

**[Report of the Medical Officer of Health for Harrow].**

**Contributors**

Harrow (London, England). Urban District Council.

**Publication/Creation**

[1937]

**Persistent URL**

<https://wellcomecollection.org/works/arqrdqfd>

**License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

439 (1) HARROW  
(Latin Mun. B.)  
HARR 3

**The**  
**Urban District Council of Harrow**

---

**Annual Report**

OF THE  
**MEDICAL OFFICER OF HEALTH**

FOR THE YEAR

**1936**

---

**E. W. CARYL THOMAS, M.D., B.Sc., D.P.H.,**  
**BARRISTER-AT-LAW.**

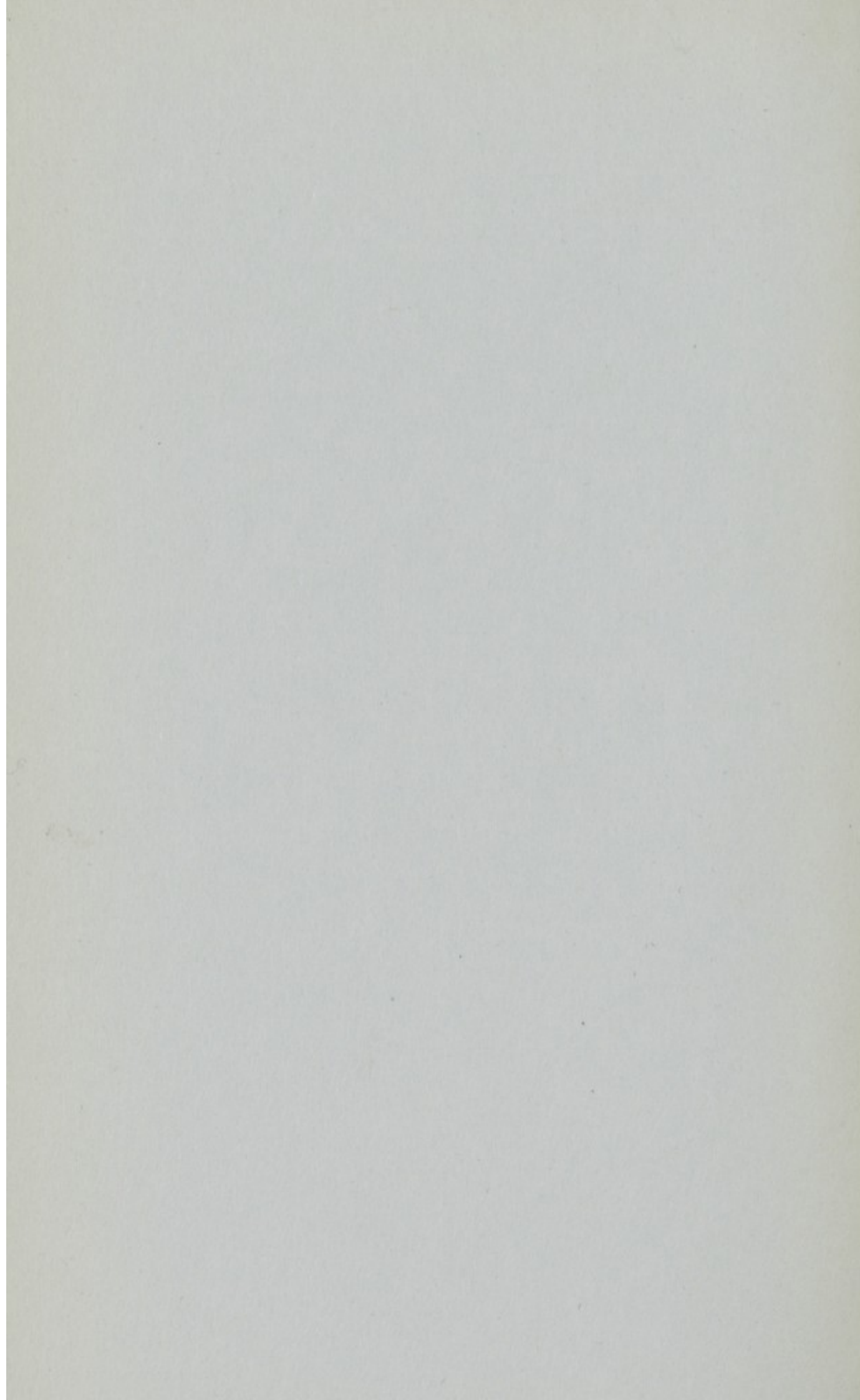


TABLE OF CONTENTS.

The  
**Urban District Council of Harrow**

---

# Annual Report

OF THE  
**MEDICAL OFFICER OF HEALTH**

FOR THE YEAR

**1936**

---

E. W. CARYL THOMAS, M.D., B.Sc., D.P.H.,  
BARRISTER-AT-LAW



The  
Urban District Council of Harrow

---

# Annual Report

OF THE  
MEDICAL OFFICER OF HEALTH  
FOR THE YEAR

1936

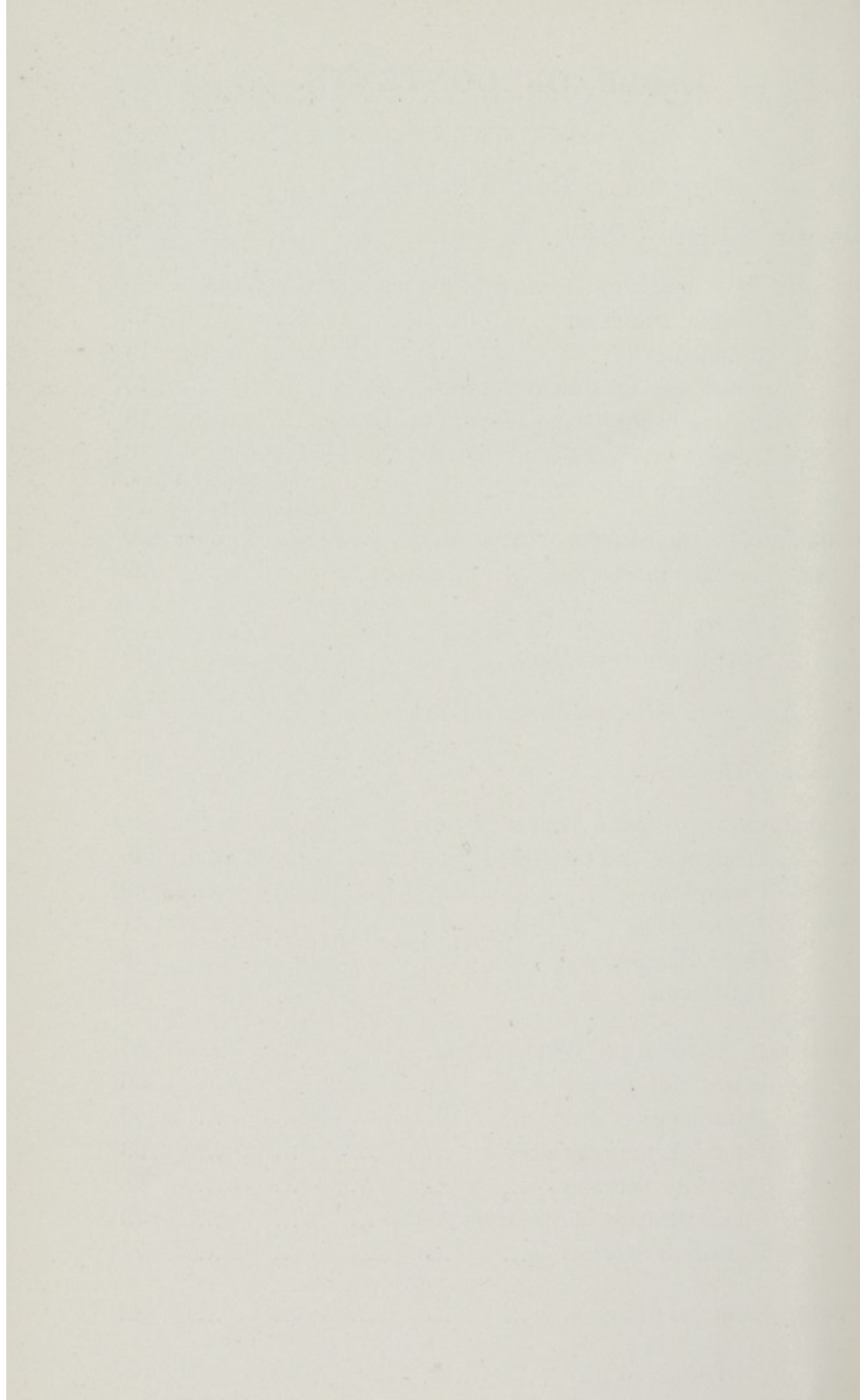
---

E. W. CARYL THOMAS, M.D., B.Sc., D.P.H.,  
HARROW AT-LAW

## TABLE OF CONTENTS.

---

	PAGE
OFFICERS OF THE PUBLIC HEALTH SERVICES ... ..	7
GENERAL STATISTICS ... ..	8
GENERAL PROVISIONS OF HEALTH SERVICES FOR THE AREA	
Hospital Provision ... ..	13
Ambulance ... ..	15
Clinics and Treatment Centres ... ..	15
Nursing in the Home ... ..	18
Laboratory Facilities ... ..	18
Legislation in Force ... ..	19
SANITARY CIRCUMSTANCES OF THE AREA ... ..	20
Sanitary Inspection ... ..	22
HOUSING STATISTICS	
Statistics of Inspections ... ..	25
INSPECTION AND SUPERVISION OF FOOD ... ..	32
ISOLATION HOSPITALS ... ..	37
INFECTIOUS AND OTHER DISEASES	
Prevalence and Control ... ..	40
Diphtheria ... ..	40
Scarlet Fever ... ..	41
Other Diseases ... ..	48
Tuberculosis ... ..	51
MATERNITY AND CHILD WELFARE	
Infant Mortality ... ..	56
Maternal Mortality ... ..	60
Infant Welfare Services ... ..	63
Maternity Services ... ..	68
Administration of Midwives Act ... ..	75
Midwifery Services ... ..	77
SCHOOL MEDICAL SERVICE ... ..	82





## REPORT OF THE MEDICAL OFFICER OF HEALTH.

---

**To the Chairman and Members of the Urban District Council  
of Harrow.**

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I beg to submit the Annual Report on the Health and Sanitary Circumstances of the District for the year 1936.

The steady development in the district has necessitated the opening of additional clinics, a service which is extremely popular. 4,963 attendances were made at the ante-natal clinics, a very large increase on the figure of 2,370 for the previous year and 1,354 in 1934. The corresponding figures for the attendances at the infant welfare centres were 59,147, 43,205 and 31,784. The attendances at the Toddlers' Clinic opened at the Broadway Clinic proved sufficiently encouraging to justify the opening of similar sessions in two other parts of the district. Arrangements have been made for the treatment of minor ailments of those under five years of age, and the health visiting staff was augmented to enable systematic home visiting of the Toddlers to be carried out. The home visits to infants and children under five totalled 10,461 as compared with figures of 8,687 in 1935 and 5,598 in 1934. The Council became the Local Supervising Authority of Midwives on October 1st, and so are responsible for the provision of the midwifery services under the Midwives Act, 1936. As from November 1st, the powers of the County Council under the Nursing Homes Registration Act were delegated to the Council.

The survey of over-crowding begun in December, 1935, continued until April. 12,934 houses were surveyed, of which 152 proved to be over-crowded. During the year seven groups of properties totalling 57 houses were represented for clearance and 20 Demolition Orders were made.

Sites were purchased for the erection of clinics for maternity and child welfare purposes, but by agreement with the County Council premises will be constructed which will house school medical and library services in addition. A site was decided upon for the erection of the isolation hospital; but the position with regard to the proposed maternity home to be erected jointly with the Wembley Council is not satisfactory.

The vital statistics for the district are satisfactory, apart from the higher maternal mortality rate. The general death rate, and the infant mortality rate were low, as were also the rates from the various infections, including tuberculosis.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

E. W. CARYL THOMAS,

Medical Officer of Health.

Council Offices,

Harrow-on-the-Hill.

June 2nd, 1937.



# OFFICERS OF THE PUBLIC HEALTH SERVICES.

## Full-time Staff.

### *Medical Officer of Health :*

E. W. CARYL THOMAS, M.D., B.Sc., D.P.H., Barrister-at-Law.

### *Assistant Medical Officers of Health :*

KATHARINE R. BROWN, M.B., Ch.B., D.P.H.

O. C. DOBSON, M.B., B.Hy., D.P.H.

### *Sanitary Inspectors :*

A. B. KRAMM (Senior Inspector) ††

H. DRABBLE, ††\*

J. E. JOHNSON ††

R. B. GIRLING, ††\*

S. N. KING, ††\*

A. C. GROOM, ††

P. SCHOFIELD, ††

E. A. SMITH, †

† Cert. R. San. I.

‡ Meat Inspectors' Cert.

\* Smoke Inspectors' Cert.

### *Health Visitors :*

MRS. D. BRACE (Senior Health Visitor), ††\*

MISS G. COUZENS, ††\*

MISS D. MARSHALL, ††\*

MISS B. EDWARDS, ††\*

MISS E. MATTHEWS, ††\*

MISS A. W. EVANS, ††\*

MISS G. M. REED, ††\*

MISS T. M. LEE, †

MISS G. RICHARDSON, ††\*

MISS E. J. LEWIS, ††\*

MISS M. J. SIMPSON, ††\*

MISS M. J. WALDEGRAVE, †\*

*Superintendent Midwife :* MISS M. CARPENTER. ††§

*Matron of Isolation Hospitals :* MISS V. R. THOMAS, ††

*District Fever Nurse :* MISS V. G. ROBERTSON.

† State Registered Nurse. ‡ State Cert. Midwife. \* Health Visitors' Cert. § Midwife Teachers' Cert.

### *Clerical Staff :*

W. GOODFELLOW, Chief Clerk.

Eight whole-time Clerks.

## Part-time Staff.

### *Consultant Gynaecologists :*

MARGARET BASDEN, M.D., F.R.C.S., F.C.O.G.

R. CHRISTIE BROWN, M.S., F.R.C.S., M.C.O.G.

ARNOLD L. WALKER, M.B., F.R.C.S., M.C.O.G.

### *Consultant Surgeon :*

R. TREVOR JONES, B.Sc., M.B., B.S., F.R.C.S.

### *Maternity and Child Welfare Medical Officers :*

NORAH BEAUMONT, M.B., B.S., D.P.H.

ETHEL M. BRAND, L.M.S.S.A.

ELIZABETH GOURLAY, M.D.

LUCY PARKER, M.D., M.R.C.P.

### *Birth Control Clinic Medical Officer :*

ROSALIE BURKE, M.R.C.S., L.R.C.P.



## STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) ... ..	12,558
Registrar-General's estimate of resident population, mid-year, 1936 ... ..	160,300
Number of inhabited houses including flats (end of 1936) according to Rate Books ... ..	46,325
Rateable Value (April 1st, 1937) ... ..	£1,812,640
Sum represented by a penny rate (1936/7) ... ..	£6,850

### Social Conditions of Inhabitants.

See Annual Report for the year 1934.

There was little change in the unemployment figures in this district. The number of people who migrated here from distressed areas being greater than in the previous year and the number on the unemployment register being about the same, the general position with regard to unemployment is really better. The ordinary winter register for unemployed males is about 1,000. This figure has occasionally, for short periods, soared to 3,000, the fluctuation being due to frost with consequent laying-off of men in the building trades. There are about 300 painters and seasonal workers, ice-cream vendors, and persons employed in parks and seaside occupations, so that the number of unemployed falls in the summer to between five and six hundred. There are some 200 to 300 unemployed women, these being chiefly young married women. There are practically no single women on the register in the categories of domestic servants, factory hands or clerical workers.

In general, the relatively low unemployment figures are due to the extensive building in the district. On cessation of building activities there will probably be some return of the unemployed to the distressed areas on account of the higher rents in Greater London.

### Extracts from Vital Statistics for the Year.

Live Births :—	<i>Total.</i>	<i>Male.</i>	<i>Female.</i>	} Birth Rate per 1,000 of the estimated resi- dent population, 17·8
Legitimate	2,793	1,384	1,409	
Illegitimate	80	38	42	
Stillbirths :—				} Rate per 1,000 total (live and still) births, 3.5
Legitimate	100	48	52	
Illegitimate	6	3	3	



Deaths	1,240	593	647	Death rate per 1,000 of the estimated resident population, 7.7
--------	-------	-----	-----	--

	<i>Deaths.</i>	<i>Rate per 1,000 total (live and still) births.</i>
Deaths from puerperal causes :—		
Puerperal sepsis ...	2	0.67
Other puerperal causes	10	3.35
Total ...	12	4.02

Death rate of Infants under one year of age :—

All infants per 1,000 live births ...	44.9
Legitimate infants per 1,000 legitimate live births	44.7
Illegitimate infants per 1,000 illegitimate live births	50.0

Deaths from Measles (all ages) ...	5
„ Whooping Cough (all ages) ...	4
„ Diarrhoea (under 2 years of age)	13

Measles was prevalent in the spring, but caused few deaths. Towards the end of the year the influenza epidemic had started in the district and resulted in a number of fatalities. Scarlet fever was relatively less prevalent than in the previous recent years, while the incidence of diphtheria was exceptionally low.

### Population.

The mid-year estimate of population is 160,300. This increase over the figure of 144,280 for mid-year 1935 is partly due to the natural increase of population (i.e. the excess of births over deaths, this figure being 1,415 in 1935 and 1,633 in 1936) and partly due to the occupation of the new houses erected (4,715 in 1935 and 4,173 in 1936).

The number of houses inhabited at December 31st, 1935, was 41,265, the corresponding figure at the end of 1936 being 46,325. For the years 1934 and 1935 the average number of persons per house were 3.68 and 3.69.

### Birth Rate.

2,873 births were registered during the year, the birth rate for thousand population being therefore 17.8. The corresponding figure for England and Wales was 14.8, and the local figures for 1935 and 1934 were 17.5 and 16.4. A high birth-rate can be anticipated for some years as the occupants of the recently erected properties will, on an average, contain a higher than normal proportion of young adults.

### Deaths and Death Rate.

Total deaths in the district ...	792
Outward transfers ...	72
Inward transfers ...	520
Deaths of residents ...	1,240



Of the 72 deaths of non-residents occurring in the district eight took place at the Orthopaedic Hospital, six at the Harrow and Wealdstone Hospital, 31 in various local nursing and maternity homes (of which three were new-born infants), and twenty-five in private houses.

