of whom also acts as secretary to the Tuberculosis Care Committee and the other as a dispenser ; a clerk and a caretaker. These officers give whole-time service to tuberculosis work.

In 1920, the borough was divided into seven areas for the purpose of home visiting in connection with maternity and child welfare work and a woman health officer was allocated to each of these districts. When the Council assumed full control of tuberculosis work in the borough arrangements were made for the home visiting of tuberculous patients to be undertaken by these women health officers in their respective areas. These officers visit the tuberculosis dispensary daily for the purpose of obtaining information as to visits necessary to be paid, and they confer weekly with the Tuberculosis Officer, when they report to him in regard to the home visits paid in the previous week.

Approximately three-sixteenths of the time of these seven women health officers is devoted to tuberculosis work.

Dispensary Diagnosis and Treatment.

The adequacy of the scheme adopted by the Council in 1922 for the prevention and treatment of tuberculosis is evidenced by the fact that after nine years of work no material alterations or additions have been required.

The number of new cases seen at the dispensary during the year, with the original diagnoses made, is shown in the following table :—

New Cases.

	Adults.		Children under 15 yrs.		Total.
	Males.	Females.	Males.	Females.	
Examined for first time ...	222	323	151	158	854
New cases with Respiratory Tuberculosis	62	58	3	8	131 (15·3 per cent.)
New cases with Non-Respiratory Tuberculosis	6	13	9	10	38 (4·4 „)
New cases regarded as "Suspects"	36	64	11	11	122 (14·2 „)
New cases not suffering from Tuberculosis	118	188	128	129	563 (65·9 „)

This table shows an increase of 21 in the number of respiratory cases over last year. This increase is partly due to the inclusion under a new regulation of the Ministry of Health of certain special cases undergoing institutional treatment. The total number of non-respiratory cases is also more than in 1929, being 38 instead of 30.

There were in addition 78 respiratory cases and 24 non-respiratory cases added to the dispensary register during the year upon removal into the borough of patients from other districts, as compared with a total of 88 for 1929.

The " suspect " cases shown above include all cases not diagnosed in the first instance as either definitely tuberculous or non-tuberculous ; to these must be added 10 left on the dispensary books at the end of 1929, making a total of 132.

The subsequent disposal of these 132 was as follows :—

Diagnosed subsequently as suffering from respiratory tuberculosis	7	
Diagnosed subsequently as suffering from non-respiratory tuberculosis ...	0	
Discharged finally as non-tubercular	91	
Discharged as having ceased attendance		
Remaining on books on 31st December, 1929	34	

Cases came to the dispensary of their own accord or were sent up through one of the following agencies : the Public Health Department of the Council, the Ministry of Pensions, Hospitals, School Medical Officers, the Kensington Board of Guardians, the Invalid Children's Aid Association, the Charity Organisation Society, Clergy and private practitioners. Primary consultation cases with the latter numbered 237.

The treatment recommended for the cases diagnosed at the dispensary as suffering from tuberculosis., which numbered 176 (pulmonary 138 and 38 non-pulmonary), was as follows :— Sanatoria, 82 ; Domicilary, 6 ; St. Mary Abbots and other Hospitals, 72 ; Dispensary, 14 ; Kensal House School, 2.

The total number of attendances by patients at the dispensary was 2,807, and 1,589 systematic examinations were made.

The number of visits paid by the Tuberculosis Officer was 123, of which 34 were consultations at home with the doctor in charge of the case.

Written reports on cases to public authorities numbered 1,732 and to doctors 496.

The total number of sputum examinations was 503 (including 56 specimens sent in by doctors) from 410 individual cases. One hundred and fifty-five specimens showed tubercle bacilli to be present and 348 gave negative results.

Records.

Each year several cases of tuberculosis are notified but for special reasons are not kept under subsequent supervision by the Council's staff. Some of these cases are in comfortable circumstances and the private practitioners send requests with the notifications that visits by the Council's staff should not be paid and that they will take steps to prevent the spread of infection. Other notifications are in respect of domestic servants in good class houses who, in a very short time, may leave for their homes in other districts without any notification to this effect being sent to the Public Health Department. Some of these patients die, some are cured, whilst still others are lost sight of, with the result that in the course of several years a number of cases remain on the register, the inclusion of which does not give a fair index of the number actually within the borough.

With a view to bringing the register up-to-date, the staff at the tuberculosis dispensary and the women health officers devoted a considerable amount of time during 1929 and 1930 investigating the circumstances and residence of all cases notified which have not in the past been kept under regular supervision. This investigation resulted in the removal of a large number of cases from the register and details are given in the following table :—

	Pulmonary.		Non-Pulmonary.	
	Males	Females	Males	Females
No. of cases on the register of notifications on 1st January, 1930	414	419	209	220
No. of cases notified for the first time during the year ...	105	97	23	35
No. of cases brought to notice otherwise than by notification	59	58	22	11
No. of cases removed from the register during the year on account of having :—				
(*a*) been cured	21	10	14	15
(*b*) removed from district	98	133	45	40
(*c*) died	100	88	18	11
(*d*) been inaccurately diagnosed	2	0	0	1
No. of cases remaining on the register on 31st December, 1930	357	343	177	199

The number ot patients on the dispensary register on December 31st, 1930, was 877, whilst at the beginning of the year they numbered 814.

A comparison of the dispensary figures with the total number on the register (1076) shows that the majority of the tuberculosis cases are dealt with through the Council's scheme.

Residential Institutional Treatment, Light Treatment, X-Ray Diagnosis, etc.

The facilities available for residential institutional treatment at sanatoria and St. Mary Abbots Hospital, for medical consultations, X-ray diagnosis and light treatment, will be found on page 82 of the Annual Report for 1928, which also contains reference to the close co-operation of the Council's staff with general medical practitioners and other bodies and institutions.

Home Visiting

The number of home visits paid in 1930 by the Council's women health officers is shown in the following table :—

	Women Health Officers.							TOTAL.
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	
Tuberculosis.								
Pulmonary.								
First Visits	40	13	31	36	24	28	64	236
Re-Visits	216	140	213	228	237	262	389	1,685
Non-Pulmonary.								
First Visits	12	7	9	10	4	7	13	62
Re-Visits	118	96	142	51	48	89	88	632

Housing conditions form an important element in regard to tuberculosis, and home visits are valuable in this connection. The sleeping arrangements are frequently unsatisfactory and the women health officers always enquire into them. Wherever possible, desirable alterations are pointed out and urged upon the family.

The following table giving the number of rooms occupied by the families of definite cases of tuberculosis diagnosed in 1930 by the Tuberculosis Officer, and the number of occupants, ascertained by the women health officers on their visits to the homes, is inserted to show the difficulties experienced in securing home isolation in many cases :—

	No. of occupants.										
	1	2	3	4	5	6	7	8	9	10	
Rooms 1	6	5	3	1	—	—	—	—	—	—	=15 cases
„ 2	—	11	7	14	8	3	5	2	—	1	=51 „
„ 3	—	1	6	10	9	6	—	—	—	—	=32 „
„ 4	1	1	6	10	8	3	2	3	1	—	=35 „
„ 5	—	1	—	5	4	1	1	2	—	1	=15 „
„ 6	—	—	—	—	2	2	—	1	—	—	= 5 „

153 cases

This total falls 23 short of the total number of cases owing to patients living in boarding houses, private hotels or large private residences not being included.

It is now six years since this table was first given in the annual report, and it is interesting to note that the overcrowding which is so often associated with tuberculosis shows slight improvement as follows :—

1925.	No. of rooms per occupant in all tuberculous families in the table		·55
1926.	Ditto.	ditto.	·58
1927.	Ditto.	ditto.	·59
1928.	Ditto.	ditto.	·61
1929.	Ditto.	ditto.	·67
1930.	Ditto.	ditto.	·73

The Following-up of Patients in Cases of Doubtful Diagnosis.

Patients often do not realise the importance of allowing the Tuberculosis Officer to complete his diagnosis.

When a "suspect" has failed to keep an appointment, he is visited at home by a woman health officer, who gives him a definite appointment with the Tuberculosis Officer at the dispensary so that he will not be kept waiting. If he fails to keep this appointment, second and third visits are paid for the same purpose, when, if of no avail, the case is dropped for the time being.

During the year there were 132 "suspect" cases. Of these, 7 were finally discovered to be suffering from respiratory tuberculosis, and there were 34 still on the books at the end of the year. There were no cases of non-respiratory tuberculosis. The remaining 91 were finally discharged as non-tubercular.

Examination and Systematic Supervision of Home Contacts.

There were 740 contacts traced by the dispensary service in 1930. Of these, 423 were examined one or more times by the Tuberculosis Officer, 132 were examined by their own doctors or had been recently examined at school, while 185 refused examination or failed to attend after three appointments had been given them.

The endeavour to secure a second examination of the "home contacts" of infectious cases after approximately one year's interval, especially young adult cases whose age renders them more vulnerable, has been continued. These examinations are not included in the above totals.

Dental Treatment of Tuberculous Persons.

Mr. A. Dreaper, L.D.S. (R.C.S.), who was appointed by the Council on the 27th September, 1927, as Dental Officer, continued to act in this capacity during 1930.

The work at the dispensary during the year is shown in the following table :—

Dentist's attendances at the dispensary	44
Number of individual patients treated	25
Patients' attendances	56
Number of fillings	1
Number of extractions	27
Number of dentures arranged for	10

Artificial Pneumothorax Treatment.

During the year the Council undertook to pay for artificial pneumothorax treatment in ten cases and the payments amounted to £45 13s. 6d.

Home Nursing.

The cases of tuberculosis attended and the visits paid by the nurses of the Kensington District Nursing Association during the past five years are shown in the following table :—

Year.	Cases.	Visits.
1926 ...	34 ...	987
1927 ...	22 ...	804
1928 ...	23 ...	901
1929 ...	28 ...	1,327
1930 ...	18 ...	946

The nurses carry out their work splendidly and are very much appreciated by the poor.

Supply of Extra Nourishment to Tuberculous Persons.

The following are particulars of the nourishment granted during 1930 :—

Number of patients assisted 10

Number of pints of milk granted.	Number of eggs granted.
105	105

Estimated cost to the Council of nourishment during the year ... £3 14s. 7d.

Arrangements for "Care" and "After Care."

In July, 1922, the Council approved a proposal for the constitution of a Borough Tuberculosis Care Committee, and this committee, which commenced its activities in December of that year, undertakes all the "care" and "after-care" work in the borough.

The constitution and membership of the committee during the past year were as follow :—

(1) Borough Council—Councillor Miss E. M. Pennefather and Councillor Miss A. S. Hayne.

(2) London County Council—Dr. A. W. Sikes, Divisional Medical Officer and Miss G. M. S. Paddon, District Organiser of School Care Committees.

(3) Kensington School Care Committees—Miss A. Webster.

(4) Kensington Invalid Children's Aid Association—Miss M. G. Crombie and Miss M. H. Joseph.

(5) Kensington Charity Organisation Society—Miss O. A. Nixon.

(6) Brompton Hospital—Miss L. C. Marx, Lady Almoner.
(7) Kensington Board of Guardians—Lady Mellor.
(8) Kensington District Nursing Association—Miss E. D. Gibbes.
(9) Kensal House School—Miss E. S. Davidson.
(10) London Insurance Committee—Dr. W. C. Robinson.
(11) Panel Committee for the County of London—Dr. A. K. Barrett.
(12) British Red Cross Society—Mrs. Burne, M.B.E., and Miss H. MacMillan.
(13) British Red Cross Society (Emergency Help Committee)—Miss C. Keeling, M.B.E., J.P., L.C.C.
(14) United Services Fund—Miss M. Pickton.
(15) Ex-officio members—The Medical Officer of Health, Tuberculosis Officer and two Women Health Officers.

The committee have met fortnightly during the year, and the attendance of members has been well maintained.

Arrangements for Finding Employment.

The difficulties of a care committee in securing work for persons whose physical capacity is limited will be readily appreciated, but every effort is made in this matter.

In some instances the intervention of the Tuberculosis Care Committee has resulted in employers holding open the positions of men about to undergo sanatorium treatment.

Provision of Shelters at the Homes of Patients.

The Council are prepared to loan shelters and they keep several in readiness at their Wood Lane Depot but, at the present time, none is in use.

Provision of Bedding for Home Isolation.

At the present time there are eight patients to whom bedsteads and bedding are being loaned. In four of these the assistance was given for the first time during the past twelve months, the articles issued being as follow :—

Bedsteads	...	4	Mattresses	...	4
Bolsters...	...	4	Pillows ...	...	4
Pillow-slips	...	8	Sheets ...	...	12
Blankets	...	4	Quilts ...	...	4
		Mattress Covers ... 4			

The total stock of bedding, etc., on loan on December 31st, 1930, was :—

Bedsteads	...	8	Mattresses	...	10
Bolsters...	...	8	Pillows ...	...	12
Pillow slips	...	16	Sheets ...	...	19
Blankets	...	21	Quilts ...	...	7
		Mattress Covers ... 7			

Disinfection after Death or Removal to Hospital.

In all cases after death from tuberculosis the Council offer disinfection. This offer is also extended when patients enter hospitals or sanatoria and when they change their residence.

Disinfection is also carried out upon request by the Tuberculosis Officer or private practitioners.