Of the 520 deaths of local residents which occurred outside this area, most took place in institutions, 208 being at Redhill Hospital and 53 at other county general hospitals. 18 deaths occurred at institutions for the treatment of the tuberculous (nine in County Tuberculosis Institutions) and 19 at mental hospitals (17 at Shenley). 33 deaths occurred in hospitals just outside the district, most of them being at the general hospitals in Northwood, Wembley, Willesden and Hampstead. 120 deaths took place at various of the London general and maternity hospitals, including 11 deaths of infants of mothers confined in the hospitals. Two deaths occurred in outside municipal isolation hospitals.

Sixty-eight local residents died in the Harrow and Wealdstone Hospital.

1,240 deaths in a population of 160,300 represents the death rate of 7.7 compared with local figures of 8.1 and 7.7 for the years 1934 and 1935, a figure of 12.1 for England and Wales and one of 12.3 for the Great Towns.

The corrected death rate, obtained by the application of the areal comparability factor of 1.17, is 9.01. The corresponding figure was 9.01 in 1935 and 9.5 for 1934.

The fatalities of the infectious diseases expressed as a rate per thousand population compare favourably with the figures for the country as a whole. There were no deaths from scarlet fever, while the rates for measles (0.03), whooping cough (0.026), diphtheria (0.02), and influenza (0.06) were all lower than the corresponding national rates of 0.07, 0.05, 0.07, and 0.14.

Deaths from tuberculosis, both pulmonary and non-pulmonary forms, showed a slight increase over the figures for the previous year. The rate per 100,000 population of 53.6, however, is well below the figure of 71.8 recorded for the country as a whole in 1935.

The infant mortality rate is again relatively low, being only 44.9 compared with the figure of 59 for England and Wales and 63 for the Great Towns. The local figure for last year was 42.1 and for 1934, 47. This rise over the previous year's figure was due to a number of deaths in the latter part of the year from influenza.

The maternal mortality rate was 4.02 compared with local figures of 3.46 for 1935 and 5.99 for 1934, and a figure of 3.81 for England and Wales.



There were 170 deaths from cancer, the recorded death rate per million living being 1,060, compared with a figure of 1,587 for England and Wales for the year 1935. Part of the smaller rate is to be explained by the abnormal age constitution of the population. The following is an analysis of the affected sites, being the proportional frequency of sites of cancer expressed as rates per 1,000 of all deaths from cancer, the international grouping being used, and the figures for England and Wales for the year 1934 being included for purposes of comparison :

<i>International Group Number.</i>				<i>Proportional Rate per 1,000.</i>			
				<i>Local.</i>		<i>England and Wales.</i>	
				<i>Male.</i>	<i>Female.</i>	<i>Male.</i>	<i>Female.</i>
45.	Lip, tongue, etc....	...	...	83	19	103	16
46.	Stomach ...	...	...	216	124	221	168
	Rectum ...	...	...	100	57	107	61
	Other abdominal	...	...	183	219	276	248
47.	Respiratory ...	...	...	166	19	109	31
48.	Uterus ...	...	...	—	76	—	133
49.	Ovary, etc. ...	...	...	—	76	—	57
50.	Breast ...	...	...	—	324	—	200
51.	Urogenital ...	...	...	116	38	115	21

There were 17 suicidal deaths (10 male and 7 female) during the year, giving a rate per 100,000 population of 10·6 compared with the figure of 13 for the country as a whole for 1935. The commonest method was the use of coal-gas (3 male and 5 female), hanging and the railway track being the next commonest (2 male and 1 female in each case).

Of the 46 (25 male and 21 female) other deaths from violence, 20 were due to road accidents, of which 12 (8 adults and 4 children) were of pedestrians. Falls of elderly persons accounted for 9 deaths, while 3 adults were drowned.

The following table gives the percentage of deaths at certain age periods, with the corresponding rates for England and Wales for the year 1935 :—

<i>Age periods.</i>				<i>Percentage of Total Deaths.</i>	
				<i>Local, 1936.</i>	<i>England and Wales, 1935.</i>
0-1 ...	...	...	...	11·0	7·1
1-4 ...	...	...	...	1·6	2·4
5-14...	...	...	...	2·9	2·3
15-24...	...	...	...	2·9	3·3
25-34...	...	...	...	6·1	3·3
35-44...	...	...	...	7·7	5·3
45-54...	...	...	...	9·3	9·4
55-64...	...	...	...	16·1	16·5
65-74...	...	...	...	19·8	33·7
75 and over ...	...	...	...	22·5	25·7



The higher proportion of deaths in the 0-1 and the 25-44 age groups and the lower proportion in the 65-74 group are to be explained by the abnormal age composition of the population.

The commonest causes of deaths are shown in the following table, in which the local rates for certain causes are compared with those of England and Wales for the year 1935, the figures representing the percentage of deaths from the particular cause of total deaths.

	<i>Local, 1936.</i>	<i>England and Wales, 1935.</i>
1. Diseases of the heart and circulatory system ... ..	31.6	29.5
2. Malignant disease ... ..	14.9	13.5
3. Bronchitis, pneumonia and other respiratory diseases ... ..	12.5	9.9
4. All forms of tuberculosis ... ..	7.5	6.2

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

### HOSPITALS PROVIDED OR SUBSIDISED BY THE LOCAL AUTHORITY OR BY THE COUNTY COUNCIL.

#### a. (1) **Fever.**

The two Isolation Hospitals in the District were described in the Annual Report for 1934.

#### (2) **Smallpox.**

The Middlesex County Council is the Authority for the provision of smallpox hospital accommodation for the whole of the administrative county. By agreement with the London County Council cases of smallpox occurring in the County of Middlesex are removed to the River Hospitals.

#### b. **Tuberculosis.**

The Middlesex County Council is the Authority by whom arrangements are made for the treatment of those in the county suffering from tuberculosis. The County Council possesses two sanatoria, that at Harefield, which is reserved for sanatorium pulmonary cases, possessing 117 male and 130 female beds, 4 adult observation beds, 56 beds for children and 8 observation beds, and the Clare Hall sanatorium, for late sanatorium and hospital pulmonary cases, which has 120 male and 66 female beds.

Cases of non-pulmonary disease in children are treated at one of the 25 beds reserved for the County Council at Heatherwood Hospital, or at one of the 6 beds reserved at Victoria Home, Margate.

Those for whom institutional accommodation is required and who can not be accommodated at the County institutions are admitted to the sanatoria or hospitals belonging to other Local Authorities or to voluntary organisations where the cost of their maintenance is met by the County Council.

### HOSPITALS FOR GENERAL CASES.

#### (1) **Hospitals for Medical and Surgical Cases.**

The two hospitals most used by the local inhabitants are the Harrow and Wealdstone Hospital, and the Redhill County Hospital. For particulars of the in-patient accommodation of these institutions see the Annual Report for the year 1935; and of other hospitals used by local residents see the Annual Report for the year 1934.

The consultative out-patient clinics held at the Harrow and Wealdstone Hospitals, namely, medical, surgical, diseases of children, diseases of women, ear, nose and throat, and radiological



examinations, were, during the year, supplemented by a dermatological clinic. Massage, electrical and sunlight treatment continued to be provided at "Tyneholme."

The out-patient clinics held at the Redhill Hospital comprise dental, ante-natal and post-natal, ear, nose and throat, medical, orthopaedic and fracture, varicose veins, genito-urinary and radiological.

Since the latter part of 1931 the accommodation at the Redhill County Hospital has remained at 215 beds, comprising 69 male, 65 female, and 21 maternity beds, 20 cradles and 6 isolation beds and cradles, 32 beds for children and 2 for sick nurses. In his Annual Report for 1935 the County Medical Officer states: "During the year 1934 the pressure of work at this hospital has continued and the urgent need for the extensions decided upon by the County Council has been only too apparent. The area served by Redhill County Hospital is one of the most rapidly developing in Middlesex and it would appear that, not only will further extension be called for in the near future, but it may well be that the County Council will require to establish an additional hospital to serve the needs of part of the area which, at present, is served by Redhill County Hospital."

From April 1st, 1936, all general hospitals belonging to the Middlesex County Council ceased to be administered under the Acts relating to the Poor Law and became Public Health Hospitals. From that date urgent admissions have been made by direct application to the Medical Superintendent. For admission of non-urgent cases, referred either as out-patients or in-patients, application is first made to the Almoner of the hospital, and no case is referred to the Relieving Officer.

Of the 4,362 patients admitted to Redhill Hospital in 1935, 1,406 came from Harrow, 2,023 from Hendon, 893 from Wembley and 40 from other parts of Middlesex. During the same year 805 of the 7,378 patients admitted to the Central Middlesex Hospital came from Harrow or Hendon.

## **(2) Hospitals for Maternity Cases.**

Arrangements are made for the admission of maternity cases to various of the London Maternity and General Hospitals. The Council pays the fees of necessitous cases for whom such arrangements have been made.

Cases of puerperal infection are admitted either to the London County Council North-Western Fever Hospital or to Queen Charlotte's Isolation Hospital.

## **(3) Hospitals for Children.**

Apart from the arrangement by which cases of ophthalmia neonatorum are admitted to St. Margaret's Hospital, Hampstead, there is no provision for admission of children to hospital.



#### (4) Orthopaedic Hospitals.

The Council has no agreement with any particular orthopaedic hospital for the admission of patients, though responsibility for the payment of fees of necessitous cases admitted to the various orthopaedic hospitals is accepted.

### AMBULANCE FACILITIES.

#### (a) For Infectious Cases.

Infectious cases are removed by the Austin ambulance, which is housed alternately at the two isolation hospitals.

#### (b) For Non-Infectious Cases and Accidents.

Two 20 h.p. Austin ambulances are housed at the Fire Station, Harrow-on-the-Hill and a 20 h.p. Talbot ambulance at the Wealdstone Fire Station. A 14-h.p. Morris ambulance is housed at the Stanmore Station, being used for accident cases in that locality.

For the rules and conditions governing the use of the ambulance see Page 17 of the Annual Report for 1935.

The following list gives a summary of the extent to which the ambulances have been used during the year and the figures for the previous year :—

			1936.	1935.
Accident cases...	...	...	480	400
Maternity cases	...	...	211	142
Other cases	...	...	971	897

### CLINICS AND TREATMENT CENTRES.

The following is a summary of the various clinics and treatment centres in the district at 31st December, 1936 :—

#### Infant Welfare Centres.

The Broadway Clinic, Wealdstone—Tuesdays, Wednesdays and Thursdays at 1.30 p.m.

Elmwood Avenue Clinic, Kenton—Wednesdays, Thursdays and Fridays at 1.30 p.m.

Conservative Club, Lowlands Road, Harrow—Tuesdays at 1.30 p.m.

Baptist Church Hall, Northolt Road, South Harrow—Thursdays and Fridays at 1.30 p.m.

St. George's Hall, Headstone—Tuesdays and Wednesdays at 1.30 p.m.

The Institute, Whitchurch Lane, Stanmore—Mondays and Fridays at 1.30 p.m.

Memorial Hall, Harrow Weald—Thursdays at 2 p.m.



Baptist Church Hall, Imperial Drive—Mondays and Tuesdays at 1.30 p.m.

The Pinner Club, Marsh Road, Pinner—Fridays at 1.30 p.m.

St. Edmunds Hall, Rickmansworth Road, Pinner—Fridays at 1.30 p.m.

Baptist Church Hall, Streatfield Road, Kenton—Mondays at 1.30 p.m.

These clinics are all maintained by the Local Authority, the sessions being held weekly with the exception of the two at Pinner which are held alternate Fridays.

### **Toddlers' Clinics.**

The Broadway Clinic, Wealdstone—Fridays at 1.30 p.m. weekly.

Elmwood Avenue Clinic, Kenton—Fridays at 9.30 a.m. fortnightly.

Baptist Church Hall, Imperial Drive, Rayners Lane—Fridays at 9.30 a.m. fortnightly.

### **Ante-Natal Clinics.**

The Broadway Clinic, Wealdstone—Mondays at 1.30 p.m. and Fridays at 9.30 a.m.

Elmwood Avenue Clinic, Kenton—Wednesdays and Thursdays at 9.30 a.m.

The Institute, Whitchurch Lane, Stanmore—Mondays at 9.30 a.m.

Baptist Church Hall, Imperial Drive, Rayners Lane—Tuesdays at 9.30 a.m.

Baptist Church Hall, Northolt Road, South Harrow—Thursdays at 9.30 a.m.

"Tyneholme," Headstone Drive, Wealdstone—Tuesdays at 2 p.m.

These clinics are maintained by the Local Authority with the exception of that at "Tyneholme," which was maintained by the Council of Child Welfare.

### **Birth Control Clinic.**

The Broadway Clinic, Wealdstone—Mornings of the first and third Tuesdays of the month.

### **Consultant Ante-Natal Clinic.**

The Broadway Clinic, Wealdstone—Mornings of the second Tuesday of the month.



## Treatment Centres.

The following treatment centres were provided by the Council of Child Welfare at "Tyneholme," Headstone Drive, Wealdstone :—

Dental Clinic	... Saturday, 10 a.m. and 2 p.m.
Massage Clinic	... Monday, Wednesday and Friday, 1.30 p.m.
Sunlight Clinic	... Tuesday and Thursday, 9 a.m.

In addition the following clinics were held on behalf of the Harrow and Wealdstone Hospital :—

Massage Clinic	... Monday, Wednesday and Friday, 5 p.m.
Sunlight Clinic	... Monday, Wednesday and Friday, 5 p.m.

## School Treatment Services.

Minor Ailments Clinic :—

Roxeth Hill Council School, Harrow—Wednesday, 9.30 a.m.

Broadway Clinic, Wealdstone—Monday and Thursday, 9.30 a.m.

Whitchurch Institute—Friday, 9.30 a.m.

Ophthalmic Clinic :—

Broadway Clinic, Wealdstone—Wednesday, 9.30 a.m.

Dental Clinic :—

"Tyneholme"—by appointment.

Baptist Church Hall, Northolt Road, Harrow—Monday, Tuesday and Wednesday, 9.30 a.m. and 2 p.m.

Whitchurch Institute, Stanmore—Wednesday, 9.30 a.m. and 2 p.m.

## Tuberculosis Clinic.

Since May, the local Tuberculosis Dispensary has been held at 53, Greenhill Crescent, Harrow, on Monday mornings, Thursday afternoons and at 6 p.m. on the second and fourth Wednesdays of the month. A clinic is also held at 158, The Broadway, Hendon, on Wednesday and Friday mornings and on the first and third Wednesdays of the month at 6 p.m.

The following is extracted from the Annual Report of the County Medical Officer for the year 1935 : " Since 1919 the County has been divided for administrative purposes into six dispensary areas, each in the charge of a tuberculosis Medical Officer. . . . In November, 1935, the County Council approved a proposal to establish an additional dispensary area by the division of the existing areas 2 (which included Finchley, Friern Barnet, Hendon (excluding Edgware), Hornsey, Potters Bar, Southgate and Wood Green) and 3 (which included Edgware, Harrow, Ruislip-Northwood, Wembley and Willesden) where the pressure of work has been



most heavily felt, into three new areas. The scheme entailed the appointment of an additional tuberculosis officer and two tuberculosis nurses, and the erection of a local dispensary to serve the new area. It was decided that the new area should consist of the Borough of Hendon and the Urban Districts of Harrow and Ruislip-Northwood, and that the new head dispensary should be built in the grounds of Redhill County Hospital, in order that the resources of the hospital—X-ray department, laboratories and, if necessary, beds—might be available for the assistance of the dispensary."

### **Venereal Diseases.**

There is no treatment provided locally for persons suffering from venereal disease. Provision is made under the London and Home Counties Scheme, the only centre in the county providing this treatment being the Prince of Wales' Hospital, Tottenham. Travelling expenses are now paid by the County Council to out-patients in necessitous circumstances who otherwise might be unable to make the numerous attendances over long periods which are usually necessary if a cure is to be obtained. Information as to the patients' financial circumstances is obtained by the Almoner. If approval is granted the Almoner advances the patient's fare on the occasion of each visit to the hospital.

## **PROFESSIONAL NURSING IN THE HOME.**

### **(a) General.**

For the particulars of the three Nursing Associations in the district see Annual Report for 1935.

### **(b) Nursing of Cases of Infectious Disease.**

Apart from the arrangements made under the maternity and child welfare scheme, there is no provision for home nursing of cases of infectious disease. Regular visits are paid to the homes of those suffering from notifiable diseases, but on these occasions, advice only is given and no treatment carried out.

## **LABORATORY FACILITIES.**

Examination of clinical material is undertaken at the laboratories of the Clinical Research Association. During the year five swabs were examined for the diphtheria bacillus, sixteen for the haemolytic streptococcus, two hundred and one samples of sputum for the tubercle bacillus and nine samples for other purposes. At the same laboratory, forty-three samples of milk were examined and thirteen of ice-cream.

Most diphtheria swabs are now examined at the Isolation Hospital.



## LEGISLATION IN FORCE

(See Page 71 of the Annual Report for the year, 1935).

The following Orders were made during the year :—

The Harrow Urban (Supervision of Midwives) Order, 1936, made under Section 62 (1) of the Local Government Act, 1929, dated 11th September, 1936, and operative as from October 1st, 1936.

The Harrow Urban (Offensive Trades) Confirmation Order, made under Section 112, Public Health Act, 1875—amended by P.H.A.A.A. 1907, dated 16th April, 1936, and operative as from the 4th May, 1936.

Under this the following trades, businesses or manufactures are declared to be offensive trades :—

Rag and Bone Dealer,  
Blood Drier,  
Leather Dresser,  
Tanner,  
Fat melter or fat extractor,  
Glue maker,  
Size maker,  
Gut scraper.

(" Rag and bone dealer " means any person who, for the purpose of sale, carries on upon any premises, the trade of receiving, storing, sorting or manipulating any rags in an offensive condition or in a condition likely to become offensive, or any bones, rabbit skins, fat or other putrescible animal products of a like nature.)

Bye-laws dealing with the following were made during the year ; or have become operative since the date of the last report :—

Cemeteries	...	...	(came into operation)	1.1.37
Pleasure-grounds	...	...	..	1.1.37
Hoardings and advertisements	...	...	..	14.1.37
New streets and buildings	...	...	..	1.1.37
Hairdressers and Barbers	...	...	..	1.2.37
Camping grounds and moveable dwellings	..	..	..	1.4.37
Offensive Trades (supplemental)	...	..	..	1.11.36



## SANITARY CIRCUMSTANCES OF THE AREA.

### WATER

(See Annual Report, 1935).

### DRAINAGE AND SEWAGE.

In the early part of the year the remaining sewage works were connected to the West Middlesex Drainage Scheme. It is calculated that this can deal with up to 240 gallons per head per day for a population over the whole area of 26 persons per acre.

The main surface water out-flow between Belmont and Kenton Road discharging into Wealdstone brook was completed during the year, the area served by this outflow being that lying to the north of Kenton Road between Kenmore Avenue and Honeypot Lane. A beginning was made on the Moat Farm Drainage Scheme by which some 1,000 acres will be dealt with by an arterial main culvert running from Long Elms, Harrow Weald to Hooking Green, North Harrow.

### Refuse Disposal.

At the April meeting, the Highways and Cleansing Committee recommended that the land forming the Great Stanmore Sewage Farm be used for the tipping of refuse, the tipping to be carried out in strict conformity with the requirements of the Minister of Health in regard to controlled tipping. After a public inquiry, approval was granted by the Minister and the site was first used for this purpose in September. Towards the close of the year complaints of the prevalence of flies were received from occupiers of houses in the vicinity, though, on inquiry, it appeared that they had been subjected to this annoyance before the site was used for the tipping of refuse.

Towards the end of the year, the 725 tons of refuse collected weekly were dealt with : 30 per cent. at the Harrow Destructor serving the following wards : Roxeth, West Harrow (except northern section), Harrow-on-the-Hill and Greenhill (except northern section) and Pinner South ; 15 per cent. at the Wealdstone Destructor serving : Wealdstone South, Wealdstone North, Kenton (south western section), Harrow Weald (southern section), Harrow-on-the-Hill and Greenhill (northern section) ; 25 per cent. at the Cannon Lane tip serving : Pinner South (northern section), Pinner North, Headstone, Harrow Weald (western section), West Harrow (northern section) ; and 30 per cent. at the Stanmore tip, serving Harrow Weald (north eastern and eastern section), Kenton (except south western section), Stanmore North and Stanmore South.



Trade refuse is dealt with mostly at the South Harrow destructor, the remainder at the Wealdstone plant. Street sweepings, grass, tree cuttings, etc., are disposed of at the controlled tips.

The average cost of disposal per ton for the last nine months of the year was 2s. 10d. for tipping as compared with 5s. 5½d. for incineration.

### MORTUARY.

Particulars of the Mortuary are contained in the Annual Report for 1934.

155 bodies were received during the year; on 106 post-mortem examinations were carried out and 41 inquests held.

Twenty-one bodies were admitted for storage, and 28 bodies of persons dying from accident or suicide on whom no post-mortem examination was carried out in the mortuary.

### SWIMMING BATHS.

Particulars of the two swimming baths were given in the Annual Report for 1934.

Owing to the unfavourable weather last summer less use was made of the baths than in the previous year.

Daily tests are carried out for the presence of free chlorine and for the pH value, while, periodically, samples are submitted for complete chemical and bacteriological analysis. The following is a typical summary of the result of an analysis of a sample from the Charles' Crescent Swimming Bath: "This is a bright water containing a few particles of vegetable and mineral matter in suspension. It is of normal colour, faint earthy odour, neutral re-action and moderate hardness. The water is free from metals, contains 0.25 parts per million of free chlorine and is of satisfactory organic purity. Bacteriologically it is of a high degree of purity and is suitable and safe for swimming bath purposes."

The following is a summary of one of the reports on the Christchurch Avenue Swimming Bath water: "This is a clear and bright water of normal colour and neutral re-action. It is of moderate hardness, free from metals and contains 0.1 parts per million of free chlorine. The water is of good organic quality and of high degree of bacteriological purity and is suitable and safe for swimming bath purposes."

### SCHOOLS.

For a list of the schools in the district with their accommodation see page 27 of the Annual Report for 1935.

Practically every department recorded some increase in average attendance, this being most marked in both departments at Glebe Avenue and in the Junior Mixed Department at Priestmead. Stag



Lane School doubled its accommodation, now running in two departments. The only new school was the Stanburn Temporary, with accommodation for 200, this bringing the number of schools in the district to 22 and the number of departments to 39. The following summarises the position as regards school accommodation :

	<i>Position at end of</i>		
	<i>January, 1936.</i>	<i>March, 1937.</i>	<i>Increase.</i>
Accommodation ... ..	14,238	14,794	556
Temporary accommodation	1,634	2,320	686
Number on roll ... ..	15,154	17,031	1,877

School attendance has played no part in the spread of the notifiable infections. The extent to which the non-notifiable diseases affected schools is referred to in non-notifiable diseases. No schools were closed during the year on the action of the Sanitary Authority and no premises disinfected.

### SANITARY INSPECTION OF DISTRICT.

#### (a) Number of Inspections of :—

Houses—First visits	...	...	...	2,465
Revisits	...	...	...	7,507
Housing Surveys	...	...	...	3,816
Bakehouses	...	...	...	96
Slaughterhouses	...	...	...	1,038
Milkshops and Dairies	...	...	...	391
Cowsheds	...	...	...	78
Foodshops	...	...	...	1,001
Foster Mothers premises	...	...	...	46
Out Workers premises	...	...	...	67
Ice Cream premises	...	...	...	40
Caravans	...	...	...	74
Infectious Disease enquiries	...	...	...	12
Smoke observations	...	...	...	45
Number of nuisances investigated	...	...	...	1,433
Periodical visits	...	...	...	881

#### (b) Notices served. No. complied with.

Statutory	...	47	...	...	45
Informal	...	1,138	...	...	1,103

### SMOKE ABATEMENT.

Under the provision of Section 2 of the Public Health (Smoke Abatement) Act, 1926, the Council, during the year, made a byelaw prescribing that "The emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes from any one chimney in a building other than a private dwelling house shall until the contrary is proved be presumed to be a nuisance." The bye-law is dated the 8th January, was confirmed by the Minister of Health on the 20th February, and came into operation on the 1st April.



As in previous years, comparatively little nuisance from smoke has occurred in the district. In the few instances which nuisances were apparent or where advice has been sought the trouble was rectified following advice being given to the stoker of the furnace.

During the year 45 observations were carried out, the summary of the results being that during 406½ minutes there were only 8 minutes black smoke, 45½ dense smoke, 307½ minutes of moderate smoke.

### **SHOPS ACTS, 1912-1934.**

Inspections under the Shops Acts are undertaken by the Sanitary Inspectors. During the year 251 new shops were registered, so that by the end of the year the total number of shops on the register was 1,756.

1,728 visits were paid to shops under the above Acts and 195 evening observations made. 122 contraventions were recorded, these being classified as: serving customers after closing hours, 101; intervals for meals not given to assistants, 2; assistants not having a half holiday, 5; young persons employed over the statutory limit, 5; absence of suitable and sufficient sanitary or washing accommodation, 5; temperature of shop not maintained, 3; absence of seating accommodation for female assistants, 1.

230 letters were sent to traders regarding the absence of the appropriate notices.

In two cases, it was necessary to take legal proceedings, and in 9 instances the traders concerned received a final warning. Four certificates of exemption from the provisions requiring sanitary accommodation were granted.

### **RATS AND MICE (DESTRUCTION) ACT, 1919.**

76 complaints were received regarding the presence of rats.

### **PLACES OF PUBLIC ENTERTAINMENT.**

During the year 179 visits were paid to such premises, in all cases the sanitary arrangements being found satisfactory.

### **RAG FLOCK ACTS, 1911 to 1928.**

No rag flock is manufactured in the district although there are four premises where rag flock is occasionally used.

No samples have been taken for analysis but during year the premises have been kept under constant observation and at all times found in a clean condition.

### **FACTORY AND WORKSHOP ACT, 1901.**

In this district there are 166 factories, 184 workshops, 42 workplaces, to which the following numbers of visits were paid during the year:—factories, 285; workshops, 295; workplaces, 105.



Of the 53 public health nuisances detected, 23 were due to want of cleanliness and one to deficient ventilation. There were 11 instances of unsatisfactory sanitary accommodation, these being unsuitable or defective in nine cases, insufficient in one, while in another there was no separate provision made for the sexes. 18 other nuisances were detected.

39 Notices from other Councils and 4 from employers were received containing the addresses of 63 outworkers. Of the local outworkers 53 were engaged in the making of wearing apparel, while a further 10 were workers in leather. 67 visits of inspection were made to outworkers premises, in none of which were unwholesome conditions found to exist.

## HOUSING.

### HOUSING STATISTICS FOR THE YEAR, 1936.

Number of New Houses erected during the Year :—

Total	...	...	...	...	...	...	...	4,173
(1) By the Local Authority	...	...	...	...	...	...	...	—
(2) By other Local Authorities	...	...	...	...	...	...	...	76
(3) By other bodies and persons	...	...	...	...	...	...	...	4,097

#### 1. Inspection of Dwelling-Houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	...	...	...	...	...	2,465
(b) Number of inspections made for the purpose	...	...	...	...	...	7,593
(2) (a) Number of dwelling-houses (included under sub head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ...	...	...	...	...	...	342
(b) Number of inspections made for the purpose	...	...	...	...	...	3,736
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	...	...	...	...	...	70
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ...	...	...	...	...	...	785

#### 2. Remedy of Defects during the Year without Service of formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	...	...	...	...	...	741
---	-----	-----	-----	-----	-----	-----

#### 3. Action under Statutory Powers during the Year :—

A. Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	...	...	...	...	...	15
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	...	...	...	...	...	...
(a) By owners	...	...	...	...	...	12
(b) By local authority in default of owners	...	...	...	...	...	1



B.	Proceedings under Public Health Acts :—	
(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied... ..	22
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a)	By owners ... ..	21
(b)	By local authority in default of owners ... ..	—
C.	Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—	
(1)	Number of dwelling-houses in respect of which Demolition Orders were made ... ..	20
(2)	Number of dwelling-houses demolished in pursuance of Demolition Orders ... ..	16
D.	Proceedings under Section 20 of the Housing Act, 1930 :—	
(1)	Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	—
(2)	Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... ..	—
4.	<b>Housing Act, 1935. Overcrowding :—</b>	
(a) (i)	Number of dwellings overcrowded at the end of the year ... ..	111
(ii)	Number of families dwelling therein ... ..	116
(iii)	Number of persons dwelling therein ... ..	849
(b)	Number of new cases of overcrowding reported during the year ... ..	40
(c) (i)	Number of cases of overcrowding relieved during the year ... ..	13
(ii)	Number of persons concerned in such cases ... ..	78
(d)	Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding ... ..	—

## ACTION UNDER THE 1930 HOUSING ACT.

### Section 1.

In last year's report it was mentioned that in the returns made by the three former Councils there were no proposals for dealing with properties as Clearance Areas or Improvement Areas, but that



during the year representations had been made with regard to three groups of properties, Nos. 8—16 (even numbers) Peel Road, Nos. 3—21 (both inclusive) Alma Row, Harrow Weald, and Nos. 1—11 (both inclusive) Whitchurch Lane, Stanmore. During this year a number of other properties have been represented and in some cases the necessary enquiry has been held and the Order confirmed. The following table gives a list of the properties dealt with during the year and the position regarding them at the end of the year.

<i>Title of Order.</i>	<i>No. of Houses.</i>	<i>Position at End of Year.</i>
Peel Road ... ..	5	Application not opposed. Clearance Order confirmed.
Alma Row ... ..	10	Application opposed. Public Inquiry. Clearance Order confirmed.
Whitchurch Lane ... ..	11	Application opposed. Public Inquiry. Owner's proposals for complete reconstruction accepted. Order not con- firmed.
Marsh Road ... ..	2	Application not opposed. Clearance Order confirmed.
West End Lane, No. 1	6	Application opposed. Public Inquiry held. Awaiting decision.
West End Lane, No. 2	2	Ditto.
High Street, Edgware	7	Application opposed. Public Inquiry. Awaiting decision.
Green Lane, Stanmore	8	Application opposed. Await- ing Inquiry.
Canning Road	14	Application not opposed.
Rose Cottages, Little Common	3	Application opposed. Await- ing Inquiry.

With regard to the provision of new houses to accommodate persons displaced, as the Order of reference of the Housing Committee provides that they shall exercise the powers of the Council for the erection and completion of all houses which the Council authorise, at the joint meeting of the Housing and Public Health Committees it was agreed that the Public Health Committee submit to the Housing Committee a statement setting out the number of houses that will be required for the re-housing in connection with the Council's activities under the Housing Acts, 1930—1935, following which a recommendation to the Council for authority for the provision of the requisite number of houses would then be made by the Housing Committee.

At the November meeting of the Housing Committee, it was agreed that the persons to be displaced by the operation of the Alma Row and Peel Road Clearance Orders be re-housed on the



Glebe and the Berridge Estates, and that those persons proposed to be displaced as a result of the operation of the other Clearance Orders be re-housed on land comprised in the Harrow Urban (Rayners Lane) Housing Confirmation Order, 1936.

### Section 19.

In 1933 the Minister of Health called for a return from all Authorities of the properties it was anticipated would be considered for demolition under the Housing Act, 1930, with a five-year programme showing the rate it was proposed to deal with these up to the year 1938. In the Hendon Rural District there were twenty-one houses included in the proposal; in the Wealdstone Urban District, one; and in the Harrow-on-the-Hill Urban District, thirty-seven. By the end of the year all properties included in these programmes had been the subject of consideration. One group was dealt with under section one; a number were demolished; a few ceased to be used for human habitation; a number were re-conditioned, while any further action with regard to a few in one district was dependent on the decision of the Council with regard to a proposal submitted at the end of the year for dealing with the locality as a re-development area. Apart from these properties numbers of others have since been discovered which were in such a state as to justify action being taken in regard to them under this Section.

Notice to appear was served in respect of twenty-four groups of properties, totalling sixty-five houses. As a result, demolition orders were made relating to twenty houses; thirty-nine houses were re-conditioned; an undertaking was accepted that one was not to be used for human habitation; while demolition orders in respect of five houses were held up on the understanding that the properties would not again be used for human habitation on the termination of the present tenancies.

The following statement extracted from the returns on form H.256, shows the position at the beginning and at the end of the year:

	<i>Position at</i> <i>December 31st,</i>		
	1935.	1936.	
Number of houses demolished under Section 19	29	45	16
Parts of buildings closed under Section 20 ...	3	3	—
Number of persons displaced from these houses	88	127	39
Number of dwelling-houses made fit under Sections 17-20... ..	59	73	14
Insanitary houses demolished in anticipation of formal procedure under Section 19 ...	13	19	6
Insanitary houses closed (but not demolished) on an undertaking (which has not been cancelled) by the owner under Section 19 ...	9	15	6
Houses made fit as a result of informal notice preliminary to formal notice under Section 17	659	734	75



## OVERCROWDING.

Section 1 of the Housing Act, 1935, imposed an obligation on every Local Authority to cause an inspection to be made with a view to ascertaining what dwelling-houses are over-crowded ; and to prepare and submit a return showing the result of the inspection and the number of new houses required to abate the overcrowding ; and, unless they are satisfied that the required number of new houses will be otherwise provided, to prepare and submit proposals for the provision thereof.

It was decided that the preliminary enumeration of the occupants and of the available accommodation of the working-class houses be undertaken by temporary enumerators. This survey was begun in December, 1935, and completed by April, 1936. The result of the preliminary survey showed that some five hundred houses were provisionally overcrowded, more than half these houses being in nineteen roads, those with the largest number of overcrowded houses being : Vancouver Road, Glenalmond Road, Ruskin Gardens, Herga Road, The Chase, Weald Lane, Malvern Gardens, Roxeth Green Avenue, Bengarth Drive, Parkfield Road and Repton Road. In about three-quarters of these houses, sub-letting occurred; in 15 per cent. only one family resided, but in the remaining 10 per cent. there was at least one occupant additional to the members of the family. At the time of survey, in the actual roads surveyed there were found to be 423 empty houses and 89 empty flats or parts of houses.

The measuring of the houses was undertaken by the Sanitary Inspectors. The actual number of houses proved to be overcrowded according to the standards laid down by the Act was 152, or 1.17 per cent. of the 12,943 houses surveyed. 66 of these were overcrowded by  $\frac{1}{2}$  unit, and 49 by one unit. In nearly 50 per cent. of the cases the crowding occurred by reason of the occupation by two separate families of a house designed for the use of one.

As it was appreciated that there were many changes in occupancy of the houses in this district, just before the May meeting, at which consideration was to be given to the Council's proposals for the abatement of overcrowding, these 152 premises were visited to ascertain if the same conditions prevailed as were found at the time of the survey. This step revealed that over forty of the houses were no longer overcrowded. The following table was submitted as showing the manner in which the overcrowding in the houses occurred and the number of the various types of houses required to provide alternative accommodation of such a nature that the transferred families would no longer be overcrowded.



<i>Houses not owned by Local Authority.</i>	<i>Overcrowded by Units.</i>				<i>Houses required: Bedrooms :</i>		
	$\frac{1}{2}$	1	$1\frac{1}{2}$	$1\frac{1}{2}$	2	3	4 and over.
A. Single large families.							
(a) Overcrowding will be abated within 12 months	4	1	1	—	—	—	6
(b) Overcrowded and no movement of occupants anticipated ... ..	4	7	2	4	2	—	15
(c) Owner/occupier houses overcrowded ... ..	3	1	2	—	—	—	6
B. Houses with lodger.							
(a) Relative ... ..	2	1	2	—	2	—	2
(b) Non-relative ... ..	7	4	1	1	2	3	8
C. Houses let to two families by owner ... ..	18	9	1	5	9	13	11
D. Houses sub-let by occupier.							
(a) Occupier overcrowded ...	—	3	—	2	3	2	—
(b) Sub-tenant overcrowded	6	—	—	—	2	3	1
<i>Council Houses.</i>	<i>Overcrowded by Units :</i>				<i>Houses required: Bedrooms :</i>		
	$\frac{1}{2}$	1	$1\frac{1}{2}$	$1\frac{1}{2}$	2	3	4 and over.
A. Single families.							
(a) Overcrowding will be abated within 12 months	—	3	—	—	—	—	3
(b) Overcrowded and no movement of occupants anticipated ... ..	5	3	1	6	—	—	15
B. Family with lodger.							
(a) Relative ... ..	1	—	—	—	—	—	1
(b) Non-relative ... ..	1	—	—	—	—	—	1

With regard to certain of these categories the Committee decided that no provision of new houses need be made, namely, for those in which the overcrowding would, in the ordinary course of events, be abated within twelve months; those in which the overcrowding arose from the presence of a "non-relative lodger"; and those houses occupied by their owners. It was further decided that in view of the existence in this district of many houses of the smaller type which were unoccupied, there was no necessity for the Council to consider the erection of houses of this size. This, then, reduced the number of houses which the Council would need to erect to the forty-four houses of four or more than four bedrooms. Included, however, in the houses in the possession of the Council



were ten four-bedroomed houses occupied by tenants who require three bedrooms only, so it was agreed that steps be taken to obtain vacant possession of these ten houses to offer to an equivalent number of families who require this number of bedrooms, leaving only thirty-four four-bedroomed houses to be erected. The proposals therefore submitted by the Council for the abatement of overcrowding were for the erection of thirty-four four-bedroomed houses and ten three-bedroomed houses.