The following table shows the number of disinfections carried out during the year :—

Cases where bedding, etc., were disinfected by steam ...	184
Number of rooms disinfected	224

Bacteriological Examinations.

Specimens of sputum submitted by medical practitioners for bacteriological examination at the expense of the Council :—

At the Council's laboratory	280

Specimens examined by the Tuberculosis Officer :—

In respect of dispensary patients	447
Sent up by medical practitioners	56

Sputum Flasks.

These are supplied to patients who are infectious, and advice is given in regard to the disposal of sputum.

I have the honour to be,
My Lord, Ladies and Gentlemen,
Your obedient Servant,

JAMES FENTON,
Medical Officer of Health.

APPENDIX I.

Third Annual Report on the Kensington Rheumatism Scheme.

(October 1st, 1929—September 30th, 1930, by James Fenton, M.D., D.P.H. and Janet K. Aitken, M.D., M.R.C.P.).

PART I.

The third year of work at the Rheumatism Supervisory Centre of the Royal Borough of Kensington is now completed.

The function of this clinic is to assist in the early diagnosis of rheumatism in children, the early treatment of this disease being of paramount importance, and also to compile statistics with a view to determining etiological factors and thereby assist in the prevention of rheumatism. The statistics, up to date, are mainly negative in character.

Response to Notification.

The total number of notifications under the Kensington (Acute Rheumatism) Regulations 1927, for the third year, October, 1929—September, 1930, show a reduction of 9.9 per cent. on the second year. In the second year there was a reduction of 34 per cent. on the first year. It was pointed out in the second year that a reduction was to be expected for three reasons :—

1. The notification in the first year of an accumulation of cases, in whom the first symptoms had occurred before the year 1927.

2. The fact that it would not be necessary to notify again in 1928 a case which had had a previous attack in 1927.

3. The natural tendency of practitioners to forget to notify a disease, not usually notifiable, some time after their first interest in this new duty had been aroused. The decrease in notifications in the third year is smaller than in the second year, and probably these three factors can still account for it.

An Analysis of the Sources of Notification.

Analysis of (First) notifications of Acute Rheumatism.

	First Year, 1927-1928	Second Year, 1928-1929	Third Year, 1929-1930
Private Medical Practitioners ...	53	40	32
Rheumatism Supervisory Centre ...	32	37	12
School Medical Officers	28	1	20
Hospitals and Institutions other than St. Mary Abbots Hospital ...	27	15	19
St. Mary Abbots Hospital... ...	19	12	12
	159	105	95

This shows a general reduction, but items under certain headings have increased. The most notable variations are under the headings school medical officers and the Supervisory Centre itself, probably the decrease in the latter is largely dependent upon the increase in the former. It will be seen later that the number of cases sent up to the Rheumatism Centre by the school medical officers has also increased considerably from 32 to 6, showing that these officers are very much awake to their opportunity and responsibility for detecting rheumatism in children in its early stages, and for seeing that supervision is maintained.

Value of Notification.

This question was discussed at length in the 1928-29 Report.

It was apparent that notification was providing only 23.5 per cent. of the new cases at the clinic and was therefore not necessary in the provision of the bulk of the material. This year the percentage is slightly higher, *i.e.*, 28 per cent., but the same conclusion can be drawn. It is obvious, however, that provision of material for the centre is not the only function of notification.

New Cases in attendance at the Rheumatism Supervisory Centre.

	1927-1928	1928-1929	1929-1930	Total.
Notified	63	33	36	132
Unnotified	93	107	92	292
	156	140	128	424

It must be remembered that acute rheumatism as defined by the Kensington Regulations denotes :—

1. Rheumatic pains or arthritis, if accompanied by a rise of temperature.
2. Rheumatic chorea.
3. Rheumatic carditis.

There are many cases which cannot be definitely labelled acute rheumatism, and therefore cannot be notified, which should be under supervision. These include children who have pains or arthritis not accompanied by a rise of temperature and children who have had one or more definite attacks of rheumatism, in whom the disease is now quiescent, but in whom there is a danger of a recurrence.

It has been stated that although there is thought to be a striking difference between the incidence of rheumatism among the well-to-do and the hospital class, there is no statistical evidence about the former. Notification in a borough such as Kensington, which embraces well-to-do districts as well as very poor, should afford such evidence.

It was pointed out in an earlier report that environmental research into the etiology of rheumatism can be greatly assisted by a well conducted scheme of notification with its resulting close liason between the staff of the centre and of the Public Health Department ; and it will be advantageous to continue this Kensington Scheme in order that many important environmental investigations may be allowed to mature.

Notification is of value to the Borough of Kensington in the fight against rheumatism, apart from its direct value in sending cases to the Supervisory Centre in their early stages. In the year under discussion there were 95 notified cases, 36 of these cases attended the centres as new cases. This was a higher proportion than in the previous year when only 33 out of a total of 105 attended the centre.

It must be observed, however, that a large proportion of these notified cases are not the direct responsibility of the medical officer at the centre. Some are able to afford to be treated at home by their own private practitioners, and others are immediately admitted into a hospital owing to the fact that the urgency of their symptoms makes any delay inadvisable. Nevertheless, these cases are not neglected by the Centre. After their medical practitioner or the hospital has discharged them they are visited by the health visitors and by the Honorary Secretary of the Centre in conjunction with the Invalid Children's Aid Association. It may be found that supervision is being maintained by the practitioner who was in charge of the case during its active state, in which event this satisfactory condition of affairs is reported. Often, however, the financial status of the parents makes this impossible. These cases are advised to attend the supervisory clinic, and are referred back to the practitioner if unsatisfactory symptoms recur. Cases discharged from hospital are treated in a similar manner.

INVESTIGATIONS CONCERNING ETIOLOGY.

Contact Cases.

In view of the statement in the Medical Research Council's Report* on Acute Rheumatism in children that " there is at least a ground for suspecting that rheumatism can be conveyed in some way from person to person, and that, as might be expected, closeness of contact favours its transmission," investigations are being made into the sleeping accommodation of rheumatic children.

An analysis of 78 cases :—

Group 1.	Child sleeping in room in which no other children sleep ...	19 or 24·4 per cent.
Group 2.	Child sharing room or bed with another child or children	59 or 75·6 per cent.
	(*a*) Child in separate bed	14 or 17·9 per cent.
	(*b*) Child sharing bed with 1 to 4 other children ...	45 or 57·7 per cent.

In Group 1, therefore, the question of the spread of rheumatic infection by close contact during sleeping hours between one child and another does not arise.

In Group 2 there is no evidence that sleeping in the same bed as compared with sleeping in the same room gives a higher incidence of contact cases.

An analysis of Group 2.

(*a*) In 14 rheumatic cases the child attending the clinic sleeps in a single bed, but one or more other children occupy the same room.

In 11 cases or 78·5 per cent. the other child or children show no evidence of rheumatism.

In 3 cases or 21·5 per cent. there is evidence of rheumatism in the children occupying the same room.

(*b*) In 45 rheumatic cases attending the clinic the child shares his or her bed with another child or other children.

In 37 cases or 82 per cent. the other child or children show no evidence of juvenile rheumatism.

In 8 cases or 18 per cent. there is evidence of rheumatism in the children occupying the same bed.

Thus in Group 2a the possible contact cases are 21.5 per cent., and in Group 2b, where the chance of infection is greater the possible contact cases are 18 per cent.

The number of cases analysed is small and no definite conclusion can be drawn from them. Up to the present there is no evidence that the very close contact of sleeping in the same bed as opposed to the less close contact of sleeping in the same room, but in separate beds, has caused a greater spread of rheumatism.

Taking Group 2 as a whole, it appears that in 19·25 per cent. there was more than one case of rheumatism in the family, but it is not possible to draw any conclusion from this observation alone, as so many other factors such as heredity, clothing, feeding and lack of maternal care may be concerned.

Environmental Factors.

Careful comparisons have been made between a map which shows the distribution in the Borough of notified rheumatic cases during the three years 1927-1930, and maps showing :—

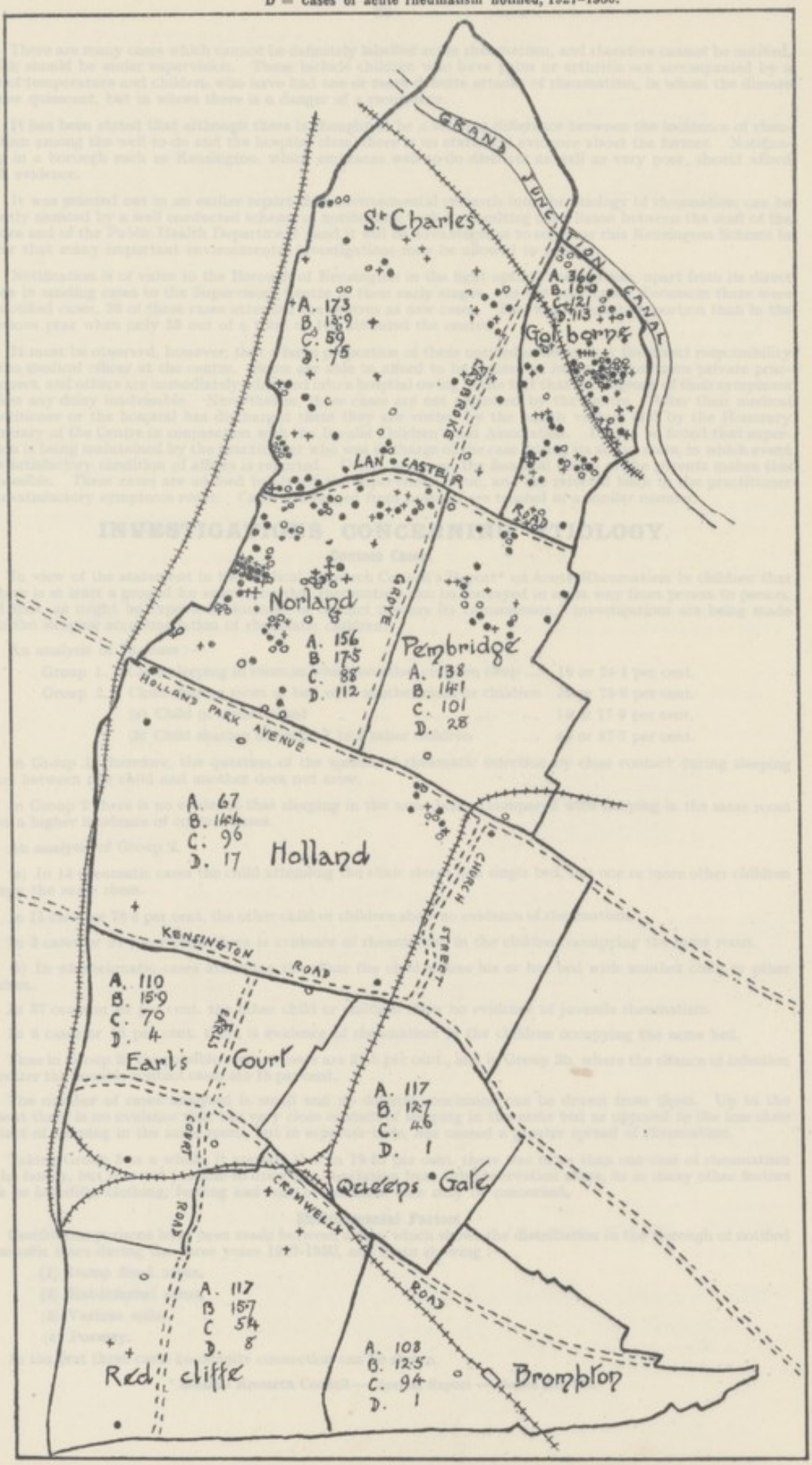
(1) Damp flood areas.
(2) Rat-infested areas.
(3) Various soils.
(4) Poverty.

In the first three cases no definite connection can be shown.

* Medical Research Council — Special Report — Series No. 114.

Map of the Borough showing the arrangement of the Wards, the Distribution of Acute Rheumatism in them and the Population per Residential Acre of each, etc.

A = Population per residential acre.
B = Death Rate, 1929.
C = Infantile mortality rate, 1929.
D = Cases of acute rheumatism notified, 1927–1930.



• Cases of Acute Rheumatism notified October 1st, 1927 to September 30th, 1928
† " " " " " " 1928 " " " 1929
° " " " " " " 1929 " " " 1930

Evidence of dampness.

Information concerning the presence of dampness in the rooms occupied by the rheumatic children notified during the year 1929-1930 shows that the Health Visitors reported dampness to be present in 37 instances, while in 58 instances no dampness was found.

Dampness present	37	(39 per cent.)
Dampness absent	58	(61 per cent.)

In pursuance of the policy of the two previous years the houses reported by the Health Visitors to be damp were re-inspected by the Sanitary Inspectors.

Dampness confirmed by Sanitary Inspector	24
No dampness remediable under the Public Health (London) Act, 1891	13
	37

During this year the proportion of damp houses reported by the Health Visitors has increased from 25·5 per cent. in 1928-29 to 39 per cent., and is even greater than the figure for 1927-28 which was 37·7 per cent. It is true that the proportion confirmed by the Sanitary Inspectors was slightly lower than in the previous year, but even taking these figures the proportion of damp houses has increased from 18 per cent. to 26·3 per cent., and this in spite of the fact that the instances of dampness reported in the year 1928-29 were remedied during that year.

An analysis of the causes of reported dampness was therefore undertaken. It was found that in 16 cases it was due to a quite temporary defect which was easily remedied. In 8 only the dampness was serious.

Temporary dampness due :

(*a*) Roofs defective	12
(*b*) Rainwater Pipes defective	2
(*c*) Burst Pipes	2
	16

Serious dampness :

(*a*) Rising dampness in basement walls	6
(*b*) On outside walls due to porous bricks	1
(*c*) Defective outer walls	1
	8

In the Golborne Ward, in which there is the largest incidence of acute rheumatism, there is a small flood area in which the houses are considered likely to be damp, but it does not coincide with the largest number of rheumatic cases. Similarly in the Norland Ward, the damp area is north of the area in which it will be seen that a large number of cases is concentrated. There is a large flood area in the Holland Ward, and only one case has occurred in this district. There is thus no definite evidence to show an etiological connection between damp areas and acute rheumatism.

Rats.

Rat infested areas very commonly follow the railways, probably because there is on either side of the railways a certain amount of open space from which the rats are not harried, and because there is often a considerable amount of food debris thrown away in these spaces. The rat areas rarely coincide with the most marked incidence of rheumatism. During the year 1929-30 among the new cases visited only 6·4 per cent. reported the presence of rats. Rats are reported if they have ever been seen, although it may have been a single rat which has strayed in from outside.

Soil.

It has been thought that dwellings built on clay soil give a high incidence of rheumatism. It is true that the Golborne Ward, where there are numerous cases of acute rheumatism in children, has clay soil, but the south-western corner of St. Charles and the north-western part of Norland have not a clay soil, and it will be seen from the map that the cases of acute rheumatism in these districts are almost as numerous as in Golborne.

Poverty.

The 95 cases notified during 1929-30 are distributed in a way similar to that of the 1927-8-9 notifications and a consideration of a map shows a definite grouping in the " poor " areas of the Golborne, Norland and St. Charles Wards of North Kensington.

Golborne Ward, in which the greatest number of cases occur is a district inhabited by a large number of the poorest inhabitants of the Borough, and is one of the densely populated areas in London. The majority of the houses were primarily built for one family only, but are now occupied by 3, 4 and 5 families without having been specially adapted for the purpose.

In the First Annual Report of the Rheumatism Scheme, it was stated that about 90 per cent. of the acute rheumatism notifications came from North Kensington. The same figure applies to the distribution between North and South Kensington of the second and third year's notifications ; and the combined figures show that in a series of 359 notifications only 9·5 per cent. come from South Kensington.

Now the incidence of a disease is also related to the number of susceptible persons, and in the case of a malady such as juvenile rheumatism, which has a particular age incidence, the population must be corrected for age; therefore, the ratio of the total number of children under sixteen in North and South Kensington has been calculated. This calculation, based on the Census figures for 1921, corrected by the births and child deaths in each year since 1921, is presented below.

Ward.	Total Population (1921 Census).	Estimated child population under 16 years of age in 1930.	Notifications of acute rheumatism under 16 years of age.		
			1927-28	1928-29	1929-30
St. Charles	24,268	7,539	34	22	19
Golborne	26,329	9,932	44	39	30
Norland	22,106	8,136	55	28	29
Pembridge	19,969	4,688	14	6	8
North Kensington	92,675	30,295	147	95	86
Holland	18,874	3,048	9	3	5
Earl's Court	17,912	2,545	1	1	2
Queen's Gate	13,777	1,252	1	0	0
Redcliffe	19,865	2,852	1	6	1
Brompton...	12,759	1,329	0	0	1
South Kensington	83,187	11,026	12	10	9

On combining the notifications for 1927-28, 1928-29 and 1929-30, it is found that North Kensington has 73 per cent. of the children under sixteen years of age, and 91 per cent. of the notified cases; South Kensington has 26 per cent. of the children under sixteen years of age, and 8 per cent. of the notified cases.

Of the 78 reports on the 95 notified cases reported this year, in 24 the homes are described as being reasonably comfortable, while in 54 the circumstances were reduced or very poor.

The statistics, therefore, support the view of Dr. Alison Glover who holds that the incidence of acute rheumatism increases directly with poverty, malnutrition, overcrowding, and bad housing, and do not support those who hold that the incidence is greater in the artisan class, or in those just above the poverty line rather than in classes below that line.

PART II.

THE WORK OF THE CENTRE.

During the three years 1927-1930 that the Centre has been in existence, 543 cases of rheumatism or potential rheumatism have been supervised. Although the Centre was primarily established to deal with cases from Kensington it has been the custom to accept cases from other Boroughs whenever advice was required.

The Borough of Hammersmith have made a grant towards the expenses of the Centre (which is held at the Princess Louise Hospital for Children), and to the Medical Officers, in order that the Centre may be responsible for the supervision of certain cases referred to the Centre from that borough.

Cases attending the Centre.

	1929-30	1927-30
Kensington	128	424
Hammersmith	35	100
Hounslow	1	4
Fulham	4	7
Putney	0	2
Paddington	3	4
Chelsea	2	2
	173	543

During the year 1929-30, 48 sessions have been held at the Princess Louise Hospital, and the average attendances have been as follows :—

Kensington	12·9
Other Boroughs	3·4
	16·3

The total number of attendances, 784.

At the end of the first year 225 cases were under supervision; by the end of the second this number had grown to 323, and now it has reached 447. During the three years names have been erased from the books for various reasons.

Five have died.
Eighteen have moved to another district.
Five have passed the age limit.
Fifteen have not attended when advised to do so.
Fifty-two have been diagnosed as non-rheumatic.
One has been sent to a reformatory.

The total number of attendances of patients during 1929-30 is as follows :—

Kensington	Notified cases	(*a*) New	33
		(*b*) Old	258
	Unnotified cases	(*a*) New	92
		(*b*) Old	248
Hammersmith		(*a*) New	35
		(*b*) Old	85
Fulham		(*a*) New	4
		(*b*) Old	6
Hounslow		(*a*) New	3
		(*b*) Old	2
Paddington		(*a*) New	3
		(*b*) Old	12
Chelsea		(*a*) New	2
		(*b*) Old	1
			784

It is the considered opinion of the health visitors and officers of the Invalid Children's Aid Association, etc., that there are still cases of rheumatism which have escaped medical supervision in any form, in spite of the activities of the various bodies which are able and anxious to report their cases.

Hospital Accommodation.

St. Mary Abbots Hospital (Kensington Infirmary) have reserved 12 beds for rheumatic cases. The girls are accommodated, if possible, in a ward by themselves, which is advantageous, as it is essential to their proper treatment that these cases should be kept very quiet, and it is difficult for the nursing staff to give the children the necessary attention to attain this ideal in a large ward containing adults and children.

Two beds are reserved at the Princess Louise Kensington Hospital for children, but when the pressure on the beds permits more than two cases may be admitted.

Convalescent Treatment.

Very prolonged treatment is necessary in severe rheumatism cases, the essential factor being complete rest in healthy surroundings. In chorea also, and in mild cases, where there has been even slight cardiac involvement, it is imperative that the treatment should be extended over many months.

It has been definitely established that the danger of recurrences has been reduced by these means. Also where there has been cardiac involvement there is a certainty that the severity of the permanent damage to the heart is thereby lessened, or this serious disability may even be avoided altogether.

It is only in rare cases that home conditions make such prolonged domiciliary treatment possible. It is also much less depressing for a child to submit to this curtailment of his activities when surrounded by others undergoing the same restraint.

It is therefore satisfactory that the accommodation at convalescent hospitals and specially organised convalescent homes has increased, although it is still inadequate, and there are still long delays before admission to these institutions can be arranged.

During the year 1929-30, 28 children were sent away by the Invalid Children's Aid Association, working through the Centre for a period of a few weeks. The after treatment for the acute and sub-acute cases which had been admitted to St. Mary Abbots Hospital or the Princess Louise Hospital, was arranged by the institutions concerned, in conjunction with the Invalid Children's Aid Association. Under the London County Council Rheumatic Scheme many were sent to Queen Mary's Hospital, Carshalton, and to Highwood, Brentwood.

The Ladies' Association of the Princess Louise Kensington Hospital for Children pay for :—

2 Beds at West Wickham Heart Home.
1 Bed at Children's Heart Home, Lancing.

These beds are reserved for the benefit of children who have been in-patients of the above hospital.

The work of the Centre in regard to the disposal of severe cases, and the arrangements made for operative treatment, convalescence, etc., during 1929-30 may be summarised as follows :—

Tonsillectomy at Princess Louise Hospital	33
Admission to St. Mary Abbots Hospital	20
Admission to Princess Louise Hospital	9
(Special) Physically Defective School	10
Convalescence (average length of stay 11 weeks)	28

CLINICAL REPORT.

It is not possible to write a very full clinical report on the work of the centre this year as the writer of this part of the report has been in charge for a few months only.

It is clear from the examination of children at the supervisory clinic that there is great difficulty in the diagnosis of the earliest signs of juvenile rheumatism. It is unjustifiable and will not further our investigations to label as rheumatic any child who complains of pains just because no other cause for the pains can be found.

Rheumatic pains are described as occurring chiefly in the limbs, arms as well as legs, and particularly in the thighs, also at the back of the neck. They occur during the night as well as on exertion, and are, on the whole, more severe than pains due to other causes. In spite of this differentiation however, the picture is, very often, far from clear. There is at present no test, such as the Wasserman test for syphilis, which is specific for this disease.

Where the diagnosis is doubtful the child is kept under observation as a potential rheumatic. If the general health remains good, that is all that is necessary. Should the child lose weight, be languid and easily tired or lose appetite, closer investigation is arranged by the private doctor or the hospital.

It is also impossible to be dogmatic as to the early signs of cardiac involvement, authorities differ considerably as to those signs, and much investigation has still to be undertaken, and our clinical knowledge enlarged before there can be any certainty in the diagnosis of the earliest manifestations of rheumatic carditis.

*Dr. Carey Coombs believes that signs of cardiac insufficiency do not appear until the lesions are already established and severe, the earliest symptoms being entirely constitutional not cardiac. In any case the presence of a single sign, except perhaps enlargement of the heart, of which it is not easy to be certain when present to a minor degree, does not always make the diagnosis clear.

For instance, should one examine a case and find the following signs present, one would have no doubt that cardiac involvement was present.

(1) Tachycardia.

(2) Localised apical systolic murmur.

(3) An accentuated second sound in the pulmonary area.

(4) A mid diastolic murmur or audible third sound.

Taking these signs separately, however, it will be found that their presence as a single sign is not diagnostic.

Tachycardia.

Under this heading 414 cases have been analysed.

Pulse Rate.	Patients with juvenile rheumatism.					Patients with pains which may or may not be rheumatic.	Patients definitely not rheumatic.
	Rheumatic.		Chorea.		Total.		
70–80	0	+	0	=	0	6	1
80–90	34	+	14	=	48	76	12
90–100	25	+	17	=	42	60	2
100–110	30	+	9	=	39	54	2
110–120	11	+	4	=	15	12	3
120–130	7	+	7	=	14	18	2
130–140	2	+	1	=	3	2	0
over 140	1	+	2	=	3	0	0
Total ...	110	+	54	=	164	228	22
Total over 100				=	74	86	
Total over 120				=	20	20	

A comparison between the cases which were definitely juvenile rheumatism and the doubtful cases shows :—

All cases ... ... 42% were juvenile rheumatism 58% were indefinite cases.

All cases with pulse over 100 46·6% ,, ,, ,, 53·4% ,, ,, ,,

All cases with pulse over 120 50% ,, ,, ,, 50% ,, ,, ,,

The cases which were definitely not rheumatic are omitted as the object of the investigation was to ascertain whether the pulse rate was markedly higher in the child definitely suffering from juvenile rheumatism as compared with the case in which the diagnosis is not certain. As the pulse rate increased the percentage of cases which were definitely rheumatic increased, but to such a small extent that tachycardia cannot be said to be of much value as a diagnostic sign.

Apical Systolic Murmur.

Dr. Treadgold† has found that a localised apical systolic murmur can be detected in 50 per cent. of healthy young people if examined after exercise, prone and in the left lateral position. The writer has had a similar experience in examining healthy school children and statistics will be given in a later report.

Accentuated Pulmonary Second Sound

The pulmonary second sound is normally more marked than the aortic second sound in young children, and a slight accentuation is not important as a diagnostic sign

Audible Third Sound

The presence of an audible third sound at the apex is thought by some authorities to be a sure indication of active carditis, but even here Dr. Treadgold asserts "A triple rhythm is also of comparatively frequent occurrence at the apex in the left lateral position without necessarily having any clinical significance *per se*" The writer is of the opinion that, although this sign may not be definite evidence of rheumatic cardiac involvement in the child suffering from pains which may or may not be rheumatic in origin, it is, however, a sign which does not occur in an absolutely normal heart.

Value of Tonsillectomy in Rheumatism Cases.

An analysis of 414 cases.

These are divided into three groups.

A. Cases in which the first onset of symptoms was after complete tonsillectomy. The date of cardiac involvement in relation to tonsillectomy is often not known, but in rheumatic cases of this group there was no history of pains before tonsillectomy, although there was often a history of constant colds and sometimes of tonsillitis.

B. Cases in which the first onset of symptoms was after incomplete tonsillectomy.

* Carey Coombs. British Medical Journal. Feb. 1930.