The appointed day from which fresh overcrowding would be an offence in this district was fixed as January 1st, 1937. For the education of owners and tenants, in the hope that it would tend to prevent, to some extent, overcrowding occurring during the later months of the year, in the summer informatory leaflets were issued to owners and estate agents and posters put up drawing attention to the position that would shortly prevail. The same steps were again taken late in December. In a rapidly growing district such as this, transfer of population occurs to a marked degree, more particularly in that class of house in which overcrowding is likely to be found. The fact that over forty houses found on one day to be overcrowded were not so in the course of a few weeks, is evidence of this. Now while these houses, which at the time of the survey were crowded but were later found not to be so, removed, at the time of the consideration of their proposals, the necessity of any action by the Council with regard to these particular properties, it is conceivable that some of these families have merely transferred to other houses in the district, and that also, of course, there will have occurred much new overcrowding by the operation of the same conditions which lead to that degree of crowding which was found to prevail. There must have been on January 1st, much more overcrowding than is revealed by the returns submitted at the time consideration was being given to the Council's proposals in May, 1936. While it is admitted that the legal obligations of the Council under the Act have been or will be met by the proposals, complete action within the spirit of the Act cannot be taken without a re-survey, or possibly a limited survey concentrated on those portions of the district which were found to contain most of the overcrowded houses, though it would appear, however, that there would be little enough to be gained by taking such action until the Council is in a better position to provide alternative accommodation.

By December 31st some amelioration in overcrowding had occurred. 11 families requiring 3-bedroomed houses had been rehoused in Council houses and 6 had found other suitable accommodation.

In addition to those houses found overcrowded at the time of the survey, there was 35 instances in which, owing to the ageing of the children, the houses would be overcrowded within two years. Of these families four have been rehoused in Council houses and four have found other suitable accommodation.



# INSPECTION & SUPERVISION OF FOOD.

## (A) MILK SUPPLY.

### Producers.

There are now 15 cow-keepers in the district compared with 18 in the previous year. Of these, 5 hold licences for the production of accredited milk. 9 only of these producers sell milk in the district by retail.

### Retailers.

Including the three company distributors, there are 80 retailers of milk in this district.

The following is a summary of the various classes of retailer :—

Number of local producers who sell milk locally...	...	9
Number of premises from which the three multiple firms distribute milk	... ..	31
Number of premises from which the single retailers distribute milk	... ..	10
Number of retailers not occupying premises in the district	... ..	12
Number of shops from which milk is sold in unopened receptacles only	... ..	51

### Licences.

The following licences were in force in respect of premises in the district :—

Bottling of Grade A. (T.T.) Milk at premises other than place of production	... ..	1
Bottling of Grade A Milk at premises other than place of production	... ..	2
Pasteurizing establishments	... ..	3
Selling of pasteurized milk at premises other than establishments where pasteurizing is carried on	... ..	39
(Of these, 17 premises belong to one firm, 12 to another and 3 to a third.)		
Selling of certified milk at premises not including establishments where the milk is produced	... ..	14
(Of these, 10 premises belong to one firm, and 2 to another.)		
Selling of Grade A (T.T.) Milk at premises other than establishments where the milk is produced	... ..	17
(Of these, 10 belong to one firm and 2 to another.)		



Selling of Grade A Pasteurized Milk at premises other  
than establishments where the milk is produced ... 2  
(Both of these belong to one firm.)

Selling of Grade A Milk on premises other than estab-  
lishments where the milk is produced ... ... 3

The Milk (Special Designations) Order, 1936, which revoked the Orders of 1923 and 1934 came into operation on June 1st, 1936. Three grades of milk are now prescribed, namely, tuberculin-tested, accredited and pasteurized. The conditions attached to tuberculin-tested milk are substantially the same as those previously prescribed for Grade A. (T.T.) Milk, namely, that it is a milk from cows which have passed a veterinary examination and the tuberculin test. Up to December 31st it should contain not more than 200,000 bacteria per millilitre ; after that date it must pass the prescribed methylene blue reduction test. At all dates it must contain no B.coli in 1/100th of a millilitre. The conditions regarding accredited milk are similar to those previously prescribed for Grade A milk, being the product of cows which have passed a veterinary examination. The bacterial standards are those prescribed for raw tuberculin-tested milk. The conditions regarding pasteurized milk are substantially the same as those under the 1923 Order. Further conditions now, however, are imposed in regard to thermometers and temperature records.

Tuberculin-tested milk may be pasteurized and sold as T.T. Milk (Pasteurized) in which case it must not contain more than 30,000 bacteria per millilitre. If it is bottled on the farm the word "certified" may be added to its description.

The previous designations, Certified, Grade A (T.T.) and Grade A, are now abolished, though provision was made whereby compliance with the conditions in the Orders of 1923 and 1934 as to the wording to be placed on caps, bottles and other vessels containing milk, was, until December 31st, 1936, regarded as satisfying the corresponding provision of the new Order.

Licences for the production of Certified and of Grade A (T.T.) Milk were formerly issued by the Ministry of Health. In future, producers' licences for T.T. Milk will be issued by the councils of counties and county boroughs.

The following is a summary of the licences issued in the latter part of the year :—

The bottling or retailing of T.T. Milk at premises other  
than that at place of production ... ... 21  
(Of these, 10 belong to one firm and two other  
firms each have 2.)



Bottling of Accredited Milk at premises other than at place of production ... ..	5
Pasteurizing Establishments . . . . .	3
Selling of Pasteurized Milk at premises other than establishments where pasteurization is carried on (Of these 34 belong to 4 firms, one possessing 16 premises, the next 13, another 3 and one 2.)	41

### **Milk Sampling.**

45 samples of certified milk were examined, of which six gave unsatisfactory counts. The producer supplying the six samples also had many bad samples last year, but is not now supplying this area with milk.

44 samples of other milk were taken. Of these one of the two samples of Grade A. (T.T.), four of the 25 of pasteurized, and one of the 15 of ordinary milk were unsatisfactory.

### **Ice Cream Sampling.**

13 samples of ice-cream were taken, of which 8 were unsatisfactory. Most of these were from small producers where the ice cream is manufactured in private houses. Some improvements were effected in the methods of production but much remains to be done.

### **Milk and Dairies Act, and Tuberculosis Order.**

The following is a copy of a report on the working of the Milk and Dairies Act, 1915, and the Tuberculosis Order, 1925, in this district:—

“During the year 1936 thirty-seven samples of milk were taken from retailers in the district. These samples were submitted to the Lister Institute for animal inoculation tests for the presence of tubercle bacilli. Two of these samples, one produced in Buckinghamshire and one in Hertfordshire, were found to contain living tubercle bacilli, and in each instance the offending animal was discovered and slaughtered. During 1936 three cows were reported by owners as suspected to be suffering from tuberculosis and were slaughtered.”

“Routine examination of milch cattle was carried out during the year by Mr. Reginald Wooff, M.R.C.V.S., the County Council's whole-time veterinary inspector; 668 inspections of bovine animals were made in Harrow. Three cows were found to be suffering from tuberculosis as defined in the Tuberculosis Order, 1925, and were slaughtered.”



## (B) MEAT AND OTHER FOODS

### Meat Inspection.

There are nine licensed but no registered slaughterhouses in the district. The slaughterhouse at the rear of No. 25 High Street, Wealdstone, was closed during the year, and a new slaughterhouse, which was licensed by the Council, was built at the rear of No. 46 High Street, Wealdstone. These premises are kept under observation, 1,038 visits being paid by the Sanitary Inspectors, the number of carcasses examined being 3,920.

Of the 214 beasts slaughtered 74 were unsound in some respects. Parasitic disease of the liver was found 23 times, abscess of the liver twice, and pneumonia once. The only other common disease present was tuberculosis, being found in the head 8 times, tongue of 8, lungs of 30, liver of 10, heart of 3 and mesenteric fat of 18 (more than one organ of the same animal being frequently affected). The forequarters of one carcass were condemned on account of tuberculosis, and an entire carcass on account of generalized tuberculosis. In addition, 160 lbs. of beef were condemned on account of bruising and decomposition.

184 of the 2,170 pigs slaughtered were diseased, cirrhosis of the liver occurring in 28, fatty liver in 1, pericarditis in 6, pleurisy in 3, pneumonia in 14, parasitic disease of liver in 7, abscesses in 6, mastitis in 1, urticaria 1, bruising 4, and fevered carcass four times. Tuberculosis was found in the entire carcass of three, in the forequarters of one, in the head of 63, in the lungs of 25, in the spleen of 2, in the liver of 21, and in the mesenteric fat of 80.

1,206 sheep were slaughtered, of which only 22 were found unsound in any respect, parasitic disease of liver occurring in 14, parasitic disease of lungs in 6, pneumonia in 1, and abscesses in carcass of one. Tuberculosis was found in the carcass of one.

330 calves were slaughtered, of which only 2 were found unsound, both due to immaturity.

### Bakehouses.

There are 33 factory and 12 retail bakehouses in the district to which a total of 96 visits were paid during the year.

In some instances it was found the premises needed cleansing which was carried out on receipt of notice from this department.

### Food Shops.

727 visits were paid to butchers shops, 122 to fish shops, 317 to provision shops, 391 to dairies and milk shops and 142 to green-grocers shops. The following amount of foodstuffs were condemned and voluntarily surrendered: Fish, 11 stone 10 lbs; apples, 56 lbs; grape fruit, 27 lbs; chickens, 6 lbs., and rabbit, 2½ lbs.



### **Fried Fish Shops.**

Fish frying is one of the scheduled offensive trades in the district. At the beginning of the year there were 25 such premises in the area. During the year another two were sanctioned, making the total such businesses 27.

To these 101 visits were paid. Most of the businesses are carried on in up-to-date premises with modern appliances. The premises are kept clean, and the few complaints received were promptly attended to.

### **(C) ADULTERATION, ETC.**

The Food and Drugs (Adulteration) Act is administered by the Public Control Department of the Middlesex County Council. During the year, 176 samples were analysed. Of these, 129 were of milk, of which 4 were adulterated. Of 26 samples of spirits, 3 were adulterated, as was one of the 4 samples of minced beef. Samples of meat, fish and sausages were taken but none of these proved to be adulterated. A conviction was obtained in the one case prosecuted.

### **(D) CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.**

These examinations are carried out at the laboratories of the Clinical Research Association Limited, Watergate House, Adelphi, London, W.C.2.

---



## ISOLATION HOSPITALS. DESCRIPTION OF PREMISES.

Particulars of the hospitals were given in the Annual Report for 1934.

### ADMINISTRATION.

Authority was given for arrangements to be made for the admission to hospital of infectious cases other than mumps and chickenpox.

Approval was also given for the erection of a building of a temporary character at the Rayners Lane Isolation Hospital for use as an operating theatre, and for the purchase of the necessary equipment.

### ADEQUACY OF ACCOMMODATION.

The accommodation at the Hospital was sufficient for the admission of cases of scarlet fever and diphtheria. All cases of double infection, however, had to be treated elsewhere, as had also those infections, other than scarlet fever and diphtheria, for whom institutional treatment was required. Owing to the low incidence of scarlet fever in the earlier months of the year when measles was prevalent, it proved possible to use a block for the admission of measles cases.

The following table shows the extent to which use was made of the hospital during the year :—

<i>Admitted as</i>	<i>In Hospital 1/1/1936</i>	<i>Admitted during year.</i>	<i>Total.</i>	<i>Dis- charged</i>	<i>Died.</i>	<i>In Hospital 31/12/36</i>
Scarlet Fever	18	246	264	255	—	9
Diphtheria ...	3	33	36	30	3	3
Measles ...	—	91	91	89	2	—

In addition to these cases, arrangements were made for the admission to the isolation hospitals of other Authorities, some 37 patients, who, had suitable accommodation been available, would have been admitted to the local hospitals.

### PROVISION OF NEW ISOLATION HOSPITAL.

During the year, the provision of a new Isolation Hospital was taken a stage further by a step which will probably result in the acquisition of a suitable site.

### CLINICAL ASPECTS.

#### Diphtheria.

Admissions—

Number admitted on a diagnosis of diphtheria ...	...	33
Number of cases clinically diphtheria ...	...	17
Number of carriers ...	...	4

Of the 12 cases in which a diagnosis of diphtheria was not confirmed, 8 were suffering from acute tonsillitis, 2 from peritonsillar abscess, and one each from acute laryngitis and acute leucaemia.



Period of stay.—The average length of stay in hospital of all cases was 19.6 days ; of clinical diphtheria cases, 29.4 ; of carriers, 8.8 ; and of those suffering from other conditions, 11.9 days.

Deaths.—Number of deaths, 3.

Case mortality, 17.7 per cent.

Of the fatal cases the first was admitted on the 8th day of disease, dying 4 days later. The second was one of haemorrhagic diphtheria admitted on the 3rd day of disease, dying three days later. The third was a case of laryngeal diphtheria who died soon after admission, on the 8th day of disease.

Complications :—Paralyses, 3 comprising palatal 2, and ciliary 1 ; albuminuria, 2 ; abscess, 1 ; and broncho-pneumonia, 1.

Cross Infection.—One patient contracted scarlet fever while in hospital.

Day of Disease on Admission.—The following summarizes the information with regard to the duration of illness at the time of admission : —

<i>Day.</i>		<i>1st</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>5th</i>	<i>6th</i>	<i>7th</i>	<i>Over</i>
Number of cases	...	1	2	7	—	2	2	1	2

Serum Administration.—The average amount of serum used per case was 24,470 units.

Operations.—Tracheotomy was performed in one instance.

Bacteriological Examination.—1,343 swabs were examined for the Klebs-Loeffler bacillus. Of the 538 sent in by general medical practitioners, 17 were positive. Of the 129 swabs from patients in the diphtheria wards, 13 were positive. Of the 676 swabs from patients admitted to hospital suffering from other diseases, 3 were positive.

### Scarlet Fever.

Admissions :—

Number admitted with diagnosis of scarlet fever	...	246
Number suffering from scarlet fever	... ..	217
Number in whom diagnosis not confirmed	... ..	29

Of these 29 cases, 10 suffered from an erythema, 6 from tonsillitis, 4 from German measles and 2 from measles, 2 from urticaria, 4 from other rashes and one from influenza.

Period of stay.—The average length of stay of all cases was 28.5 days. The average stay of scarlet fever cases was 31.1, the duration in uncomplicated cases being 25.2 and of complicated cases, 43.1. Non-scarlet fever cases were detained on an average of 9.5 days.

Deaths.—Nil.

Complications.—73 cases (or 35 per cent.) suffered from some complication, adenitis occurring in 32 (15.4 per cent.), otorrhoea in



10 (4.8), mastoiditis in 4 (1.9), rhinorrhoea in 18 (8.7), abscess in 9 (4.3), albuminuria in 10 (4.8), nephritis in 1 (0.5) and rheumatism 5 (2.4). 4 suffered from secondary sore throat and one from a relapse.

Operations.—Major: Mastoid operations were performed on three cases, two of these patients also suffering from measles.

Minor: there were two minor operations, both being incisions of cervical glands.

Double infection.—One patient was incubating measles on admission; another patient admitted with otorrhoea was recovering from both scarlet fever and measles.

Cross infection.—Nil.

Serum treatment.—Serum was given in 73 cases, 10 c.c.s. to 37 and 20 c.c.s. to 36. Reactions followed in practically 50 per cent., being slightly more common after an injection of 20 c.c.s. 26 (or 35.6 per cent.) of serum treated cases developed complications as against 47 (or 34.8 per cent.) of untreated cases.

Serum was given in 7 cases in whom immunization against diphtheria had previously been carried out. Reactions followed in four cases. Only 19 cases out of the 246 admitted gave a history of having been immunized against diphtheria.

Diagnosis.—The Dick test was used for diagnostic purposes in 31 instances and the Schultz-Charlton reaction once.

Return cases.—There were 7 return cases following the discharge of patients from the local hospitals.

### Measles.

Admissions.—91 cases were admitted on a diagnosis of measles, in all of which the diagnosis was confirmed.

Period of stay.—The average length of stay of all cases was 16 days, the average stay of uncomplicated cases being 8.9 and of complicated cases being 26.9 days.

Deaths.—There were two deaths, giving a case mortality of 2.2 per cent. One was a case in the late stages of diphtheria admitted at the onset of measles and who suffered at this time from bronchial pneumonia. The second case developed mastoiditis, was operated on the 19th day but, in spite of a second operation, developed meningitis.

Complications.—36 (or 39.6 per cent.) of the cases developed complications, bronchitis occurring in 14, bronchial pneumonia 3, mastoiditis 4, blepharitis 5, otorrhoea 9, corneal ulcer 1, and adenitis 2.

Operations.—Mastoid operations were performed on five patients, two requiring a bilateral operation.

Double infection.—One case was incubating chicken-pox on admission.



# PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

PREVALENCE OF INFECTIOUS DISEASE (other than Tuberculosis)

Disease.	Under 1 yr.	1-4 yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-24 yrs.	25-34 yrs.	35-44 yrs.	45-54 yrs.	55-64 yrs.	65 & over.	Total
Scarlet Fever ...	1	62	197	88	27	13	24	6	4	1	—	423
Diphtheria ...	—	8	10	4	—	4	2	1	1	—	—	30
Pneumonia ...	2	6	6	4	4	7	13	10	18	7	13	90
Erysipelas ...	—	—	2	—	—	2	4	6	9	4	4	31
Puerperal Fever	—	—	—	—	—	1	3	—	—	—	—	4
Puerperal Pyrexia	—	—	—	—	—	6	14	2	—	—	—	22
Enteric Fever...	—	—	—	1	—	—	2	—	2	—	—	5
Ophthalmia Neonatorum	6	—	—	—	—	—	—	—	—	—	—	6
Cerebro-spinal Fever	—	—	—	1	—	—	—	—	—	—	—	1
Dysentery ...	—	2	1	—	—	—	—	—	—	—	—	3
Acute Polio- myelitis	—	1	2	1	1	—	—	—	—	—	—	5

Disease.	Cases Notified	Admitted to Harrow Isolation Hospital	Admitted to other Isolation Hospitals	Admitted to other Hospitals	Deaths Registered
Scarlet Fever ...	423	221	14	—	—
Diphtheria ...	30	21	6	—	—
Pneumonia ...	90	—	—	—	—
Erysipelas ...	31	—	6	5	—
Puerperal Fever ...	4	—	2	1	—
Puerperal Pyrexia ...	22	—	10	4	—
Enteric Fever ...	5	—	2	2	—
Ophthalmia Neonatorum ...	6	—	1	—	—
Cerebro-spinal Fever ...	1	—	1	—	—
Dysentery ...	3	—	1	2	—
Acute poliomyelitis ...	5	—	2	2	—

## DIPHTHERIA.

### Incidence.

42 notifications of diphtheria were received during the year, the diagnosis, however, being revised in 12 of the cases to some other condition, of which the most common was tonsillitis. Of the 30 cases, five contracted the infection while they were in-patients at London hospitals. This is the seventh consecutive year a low incidence of this disease has prevailed, the rate per 1,000 population being only 0.22 as compared with the figure of 1.39 for the country as a whole.