† Treadgold. Proceedings of Royal Society of Medicine. Vol. xxiii, 1930.

C. Cases which had not had tonsillectomy or in whom the first onset of symptoms was before tonsillectomy. This group was not divided into those with healthy tonsils and those with unhealthy tonsils owing to the difficulty of making this differentiation accurately.

	A Cases.	Percentage of total of 60.	B Cases.	Percentage of total of 45.	C Cases.	Percentage of total of 309
Severe rheumatic carditis ...	1		1		18	
Milder cases but notifiable under scheme	11		8		71	
Chorea	7	56·6%	3	64%	40	71%
Rheumatic pains with no pyrexia or carditis	15		17		90	
Probably not rheumatic ...	15	43·4%	16	35%	79	29%
Definitely not rheumatic ...	11		0		11	
	60		45		309	

Cases in Group C who had complete tonsillectomy later, and who have developed further symptoms since that date are as follows :—

1 developed more severe heart lesion.

1 developed chorea.

1 had a second attack of chorea.

8 had a second attack of juvenile rheumatism with cardiac involvement.

28 continued to have rheumatic pains.

Although the percentage of cases in which a diagnosis of Juvenile Rheumatism was made is higher in the group which had not had tonsillectomy than in the group which had had complete tonsillectomy (71 per cent. to 56 per cent.), it cannot be shown that tonsillectomy is of any marked value in preventing the onset of rheumatism in children, for it will be noted that out of 60 children who had had complete tonsillectomy 18 developed rheumatism for the first time after the operation. Also 38 children, who had not had tonsillectomy at their first attack, showed further rheumatic symptoms after the operation. Most of the children who had definitely infected tonsils during their first attack have had tonsillectomy at a later date, but in a number of cases such a short time has elapsed since the operation that no conclusions can be drawn.

It does appear, however, that tonsillectomy has had some beneficial effect in modifying the severity of the disease as far as cardiac involvement is concerned. Out of 219 rheumatic children whose tonsils were intact, there were 18 cases or 8 per cent. classified as severe, whereas in the other group only one out of 34, or 2·9 per cent. was severe.

Also of the 7 cases of chorea whose onset was after complete tonsillectomy, none had carditis (although one developed carditis during a second attack which was after tonsillectomy), whereas of the 40 cases before tonsillectomy nine or 22 per cent. had an associated heart lesion.

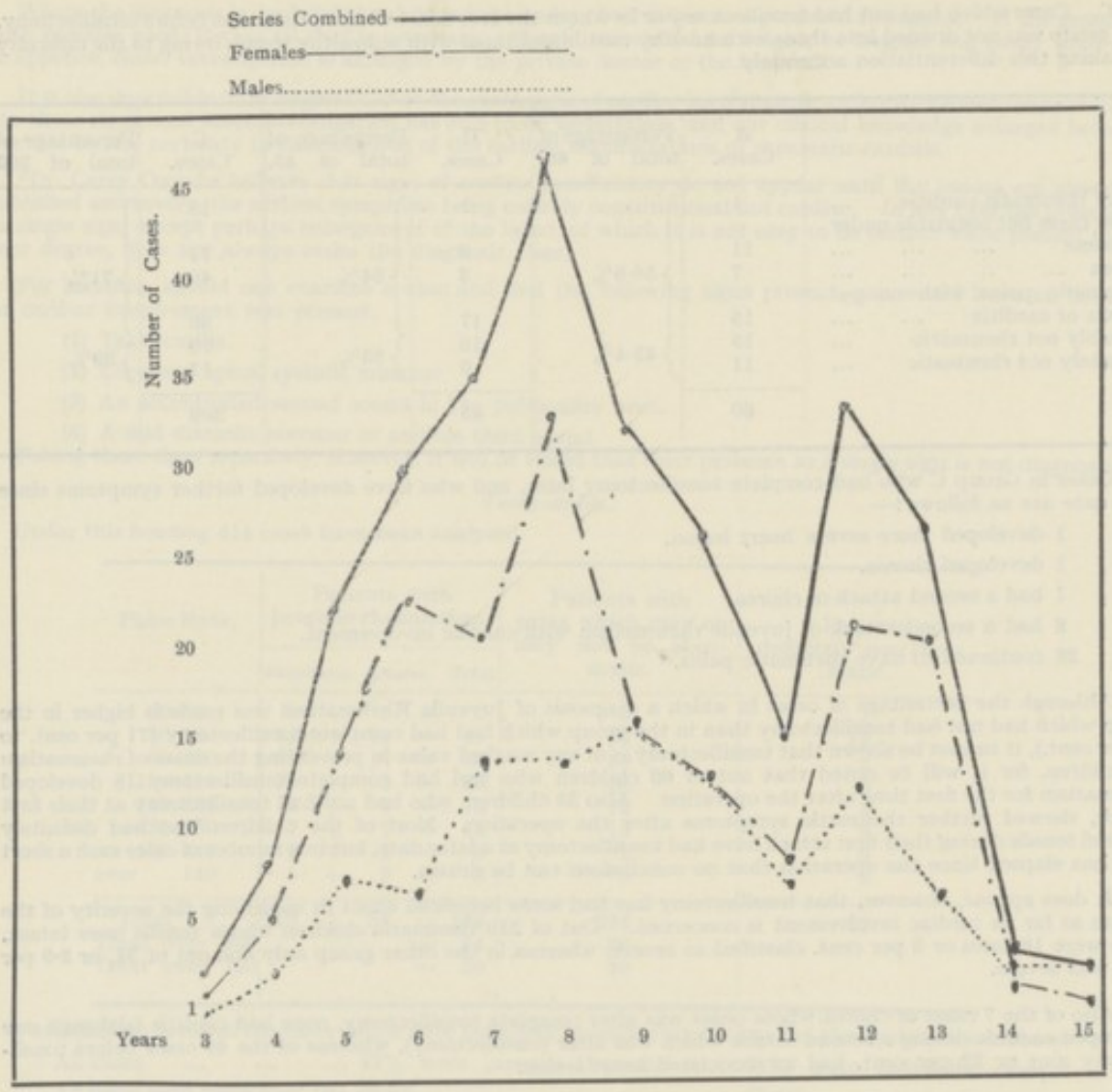
This modifying effect upon the severity of the disease does not apply to chorea.

The 45 cases in which incomplete tonsillectomy had been performed are omitted, as in some the throat appeared healthy, although some tonsillar remnants were present, whereas in others the throat was definitely unhealthy.

Age and Sex.

The Rheumatism Scheme of the Royal Borough of Kensington concerns itself only with children under the age of 16 years. The youngest child in the series was three years old and the eldest 15 years old. The ages of rheumatic children when first juvenile rheumatism was definitely diagnosed is shown in the table below and reproduced graphically on the next page. In the first Annual Report the ages when first the children presented themselves at the clinic was represented, so that the average age was older than in the present graph. The highest peak is at eight years, and there is a secondary peak at 12 years.

Ages.	Female. Rheumatism.	+ Chorea.	= Totals.	Male. Rheumatism.	+ Chorea.	= Totals.	Total. (Male and Female.)
3	2		= 2	1		= 1	3
4	4	+ 2	= 6	3		= 3	9
5	12	+ 3	= 15	8		= 8	23
6	18	+ 5	= 23	4	+ 3	= 7	30
7	19	+ 2	= 21	11	+ 3	= 14	35
8	24	+ 9	= 33	10	+ 4	= 14	47
9	15	+ 1	= 16	13	+ 3	= 16	32
10	9	+ 4	= 13	10	+ 3	= 13	26
11	8	+ 0	= 8	7	+ 0	= 7	15
12	20	+ 1	= 21	9	+ 3	= 12	33
13	16	+ 4	= 20	6	+ 0	= 6	26
14	1	+ 0	= 1	2	+ 0	= 2	3
15	0	+ 0	= 0	2	+ 0	= 2	2
	148	31	179	86	19	105	284
	52·3%	10%	63%	29·9%	6·7%	37%	



Out of a total of 284 cases.

Sixty-three per cent. were female and 37 per cent. male, or the proportion of male to female is as 1 : 1·7.

Taking the chorea cases alone the proportion of male to female is as 1 : 1·6. The proportion of males is higher in this series than in some others—the average has been stated to be 1 : 3.

APPENDIX II.

Report by North Kensington Medical Practitioners on the Infantile Mortality Rate in Kensington.

As a result of discussion at a meeting of the North Kensington Medical Society in October, 1929, an Infantile Mortality Committee was formed to investigate the statistics of deaths of infants under one year in Kensington during 1928.

The Committee wish to thank Dr. Fenton, the Medical Officer of Health, for giving them facilities for carrying out this investigation. On his suggestion the preliminary enquiries were carried out at the Town Hall, with the help of the Health Visitors, who knew the particulars of the cases. This was found to be of the greatest asistance in supplying the data necessary to form any opinion regarding the cause of illness and death in these infants.

In each case an attempt was made to classify the various environmental factors such as "Housing," "Income," etc., as "Good," "Fair," or "Bad," these being indicated by the letters "A," "B," and "C" respectively.

In the case of "Maternal Employment, Ante-Natal" a case was classed as "A" where the mother did no work during her pregnancy, as "B" when she was employed until she was six months pregnant, and "C" where she was employed during the last three months of pregnancy. In "Maternal Employment—Post Natal," "A" indicates a mother who did not go back to work during the first nine months of the baby's life; "B" a mother who resumed work when the baby was six months old, and "C" a mother who went back to work before the baby was six months old.

Classifications under "Feeding" are: "A", entirely breast-fed; "B", partly breast and partly artificially fed, or satisfactory artificial feeding; "C," unsatisfactory feeding.

Under "Size of Family," "A" is 1–3 children; "B" 4–6 children, and "C," 7 or more children.

From the collected data (Table I.), the Committee have attempted to come to some conclusions as to the causes of death, as is shown in the body of the Report.

Where it has been necessary to confirm or modify the purely statistical findings as a result of clinical experience the Committee have indicated this fact.

Table I shows the results obtained by collecting the particulars under the various headings, and represents the gross figures of infant deaths in 1928.

TABLE I.

	Housing.			Income.			Maternal Employment. Ante-natal.			Maternal Employment. Post-natal.			Feeding.			Maternal Care.			Foster-Care.			Size of Family.			Proximity of Open Spaces.		
	A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
Gastritis and Enteritis ...	5	5	5	7	1	7	12	1	2	14	–	1	2	8	5	7	2	6	1	–	1	6	5	4	10	4	1
Measles	1	3	4	3	1	4	7	–	1	7	–	1	4	4	–	6	1	–	–	1	–	2	4	2	5	2	1
Atrophy, Debility, and Marasmus	6	9	16	5	11	15	17	–	9	19	–	5	4	14	7	12	4	8	1	–	1	21	6	–	14	12	5
Bronchitis and Broncho-Pneumonia	21	20	20	23	14	24	48	4	7	48	3	3	30	18	7	29	14	11	4	–	2	33	18	5	24	25	12
Congenital Malformations	3	2	–	4	–	1	5	–	–	4	–	–	2	–	–	2	–	1	–	–	–	4	–	–	3	1	–
Convulsions ...	2	–	1	1	1	1	2	–	1	2	–	1	1	1	1	1	–	1	1	–	–	1	1	1	1	1	1
Whooping Cough... ...	–	1	2	–	–	3	1	–	2	1	–	2	1	2	–	1	1	–	1	–	–	1	1	1	1	1	1
Premature Birth ...	13	10	14	8	14	14	22	2	11	11	–	–	11	7	–	14	4	6	–	–	–	32	1	1	13	17	6
Complications of Birth ...	7	2	–	7	2	–	6	–	–	2	–	–	–	–	–	2	–	–	–	–	–	4	–	–	6	2	–
Other Conditions ...	7	8	3	9	4	5	14	2	1	14	–	1	7	6	2	10	5	1	–	–	1	12	4	–	5	12	1
	65	60	65	67	48	74	134	9	34	122	3	14	62	60	22	84	31	34	8	1	6	116	39	14	83	77	27

It will be seen that in 74 out of 189 cases (nearly 40 per cent.), the family income is "C," *i.e.*, unsatisfactory. It is important, therefore, to try to estimate how far poverty and the unsuitable conditions associated with it can be held responsible for infant mortality, and an attempt has been made to do this in Table II. For purposes of comparison the number of "C" entries in any case or group of cases has been taken as an index of bad environment. As might be expected, environment is shown to get worse as the family income gets less.

TABLE II. AVERAGE NUMBER OF "C" ENTRIES PER CASE OF—

	Marasmus.	Bronchitis.	Enteritis.	Measles.	Prematurity data	Prematurity corrected.
Class A Incomes	0·8	0·4	0·3	1·7	0.5	0·6
Class B ,, ...	0·8	0·7	—	1·0	0·6	0·8
Class C ,, ...	3·1	2·5	4·1	1·5	2·4	2·8

In cases with Class "C" incomes it will be seen that the number of "C" entries is so high that illness and death were probably due, not to any one adverse factor, but to the effects of several unsuitable environmental factors. These unsuitable conditions are mainly due in the first place to poverty, which must be the real cause behind a number of these deaths.

In the cases with Class "A" and Class "B" incomes, unsuitable conditions are fewer—though illness and death is still the answer, the equation is one with fewer variables—and it is these cases that the Committee has thought it most useful to investigate carefully. Any conclusions come to in this way as to the relative importance of certain environmental conditions can then be applied to these more obscure cases in families with poor incomes.