There were no secondary or return cases.



### **Place of Treatment.**

Six patients were treated in outside hospitals, five of them being removed as in-patients and one as an out-patient from London hospitals. One patient was treated at home, and the remainder admitted to the Rayners Lane Isolation Hospital.

### **Deaths.**

Three of the cases proved fatal, being a case mortality rate of 10 per cent.

### **Bacteriological Examination.**

1,343 nose and throat swabs were examined for Klebs Loeffler bacilli at the Rayners Lane Isolation Hospital during the year, and 5 at the laboratories of the Clinical Research Association.

### **Immunization.**

The same arrangements were continued as in the previous year by which immunization against diphtheria was carried out by the patients' own medical attendants. 315 children completed the course of injections and a further 9 received one or more doses after Schick-testing had proved them to be still susceptible after they had been subjected to a previous course. T.A.M. is still being used as antigen, three doses being given at two or three weeks' interval. No "one-shot dose" antigen appears to give results comparable in efficiency with this method, so no change has been made. Of the 276 children Schick-tested subsequent to the course of inoculations, 19 proved positive. Of those primarily Schick-tested, again none under the age of ten years were negative; while most of those even to the age of thirteen, were positive. This high proportion of reactors is what might be expected in a district which has been so free from diphtheria for a number of years. The low level of herd immunity, which indicates the susceptible state of the community, can be raised, in default of the occurrence of cases, only by a greatly extended use of the facilities for artificial immunization.

### **Provision of Anti-toxin.**

Diphtheria anti-toxin is available free of charge to medical practitioners for the treatment of necessitous patients. 18 lots were issued during the year, totalling 248,000 units.

## **SCARLET FEVER.**

### **Incidence.**

423 cases of scarlet fever occurred during the year, a marked fall on the figures for the previous year, being an incidence rate of 2.64 per 1,000 population, compared with the figure of 2.53 for the country as a whole.



The incidence of infection was fairly even throughout the year, the months of February and March being those in which most cases were notified and August the smallest number.

### **Places of Treatment.**

The accommodation at the hospital for the ordinary cases proved sufficient throughout the year. 176 cases were treated at home at the election of the parents and 14 were admitted to outside hospitals. Of these, eight were in-patients of London Hospitals at the time of onset of illness and were removed to London County Council Isolation Hospitals, two children were removed at the desire of their parents to the London Fever Hospital; while four were admitted to the isolation hospitals of other authorities as they were, at the time, suffering from a double infection, the other illness being whooping cough in two cases and measles and chicken-pox in one each. Seven patients were at first nursed at home but later admitted to the hospital. In five of these the reason for the later removal was the inconvenience found arising from the children being at home; one was admitted because she had developed an involvement of the mastoid, while the remaining case was removed to hospital when she developed measles.

The commonest reason for the removal of 201 of those treated in hospital was difficulty in nursing. Of the 55 removed on this account, 39 were adults. The risk of spread to others owing to the crowding of the houses was the reason in 17 instances, while in a further 41 there were other susceptible children at home. In 8 cases only was removal requested because home treatment of the case would have affected the employment of one of the contacts, and 8 cases were removed either from a hospital or from a residential school. In 70 of the cases in which the homes seemed perfectly suitable for the home treatment of the case there appeared to be no reason for the removal apart from the inconvenience entailed or the still common fear of infection.

### **Secondary Infection.**

Secondary infections occurred in 20 households, in 14 of which there was only one secondary case, in 4 there were three affected, and in 2, four affected.

In 14 of the households, the primary case was at home throughout the illness. Of these homes, 7 had one secondary infection, 2 had two and 1 had three. The time of onset of illness of the primary to the onset of illness of the secondary, or of the first of the secondaries where more than one was affected, was within one week in 5 cases, between one and two weeks in 3, between two and three weeks in 2, between three and four in 1 and over four in 2. In 9 of these cases the onset of illness in the second was subsequent to the diagnosis of the disease in the primary patient. As regards the remaining instances the original patient in one case



was missed until infection had occurred in two other members of the household; while in three other cases the onset of illness in the second patient led to the diagnosis of the first case. Eight cases, therefore, occurred in which it can be assumed that they might have been prevented had the patients been removed, at the time of diagnosis, to hospital. In two instances the secondary case was the mother of the first patient to whom she was acting as nurse.

Secondary cases occurred in six households in which the primary case was removed to hospital. In four of these, however, the onset of illness of the secondary case preceded the date of removal of the first case; while in the other two instances the onset of illness of the second was the day following the removal of the first patient, a time well within the incubation period from the time of last exposure to infection.

### Return Cases.

A return case is defined as one whose onset occurred over 24 hours but within 28 days from the return home of a patient discharged from the isolation hospital. There were nine households in which such cases occurred, though one was apparently secondary to a relapse which occurred on the 9th day from the patient's return home. In the three cases whose onset was within the first week of the return home of the patient, there were no abnormal signs or symptoms in the original patient. In the case of one whose onset was on the 9th day the returned patient had developed tonsillitis. The interval from the return home to the onset was 24 days in one and 27 days in the remaining three cases. Two of the returned patients were normal, but the other two had developed a nasal discharge on return home.

There were five instances of a further case in the home on the return home of a patient where the interval separating the date of return from the onset was over 28 days, the actual intervals being 29, 36, 45, 61 and 63 days. In three cases the returned patients were well, but in the case where the interval was 61 days the patient had developed a nasal discharge, and in the case where the interval was 36 days, the patient had succumbed to measles after her return from hospital.

In only one household, in which three patients were affected, was there more than one case of illness following the return home of the discharged patient.

The return case rate this year, which is lower than the average, is a marked contrast to that experienced during 1935 when the rate was well above the average though the same practice in the administration of the hospitals and in regard to the discharge of patients had been followed.



In two instances a presumably infectious case had been treated in outside hospitals, but the remainder had been in-patients at the local hospitals. Of these, 4 were discharged within 28 days from the onset of illness, 4 in the fifth week, 2 in the sixth week, while 3 had been in over 10 weeks, two being detained because of rhinorrhoea and one because of adenitis.

### **Recovery Cases.**

There were four cases in which a patient in a house succumbed to scarlet fever within 28 days after the freeing of the patient who had been nursed at home. The intervals separating the date of freeing from the onset of illness were 9, 13, 15 and 25 days (in another case the interval was 33 days). Apart from one patient who had a nasal discharge, the original patient presented no abnormal signs at the time of the onset of illness in the other patient. In the case where the interval was 9 days the second patient had been away from home during the illness of the original patient.

### **Home Treated Cases.**

176 patients suffering from scarlet fever were treated in their own homes.

Most cases were uncomplicated and made uninterrupted recoveries. Adenitis occurred in 6 per cent. of the cases, rhinorrhoea in 7 per cent., otorrhoea in 6, and joint pains in 2 per cent. The corresponding figures for those treated in hospital were: adenitis 15.4, otorrhoea 4.8, rhinorrhoea 8.7, abscess 4.3, albuminuria 4.8, rheumatism 2.4 and mastoiditis 1.9.

The occurrence of secondary and recovery cases has already been referred to.

### **Cases following Operation on the Naso-pharynx.**

There were four cases this year where scarlet fever followed operative treatment of tonsils and adenoids. In one patient on whom an operation had been performed at home the interval from the date of the operation to the onset of illness was three weeks. The other children were operated on at hospitals, two in one and the third in a different hospital. The onset of illness was the third day from the date on which the operation was performed in one case and the fifth and sixth days in the other two. In one of these cases the patient secondarily infected another child.

### **Deaths.**

There were no deaths from scarlet fever during the year.



### Dick-testing and Active Immunization.

Apart from those tests carried out in the isolation hospital for diagnostic purposes, no provision was made for Dick-testing or for artificial immunization.

### Schools and Scarlet Fever.

Only 115 of those cases notified were of children who, just prior to succumbing to the illness, were in attendance at a public elementary school. In 62 cases the patient was the only person in attendance at school who suffered from scarlet fever at that time, the onset of illness in any other children who attended the same department being separated from that of each of these cases by an interval of at least ten days.

In regard to the other cases there was very little grouping, and nothing to suggest that spread was caused by attendance at school until the end of the year when, in the last week of the term, there were four cases in an Infants' Department in which there had been one case the previous week. The other groupings were one case in two consecutive weeks on three occasions; one in each of three consecutive weeks twice; two cases in one week on five occasions and three in one week twice; three cases in two consecutive weeks twice, and four cases spread over three consecutive weeks on three occasions.

In a large residential school in which there are pupils of both sexes, over a period of seven consecutive weeks in the spring term 34 cases were notified, all girls, the week when the last cases were notified ending March 14th. In the summer term, in the six weeks following the week ending May 9th, 21 cases were notified, all being girls except that two boys were notified in the third week. After a few weeks' freedom from infection another group of cases occurred, six being notified in the week ending July 18th, of whom five were boys; and another boy was notified in the following week. Scarlet fever attacked some of those who apparently gave negative readings of the Dick test, but did not attack any of those who had previously been actively immunized.

In the report for 1935 reference was made to the occurrence of a number of cases of scarlet fever at a non-residential private school in the district. The following is a report on the sequence of cases which occurred:

"At a private day school of some 76 scholars a number of cases of scarlet fever occurred, dating back to May, 1935. Most of the scholars are local residents though a few live in adjoining districts. A few take a mid-day meal at the school on three days a week. There is a staff of six, and a gymnastic instructor who is the only member of the staff who is associated with all the classes. The classes remain in their own rooms, being visited by the teachers. At the time of maximum incidence at the school, very few cases of scarlet fever were being notified in the district.



The following is a summary of the cases notified :

	<i>Onset.</i>	<i>Age.</i>	<i>Class.</i>	<i>Last attendance.</i>
1	4 / 5 / 1935	7	3b	
2	5 / 5 / 1935	9	3b	
3	26 / 5 / 1935	—	3b	
4	7 / 6 / 1935	9	2	
5	26 / 10 / 1935	7	2	25 / 10 / 1935
6	6 / 11 / 1935	9	3a	6 / 11 / 1935
7	10 / 11 / 1935	9	3c	10 / 11 / 1935
8		8	3b	14 / 11 / 1935
9	16 / 11 / 1935	11	4b	16 / 11 / 1935
10	16 / 11 / 1935	10	4b	16 / 11 / 1935
11	15 / 11 / 1935	12	3a	15 / 11 / 1935
12	27 / 11 / 1935	12	4b	27 / 11 / 1935
13	9 / 12 / 1935	11	4b	9 / 12 / 1935
14	20 / 1 / 1936	11	4b	20 / 1 / 1936
15	20 / 1 / 1936	11	4b	20 / 1 / 1936
16	23 / 1 / 1936	7	2	23 / 1 / 1936
17	3 / 2 / 1936	13	4a	1 / 2 / 1936
18	5 / 2 / 1936	—	3b	1 / 2 / 1936
19	7 / 2 / 1936	12	4b	7 / 2 / 1936
20	11 / 2 / 1936	9	3b	11 / 2 / 1936
21	22 / 2 / 1936	—	3b	21 / 2 / 1936
22	26 / 2 / 1936	—	3a	26 / 2 / 1936
23	26 / 2 / 1936	—	3b	26 / 2 / 1936
24	3 / 3 / 1936	9	3c	3 / 3 / 1936
25	12 / 3 / 1936	8	3c	11 / 3 / 1936
26	13 / 3 / 1936	12	4a	13 / 3 / 1936
27	15 / 3 / 1936	9	3b	14 / 3 / 1936

Nos. 4 and 7 are the same child and No. 13 was a return case to No. 6.

It was not until the occurrence of the group of cases in the middle of November that it was appreciated that there was anything in the nature of a school infection. On clinical examination of the scholars at this time with the object of detecting any possible missed case present in the school who possibly were spreading infection, only one boy presented any suspicious signs and he was temporarily excluded. The school was closed voluntarily for a week late in November—on re-opening one case occurred within the next week, this being the last case to occur before the closure for the Christmas holidays which extended from December 18th to January 14th.

On re-opening, two children in class 4b. fell ill with a simultaneous onset. The class was swabbed and of 13 swabs 10 were negative to the haemolytic streptococcus. Two showed moderate growths and one a smaller growth of the haemolytic streptococcus. One of those giving a marked growth was case No. 9. His nose and



throat appeared normal as did also those of the others who gave positive results. An assistant mistress who took the lower forms who had recently suffered from a sore throat was swabbed with negative results.

A circular letter was at this time sent to all parents of scholars at the school informing them of the Dick test and of the possibility of immunization against scarlet fever, and the suggestion made that they approach their own medical attendants.

All cases who were at the time suffering from scarlet fever were swabbed and typed early in February. All except one gave the type 2 organism in their throats and many in the nose as well.

All cases who had had scarlet fever since the occurrence of the first case, namely, in May, 1935, were then swabbed. Of the four cases who had succumbed early in the year, one went down again early in November. Of the other three, two gave negative results; the third showed the presence of type 1 streptococcus. Most of the others were also negative but nos. 7 and 13 gave scanty growths of type 2 organism.

All fresh cases were swabbed as they occurred and all continued to show the presence of the type 2 organism.

Swabbing of the teaching staff gave negative results except for a moderate growth of type 2 in one of the members. This teacher and those boys (nos. 7, 11 and 13) who gave positive results were segregated and did not come into contact with any of the remaining pupils. Any children who had suffered from scarlet fever were swabbed before being re-admitted to school; the teacher was later excluded from school following which there was a lull, no cases being notified, but before he had been re-admitted three fresh cases (nos. 25, 26 and 27) had occurred.

Following this, every child in the school was clinically examined and those presenting any abnormality of the nose or throat or giving any history of a sore throat, were swabbed. Of the 44 swabs, 36 were negative, two contained types of haemolytic streptococcus other than type 2, but six were positive to type 2. All these had suffered from scarlet fever (nos. 3, 6, 7, 9, 12 and 14) and previous swabbing of the throats of three of these (nos. 3, 6 and 12) had given negative results.

No further cases occurred up to the time (April 3rd) of closing of the school for Easter holidays. Before the holidays all those who had, at any time, given positive results, were swabbed, all proving negative.

The typing of the organisms was kindly undertaken by Dr. V. D. Allison at the Ministry of Health's Laboratory.

The method of spread of these cases remains unknown. If, as seemed possible, it was through the agency of a healthy carrier, there must have been more than one, and they must have been



intermittent. The spacing of the cases was strange, in that there occurred groupings of two or three with roughly the same date of onset, separated from others by intervals of more than a week—and commonly enough those with approximately the same date of onset were not in the same class."

### **Period of Residence of Patients Notified.**

Of 329 patients notified as suffering from scarlet fever, 11 had lived in the district less than one month; 13 had been here over one but under three months, 16 over three but under six, and 39 over six but under twelve months. 37 had been here over twelve but under eighteen months, and 13 over eighteen months but under two years. 39 were in their third year of residence, 40 in their fourth, 38 in their fifth, and 83 had lived here over five years.

### **ENTERIC FEVER.**

Five cases of enteric fever were notified during the year, all being due to the typhoid organism. All occurred either in late August or early September, in three at least, the disease being contracted in Bournemouth, and a fourth outside the district.

Two of the cases proved fatal.

One was treated at home, two in isolation hospitals and two in general hospitals.

### **DYSENTERY.**

Three cases were notified as suffering from dysentery. All three were children who, at the time of onset, had for periods longer than the incubation period of the illness, been in-patients at one of the London hospitals.

### **ERYSIPELAS.**

31 cases of erysipelas were notified during the year, 23 of these having succumbed during the first six months. Females suffered more than males in the proportion of two to one.

The only age group preponderately affected was 45-54. The face was affected in two-thirds of the cases, the legs and the head being the affected sites in most of the others.

Three cases proved fatal.

Six cases were admitted to isolation hospitals; five to general hospitals and 21 were treated at home.

### **SMALLPOX.**

No cases of smallpox were notified during the year, and no vaccinations performed by the Medical Officer of Health under the Public Health (Smallpox Prevention) Regulations, 1917.

A number of visits were paid to the homes of those, who, while on board ships were contacts of this infection.



## EPIDEMIC DISEASES OF THE CENTRAL NERVOUS SYSTEM.

### Cerebro Spinal Fever.

In May a girl of thirteen contracted this infection. Treated at an isolation hospital, she made a complete recovery. A male infant of 8 months died of meningococcal meningitis in December.

### Encephalitis Lethargica.

No cases of encephalitis lethargica were notified during the year, but past infection by this disease was a contributory cause of death of two adult women, one of whom was an in-patient at a mental institution.

### Acute Anterior Poliomyelitis.

Six cases of this infection were notified during the year, in one of which, however, the diagnosis was revised to rheumatism. In three of the cases the onsets of illness were within a few days one of the other, but the patients had apparently had no communication, nor was there any common source of infection. The cases were all relatively mild, some slight paresis being left. Early in November a girl of eighteen suffered from a mild attack, and later in the month a boy of six years of age.

Two cases were removed to an isolation hospital, and one to a general hospital.

## NON-NOTIFIABLE INFECTIONS.

### Measles.

It was anticipated that this would be a year of higher incidence of infection with measles in this district. Except for a number of cases in one school, however, the district was practically free from the disease during January. This school was more heavily affected in February, after which it enjoyed relative freedom. In this month, however, the infection entered and severely attacked another school, which suffered again for the next month, after which it was free. Infection started in two other schools in March and began to be general throughout almost every school in the district in April, though it was not until May that the brunt of the attack was felt. Apart from a few odd cases, most schools were free by June.

Information of infection in the schools is received from the heads of the elementary schools, the total number of notifications received being 1,641. Acting on this information the Health Visitors visited the homes and advised the mothers, particularly on the necessity of endeavouring to avoid the spread of infection to children of pre-school age. 808 home visits were paid to measles cases and 912 to other cases of infectious disease.



As the incidence of scarlet fever was light, one of the wards at the Rayners Lane Isolation Hospital was opened for the admission of measles cases. During the four months, February to June, 91 cases were admitted to the local hospital and 7 cases to other isolation hospitals. A very high proportion of those admitted were adults of Irish nationality, being men engaged in the district as labourers or girls employed as domestic servants. Some of these attacks were of quite a severe nature and for them skilled nursing which could not be obtained in their homes was urgently required.

Five cases of measles proved fatal.

### **Whooping Cough.**

Whooping cough appeared in the first half of the year in eight schools, most being only lightly affected, in only three of them were there as many as twenty cases altogether. In one of these it reappeared in the last quarter of the year when over fifty children were attacked. In addition to this school, three others had a few cases during the Christmas term. Altogether notice was received of the occurrence of 223 cases.