The information required for such investigation has been obtained for the diseases causing most deaths by taking the figures from Table I, and deleting from it the particulars of all cases with "C" incomes. In this way Table III has been constructed, containing data of cases with "A" or "B" incomes only. (In the second line the "Marasmus" figures are shown multiplied by 3 for ease of comparison with the "Bronchitis" figures.)

TABLE III.

Particulars of Cases, *excluding* those with "C" Incomes.	Housing.			Income.			Maternal Ante-natal.			Employment. Post-natal.			Feeding.			Maternal Care.			Foster-Care.			Size of Family.			Proximity of Open Spaces.		
	A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
Marasmus	5	5	6	4	11	–	8	–	3	9	–	1	2	8	2	8	1	1	–	–	–	9	3	–	7	5	4
Marasmus X3	15	15	18	12	33	–	24	–	9	27	–	3	6	24	6	24	3	3	–	–	–	27	9	–	21	15	12
Bronchitis...	20	14	3	23	14	–	31	2	3	31	2	2	17	12	3	24	3	4	3	–	1	21	10	2	17	14	6
Enteritis	5	2	1	7	1	–	7	–	1	8	–	–	2	6	–	7	1	–	1	–	–	4	4	–	5	2	1
Prematurity	11	7	5	8	14	–	14	1	7	8	–	–	4	5	–	11	2	1	–	–	–	20	–	–	9	12	2

It will be noticed that the omission from Table III of all cases with "C" incomes has not brought about the entire disappearance from the Table of "C" entries under other headings, which might conceivably be a factor in causing the deaths of these infants.

Accordingly Table IV has been constructed by leaving out the data of all cases with a "C" entry under any heading, except under "Proximity of Open Spaces" as this is not wholly under the control of the parents.

TABLE IV.

	Percentage of total Cases.	Housing.			Income.			Maternal Ante-natal.			Employment. Post-natal.			Feeding.			Maternal Care.			Foster-Care.			Size of Family.			Proximity of Open Spaces.		
		A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
Marasmus ...	16%	2	3	–	2	3	–	2	–	–	2	–	–	1	3	–	3	–	–	–	–	–	3	1	–	2	2	1
Bronchitis ...	38%	13	10	–	16	7	–	22	1	–	22	1	–	15	5	–	20	1	–	1	–	–	12	7	–	12	9	2
Enteritis ...	40%	4	2	–	5	1	–	6	–	–	6	–	–	1	5	–	5	1	–	1	–	–	3	3	–	4	1	1
Prematurity	38%	8	6	–	6	8	–	13	–	–	6	–	–	2	3	–	8	1	–	–	–	–	12	–	–	4	9	1

It will be noted that the numbers of cases remaining correspond to the numbers of "A" incomes shown in Table I—exactly in the cases of "Bronchitis" and "Marasmus" and approximately in the cases of "Enteritis." It appears, therefore, that lack of income is a large factor in producing the poor environment which excludes the remaining cases from Table IV. (See also "Prematurity.")

In Table V similar information has been obtained in a slightly different way—by setting out particulars of only such cases as have an "A" income.

TABLE V.

	Housing.			Income.			Maternal Ante-natal.			Employment. Post-natal.			Feeding.			Maternal Care.			Foster-Care.			Size of Family.			Proximity of Open Spaces.		
	A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
Marasmus	2	1	2	5	–	–	2	–	2	2	–	1	–	4	–	3	–	–	–	–	–	4	–	–	3	1	1
Bronchitis...	18	5	–	23	–	–	20	–	2	20	1	1	12	5	2	16	2	2	3	–	1	15	4	1	15	7	1
Enteritis	5	1	1	7	–	–	6	–	1	7	–	–	2	5	–	7	–	–	1	–	–	4	3	–	5	2	–
Prematurity	7	–	2	8	–	–	7	–	2	4	–	–	2	2	–	6	–	–	–	–	–	6	–	–	4	4	–

In Table VI the data regarding "Bronchitis" and "Marasmus" cases, neo-natal and total, are contrasted. (Neo-natal cases are shown also multiplied by 4 for more easy comparison.)

TABLE VI.

		Housing.			Income.			Maternal Ante-natal.			Employment. Post-natal.			Feeding.			Maternal Care.			Foster-Care.			Size of Family.			Proximity of Open Spaces.		
		A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
"Bronchitis" Cases.	Totals.	21	20	20	23	14	24	48	4	7	48	3	3	30	18	7	30	12	12	4	–	2	32	18	5	25	24	11
	Neo-N.X4	16	20	20	20	8	28	44	4	8	40	4	–	52	–	–	28	12	12	–	–	–	32	16	4	20	32	4
	Neo-Natal	4	5	5	5	2	7	11	1	2	10	1	–	13	–	–	7	3	3	–	–	–	8	4	1	5	8	1
"Marasmus" Cases.	Neo-Natal	3	2	3	–	5	3	2	–	4	4	–	–	1	3	–	2	1	1	–	–	–	5	1	–	4	3	1
	Neo-N.X4	12	8	12	–	20	12	8	–	16	16	–	–	4	12	–	8	4	4	–	–	–	20	4	–	16	12	4
	Totals.	6	9	16	5	11	15	17	–	9	19	–	5	4	14	7	12	4	7	1	–	–	21	6	–	14	12	5

Table VII shows the worse environment found associated with the deaths of illegitimate infants.

TABLE VII.

	Average number of "C" entries per case.		
	Total.	Legitimate.	Illegitimate.
Enteritis	2·1	1·7	3.7
Marasmus	2·0	1·7	2.6
Prematurity	1·5	1·1	2·3
Convulsions	2.7	2·0	4·0
Whooping cough	3·3	3·0	4·0
Measles	1·5	1·5	—
Bronchitis	1·3	1·1	2·5

BRONCHITIS AND BRONCHO-PNEUMONIA.

"Bronchitis" Group.

In this group of cases death is no respecter of houses or incomes. In the large majority of cases the mother's employment before or after confinement could not have affected the baby's health; more than half the cases were entirely breast-fed. From Table III it will be seen that there are 37 deaths from "Bronchitis" in families with "good" or "fairly good" incomes. In Table IV (no "C" entries at all), there are 23 deaths. None of these cases are illegitimate infants, and their home environment—entirely "A" or "B"—is probably above the average for the Borough. In Table V also (Class "A" incomes only) there are 23 deaths.

To account for these deaths it seems likely that there are other factors involved not shown on the lists, which are capable of causing ill-health and death, or that some factors estimated as satisfactory are really unsatisfactory, or there may be a combination of these malign influences.

To gain further knowledge as to the nature of these factors, it is perhaps easiest to consider cases of Broncho-pneumonia in three groups—those between six months and twelve months, those in the neo-natal group, and lastly, those between one month and six months.

In the first group—*i.e.*, six months to twelve months, some cases occur in apparently well-nourished children, but a large proportion of them exhibit manifestations of rickets (*vide* B.M.J., October 12th, 1919, article on "Control of Measles," and correspondence, October 19th to November 9th).

Rickets is due to a deficiency of Vitamin D in the diet, and those foods which contain Vitamin D are those which contain Vitamin A, which protects against infections. It would appear, then, that an avitamosis in A and D would be sufficient to account for the occurrence of Broncho-pneumonia associated in varying degree with symptoms of rickets in infants between 6 and 12 months old.

The Committee has had little clinical experience of bronchitis, etc., in infants of less than one month old, but thought that, to account for deaths at such an early age, there might be some other factors present, such as aspiration pneumonia or marasmus. Table VI, however, shows close correspondence between the figures for neo-natal deaths and those for the total "Bronchitis" deaths. (Compare lines 1 and 2). It is very unlikely that this similarity would be found if all the neo-natal deaths were cases of aspiration pneumonia, unless of course, the proportions of A, B and C environments appearing in these cases were the average environments of all infants in the Borough. Table VI shows also that there is little resemblance between the figures for neo-natal "Bronchitis" cases, and those for "Marasmus," either neo-natal or total. (Compare lines 3, 4 and 6). Altogether it seems likely that the neo-natal "Bronchitis" deaths are a true sample of the total "Bronchitis" deaths.

The Committee find it difficult to believe that an entirely healthy infant will die in less than a month as a result of any of the factors mentioned. It seems much more probable that early infant deaths occur among those born with a decided tendency to suffer from bronchitis, etc. It is now recognised that such an innate tendency may be present in an infant, if the environment, feeding, etc., of the mother during pregnancy have been unsuitable.

The following is an extract from an article by Professor Stuart J. Cowell, Professor of Dietetics in the University of London. ("Public Health," July, 1929).

> "There is another fat soluble vitamin that may influence the well-being of the young child, namely, Vitamin A, which has recently been called by Mellanby the anti-infective vitamin. The frequency with which mild grade infections attack young infants brought up in poor surroundings must have struck every observer; the nasal and bronchial catarrh and the attacks of enteritis which are so frequently met with may, in all probability, in many cases result from a deficiency of Vitamin A. Seeing that this vitamin can be stored up in the liver of young animals in very considerable amounts when the pregnant or lactating mother receives a liberal supply, it seems surely worth while seeing that the mother gets the necessary quantity so that her child may start off his independent life with a supply which may prove of great help to him in fighting infections he may have to encounter almost immediately after birth."

In cases where death occurs between one and six months, it is suggested that the causes are partly those mentioned in the preceding paragraphs, and partly deficiency in diet, as in older children. Clinical observation seems to confirm this. Great improvement has been seen in cases of bronchitis and broncho-pneumonia, both in breast-fed and bottle-fed infants, where vitamin preparations have been administered as well as the ordinary remedies.

So far, then, it would seem that an avitaminosis is a constant factor in the causation of these diseases during the first year of life. The question at once arises, "How is it that breast-feeding has failed to protect these children?"

It will be noticed that 30 infants were entirely breast-fed, 18 partly breast-fed, and 7 were artificially fed. From Table III, it will be seen that in families with good or fair incomes there are 17 deaths in entirely breast-fed babies, and 12 among those partially breast-fed. In Table IV, there are still 15 deaths in entirely breast-fed babies, and 5 among partly breast-fed.

When it is kept in mind that two other classes of infants—those who die after twelve months, and those who survive with more or less damaged constitutions—are probably fed on similar lines, it becomes a question whether the present implicit belief in the suitability of breast-feeding for all sorts and conditions of infants should not be modified. If it is accepted that environmental conditions can so affect a mother that her infant at birth is lacking in vitamins, it seems likely that her breast milk will be similarly lacking. Could a more unsuitable person be found to breast-feed this particular infant?

ATROPHY, DEBILITY AND MARASMUS.

"Marasmus" Group.

In these cases the proportion of Class C incomes is larger than in the Bronchitis group, and this must be a factor in causing the lowered vitality found in these cases. It is suggested, however, that in addition to that, there are other important contributory factors. There is a large proportion of small families, and this suggests early marriages and, therefore, young parents, or marriages late in life. In collecting these statistics, "Income" was estimated as average or usual income, and not merely a temporary lack of income through unemployment. Other things being equal, habitual lack of employment, or poorly paid employment, in a young man or woman, suggests lack of physical or mental ability, or both. Is it to be wondered at if the offspring show lack of vitality?

Table III contains only particulars of cases where the income is "good" or "fairly good." It will be seen by comparing the 2nd and 3rd lines of the Table that the proportion of unsatisfactory factors is greater in the Marasmus cases than in the Bronchitis cases. This is also shown in Table V and Table II. Table VII shows that in a family where a legitimate baby dies from marasmus there are 50 per cent. more bad environmental factors than in a family where a legitimate baby dies from broncho-pneumonia. Table IV shows that only 5 out of 31 cases of "Marasmus" are without a "C" entry (16 per cent.), while in "Bronchitis" 23 cases are left out of 61 (38 per cent.)

The difference between the figures under "Size of Family" in Marasmus and Bronchitis cases may be contrasted more easily by increasing the Marasmus figures by 50 per cent., giving A 32, B 9, C nil; compared with Bronchitis: A 33, B 18, C 5. It is interesting to speculate on the reasons for these differences. Does poverty cause marasmus in the children of young parents, and broncho-pneumonia in the children of more mature parents? Does low vitality of the parents produce a marasmic child and also a small family? Is there any evidence of a gradual decline in vitality from one generation to the next? That is, do instances occur of healthy grandparents, parents who suffered from rickets and broncho-pneumonia in their youth (with consequent lack of vitality), and marasmic children in the third generation? Is the lack of vitality in parents and offspring due in both cases to poor feeding?

Altogether, the "Marasmus" group of cases gives the impression of immaturity of parents, possibly of bad stock, lack of earning capacity, or poor management of domestic affairs. A number of cases of miscarriage, premature birth, and marasmus may be manifestations of the fusion of unsuitable elements from a genetic point of view.

GASTRITIS AND ENTERITIS.

"Enteritis" Group.

In this group there are a number of cases where the home conditions are very unsatisfactory. For instance, among the 12 legitimate cases there are four which have each "C" entries under "Income," "Feeding," and "Size of Family." Three of these have also "C" entries under "Housing" and "Maternal Care." These four cases and three illegitimate cases comprise all the cases in this group with "C" incomes. Particulars of the remainder of the "Enteritis" cases are given in Table III.