### **Chicken-Pox.**

Chickenpox appeared in most schools during the course of the year, being much more prevalent from February to June than at any other period. Four schools had over fifty scholars away, the total number of intimations from the head teachers received being 541.

### **Mumps.**

Mumps appeared in eight departments. Only one school, however, was heavily affected, accounting for 69 out of the total of 248 cases.

### **Influenza.**

Although influenza appeared on the death certificates of some six people who died in the first half of the year, it was not until almost Christmas time that the district was affected by an influenza epidemic. The disease soon reached epidemic proportions, though up to the end of the year the character of the illness was a mild type being typically a three-days' rise of temperature with no complications.

### **Epidemic Jaundice.**

A number of cases of jaundice occurred amongst children attending the Infants' Department of one of the public elementary schools. Information was received of its occurrence amongst eleven children, of whom two, though attending the school, were home contacts of previous cases, the intervals separating the onsets of the jaundice in the cases at home being sixteen days in one instance and thirty in the other. Excluding these possible home infections, three classes were affected, five children being scholars in one class and two each in two others. The intervals between the cases most commonly were about twenty-eight days.



## TUBERCULOSIS.

## Notifications.

	New Cases.								Deaths.				
	Primary Notification.				Brought to notice other than by Form A.								
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary		
	M	F	M	F	M	F	M	F	M	F	M	F	
Under 1	—	—	—	1	—	—	—	—	—	—	—	1	
1—	1	1	1	1	—	—	—	—	—	—	1	1	
5—	4	2	1	3	—	—	—	1	}	—	1	2	1
10—	1	—	5	1	1	—	1	—		3	8	5	—
15—	3	9	3	—	—	1	1	—			19	4	—
20—	10	20	2	2	2	1	—	—	11	7	1	1	
25—	30	25	3	2	2	3	—	—	5	4	—	—	
35—	24	9	1	3	—	1	—	1	8	1	—	—	
45—	17	6	—	—	3	1	—	—	1	—	—	—	
55—	6	3	—	—	1	—	—	—	—	—	—	—	
65 & upwards.	3	—	1	—	—	—	—	—	—	—	—	—	
Total ...	99	75	17	13	9	7	2	2	47	25	9	5	

In regard to cases brought to notice other than by Form A, most commonly the information was obtained of the removal into the district of some patient from another area and that patient had not attended a medical practitioner since transferring here.

During the year 190 pulmonary cases (108 male and 82 female) were added to the register as compared with 180 for the year 1935. Of 173 cases in regard to which particulars are known, 80 (namely, 52 male and 28 female) contracted the disease locally; and 93 (49 male and 44 female) transferred here already suffering from it (the criterion for allocation into this group is that the patient had already been notified in some other district before transfer, or was notified as suffering from the disease or gave a history of definite symptoms of onset within 6 months of taking up residence here.) If it is assumed that those patients about whom no information is available had contracted the disease locally, the total number of cases in this category would be only 97, giving a rate per 1,000 population of 0·6 compared with a national rate of 1·1.

The following table summarizes the position with regard to the period of residence of those who contracted the disease locally:—

Period of residence	6-12 months	1-2 years	2-3 years	3-4 years	4-5 years	5 years & over.
Males ...	9	7	3	10	1	22
Females...	2	5	7	3	—	11



Of those cases locally contracted, one in four of the males gave a family history of infection and one in 3 of the females. There was, amongst the males, no especial preponderance amongst workers at any particular employment, about one-quarter of them being clerks. Most of the females were engaged in house-work, the majority being married. Of the 93 cases who transferred here while suffering from tuberculosis, 74 were known of within 12 months. 19, however, were not learned of for a longer period, 15 of these being women, these cases exceptionally being lost for periods up to 5 years, though most of them were known of within two years of transfer.

34 cases (19 male and 15 female) of non-pulmonary disease were learned of during the year, being a rate of 0.23 per 1,000 population compared with the figure of 0.36 for England and Wales for the year 1935. Of those about whom particulars are known, 14 contracted the disease locally, while 12 transferred here suffering from it. One-third of the lesions were of bones or joints, equally divided amongst those who contracted the disease locally and those who transferred here with it. The only other frequent sites were the meninges and the abdomen, four patients dying of meningitis having apparently contracted the disease while living here, but all the cases of abdominal infection having transferred here while already suffering from the complaint. A family history of tuberculosis was rarely obtained, and in practically all the cases the milk supply was pasteurised.

### Register.

	Pulmonary.		Non-Pulmonary.	
	Male.	Female.	Male.	Female.
No. on register Jan. 1st, 1936...	249	213	50	62
No. of New Cases added ...	99	75	17	13
No. of cases added—other than on Form A ...	9	7	2	2
No. of cases restored to register	7	2	—	2
No. of cases removed ...	116	87	13	23
No. on register Dec. 31st, 1936	248	210	56	56

Per 100,000 population the numbers of pulmonary cases on the register at the end of the year were 155 male and 131 female, the comparable figures for the country as a whole at the end of 1935 being 292 and 252. The corresponding local figures for non-pulmonary tuberculosis were 3.5 and 3.5 and for England and Wales 12 and 11.5.



The following table is a summary of the cases removed from the register with the reason for their removal :

	<i>Pulmonary.</i>		<i>Non-Pulmonary.</i>	
	<i>Male.</i>	<i>Female.</i>	<i>Male.</i>	<i>Female.</i>
Left the District ...	62	48	5	11
Died ... ..	41	28	5	6
Cured ... ..	6	5	3	6
Diagnosis not confirmed or withdrawn ...	7	6	—	—

### Deaths.

72 persons (47 male and 25 female) died from pulmonary tuberculosis during the year, and 14 (9 male and 5 female) from non pulmonary tuberculosis. The death rates per million population was therefore 448 from the pulmonary disease, compared with a figure of 605 for England and Wales for the year 1935, the comparable local figures for non-pulmonary tuberculosis being 71 and the corresponding national figure 113.

Tubercular disease resulted in 86 deaths, accounting for 6·8 per cent. of the total deaths in the district, the corresponding figure for England and Wales being 9.

21 deaths, or 24 per cent. of those who died from tuberculosis, occurred amongst patients who had not been notified in this district as suffering from tuberculosis. Of these 7 died in institutions outside the district, a number of these being only temporary residents here. Notification is, however, expected from institutions specifically for the treatment of the tuberculous, three of these unnotified patients dying in such hospitals. With regard to four patients the diagnosis of tuberculosis was not made until after the result of post-mortem examination, two of these suffering from pulmonary and two from non-pulmonary disease. In the other cases where there was failure to notify that the patient was suffering from tuberculosis, the reasons given were: deliberate abstention from notification so as to keep the knowledge from the patient that he was suffering from tuberculosis; one patient died at a mental hospital, not having lived in this district for many years; one patient died after a very short illness from meningitis; in one case a doctor was summoned only just prior to the fatal issue; in two cases medical practices had only recently changed hands; while two patients transferred here suffering from the disease and were, in error, not notified. One patient died from uraemia, tuberculosis appearing on the certificate as an infected kidney had been removed 20 years previously. In only one instance of local failure to notify was no reason advanced.

Of the 58 notified cases of pulmonary tuberculosis who died, 18 succumbed within one year of notification, 7 of these being within one month and 12 within 6 months. 13 died in the second year



after notification, 7 in the third, 4 in the 4th, and five in the 5th, while 11 survived 5 years. Of the nine non-pulmonary cases, all but one were dead within 6 months, all but one of these being within one month, most of these deaths being due to meningitis.

40 of the deaths of the pulmonary cases and 9 of the non-pulmonary cases occurred in the district, mostly in the patients' own homes; while 32 of the pulmonary and 5 non-pulmonary occurred outside the district, mostly in institutions.

### Preventive Measures.

Home visiting of tuberculous patients is now carried out by the staff of the Middlesex County Council.

Bacteriological examination of sputa is carried out at the laboratories of the Clinical Research Association, 201 samples having been submitted during the year.

No action was taken during the year under Section 62 of the Public Health Act, 1925, for the compulsory removal to hospital of any infectious tuberculous person.



## MATERNITY AND CHILD WELFARE.

### REGISTRATION AND NOTIFICATION OF BIRTHS.

The total number of live births registered during the year was 2,873, 1,422 males and 1,451 females. Of these 80 were illegitimate, being a percentage of total births of 2·7.

2,299 births occurred in the district (2,236 live and 63 still births). Of this number 164 (159 live and 5 still births) were to residents of other districts, leaving 2,077 live births and 58 still births notified in respect of local residents. Of this number, 1,287 were notified by midwives and 848 by doctors or parents.

808 (773 live and 35 still births) notifications were transferred from other districts, being mostly in respect of births occurring to Harrow mothers in London or in Middlesex County Council Hospitals.

### STILLBIRTHS.

51 male and 55 female stillbirths were registered, being a rate per 1000 population of 0·66 compared with the figure of 0·61 for the country as a whole.

In nearly one-half of the cases the infant was alive up to the onset of labour at full term, the death occurring from injury or shock during delivery. Included in these were cases of obstructed labour, of post-mature infants or of very large babies at the first confinement. Some of these cases would appear to be preventable by ante-natal supervision and appropriate treatment. On the other hand quite a number were first pregnancies in which, in spite of possible difficulties at the confinement it is appropriate that there should be a trial labour, though this should be permitted only in the most favourable of surroundings.

In one quarter of the cases there was some abnormality on the part of the mother which resulted in the death of the foetus, the commonest being antepartum haemorrhage. A number of such cases could be saved by the education of mothers as to the significance of abnormalities, by the co-operation of the mother, by the provision of domestic assistance and by a sufficiency of ante-natal beds.

The remaining quarter were almost equally divided between premature births at about seven months and full time infants. In the latter group presumably the shock of delivery was too great for the deficient stamina of the infant, though possibly some of these might have survived an easier delivery. Of those prematurely delivered, in some, no doubt, the premature confinement would have occurred because of the previous death of the foetus.



The maternal mortality rate is commonly accepted as an index of the general efficiency of the maternity services. Quite apart from its utility for this purpose being nullified to an appreciable extent by the inclusion of such deaths as those from abortion, the figure is too small as an index. Rates in any one year of anything from 2 to nearly 7 are possible and normal when the average rate is 4. Considered another way, three additional deaths in a district with 3,000 confinements annually will transfer the rate above instead of below the average. A larger figure which would be subject to relatively much smaller fluctuations would be a more accurate index. Although many stillbirths are, in our present state of knowledge, causeless, or, at least, inexplicable, a large number are closely related to ante-natal conditions and conditions appertaining at the confinement. Similarly, although not by any means all of the neonatal deaths are related to these conditions, such as, for instance, those dying from gross congenital abnormalities, the bulk of them are. Analysis of stillbirths and of neonatal deaths could give for each group those which are subject to the influence of ante-natal care and attention, and of skilled attention at labour. Such a figure would then be a more accurate index of the efficiency of maternity services than that at present used.

### INFANT MORTALITY.

The infant mortality rate, by which is expressed the number of deaths among infants under one year of age per 1,000 born was 44.9 compared with the figure of 59 for the country as a whole 63 for the Great Towns, 66 for London, and local rates of 47.5 and 42.1 for the years 1934 and 1935.

The following table indicates the ages at which these deaths occurred, with the corresponding figures for England and Wales for the year 1935 for comparison :

	Local.		England & Wales.	
	1936.		1935.	
	M.	F.	M.	F.
Under 4 Weeks ...	22.5	21.3	34.11	26.45
4 Weeks—3 Months ...	7.7	7.6	10.52	7.64
3—6 Months ...	10.5	6.2	8.56	6.78
6—9 Months ...	7.0	1.3	6.04	4.77
9—12 Months ...	2.1	3.4	4.67	3.95
Total under 1 Year ...	49.8	39.8	63.90	49.58



Below is set out an analysis of the causes of these deaths under 12 months with the corresponding figures for the country as a whole for the year 1935 :—

	Local 1936.		England & Wales. 1935.	
	M.	F.	M.	F.
Measles ... ..	—	0·7	0·54	0·42
Whooping Cough ... ..	—	1·4	1·19	1·54
Influenza ... ..	—	—	0·36	0·33
Diarrhoea and Enteritis ... ..	5·6	3·4	5·88	4·20
Premature Birth ... ..	23·2	22·0	19·07	15·28
Congenital defects ... ..			8·57	6·95
Congenital Debility and Icterus ... ..			3·61	2·40
Developmental and wasting Diseases ... ..			31·25	24·63
Tuberculous Diseases ... ..	—	0·7	0·62	0·49
Convulsions ... ..	—	—	2·02	1·39
Bronchitis and Pneumonia ... ..	14·0	4·8	11·58	9·13
Other Causes ... ..	7·0	6·9	10·46	7·45
TOTAL ... ..	49·8	39·9	63·90	49·58

The neonatal mortality is the death rate per 1,000 births occurring in infants at under one month. This figure was 22·2, constituting 48·9 per cent. of the total infant mortality rate. The distribution of these deaths per 1,000 births amongst infants of different ages is set out below, with the corresponding figures for the country as a whole for the year 1935 :

	Local. 1936.	England & Wales. 1935.
Under 1 Day ... ..	6·95	10·75
1—7 Days ... ..	9·05	11·27
1—4 Weeks ... ..	6·26	8·37
Total ... ..	22·26	30·39

The lower local rate follows much the same distribution as the national rate. The following table is an analysis of the causes of the neonatal mortality :—

	Local. 1936.	England & Wales. 1935.
Common Infectious Diseases ... ..	0·4	0·06
Tuberculous Diseases ... ..	—	0·01
Diarrhoea and Enteritis ... ..	—	0·54
Developmental and Wasting Diseases ... ..	19·5	23·25
Other Causes ... ..	2·1	6·53
TOTAL ... ..	22·0	30·38



According to this classification most of these deaths have been classed to "Developmental and Wasting Diseases," the rate from these causes being 19.5 per 1,000 compared with the national figure of 23.25 in 1935. The deficiency in the local rate, therefore, is mostly to be found amongst other causes. Of the 56 deaths in this group, 32 were ascribed to prematurity. In a few of these, the reason for the premature onset of labour was known, such as in those cases of placenta praevia and eclampsia. In most, however, there was no apparent reason for the premature confinement. In 12 instances the death of the infant followed on birth injuries due to difficulty in confinement. In 7 it was due to some congenital mal-formation of the infant; in 4 to atelectasis, one to inanition, and in 2 to inattention at birth.

The following table is an analysis of the causes of death of those infants of ages between 1 month and 1 year:—

	1-3 Mths.	3-6 Mths.	6-9 Mths.	9-12 Mths.
Infectious Disease ...	—	2	2	—
Pneumonia & Bron-				
chitis ...	9	9	6	3
Tuberculosis ...	—	1	—	—
Diarrhoeal Diseases	5	7	—	1
Deficient Inherent				
Vitality ...	8	3	—	1
Violence ...	1	1	—	—
Other Causes ...	1	1	3	1
TOTAL ...	24	24	11	6

The infectious diseases were 2 of whooping cough, 1 of measles and 1 of meningococcal meningitis. The group of deficient inherent vitality includes those suffering from congenital defects, from birth injuries and from prematurity, marasmus and inanition.

It will be noticed that the commonest cause of death at these ages was bronchitis or pneumonia. Although the death certificates contain no reference to the fact, it is probable that many of these deaths, of which there was a large number in December, were due to influenza which became prevalent in the district at that time. Most of the deaths from diarrhoeal diseases occurred during the first quarter of the year, the summer months being particularly free.



## DEATHS OF OLDER CHILDREN.

The following table classifies the deaths of children between the ages of 1 and 5 years :—

	1-2 Yrs.	2-3 Yrs.	3-4 Yrs.	4-5 Yrs.
Infectious Disease ...	2	—	1	—
Pneumonia & Bronchitis ...	4	3	2	—
Tuberculosis ...	1	—	—	—
Violence ...	—	—	—	1
Other Causes ...	—	3	3	—
<b>TOTAL ...</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>1</b>

The death rates per 1,000 living at these ages in England and Wales for the year 1935 were 9·6 ; 4·6 ; 3·4 and 3·0. The local figures of actual deaths cannot be translated into corresponding rates as the actual numbers of those living in this district at these ages is not known, though some indication is obtained from the knowledge that in 1935 the number of births in the district was 2,523 and in 1934, 2,167.

## INFANT MORBIDITY.

### Ophthalmia Neonatorum.

Number of cases notified : 6.

Number treated at home : 6. In hospital : nil.

Vision unimpaired : 6. Impaired : nil. Blindness : nil.

Deaths : nil.

Of the six cases notified, one was an infant who, at the time of notification, was an in-patient at a London Hospital. All cases were mild in character and made complete recoveries.

Cases of ophthalmia neonatorum are investigated by the health visitor on receipt of notification, and are visited regularly until the eyes are clear. A similar procedure is followed in respect of those cases to which a midwife has summoned a medical practitioner by a medical aid notice on account of some abnormality of the infant's eyes.

Institutional treatment is provided by arrangement with the London County Council, at St. Margaret's Hospital. No cases were admitted this year. Home nursing for mild cases is provided by agreement with the Harrow, Wealdstone and Harrow Weald District Nursing Association who treated two cases during the year.

### Pemphigus.

Pemphigus of the new-born has, since 31st July, 1935, been notifiable in this district. No notifications were received during the year.



## MATERNAL MORTALITY.

There were 12 deaths registered as due to or associated with pregnancy, of which two were due to sepsis giving a maternal mortality rate from this cause of 0·67 and for other accidents and diseases of pregnancy and parturition a rate of 3·35, being a total rate of 4·02 per 1,000 live births. The corresponding rates for England and Wales were 1·34, 2·31 and 3·65, and for this district for the year 1935, 1·92, 1·54 and 3·46.

Both patients who died of sepsis had abnormal confinements in their own homes and were removed to hospital for treatment.

Of the ten deaths from other accidents or diseases of pregnancy or parturition, a number might have been prevented by the exercise of more care or co-operation on the part of the patient. One patient started bleeding when about two months pregnant. It was not until after three weeks' loss, however, that she decided to obtain medical advice. Another patient who had a poor obstetrical history was advised to have her confinement in an institution but refused. A difficult labour ensued over a brow presentation. She was delivered in hospital. The following day she had signs of infarction, more about a fortnight later, and followed by thrombosis of the leg. From these conditions there was a gradual improvement but four weeks after confinement she died from pulmonary embolism. Another patient had been under regular medical supervision, the urine and blood pressure being normal up to the 36th week. At the last examination the urine was free though there was slight oedema of the legs. Five days after this examination the patient suffered from vomiting and intense headache. In spite of the significance of these symptoms she did not call in her medical attendant for many hours. She was removed to hospital where, after she had been confined of a macerated foetus, she became increasingly oedematous, dying finally of pulmonary oedema.