From Table IV it will be seen that 40 per cent. of the "Enteritis" cases are without a "C" entry, as compared with the "Marasmus" cases where only 16 per cent. pass this test. These figures may be contrasted with those for "Enteritis" and "Marasmus" in the first two columns of Table VII, which show that the average number of "C" entries for each case of either disease is substantially the same.

The explanation appears to be that there are two types of case in the "Enteritis" group—one in which the very bad environment and the clinical findings are like those in "Marasmus" cases, and one where, the environment being quite satisfactory, the cause of illness and death must be further enquired into. This is borne out to a certain extent by the figures for "Enteritis" in Table II.

Can the deaths shown in Tables III, IV and V be attributed to any of the factors mentioned? The only two that invite comment are the large proportion of "B" families and of "B" methods of feeding.

Three out of the four fairly large families, however, have "A" incomes, so that their home environment probably compares favourably with that of other families of similar size in the Borough.

From a clinical point of view frequent changes of diet is a common cause of gastric disturbances in infants; unsuitable food or lack of cleanliness may lead to enteritis. Whether these cases had difficulties while still being breast fed, and continued to have them when other methods of feeding were tried, or whether the trouble began only when artificial feeding was instituted is not known. There seems little doubt, however, that bad feeding, chiefly artificial, is the chief cause of death in this group, and this is shown from the figures in Table I.

Measles.

As this is a small group the Committee do not feel justified in drawing very definite conclusions from the statistics. Three out of the four fairly large families have poor incomes. The proportion of poor housing conditions is high. There is no case without a "C" entry—that is this group would not appear at all in Table IV. It is interesting to find that bad home conditions are shown by the statistics of these cases, because clinically serious illness and death are seldom found to supervene unless the infant has a poor constitution already. (See findings under "Bronchitis.")

Whooping Cough.

In this very small group the conditions are unsatisfactory throughout. Clinical experience suggests that poor constitution is the chief cause of death in these cases.

Premature Birth.

" Prematurity " Group.

In a number of these cases the mother was suffering from some illness or accident, and some of the " Prematurity " cases are probably due to lack of care on the part of the mother in the later months of her pregnancy, but the general opinion is that many such cases are the result of attempts to bring about a miscarriage at an earlier date. Premature births occur almost entirely in small families.

A comparison of the figures for the various diseases under the heading " Maternal Employment, Ante-Natal " (Table I) shows that employment late in pregnancy is likely to be a cause of premature birth, but it should be noted that the proportion of illegitimate children is high, 12 out of 37 cases. Of the 11 " C " entries under " Ante-natal Employment " eight are illegitimate infants, so that in these cases there is a combination of two adverse factors. Further light on these cases is thrown by Table VIII.

TABLE VIII.

	Housing			Per-centage of " C " hous-ing	Income			Per-centage of " C " in-comes	Maternal Employ-ment Ante-natal			Post-natal			Feeding			Maternal Care			Foster-Care			Size of Family			Proximity of Open Spaces		
	A	*B*	*C*		*A*	*B*	*C*		*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
Marasmus Cases	6	9	16	51%	5	11	15	48%	17	–	9	19	–	5	4	14	7	12	4	8	1	–	1	21	6	–	14	12	5
Prematurity Cases (Illegitimate) X2	8	2	14	58%	2	10	10	45%	4	2	16	4	–	–	8	4	–	6	–	6	–	–	–	22	–	–	18	2	4
Prematurity Cases (Legitimate) X2	18	18	14	28%	14	18	18	36%	40	2	6	18	–	–	14	10	–	22	8	6	–	–	–	42	2	2	8	32	8
Bronchitis Cases	21	20	20	33%	23	14	24	39%	48	4	7	48	3	3	30	18	7	29	14	11	4	–	2	33	18	5	24	25	12

It will be seen that the illegitimate cases show figures for their environment somewhat similar to those for the " Marasmus " group of cases. The legitimate cases, on the other hand, resemble in environmental data the " Bronchitis " group—the deaths do not seem to be determined in any way by conditions of housing, income, etc.

That environmental conditions are to a great extent satisfactory in these cases is shown in Table VII. (" Prematurity " figures have been corrected for the lack of reliable data under " Post-natal Employment " and " Feeding " by the addition of 20 per cent.). Table IV also shows that large numbers of these families are without bad home conditions.

As has been already noted, the number of cases appearing in Table IV usually corresponds to the number in Table V. In " Prematurity " cases the number considerably exceeds those shown in Table V. That is to say, good home conditions are more frequently found than would be expected from a consideration of the family income. This would seem to indicate that the type of parent in these cases was somewhat above the average.

The Committee suggest that two types of case are included in the " Prematurity " group. One, a small group, is similar in many ways to the " Marasmus " group, and the findings of the Committee on that group might apply here also. In the other, a large group, the premature births are not due to environment, as this is satisfactory, but to illness, accident, or lack of care in the later months of pregnancy, to previous attempts to terminate the pregnancy, or occasionally to the fact that the infant is genetically unsound.

Convulsions.

Congenital Malformations.

Complications of Birth.

Other Conditions.

The Committee do not propose to offer any observations on these cases.

Neo-Natal Deaths.

The gross neo-natal deaths are shown in Line 1 of Table IX, the total infant mortality in Line 2, and the difference between these two sets of figures, *i.e.*—the data of infants dying between one month old and twelve months old in Line 3. In Line 4 the data of neo-natal deaths are shown multiplied by two for ease of comparison with Line 3.

TABLE IX.

NEO-NATAL DEATHS COMPARED WITH DEATHS FROM ONE TO TWELVE MONTHS.

Deaths	Housing			Income			Maternal Ante-natal			Employ-ment Post-natal			Feeding			Maternal Care			Foster-Care			Size of Family			Proximity of Open Spaces		
	A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
1 0–1 month	36	21	21	29	14	24	51	3	17	34	1	–	28	12	–	31	9	10	–	–	–	54	8	2	34	34	8
2 0–12 ,, ...	65	60	65	67	48	74	134	9	34	122	3	14	62	60	22	84	31	34	8	1	6	116	39	14	83	77	27
3 1–12 ,, ...	29	39	44	38	34	50	83	6	17	88	2	14	34	48	22	53	22	24	8	1	6	62	31	12	49	43	19
4 Line 1 X2	72	42	42	58	28	48	102	6	34	68	2	–	56	24	–	62	18	20	–	–	–	108	16	4	68	68	16

This comparison brings out the interesting fact that the environmental conditions, under the headings of " Housing," " Income," and " Size of Family " in the case of infants failing to survive the first month of life are better than those in the case of infants dying in the next eleven months.

Neo-natal deaths, however, may be divided into two groups, the first containing cases of "Bronchitis," "Marasmus," "Enteritis" and "Prematurity," and the second "Complications of Birth," "Congenital Malformations" and "Other Conditions."

It will be seen from line 2 and line 3 of Table X that the environmental conditions in the first group are very similar to those of the total infant deaths from all causes, except that the proportion of "A" incomes is rather lower.

TABLE X.

	Housing.			Income.			Maternal Ante-natal.			Employ-ment Post-natal			Feeding.			Maternal Care.			Foster-Care.			Size of family.			Proximity of Open Spaces.		
	A	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*	*A*	*B*	*C*
1	21	17	21	14	11	23	36	3	17	26	1	–	25	11	–	24	8	10	–	–	–	44	7	2	23	28	8
2 (Line 1 X 3)	63	51	63	42	33	69	108	9	51	78	3	–	75	33	–	72	24	30	–	–	–	132	21	6	69	84	24
3	65	60	65	67	48	74	134	9	34	122	3	14	62	60	22	84	31	34	8	1	6	116	39	14	83	77	27

Line 1 is the neo-natal deaths from "Bronchitis," "Marasmus," "Enteritis," and "Prematurity."
Line 3 is the total deaths of infants under 1 year (see Table I.).

In the second group of neo-natal deaths the environmental conditions are decidedly above the average; it seems unlikely, therefore, that these deaths can be attributed to home conditions. It seems possible that good environment may be associated in some of these cases with later marriages and more difficult confinements associated with complications and birth injuries.

In the first group it is difficult to avoid the conclusion that deaths of those infants are not due to the bad influence of their surroundings, but frequently to an innate lack of the capacity to remain alive.

Between a baby that is full of energy and one with inanition the clinical differences are very great. They resemble so closely those found in animals, according to whether their diet contains or does not contain vitamins, that an avitamosis seems a possible explanation of these cases.

ENVIRONMENT.

In considering environment as a factor in the causation of the illness and death of these children, the Committee have indicated in the following paragraphs, if any alteration or improvement appears to be possible, the direction in which, in their opinion, action should be taken.

Housing.

The deaths of infants appear to occur equally in the good, fair, and bad types of house. It is interesting to note that Dr. Corry Mann, investigating rickets in Southwark, found that size of house, or air-space in the bedrooms, had no influence in producing rickets. (Special Report No. 68 of the Medical Research Committee, 1922). The number of houses classed "A" is based on a comparison with the average for the borough, but many of these houses leave a great deal to be desired. Of the houses classed as "C" many are very unsatisfactory basements.

Income.

Poor incomes affect the child's health probably mostly by reason of poor feeding, such a child having little resistance, and being prone to take any disease.

In families with "A" and "B" incomes, on the other hand, there is not the excuse of poverty, and the Committee feel that the proportion of deaths in these cases is higher than it should be.

Ante-Natal Maternal Employment.

In considering the 34 "C" entries under this heading, it should be noted that 23 of the 34 are illegitimate infants. In the 11 "Prematurity" cases included in the 34, 8 are illegitimate. The combined effect of illegitimacy and work in the last three months of pregnancy must be a serious adverse factor capable of producing poor health in the infant.

Ante-natal employment *per se* does not appear to be a very large factor in the causation of the infantile mortality in Kensington.

Post-Natal Maternal Employment.

It will be seen that 122 mothers did not resume work till the baby was 9 months of age or more. If we exclude "Congenital Malformations," "Complications of Birth," and "Other Conditions," we have still left 102 mothers who stayed at home to look after their family. Of the 102 children, 40 were entirely breast fed and 35 were partly breast fed, a total of 75.

It is evident that home nursing of an infant by its mother is not necessarily satisfactory, unless certain other factors are satisfactory also, as suggested elsewhere in this Report.

Feeding.

Before considering the extent to which feeding may contribute to the causes of illness and death of these infants it may be useful to summarise the information available on this subject.

In infants, as compared with adults, a greater proportion of the food taken is devoted to tissue-building. If these tissues are to be healthy—if the infant is to have a sound constitution—the importance of using from the beginning sound materials in the building process is apparent.

We have little or no control over the waves of illness that from time to time sweep over the community, but we know that the well-built child with a sound physique will survive the storm, while the child with a poor constitution will become waterlogged and sink.

It is now recognised that without an adequate supply of vitamins in the diet of a growing child healthy growth and development is impossible.

We may now consider whether the usual food of an infant in its first year is satisfactory. The food may be :

(*a*) Breast milk.
(*b*) Cows' milk.
(*c*) Dried milk or patent foods.
(*d*) Ordinary foodstuffs.

For several reasons it is convenient to take (*b*) first.

Cows' Milk.—It is agreed that the quality and vitamin content of cows' milk vary very considerably. Milk produced by cows which are grass fed in the open is likely to contain sufficient vitamins, but when these ideal conditions do not obtain there is found a serious deficiency in Vitamin D, and also some deficiency in Vitamin A. This deficiency is apparently quite common ; in the milk of cows fed on oil-cake Vitamin D is completely absent.

In practice children are frequently seen who show varying signs of defective development, where the feeding has been cows' milk and water, with some orange juice each day. The Committee suggest that as such feeding is seriously lacking in fat and in Vitamins A and D it cannot be regarded as satisfactory.

After weaning also, the position is unsatisfactory. In many families it has been noted that owing to poverty an altogether insufficient quantity of milk is being given to the children, so that their chances of getting adequate supplies of Vitamin D must be small.

Breast Milk.—The Committee are agreed that in suitable cases, where the mother has a natural capacity for breast feeding and a placid temperament, there is no better method of infant feeding. It seems likely, however, that the environmental conditions under which many mothers attempt to produce breast milk may be as likely to lead to bad results as the somewhat similar conditions referred to above which lead to the production of unsuitable cows' milk. Especially is this so if we add the effect of financial or domestic worries to the effects of poor feeding, lack of fresh air, and lack of sunlight.

Confirmation of this view may be found in the following quotations from No. 38 of the Medical Research Council's Reports, published in 1919.

" . . . But it is most important to remember that it has been proved experimentally that the mother is entirely dependent upon her own food supply to provide her young with these substances, and should her diet be deficient in this respect, they will suffer, sooner or later, in spite of any sacrifices she may make."

" From a consideration of a number of the dietaries consumed by the poorer classes in the towns of this country, one is led to suggest that no inconsiderable proportion of the population is existing on a food supply more or less deficient in the fat soluble factor. If that is so, it must follow that thousands of infants which are being nursed by the women of this population, are indirectly being deprived of an adequate supply of that substance during the period of their life when it is vitally important that they should suffer from no dietary deficiency."

It is by no means rare for breast-fed babies to be brought to a doctor showing quite definite signs of rickets. Frequently the weekly gain in these cases proves to be about 4 ounces. The Committee feel that where an infant's weekly increase in weight falls to as low a figure as this, not only should the feeding methods in use be looked on with great suspicion, but the infant should be regarded as an early or commencing case of malnutrition. Prompt action directed to improving the feeding can only have good results, whether the baby is breast-fed or bottle-fed ; acceptance of these small gains as satisfactory is likely to be followed by the appearance at some later date of other signs of avitamosis, malnutrition, and lessened resistance to disease.

The Committee understand that improvement has been noted in some cases where the mother has been supplied with extra meals. While this must be of use in these cases where the mother's diet has been insufficient, it should be noted that in many of these cases the quality and not the quantity of food has been at fault. This suggests that a small addition to the mother's diet of food rich in vitamins might be tried, or the more direct administration of concentrated vitamin preparations to the infant.

Professor Cowell (loc. cit), states :—

" The ill-effects of a faulty diet, particularly in the young, may persist long after the fault has been remedied. If, then, the maximum benefit is to be gained from correct feeding, such feeding must be instituted at the earliest possible moment in the life of the child, and that implies attention to the ante-natal feeding of the mother."

He makes the following practical suggestions :—

(1) " The diet of the pregnant mother, particularly during the later period of gestation, should include an abundant supply of milk to provide calcium and good protein ; green vegetables to supply iron and vitamin A, and butter or vitaminised margarine and eggs to furnish the fat soluble vitamins A and D. It is recommended that additional supplies of vitamins A and D should be given for some weeks before parturition, in the form of either cod-liver oil, or of a reliable concentrated preparation."

(2) " During early infancy, milk should be supplemented by some rich source of the fat soluble vitamins—either cod-liver oil or a concentrated preparation which contains vitamin A as well as vitaimn D. Yolk of egg may be given after the second month of life ; this supplies iron as well as fat soluble vitamins, and is particularly valuable to the artificially-fed infant."

Dried Milk and Patent Foods.—A few years ago, and to a lesser extent nowadays, feeding on dried milk or patent foods frequently produced a large, flabby infant that subsequently " fell away to nothing " (to use an expression commonly employed by the mothers of such children), usually after a severe attack of bronchitis.

Nowadays most of the manufacturers supply a foodstuff that approximates very closely to the standard of good breast milk, and contains an adequate amount of the necessary vitamins. Such a food must, in many cases, be better for the infant than the breast milk or cows' milk it would otherwise receive, and this is borne out by the excellent late results obtained by this method of artificial feeding.

Ordinary Food Stuffs.—After seven months the infant will receive some of the ordinary foodstuffs used by the family, and the considerations advanced above as to the way in which this food is lacking would apply here also.

In this connection it should be mentioned that instruction of the mother by means of leaflets, such as those of the London Public Medical Service which deal with breast feeding and feeding after seven months, has been found to give good results.

Maternal Care.

In 23 per cent. of cases this was "poor," in 21 per cent. "fairly good." The comparatively low percentage of good mothers must be a factor in causing the illness and death of these infants. This rather confirms what is found in general practice—that the chief factor in producing a robust child is maternal care. When a good mother has in addition the advantage of sound advice on child management, the results are very good.

The following is quoted from "Better Health," for June, 1930 :—

"The children from our poorer quarters would appear to be ill-nourished and unsuitably fed. . . . There can be little doubt that part of this is due to improvidence on the part of the parents, part to parental laziness, cooking being too much trouble. In some cases it is, of course, the result of unavoidable poverty.—Dr. Austin Priestman, Folkestone."

Foster-Care.

The scanty figures would suggest either that very few Kensington infants were looked after except by their parents, or that the standard of foster-care in the borough was high, and that deaths, therefore, were few. Possibly in some future investigation this point may be cleared up.

Size of Family.

The figures in Table I seem to show that size of family by itself has little bad effect on the health of the children. This corresponds to the conclusions come to on this point in Dr. Corry Mann's report already referred to. The Committee feel that the death-rate in small families is higher than it should be.

Proximity of Open Spaces.

This appears to have little influence on the death-rate ; this was the finding also in Dr. Corry Mann's report. But it must be kept in mind that as few of these families have gardens, an open space is a necessity, and in only 83 of the 187 cases was this easily available.

Cleanliness of Streets.

The Committee are satisfied with the steps taken by the Borough Council to cleanse the streets, and do not wish to suggest that these are in any way inadequate. But a great deal of filth is deposited on the pavements and streets which could otherwise be disposed of. In certain streets the washings of butchers', fishmongers', and some grocers' shops run slowly over the pavements to reach the gutter, where they lie in pools till evening. On the other hand bakers, confectioners, and other grocers appear to be able to secure a (presumably) equal degree of cleanliness in their shops and to dispose of the washing water by waste-pipes inside their premises.

On Mondays the general messy condition of the streets is added to by the ostentatious washing of the furniture of the butchers' shops, partly on the pavement, partly in the roadway.

There are several ways in which these conditions may adversely affect the health of the community. In the first place, actual decaying material may be conveyed into the houses. Also there is the general depressing effect of such conditions. Then from an educative point of view it seems wrong that school children should come to consider such a state of affairs as normal.

That the ordinary citizen should share the responsibility for keeping the streets clean by preventing them from becoming dirty is the suggestion conveyed by the receptacles fixed to lamp-posts, etc., in this and other boroughs. The Committee feel that an extension of this principle is urgently required in the case of those responsible for the state of affairs mentioned in the preceding paragraphs.

The Committee feel that this Report suffers because there has been no opportunity of comparing the figures with similar figures from other areas or with those for normal children in this area.

The Committee suggests, however, that a similar investigation, carried out not only in Kensington, but over the same period in the adjacent Boroughs of Paddington and Hammersmith, might produce extremely helpful data which would either confirm or contradict the findings of the present Report. As these three boroughs are the area covered by the Kensington Division of the B.M.A., possibly such an investigation might be carried out under the auspices of this Division with the co-operation of the Medical Officers of Health concerned.

In view of this possibility the Committee has appended a schedule of the more detailed information which, in the light of the experience gained by the present investigation, they think should be obtained regarding each infant mortality case, before it is classified as A. B or C.

SCHEDULE OF INFORMATION,

Housing	No. of rooms. Individuals per room. Water supply and sanitation. Self-contained or tenement.
Income	Total income. Income less rent. Income per head.
Maternal Employment ...	Ante-natal. Post-natal.

Maternal Health ...	General health. Previous miscarriages. Health during pregnancy.
Feeding	Nature of feeding. Continuity of methods of feeding. Age of weaning. Quantity and quality of food given. Gain in weight.
Maternal Care	Previous deaths of children. Advice sought from clinics or doctors. Capacity for looking after children and following advice.
Size of Family	No. of Miscarriages. ,, ,, Still births. ,, ,, Children born alive. ,, ,, Previous deaths. ,, ,, Children living.
Spacing of Children in Family.	
Age of Parents	
Proximity of Open Spaces	
Neo-natal Deaths ...	Age of infant in days.

Summary of Conclusions and Recommendations.

"Bronchitis" deaths are in the main not due to environment, but to avitamosis caused by faulty feeding of mother and/or baby.

In many cases breast-feeding does not supply the infant with sufficient vitamins to keep it healthy.

Similarly, in feeding with modified cow's milk the infant may not receive sufficient vitamins in its food.

Most of the "Marasmus" cases and some of the "Enteritis" and "Prematurity" cases occur where the environment is bad, and it seems likely that poor stock is a factor in these cases as well as poverty.

Where "Enteritis" cases occur in good environment, poor feeding is the most likely cause of the illness. "Prematurity" cases are not, as a rule, due to bad environment.

Neo-natal deaths are not due to environment, but in many cases to an innate lack of vitality in the infant. Avitamosis is suggested as the cause of this.

Death of a legitimate infant is seldom due to the mother working while pregnant.

Carelessness of some residents and shop keepers in allowing the streets to become foul with domestic refuse from houses and waste matter from shops may contribute to the causation of "dirt" diseases, and greater care on the part of residents and shop keepers themselves would secure much improvement.

The Committee suggest that it would be possible to make use of the facilities afforded by the local Clinics to improve the health of these infants, and also to confirm, if possible, the findings of this Report, in the following manner :—

At an Ante-natal Clinic the dietary of a group of pregnant mothers might be supervised as suggested, and any results on the health of infants noted.

At an Infant Welfare Centre or Clinic a group of normal breast-fed babies might have their food supplemented as suggested, and their health compared with that of a similar group of babies who had nothing but breast feeding.

Similar comparisons might be made between two groups of normal bottle-fed babies.

The effects of giving vitamin preparations might be noted also in three groups of cases which had deviated from the normal :—

(*a*) Broncho-pneumonia cases.

(*b*) Marasmus and Enteritis cases.

(*c*) Cases with small weekly gain in weight.

Investigation of the environment of one or two groups of healthy infants attending the Clinics might be carried out to provide normal figures as a "control" for the data of unhealthy babies obtained in any similar investigation in the future. (The information required might be obtained from the groups already under observation.)

The deaths of infants in Kensington should be investigated for a further period of 12 months, if possible in conjunction with investigations on parallel lines in the neighbouring boroughs, and a further Report issued. This investigation might best be conducted by a series of meetings at short intervals, at which any deaths occurring since the previous meeting might be gone into while full particulars of the case were still available.

(*Signed*) H. E. BARRETT.
A. KEITH GIBSON.
ELEANOR M. REECE.

This Report is issued with the approval of the North Kensington Medical Society.

APPENDIX III.

TABLE I.

Vital Statistics of Whole District for 1930 and previous Years.

Year	Population estimated to middle of each year.	Births.			Total deaths registered in the district.		Transferable deaths.		Nett deaths belonging to the district.			
		Uncorrected Number.	Nett.				of non-residents registered in the district.	of residents not registered in the district.	Under 1 year of age		At all ages.	
			Number.	Rate.*	Number.	Rate.*			Number.	Rate per 1,000 nett births.	Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1925 ...	‡179,600 B 179,400 D	2,494	2,846	15·8	2,830	15·7	930	468	223	78	2,368	13·2
1926 ...	‡180,000 B 179,800 D	2,405	2,717	15·1	2,564	14·2	816	557	164	60	2,305	12·8
1927 ...	‡176,700B 176,500D	2,270	2,657	15·0	2,550	14·4	656	546	176	66	2,440	13·8
1928 ...	‡178,400B 178,200D	2,184	2,559	14·3	2,477	13·8	694	543	213	83	2,326	13·0
1929 ...	‡176,000B 175,800D	2,139	2,544	14·4	2,889	16·4	733	552	213	84	2,708	15·4
1930 ...	176,000	2,154	2,580	14·7	2,401	13·6	749	590	177	69	2,242	12·7

* Rates calculated per 1,000 of estimated population.

‡ B. Population as estimated by the Registrar-General for the calculation of birth rate.
D. " " " " " " " death rate.

At Census of 1921.

Area of district in acres (exclusive of area covered by water)	2,291	Total population at all ages	175,859
		Total families or separate occupiers ...	43,001

TABLE II.

Cases of Infectious Disease notified during the Year, 1930.

Notifiable Disease.	Number of cases notified.								Total cases notified in each ward.									Total cases removed to hospital.
	At all ages.	At ages.—Years.							St. Charles.	Golborne.	Norland.	Pembridge.	Holland.	Earl's Court.	Queen's Gate.	Redcliffe.	Brompton.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.										
Small-pox	4	...	...	...	...	2	1	1	...	2	1	...	...	...	...	1	...	4
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	3	...	...	3	...	...	...	...	2	...	...	1	...	...	...	...	...	1
Plague	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup)	329	4	114	133	53	20	4	1	61	70	49	26	31	27	27	25	13	322
Erysipelas	68	6	4	1	14	13	23	7	10	14	8	6	8	7	5	6	4	46
Scarlet fever ...	411	5	113	218	48	21	6	...	82	93	80	41	30	30	20	28	7	384
Typhus fever ...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Enteric fever ...	32	...	1	6	14	7	4	...	2	5	1	1	3	5	5	7	3	22
Continued fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever ...	8	...	...	...	2	6	...	...	2	...	1	3	1	...	...	...	1	5
Puerperal pyrexia ...	24	...	...	...	6	18	...	...	9	3	2	4	1	...	1	3	1	13
Encephalitis lethargica...	2	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	1	1
Cerebro-spinal meningitis	3	...	1	...	...	2	...	...	...	1	1	...	1	...	...	...	...	3
Polio-myelitis and Polio-encephalitis	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Pulmonary tuberculosis ...	202	1	3	27	87	72	7	5	44	35	30	27	17	15	7	16	11	149
Other forms of tuberculosis	58	...	4	16	10	19	9	...	12	11	12	7	4	4	1	4	3	25
Ophthalmia neonatorum	11	11	...	...	...	...	...	...	1	2	4	1	1	1	...	1	...	5
Primary pneumonia	185	15	58	29	20	30	23	10	34	89	31	8	6	5	4	5	3	106
Influenzal pneumonia	36	3	4	3	3	12	7	4	8	14	5	5	2	1	1	...	...	16
Malaria	3	...	...	...	...	3	...	...	...	..	2	...	...	...	...	1	...	3
*Enteritis	85	42	43	...	...	...	...	...	17	21	38	4	4	1	...	...	...	31
†Acute rheumatism ...	99	...	1	93	5	...	...	...	18	31	35	7	5	2	...	...	1	47
Totals ...	1564	88	346	529	262	225	86	28	303	392	300	141	114	98	71	97	48	1086

* Notifiable only in children under the age of 5 years.