In some cases little enough can apparently be done to prevent an untoward happening. Such was the case of a woman who, when three months pregnant, was admitted to hospital on account of vomiting, and in spite of treatment she died within 48 hours of acute hepatitis. Another woman, after regular ante-natal supervision, was admitted to hospital in labour and developed intra-partum eclamptic fits to which she succumbed. Another patient was satisfactorily under the ante-natal supervision of the hospital at which she was to be confined. Because of signs of toxæmia during the 37th week she was admitted for medical induction which, however, was unsuccessful. At the spontaneous labour which occurred a week later, primary uterine inertia ensued so the patient was delivered by forceps. Seven hours later the placenta was manually removed but two and a half hours afterwards the patient suddenly collapsed and died from 1 (a) obstetric shock, (b) abnormal labour, and 2 pregnancy toxæmia. Another patient who was receiving



full ante-natal supervision, when three weeks short of term showed signs of toxæmia. On this failing to respond to treatment, labour was induced and resulted in a stillborn child. Soon after labour cerebral symptoms developed, the patient becoming comatose and dying within 48 hours, the death certificate reading: "1 (a) cerebral hæmorrhage, (b) toxæmia, and (c) pregnancy."

One patient gave a very bad obstetric history. At 30 weeks she was admitted to a small nursing home because of hardening of the uterus. Owing to a slight external hæmorrhage five hours later she was transferred to a hospital where she was diagnosed as suffering from a concealed accidental hæmorrhage to which she succumbed. Because of a long second stage, forceps were applied to a woman who had had full ante-natal supervision. The patient came round from the anaesthetic and was apparently well but six hours later she died of a severe post-partum hæmorrhage. The remaining case is that of a single girl, who, failing to get a bed at hospital, went to a nursing home but while in labour discharged herself. Four days later she appeared at the hospital where she was delivered of a dead foetus. She apparently recovered of the confinement but died suddenly the next day of dystocia, toxæmia, pregnancy and uterine inertia.

Of these twelve patients two only had made any use of the local ante-natal services. One was the patient who died of intra-partum eclampsia—early on she made two attendances at the local clinic where owing to difficult domestic circumstances, arrangements were made for her admission to hospital. All her later ante-natal supervision was performed at the hospital. The other case was the one who died following a brow presentation. Her medical attendant referred her to the consultant ante-natal clinic, but the advice she received there, namely to have her confinement in hospital, she did not follow.

### PUERPERAL INFECTION.

Four notifications of puerperal fever were received during the year and twenty-three of puerperal pyrexia, the rates per 1,000 total births (i.e., live and still births) being therefore 1·3 and 7·7, compared with the figures of 3·27 and 9·64 for the country as a whole.

All four cases notified as puerperal fever recovered. One was due to pyelitis, the second followed a difficult labour due to a persistent occipito-posterior presentation in which infection of the placental site occurred, the third was due to an infection of a ruptured perineum and in the fourth the labour was normal. Three of the four cases were removed to hospital for treatment.

Of the twenty-three cases notified as puerperal pyrexia, three were patients who were confined in and notified from London



hospitals; six were patients in local nursing homes, and the remainder were confined in their own homes. Two of the cases proved fatal; in each of these a difficult labour at home being followed by sepsis, for which condition they were removed to hospital. Of the other cases, of whom eight were admitted to hospital for treatment, three were suffering from mastitis, three from pyelitis, one each from influenza, rheumatism, tuberculosis and thrombo-phlebitis, while the remainder were suffering from uterine infection of varying degrees of severity.

The Council's provisions for the treatment of these conditions is to arrange for admission either to the isolation block of Queen Charlotte's Hospital or to the London County Council North Western Isolation Hospital; or to arrange for home nursing by staff of the local nursing association.



## INFANT WELFARE SERVICES.

### HOME VISITING BY THE HEALTH VISITORS.

Routine visits are paid to infants as soon as possible after the fourteenth day, and special visits are paid to cases of ophthalmia neonatorum, puerperal infection, stillbirths, infant deaths, etc. Each Health Visitor is appointed Infant Protection Visitor for her own area.

The following table shows the number of visits paid by the Health Visitors during the year :—

(a) To expectant mothers	...	First visits	492
		Total visits	823
(b) To children under one year of age	... ..	First visits	2,820
		Total visits	5,487
(c) To children between the ages of one and five years	...	Total visits	4,979

### INFANT WELFARE CENTRES.

At the beginning of the year, sixteen weekly sessions were held at nine premises throughout the district. Towards the end of the year the premises at the Baptist Church Hall, Streatfield Road, Kenton, were opened to meet the very real need in this locality. Better to serve the needs of the people in Pinner, the weekly session held at the Free Church Hall, Paines Lane was replaced by fortnightly sessions at St. Edmund's Church Hall, Rickmansworth Road and the Pinner Club, Marsh Road. The foregoing and an additional weekly session at the Baptist Church Hall, Imperial Drive, resulted in there being at the end of the year eighteen sessions weekly held at eleven separate premises. In addition, special Toddlers' clinics, referred to later, were opened.

All the clinics are maintained by the Local Authority. At most of them two health visitors are in attendance, but at some there is only one health visitor and a nurse. During the year, owing to the demands made on the time of the nurses of the local district nursing association, approval was given to the engagement of other trained nurses for the weighing of infants.

The Health Visitor in charge of any clinic is, as far as possible, the one who visits the district which the clinic serves. A number of voluntary workers kindly assist at each clinic.

The following table shows the work done at the infant welfare centres during the year :

Total attendances at all Centres :—

(1) By children under one year of age	...	37,644
(2) By children between the ages of one and five years	... ..	21,503



Total number of children who first attended at the centres during the year and who, on the date of their first attendance were :—

(1) Under one year of age ... ..	2,138
(2) Between the ages of one and five years	1,252

Total number of children under five years of age who attended at the Centres during the year and who, at the end of the year were :—

(1) Under one year of age ... ..	1,956
(2) Over one year of age ... ..	4,005

The percentage of total notified births represented by the number of children under one year of age who attended for the first time was 75.

Although the increase in the total number of children who attended the clinics during the year for the first time is not very great, the total attendances paid by children under one year of age, namely, 37,644, is a marked increase on the corresponding figure of 28,133 for the previous year, a smaller increase being noted in the total attendances of those between one and five years, namely, 21,503 in 1936 compared with 15,067 in 1935. The 4,005 attendances of those who, at the end of the year, were over one year of age, is a gratifying increase on the figure of 2,797 for the previous year.

### TODDLERS.

In January the Council approved the recommendation of the Public Health Committee that consent be granted to a request to the Council of Child Welfare for permission to erect at "Tyneholme" a nursery school. Later in the year the school was opened, providing accommodation for forty pupils. To the extent of its powers, the Council has supported this institution, arranging for regular medical inspection of all scholars, providing the daily attendance of a nurse, arranging for the treatment of minor ailments, and for the daily supply of milk for the necessitous.

In February the Committee considered a report on the question of day nurseries which dealt with the subject from the various aspects of such institutions providing facilities at which children can be left during their mothers' absence from home, in which they would spend the day in healthy surroundings, at which the children attending could be assured of correct and sufficient feeding, at which children would have medical supervision and treatment and the benefits of the application of preventive measures before or at the onset of developmental abnormalities or diseases, and at which cleanliness and good habits could be inculcated.



As a result of an enquiry it was found that there would be relatively little demand for such provision to meet the needs of those cases where the mothers go out to work, and it was decided that no provision should be made on these lines. It was, however, agreed that as an experiment a weekly Toddlers' clinic should be held at the Broadway Clinic, this being opened in March. The object of this clinic was to arrange for quarterly inspections of a limited number of children, the actual inspection following much on the lines of the routine medical inspection of school children, sufficient children being invited to attend to ensure an attendance of about twenty at each session. The results were so encouraging that, in November, similar clinics, held fortnightly, were opened at Rayners Lane and at Elmwood Avenue.

Special consideration was given to the question of the arrangements to be made for the supervision of toddlers on receipt of Circular 1550, which outlined the various methods by which these services could be provided by the maternity and child welfare authority, namely, systematic home visiting by the health visitors with the referring for treatment of those cases requiring medical attention, the provision of Toddlers' clinics, arrangements by which toddlers can obtain treatment for minor ailments, and the provision of day nurseries.

It was agreed that the health visiting staff be augmented so as to provide a ratio of one health visitor per 250 births. With regard to the treatment of minor ailments, arrangements were made by which those children in districts well served by the minor ailment clinics for school children should receive, by agreement with the Middlesex County Council, treatment at these school clinics, and that, for those parts of the district not served by school clinics, arrangements be made by the maternity and child welfare staff.

### TREATMENT.

The treatment services include the following: dental treatment, ultra-violet ray therapy, correction of visual defects, orthopaedic treatment and the treatment of minor ailments.

In addition, arrangements are made for the admission of suitable cases to convalescent homes and for home nursing.

Facilities for treatment were on the same lines as those recorded on page 81 of the Annual Report for the year 1935. The only change of any import, apart from the inception of the provisions for the treatment of minor ailments, was that it was agreed to accept a smaller contribution from those of more limited means for dental treatment, light treatment and massage.



The particulars of the extent to which the facilities for treatment are used are summarized below :—

Dental Treatment : 52 children under five years of age made 96 attendances. 195 mothers made 396 attendances and 4 were fitted with dentures.

Ultra-violet ray therapy : 18 children made a total of 194 attendances.

Orthopaedic treatment : 28 children made 195 attendances for treatment.

In addition, 8 children were examined by the orthopaedic surgeon, making a total of 13 attendances.

One child was admitted to an orthopaedic hospital at the cost of the Council.

Correction of visual defects : 23 children were treated by arrangement with the Middlesex County Council, most of these being recommended to obtain glasses. Provision is made by which children wearing glasses are re-tested periodically.

Operative Treatment of Tonsils and Adenoids : 4 children were treated at the Harrow and Wealdstone Hospital for this condition under the provisions of the agreement.

Convalescent Homes : 12 children and 2 mothers were admitted to convalescent homes.

Home Nursing : The conditions for which home nursing could be provided by arrangement with the Harrow, Wealdstone and Harrow Weald District Nursing Association, were extended during the year to include pemphigus, pneumonia, epidemic or infective diarrhoea, impetigo, septic spots, conjunctivitis and threadworms.

During the year the Local Authority was responsible for the payment of the fees for the treatment of 11 patients.

### INFANT LIFE PROTECTION.

The same arrangements continued in force with regard to the supervision of foster children except that instead of quarterly, each home is visited every month.

The following table summarises the information with regard to foster children and foster parents in the district :—

Number of persons on the register who were receiving infants for reward at the beginning of the year ...	68
Number of persons registered during the year ...	48



Number of persons removed from the register during the year (either by reason of removal from the district ; no longer undertaking the care of the child, etc.) ...	23
Number of persons on the register who were receiving children for reward at the end of the year ...	71
Number of children on the register at the beginning of the year ...	119
Number of children received during the year ...	141
Number of children removed from the register during the year ...	128
Removed to care of parents ...	74
Removed to care of another foster-mother ...	23
Legally adopted by foster parent ...	1
Removed to charitable organisation, etc. ...	17
Removed to hospital ...	11
Of this number 1 died.	
Foster parent left the district taking the child with her. ...	—
Child attained the age of nine years ...	2
Number of children on the register at the end of the year	132



## MATERNITY SERVICES.

The facilities offered to mothers, expectant or parturient, include :—

**Ante-Natal :—**Ante-natal supervision by home visiting ; ante-natal clinics ; general practitioners' ante-natal scheme ; consultant ante-natal clinic ; consultation at the home in exceptional cases ; provision of milk ; dental treatment, including provision of dentures ; ophthalmic treatment ; and artificial sunlight treatment.

**At Confinement :—**Payment of midwife's fees in necessitous cases ; home helps ; maternity sets ; consultation in cases of difficult labour ; emergency maternity outfit ; institutional accommodation ; and ambulance for removal of women in labour.

**Post-Natal :—**Post-natal examination at the clinics, including consultant clinic ; provision of milk to nursing mothers ; dental treatment ; artificial sunlight treatment ; convalescent homes ; home nursing ; provision of consultations for cases of puerperal infection, and institutional treatment for such cases.

### ANTE-NATAL SUPERVISION.

#### Home Visiting.

During the year the Health Visitors paid a total of 823 visits to 492 expectant mothers.

#### Ante-natal Clinics.

At the beginning of the year eight weekly ante-natal sessions were held at five separate premises in the district, two maintained by the Council of Child Welfare, the remainder by the Council. Additional sessions were opened at the Rayners Lane Clinic and at the Elmwood Avenue Clinic, but for the latter part of the year only one session was held at "Tyneholme," so that, at the end of the year ante-natal supervision could be obtained at the Council of Child Welfare Clinic at "Tyneholme" (weekly), or at the Council's sessions at the Broadway Clinic (twice weekly), Elmwood Avenue Clinic (twice weekly), the Baptist Church Hall, Imperial Drive (twice weekly), the Institute, Whitchurch Lane, Stanmore (weekly), and the Baptist Church Hall, Northolt Road (weekly).

The following summarises the work done at the clinics during the year :—

Total number of expectant mothers attending the clinics ... ..	1,268
Total number of attendances by expectant mothers at all clinics ... ..	4,963
Percentage of total notified births (live and still) represented by the number of expectant mothers attending the clinics ... ..	43



About 40 per cent. of the women attended on the recommendation of the health visitor that they should obtain ante-natal supervision, and about 20 per cent. on the recommendation of a midwife. 40 were referred by medical practitioners and 43 by hospitals.

35 per cent. of those attending were pregnant for the first time and nearly an equal number for the second time, 14 per cent. were pregnant for the third and nearly 20 per cent. for the fourth or more than the fourth time, 5 per cent. being over the fifth time. Only a few were mothers of very large families, one attending for her 13th pregnancy, one her 12th, three their 9th, one her 8th, three their 7th and 8 their 6th.

The sixth month was the most frequent date at which the first visit was paid to the clinic, though the attendances for each of the two months on each side of this were only slightly lower. Only about 10 per cent. attended before the fourth month.

Half of the mothers attended more than five times, approximately equal numbers attending once to five times.

Of the 706 confinements of which particulars are available, 614 were normal, the criterion being that there was a straightforward labour and spontaneous delivery. Of the 92 abnormal deliveries, 25 necessitated the application of forceps, 26 resulted in a stillbirth or miscarriage, 8 were induced, in 8 labour was prolonged, in 6 there was an ante-partum haemorrhage mostly due to placenta praevia, and in one a post-partum haemorrhage. Twins were born at three confinements, while 3 patients suffered from puerperal pyrexia and two infants died within twenty-four hours of birth. In some of the 47 abnormal deliveries where the abnormality occurred during the confinement the interference was deliberate to prevent trouble anticipated as a result of the ante-natal findings.

The local County Hospital to which maternity cases are admitted is Redhill Hospital which is not accessible to a great part of this district, so frequent ante-natal visits to the hospital prove a real burden. For this reason it was suggested that the ante-natal supervision of normal cases to be admitted to the hospital be undertaken at the local clinics, subject, of course, to an examination being made by the hospital staff at about the thirty-sixth week of pregnancy. This suggestion was agreed to and the arrangements are now in force.

### **Compensation of Midwives.**

The same arrangements continued in force by which compensation is paid to a midwife whose case is lost to her by reason of the medical officer exercising ante-natal care of the patient referring her on medical grounds to hospital for her confinement. During the year compensation was paid in respect of six cases.



### **Consultant Ante-natal Clinic.**

The consultant ante-natal clinic was held fortnightly at the Broadway Clinic throughout the year. Patients are mostly referred from the local ante-natal clinics, at least one visit of all primiparae even though apparently normal, being encouraged. Cases are also referred direct by the general medical practitioners in the area and post-natal cases are also seen. During the year 127 women made 181 attendances.

In exceptional circumstances, the consultant may now be summoned to an ante-natal case in the patient's home.

Consideration was given to the question of the type of case for which the Council would accept responsibility for the payment of the consultants' fees, and the following decision was made: that subject to the same being reported to the sub-committee at the subsequent meeting the Medical Officer of Health be authorised to sanction the services of the consultant gynaecologist in respect of ante-natal cases, cases of difficult labour and puerperal infection to patients whose income is not in excess of that which would render them eligible for panel treatment and that in other cases the decision of the sub-committee be obtained.

### **General Practitioner Ante-natal Scheme.**

The same arrangements by which pregnant women can receive ante-natal supervision by their own medical attendants were continued last year. A very limited use was made of the scheme, only 40 women attending 15 practitioners. Of this number, 14 were insured patients. 27 women had normal confinements at home. Three, because of abnormal ante-natal findings, namely, albuminuria, a damaged heart and small pelvic measurements, were admitted to hospital where their confinements were normal. Forceps were applied in six instances to the women who were confined in their own homes, mostly because of a delayed second stage. One confinement resulted in a stillbirth, another in premature twins of whom both died, and in another case the assistance of the practitioner was summoned by the midwife on account of a prolapse of the cervix.

Only four women attended for post-natal examination,

The percentage of total notified births (live and still) represented by the total number of expectant mothers ante-natally examined at the clinics was 43 and examined under the General Practitioners' Ante-natal Scheme, 1.5, or a total of 44.5 under the provisions made by the Council.

### **ARRANGEMENTS MADE FOR THE CONFINEMENT.**

#### **At Home.**

There was no alteration during the year made in the forms of assistance to those who have their confinements at home.



In 64 cases the Council paid or contributed to the fee of a midwife ; in 31 a home help was provided, and 53 maternity sets were issued.

A consultant was summoned on 10 occasions, once to an antenatal case, twice to cases of puerperal infection, and to seven cases of difficulty arising in the course of the confinement. In each of these seven cases the infant was born alive. The causes of the difficulties were :—impacted breech, occipito-posterior presentation, shoulder presentation, transverse lie (case removed to and delivered in hospital), inertia (twins delivered), contracted pelvis (Caesarean section performed in hospital), and obstruction due to a fibroid.

Towards the end of 1935 the Council agreed to arrangements being made for an emergency outfit to be provided and kept at the Fire Station, Wealdstone, ready to be sent for the use of the consultants. This outfit has been ready since January, 1936, though actually it has not been used. It was hoped that arrangements could be made for the services of a skilled nurse to be available as well but that, up to the present, has proved impracticable—one of the disadvantages of the district not having its own maternity institution.

Arrangements for blood transfusion were made with the British Red Cross Society for the services of donors to be available when required by the consultant gynaecologist at any case to which he is summoned, an amount of one guinea being paid by the Council to the Society in respect of each transfusion.

Responsibility has been accepted for the payment of the fee of one guinea to a medical practitioner called in to give an anaesthetic at a confinement, subject to the right to recover all or part of the fee from the patient.

### **In an Institution.**

The same arrangements for the admission of expectant mothers to hospitals for their confinements continued in operation, 48 women being admitted.