† „ „ „ „ „ 16 years.

Cases of mistaken diagnosis are excluded from the above table.

TABLE III.

Causes of Death at Different Periods of Life in 1930.

Causes of Death	Sex.	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and under 75 years.	75 and upward
ALL CAUSES	M.	1,002	95	26	11	24	23	125	282	232	184
	F.	1,240	82	21	12	16	34	139	300	248	388
Enteric fever	M.	1	...	...	...	1	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...
Small-pox	M.	..	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...
Measles	M.	19	4	10	4	31	...	...	...	...	...
	F.	20	3	7	6	4	...	...	...	...	...
Scarlet fever	M.	1	...	...	...	1	...	...	...	...	...
	F.	2	...	1	...	1	...	...	...	...	...
Whooping-cough	M.	2	2	...	...	...	..	..	...	...	...
	F.	2	2	...	...	...	...	...	...	...	...
Diphtheria	M.	9	1	2	1	4	...	...	1	...	...
	F.	4	1	1	2	...	...	...	...	...	...
Influenza	M.	12	1	...	...	...	1	2	4	2	2
	F.	19	2	1	...	...	...	1	5	6	4
Encephalitis lethargica	M.	...	...	...	...	...	...	...	...	...	...
	F.	4	...	...	...	...	...	1	1	1	1
Meningococcal meningitis	M.	2	2	...	...	...	...	.	...	...	...
	F.	2	...	1	...	...	...	1	...	...	...
Tuberculosis of respiratory system	M.	81	1	1	...	2	7	34	25	8	3
	F.	59	...	...	...	2	15	27	13	1	1
Other tuberculous diseases	M.	16	2	1	1	4	2	3	3	...	...
	F.	9	2	...	...	2	1	2	2	...	...
Cancer, malignant disease	M.	120	...	...	...	...	...	7	55	38	20
	F.	191	...	...	...	1	2	20	76	39	53
Rheumatic fever	M.	3	...	...	...	2	..	1	...	.	...
	F.	1	...	...	...	...	1	...	...	...	...
Diabetes	M.	7	...	...	...	...	1	...	2	3	1
	F.	11	...	...	...	...	...	...	4	5	2
Cerebral hæmorrhage, etc.	M.	34	...	...	...	...	...	...	7	17	10
	F.	45	...	...	...	...	...	...	12	13	20
Heart disease	M.	171	...	...	...	...	1	13	50	55	52
	F.	289	...	...	...	...	3	15	62	76	133
Arterio-sclerosis	M.	51	...	...	...	...	...	1	7	18	25
	F.	79	...	...	...	...	...	...	12	19	48
Bronchitis	M.	46	1	...	...	...	...	2	14	17	12
	F.	57	...	1	1	...	...	1	11	14	29
Pneumonia (all forms)	M.	87	15	5	1	1	1	17	24	13	10
	F.	89	16	7	1	1	3	14	19	10	18
Other respiratory diseases	M.	6	...	...	..	...	...	...	3	3	...
	F.	13	1	...	...	...	...	2	3	1	6
Ulcer of stomach or duodenum	M.	17	...	...	...	...	...	3	7	5	2
	F.	8	...	...	...	...	...	2	3	1	2
Diarrhœa, etc.	M.	23	20	2	...	...	...	1	...	...	...
	F.	23	14	2	...	...	1	1	2	1	2
Appendicitis and typhlitis	M.	12	...	...	1	...	2	3	5	1	
	F.	8	...	...	...	..	1	2	1	2	2
Cirrhosis of liver	M.	8	...	...	...	...	...	1	5	2	...
	F	3	...	...	...	..	...	1	2	...	...
Acute and chronic nephritis	M.	33	...	...	...	1	...	3	13	7	9
	F.	36	...	...	...	1	...	2	7	13	13
Puerperal sepsis	M.	...	...	...	...	...	...	...	...	...	...
	F.	6	...	...	...	...	2	3	1	...	...
Other accidents and diseases of pregnancy and parturition	M.	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...
Congenital debility and malformation, premature birth	M.	44	43	...	...	...	1	...	...	...	...
	F.	29	28	...	1	...	...	..	...	...	...
Suicide	M.	21	...	...	...	...	1	6	9	3	2
	F.	20	...	...	...	...	1	9	6	2	2
Other deaths from violence	M.	38	...	1	3	4	3	8	12	4	3
	F.	45	2	...	1	1	1	11	12	8	9
Other defined diseases	M.	136	3	2	...	3	3	20	36	36	33
	F.	165	11	...	...	3	3	24	46	35	43
Causes ill-defined or unknown	M.	2	...	2	...	...	...	...	...	...	...
	F.	1	...	...	...	...	...	...	...	1	...

TABLE IV.

INFANT MORTALITY DURING THE YEAR 1930.

Nett Deaths from stated Causes, at Various Ages, under One Year of Age.

Cause of death.	Under 1 week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total deaths under one year.
All causes. Certified	37	6	5	4	52	40	34	23	16	165
All causes. Uncertified	5	...	...	...	5	3	3	1	—	12
Measles	...	...	...	...	...	...	2	2	3	7
Whooping-cough	...	...	...	...	...	1	1	1	1	4
Diphtheria	...	...	...	...	...	...	...	1	1	2
Influenza	...	...	...	...	...	1	1	1	...	3
Encephalitis lethargica	...	...	...	...	...	...	...	...	...	...
Meningococcal meningitis	...	...	...	...	...	...	...	1	1	2
Tuberculosis of respiratory system	...	...	...	...	...	...	...	...	1	1
Other tuberculous diseases	...	...	...	...	...	3	1	...	...	4
Bronchitis	...	...	...	...	...	...	1	...	...	1
Pneumonia	...	2	1	...	3	10	11	5	2	31
Other respiratory diseases	...	...	...	...	...	...	...	1	...	1
Diarrhœa, etc.	...	...	...	...	...	5	15	8	6	34
Congenital debility	...	...	...	...	...	15	4	2	...	21
Malformation	6	1	2	2	11	3	1	1	...	16
Premature birth	25	3	1	2	31	3	...	...	...	34
Other deaths from violence	1	...	...	...	1	...	...	...	...	1
Other defined diseases	10	...	1	...	11	2	...	1	1	15
	42	6	5	4	57	43	37	24	16	177

Nett births in the year of { legitimate, 2,351. / illegitimate, 229. }

Nett deaths in the year of { legitimate infants, 150. / illegitimate infants, 27. }

TABLE V.

The Work of the Women Health Officers for the Year 1930.

	HEALTH OFFICERS							TOTAL.
	1	2	3	4	5	6	7	
Child Welfare—								
First visits to infants	323	277	288	333	328	107	230	1,886
Return visits to infants	890	557	412	750	956	434	482	4,481
Visits to children between 1 and 5 years	1,656	1,419	1,392	1,132	646	873	712	7,830
Stillbirth enquiries	7	9	7	4	14	4	7	52
Visits to ophthalmia cases	2	4	8	6	4	2	4	30
Return visits to ophthalmia cases	—	6	8	18	32	14	9	87
Visist to measles cases	311	272	276	32	308	164	148	1,511
Visits to whooping cough cases	7	2	5	3	58	15	9	99
Visits to puerperal fever cases	—	—	2	—	1	1	—	4
Visits to puerperal pyrexia cases	3	2	3	7	6	1	4	26
Visits to enteritis cases	38	16	43	11	29	4	1	142
Infantile death enquiries	21	20	14	25	39	10	24	153
Milk investigations	86	16	59	110	173	16	43	503
Ante-natal visits	48	38	87	113	124	126	173	709
Half-days at welfare centres	145	143	143	130	196	99	101	957
Special Visits	133	129	109	236	282	362	374	1,625
Tuberculosis—								
PULMONARY.—First visits	40	13	31	36	24	28	64	236
Re-visits	216	140	213	228	237	262	389	1,685
NON-PULMONARY—First visits	12	7	9	10	4	7	13	62
Re-visits	118	96	142	51	48	89	88	632
Rheumatism—								
First visits to cases notified	7	13	19	14	28	7	2	90
Factories and Workshops Act.								
Inspections of factories	4	41	37	2	—	12	2	98
Inspections of workshops	11	15	22	13	32	329	296	718
Inspections of outworkers' premises	36	8	19	35	74	99	61	332
Inspections of other workplaces	—	—	—	4	—	5	3	12
TOTAL VISITS	4,114	3,243	3,348	3,303	3,643	3,070	3,235	23,956
Notices issued under the Public Health Act—								
Intimation notices	4	—	—	1	—	3	5	13
Statutory notices	—	—	—	—	—	—	—	—
Final notices	—	—	—	—	—	—	—	—
Summonses	—	—	—	—	—	—	—	—

TABLE VI.

Vaccination Officer's Return respecting the Vaccination of Children whose Births were Registered in 1929.

DATE.	Registration sub-districts comprised in vaccination officer's district.	Number of births returned in birth list sheets.	number of these births duly entered in columns 1, 2, 4, and 5 of the vaccination register (birth list sheets), viz.:				Number of these births which are not entered in the vaccination register, on account, (as shown by report book) of				Total number of certificates of successful vaccination received during the calendar year, 1930.
			Column I. successfully vaccinated.	Column II.		Column V. dead, unvaccinated.	Postponement by medical certificate.	Removed to other districts and notified to vaccination officers of the districts.	Removal to places unknown, or which cannot be reached, and cases not having been found.	Not accounted for.	
				Insusceptible of vaccination.	Certificate of conscientious objection.						
1929	1	2	3	4	6	7	8	9	10		
1st January to 31st Dec.	North	1,292	888	10	251	69	16	33	16	9	1,810
	South	846	553	13	99	53	19	52	45	12	
	TOTAL	2,138	1,441	23	350	122	35	85	61	21	

TABLE VII.

PARTICULARS OF THE STAFF OF THE PUBLIC HEALTH DEPARTMENT AT THE END OF 1930.

(as required by Ministry of Health Circular 359).

	Year of Appointment
Medical Officer of Health and Administrative Tuberculosis Officer.	
James Fenton, M.D., D.P.H.	1920
Assistant Medical Officer of Health and Tuberculosis Officer.	
A. W. K. Picard, M.D.	1922
Consultant Medical Officers (Part time).	
Hugh R. Carter, M.D., (Treatment of Zymotic Enteritis)	1924
Remington Hobbs, M.D., (Consultant Gynaecologist)	1926
Janet K. Aitken, M.D., (Rheumatism Supervisory Clinic)	1927
Thomas S. Keith, M.B., B.S. (Lond.), (Bacteriologist)	1928
Public Vaccinators.	
Owen W. Roberts, L.R.C.P., M.R.C.S. (Public Vaccinator, North Kensington)	1930
George A. Henderson, L.R.C.P.I., L.R.C.S.I. (Public Vaccinator, South Kensington)	1930
Remington Hobbs, M.D., M.R.C.P., M.R.C.S. (Public Vaccinator, St. Mary Abbots Hospital)	1930
Basil Hood, M.R.C.S., L.R.C.P. (Public Vaccinator, St. Charles Hospital)	1930
Clerical Staff.	
James H. Wilson (Chief Clerk)	1900
Francis W. Gascoyne	1919
John S. Russell	1923
Denis C. Page	1925
Donald J. Hunt	1924
Arthur L. Vague	1927
Francis T. Pearce	1929
Ronald D. Callis	1929
Sanitary Inspectors.	
*Henry Dawes (Senior Inspector)	1893
*Nelson Males	1897
*Charles G. Sexton	1898
*Thomas Cutting	1900
*Edward J. Bennett	1901
*George W. McQuinn	1901
*Joseph H. Fowles	1902
†John McDermid	1920
¶†Henry W. Walters (Food Inspector)	1925
¶†Cecil R. Webb	1925
¶†Redmond J. McCarthy	1926
¶†John S. Wheeler	1930
†Samuel G. Starling (Temporary Inspector)	1930
Vaccination Officer.	
Arthur H. Hinton	1930
Women Health Officers.	
Miss F. C. Hargrave	1910
‡†*Miss E. Dixon	1917
‡†*Miss W. H. E. Whitbread	1920
†*Mrs. V. A. Ross	1921
‡†*Miss E. M. Law	1922
Miss A. E. Haycock	1922
†‡*Miss K. M. Roe	1926
‡†Miss E. Mogridge	1929
†Miss P. Bing	1930

Health Lecturer.

Mrs. M. Hayman	1926

Mortuary Keeper.

Arthur C. Britton	1930

Disinfecting Staff.

Albert Nunn (Chief Disinfector)	1906
George H. I. Harris	1914
William Taylor	1926
Walter D. Strong	1928
Phillip H. Bowker	1929

Medicinal Baths Staff.

A. V. Boddington (Superintendent)	1929
Mrs. R. Webber (Matron)	1913

Rat Officer.

Walter E. Weedon	1926

Drain Testing Assistants.

William Clancy	1903
Charles H. Coombs	1927

Caretakers, Tuberculosis Dispensary.

Mr. & Mrs. H. Lake	1921

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* Certificate of the Royal Sanitary Institute.

† Certificate of the London Sanitary Inspectors Examination Board. ‡ Certified Midwife.

¶Certificate for Meat and other Foods.

All the Women Health Officers have undergone 3 years general hospital training and have secured the certificate of general nursing proficiency.

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