### **Local Maternity Home.**

2,077 live births and 58 still births were notified during the year as occurring to local mothers in Harrow, and a further 159 live and 5 still births were notified as having occurred in this district to mothers not resident in Harrow.

Notifications of 675 live and 32 still births were received in respect of Harrow mothers, having taken place in hospitals outside of Harrow. Of these notifications 208 were received from Queen Charlotte's Hospital, 176 from Redhill County Hospital, 105 from the City of London Maternity Hospital, 47 from Queen Mary's Maternity Hospital, 35 from University College Hospital, 13 each







mary:—"In December last (i.e. December, 1935) the County Council agreed to the provision, as a public health measure, of such maternity hospital accommodation as may be necessary adequately to meet the legitimate needs of the County, that is to say, not only for those women who are financially necessitous or who require hospital for medical reasons, but for women not included in these classes who themselves desire to enter hospital for their confinements. The provision of such accommodation will therefore become a general county charge, and the County Council will provide the accommodation for certain classes of women who were formerly dealt with by local maternity and child welfare authorities.

"... the County Council has declared its intention of providing such maternity hospital accommodation as will meet the adequate needs of the County. With regard to the interpretation of these needs the County Council has been guided by the advice received from the officers of the Ministry of Health, and has based its present proposals upon the total number of beds which would enable between 30 and 40 per cent. of all births occurring in the County to take place within county or municipal hospitals. The County Council's programme is not necessarily final, and the Council is quite willing to supplement its building scheme if local circumstances justify this and experience confirms the need."

The County Council's proposals are summarised as:—

	Present Accom- modation.	Future Accom- modation.	Position in May, 1936.
North Middlesex County Hospital ... ..	66	120	Plans in course of preparation.
Central Middlesex County Hospital ... ..	28	60	Tenders will be before the Council in July.
Redhill County Hospital...	21	60	Under construction.
West Middlesex County Hospital ... ..	31	62	Under construction.
Hillingdon County Hospital	12	60	Plans in course of preparation.
Staines Institution ...	4	4	
Temporary accommod- ation at West Middlesex County Hospital ...	12	—	
Total ... ..	174	366	

To the total of 366 beds already provided by the County Council are to be added an average of 12 beds reserved for the County Council's use at the Wellhouse Hospital, Barnet, 58 beds belonging to the Willesden Borough Council and 52 beds likely to be provided by the Ealing Borough Council, which, altogether, give a total of



498 beds maintained at public expense for residents in Middlesex. This number provides accommodation adequate for slightly over 35 per cent. of the total births in the County (based upon the figures for 1935) without taking into account the additional 60 beds whose allocation has not yet definitely been decided upon.

The accommodation of most interest to Wembley and to Harrow is that at the Park Royal and the Redhill County Hospitals. These institutions serve, in addition to these two districts, the Boroughs of Hendon and Acton.

The main objections to the proposals of the County Council are :—

1. The inadequacy of the accommodation. The requirements are based on the 1935 figures. In such rapidly growing districts as Wembley and Harrow, the demand for maternity beds grows from year to year, and by the time the accommodation envisaged is available for use it will prove insufficient. Further, the proposals contemplate accommodation for the reception of 40 per cent. of the confinements in the County. The number of beds proposed at the Redhill and Park Royal Hospitals is insufficient to meet the demand from the area these hospitals serve, and experience proves that in Wembley and Harrow the demand for institutional accommodation is well over 40 per cent.

2. The dissociation of this service from the complete maternity and child welfare scheme. It is desirable, to ensure close co-operation, that the whole of the maternity services should be provided by the one authority. Such co-operation cannot be so close if the arrangements for institutional confinements are provided by an authority other than that responsible for the rest of the maternity services. Provision of maternity beds in the hospitals of the County Council will also prevent the patients admitted being attended by their own medical attendants.

For these reasons both Councils desired to press for sanction to erect a joint hospital but, by the end of the year, no further steps had been taken to this end.

## **POST-NATAL SERVICES.**

### **Post-natal Examinations.**

97 women attended the clinics for post-natal examination, making altogether 171 attendances.

A further four women were examined under the General Practitioner Scheme.

As yet no separate session has been held for post-natal cases, the women attending the ordinary sessions of the ante-natal clinics.



### Puerperal Infection.

(a) Consultant services: A consultant was summoned on two occasions to cases of puerperal infection.

(b) Hospital services: Any cases of puerperal infection requiring hospital treatment are removed, either to the London County Council North Western Hospital, or to the Isolation Block of Queen Charlotte's Hospital.

During the year 13 patients were removed.

(c) Home Nursing: During the year it was agreed that the Council would accept responsibility for the payment of the fees of district nurses called in to take over infectious cases of midwives.

### BIRTH CONTROL CLINIC.

Fortnightly sessions of this clinic were held throughout the year. 124 women, of whom 98 attended for the first time, made a total of 245 attendances.

In addition there were a few cases to whom no advice was given as there were no medical grounds justifying such action.

### ADMINISTRATION OF THE MIDWIVES ACTS, 1902-1926.

A further application made during the year for the Council to be constituted the Local Supervising Authority of Midwives was successful and from October 1st the Council took on these duties in place of the Middlesex County Council.

The following particulars relate to the midwifery services of the district:—

Total number of midwives practising during 1936	...	56
Number who removed from the district or discontinued practice during 1936	... ..	4
Number in district at the end of 1936	... ..	52

Of the total number, 27 were resident in the district and carried on a domiciliary practice almost entirely limited to this area; 12 were engaged in local maternity homes, most of them entirely, though a few also carry on a very limited domiciliary practice; and 17 were resident in adjoining areas but attended some cases in this district.

The number of births attended in the district by midwives who gave notice of their intention to practice was 1,696. In 852 cases the midwife was in attendance as a midwife, and in the remaining 844 as a maternity nurse. Of the confinements occurring in private houses in the district 1,027 were attended by local midwives whose practice is limited to domiciliary work (625 as midwives and 402 as maternity nurses) and 136 by midwives from adjoining areas (96 as midwives and 40 as maternity nurses).



Of the midwives attending to cases in their own homes, most have limited practices. Of the 25 of local residents who were in practice at the end of the year two attended either as midwives or maternity nurses to 100 women in their own homes, 6 attended between 50 and 90 ; 9 attended between 20 and 50 ; and 8 attended less than 20 cases.

By the rules of the Central Midwives Board it is obligatory on midwives to send a notification to the Local Supervising Authority in certain circumstances. The following are the particulars of notifications received during the years :—

Sending for medical assistance	...	...	209
Stillbirth	...	...	10
Death of Infant	...	...	5
Death of Mother	...	...	—
Laying out the Dead	...	...	5
Artificial Feeding	...	...	11
Liability to be a Source of Infection	...	...	13

The details of the circumstances in which medical practitioners were summoned to cases were :—

During Pregnancy	...	...	19
During Labour	...	...	141
During Lying-in	...	...	26
For infant	...	...	23

56 of these summonses were issued from October 1st to December 31st, during which time, of the conditions for which a practitioner was summoned during pregnancy, the commonest was in antepartum haemorrhage in four cases. Delayed second stage or obstruction were the most frequent reasons for which assistance was required during labour, accounting for all but six of these cases, adherent placenta being the reason on three occasions. Ruptured perineum was the reason for thirteen and a raised temperature for three of the summonses to patients in the post-natal stage.

While the local authority is responsible in the first instance for the payment of the medical practitioners' fees for attendance on cases to which they have been summoned by medical aid notices, the Council is empowered to recover all or part of such fee from the patient or those responsible for her. The scale in operation on which milk is granted free or at half-cost to those falling within the provisions of the Maternity and Child Welfare scheme was adopted in determining what contribution should be requested, though no claim is to be made in respect of cases of ophthalmia neonatorum. The obligations of the Council to be responsible for the payment of the practitioners' fees are now somewhat restricted by the operation of the Medical Practitioners' (Fees) Regulations, 1936, in which the conditions on which fees are to be payable to medical practitioners are :—



(a) The medical practitioner shall not have agreed to attend the patient under arrangements made by or on behalf of the patient or by any Club, Medical Institute or other Association of which the patient or her husband is a member ;

(b) The medical practitioner shall not be under obligation to give the treatment to the patient under the National Health Insurance Acts, 1924 to 1935 ;

(c) The medical practitioner shall not receive or agree to receive a fee from the patient or her representative ;

(d) Fees shall not be payable (i) in respect of any services performed by the medical practitioner later than the tenth day after his first attendance, except where he has reported to the local supervising authority that he considers, for reasons stated, that his further attendance is necessary, (ii) in respect of any services performed by the medical practitioner after the expiry of four weeks from the birth.

Of the 56 notices, accounts were received in respect of 42 totalling the sum of £59 5s. 0d. Of this amount the patients' contributions were assessed at £45 8s. 6d. In the County during 1935 in about two-thirds of the cases the fee was claimed from the local supervising authority, about one half of this amount being recovered.

### MIDWIVES ACT, 1936.

The Council having been constituted the Local Supervising Authority under the Midwives Acts, 1902-1926 became the authority responsible for carrying out in this district the provisions of the Midwives Act, 1936. Under this it is the duty of the Council to secure for the district "that the number of certified midwives available . . . for attendance on women in their own homes as midwives or as maternity nurses during childbirth and from time to time thereafter during a period not less than the lying-in period, is adequate for the needs of the district." This duty could be discharged either by the Council making arrangements with voluntary organisations for the employment by them of certified midwives as whole-time servants, or by the Council thus employing such midwives.

Operating in this district are three Nursing Associations of which the Stanmore Association engages one nurse-midwife who acts only as a maternity nurse, the Pinner Association engages one nurse-midwife who acts as midwife or as maternity nurse, and the Harrow, Wealdstone and Harrow Weald District Nursing Association who undertake no midwifery or maternity nursing.

The Maternity and Child Welfare Committee, after learning the views of these Nursing Associations, of the local branch of the



British Medical Association and of the local branches of the Midwives' Institute, recommended that the provision of the midwifery services required under the Midwives Act, 1936, be undertaken by the Council for the whole district.

In considering the proposals for the provision of these services the Committee had before them the following information :—

“ In 1935, 1,377 of the 2,523 confinements took place in the patients' own homes. Of these, 822 were attended by local midwives acting as midwives or as maternity nurses and 555 by other attendants. The present indications are that there will be over 2,900 births in the district in 1936 and, assuming a similar growth, not less than 3,300 in 1937. If the same proportion of domiciliary to institutional confinements holds in 1937 as obtained in 1935, in 1937 there will be some 1,800 confinements occurring in the patients' homes, of which, applying the same ratio, 1,080 will be attended by midwives acting as midwives or as maternity nurses and 720 by other attendants. In Circular 1568 it is stated that the Minister has advised that local authorities, for the purposes of their calculations, might assume that, in populous districts, each midwife should usually be capable of attendance on 70 cases as a midwife and 30 cases as a maternity nurse. The differentiation between the activities of a woman as a midwife or as a maternity nurse is unnecessary, as it may be accepted that the time occupied by a midwife as maternity nurse will not be less than the time taken when she attends as a midwife. This figure of 100 patients has been criticised as being much too high, 80 being generally accepted as the outside figure. On the basis of 100 patients per midwife for the 1,800 confinements 18 midwives are required ; on the basis of 80, the requirements are 23. Some allowance, however, must be made for work carried on by independent midwives and also, on the 1937 figures, for the 720 cases which, on the standard of 1935, will not be employing local midwives, either as midwives or as maternity nurses. For this reason, although accepting 100 patients per midwife as not being the ideal to be aimed at, it would seem advisable to work on this basis for the total number of births occurring in the homes of the patients. If it should prove that a higher proportion of mothers having their confinements at home avail themselves of the services of the local midwives, then additional staff will be required. Similarly, provision will have to be made for the continued growth of the district with the corresponding increase in the number of confinements occurring in the home. . . . Up to the present, 37 midwives living in the district have given notice of their intention to practise. The work of 13 of these is limited almost entirely to nursing homes. In addition, notice has been received from 16 midwives, not resident in this area, of their intention to practise here. There is, therefore, a sufficiency of midwives living and practising in this district from whom the necessary staff can be engaged.”



The following is a copy of the proposals as submitted to the Minister :

“ Employment of Midwives.

1. No arrangement is suggested for the employment of midwives by voluntary organisations, but nothing herein shall prevent the continuance by the Pinner Nursing Association and the Stanmore Nursing Association of the services now rendered by them, but no contribution shall be made thereto by the Council.

2. The Council will themselves employ as whole-time servants one superintendent midwife and 18 other midwives, and will from time to time employ such further number of midwives as may be adequate for the needs of the area for the purposes of Section I of the Midwives Act, 1936.

Salary and Conditions of Service.

3. The salary and emoluments of the Superintendent Midwife shall be £350 per annum rising by annual increments of £10 to a maximum of £400, payable monthly, plus a car allowance of £35 per annum if a car is used, with a further allowance of £10 for uniform. In other respects the conditions of service of the Superintendent Midwife shall be those of other midwives as specified below.

4. The salary of other midwives shall be £240 per annum, rising by annual increments of £10 to a maximum of £280, plus a car allowance of £20 per annum if a car is used, or a cycle allowance of £4 per annum if a cycle only is used.

5. Uniforms to be provided by and laundered at the expense of the Council shall be worn ; equipment shall be provided by the Council.

6. A telephone shall be provided in all cases at the cost of the Council, who shall also pay the annual rental thereof but not the cost of telephone calls.

7. Annual holiday shall be 24 working days.

8. Each post shall be designated as an established post for the purposes of the Local Government and Other Officers' Superannuation Act, 1922.

9. In all other respects the appointments shall be subject to the Staff Service Conditions approved by the Council on the 11th December, 1934, in so far as the same may be applicable to the work of a midwife. Car allowances shall be subject to the conditions contained in the resolution of the Council of the 5th February, 1935.



Fees.

10. The scale of fees to be charged for the services of midwives as midwives or maternity nurses to be as follows :—

Attendance of Midwife for 14 days ... ..	£3 10 0
Attendance of Maternity Nurse for 14 days ...	£2 7 6
The fees may be reduced in appropriate cases. . . ."	

The Council's proposals for the midwifery services were based on the assumption of an increasing number of births taking place, the proportions of those which would take place in the patients' own homes, nursing homes and hospitals being based on the ratios that obtained in 1935. On these assumptions the figures submitted were :—

	1935.	1936.	1937.
No. of confinements ... ..	2,523	2,900	3,300
No. occurring in patients' homes ...	1,377	—	1,800
attended by midwives ... ..	822		1,080
other attendants ... ..	555		720

In 1936 the actual number of births registered was 2,979 (2,873 live and 106 stillbirths). As more confinements took place in outside hospitals in 1936 than in 1935 (805 as compared with 539) and more in local nursing homes (726 as compared with 521), the number of confinements in the home in 1936 were actually less than the number in 1935. It should therefore not prove necessary to appoint at the inception of the midwifery service all of the maximum of 18 for which provision was made in the scheme.

## NURSING AND MATERNITY HOMES.

Following their being constituted the Local Supervising Authority under the Midwives Acts, the Council made application to the Middlesex County Council to have delegated to them the powers and duties under the Nursing Homes Registration Act, 1927. This request was acceded to as from November 1st.

There are in the district 23 registered homes of which 17 are registered for the reception of maternity cases either solely or in addition to other classes of cases ; 3 receive only mental or nerve cases, while one is a children's convalescent home. Particulars of the addresses and the accommodation at these homes appear in the Annual Report for 1935.

There is in the district a Christian Science Nursing Home to which the Minister of Health has granted exemption from the operation of the Act ; while the Council has, by its powers under Section 6, granted exemption for a period of one year to two voluntary hospitals in the area.



## MILK ISSUES.

The only alteration in the arrangements for the issue of milk was that, in September, it was agreed that milk be granted to mothers of any stage of pregnancy instead of as previously in the last three months.

The number of issues has steadily increased, the figure in December, 1936, being 352 as compared with 236 for the corresponding month in the previous year. Of this number 307 grants were for pasteurized milk and 45 for packet milk.

The following is a summary of particulars of the milk issues :—

Total quantity of milk supplied			
by the Council to expectant	(a) Liquid		
and nursing mothers and	Milk	14,005	gals.
young children during the	(b) Dried		
period 1st Jan., 1936, to 31st	Milk	27,493	lbs.
December, 1936.			
Total cost of above	...	...	(a) £1,236
			(b) £1,965
	Total:		£3,201
Receipts	...	...	(a) Nil
			(b) £1,942.

## CLINIC BUILDINGS.

The sites for the new clinics selected were near the northern end of Honeypot Lane, near Village Way and on the Kenmore Park Estate. As a result of negotiations with the County Council with a view to the erection of combined buildings which would house library and school medical services in addition to the maternity and child welfare services, not all these sites will now be used for their intended purpose.



## SCHOOL MEDICAL SERVICES.

The following information regarding the school medical services in the district has been kindly supplied by the County School Medical Officer.

### ELEMENTARY SCHOOLS.

#### Medical Inspection.

The number of children on the roll at December 31st, 1936, was 16,451. The following are the particulars of children inspected during the year :—

Routine Medical Inspections	...	...	7,005
Entrants	...	...	2,677
Intermediates	...	...	1,831
Other ages	...	...	451
Leavers	...	...	2,046
Special Inspections	...	...	2,838
Re-inspections	...	...	2,121

#### Treatment of Minor Ailments.

The attendances at the clinics established for the treatment of minor ailments were :—

Roxeth Hill Council School, South Harrow	...	1,371
Broadway Clinic, Wealdstone	...	3,330
Whitchurch Institute, Stanmore	...	576

#### Treatment of Visual Defects.

645 children were refracted (including 145 re-tests) at the ophthalmic clinic held at the Broadway Clinic, Wealdstone, and 26 other children examined. Spectacles were prescribed for 470 children and changes of lens in a further 37, while repairs to the glasses of 76 children were arranged. Three cases of squint were referred to hospital for operation, and four children suffering from other diseases of the eye were sent to hospital for treatment.

#### Dental Inspection and Treatment.

Particulars of the routine dental inspection of elementary school children are set out below :—

##### AGES.

5	6	7	8	9	10	11	12	13	14	15	TOTAL
461	822	658	667	792	696	564	746	734	279	18	6,437

Of this number 4,441 were found to require treatment.



## SECONDARY SCHOOLS.

### Medical Inspection.

There are three secondary schools in the district and one Junior Art School. The following are the particulars of the medical inspection carried out :—

AGES.								
10	11	12	13	14	15	16	17	TOTAL
1	141	110	43	56	74	29	3	457

### Treatment of Defective Vision.

78 children were refracted at the ophthalmic clinic (including 9 re-tests) of whom 41 were supplied with spectacles. 9 changes of lens were also provided and repairs to glasses carried out in three instances.

### Dental Treatment.

162 children attending secondary, etc., schools were treated during the year.

---





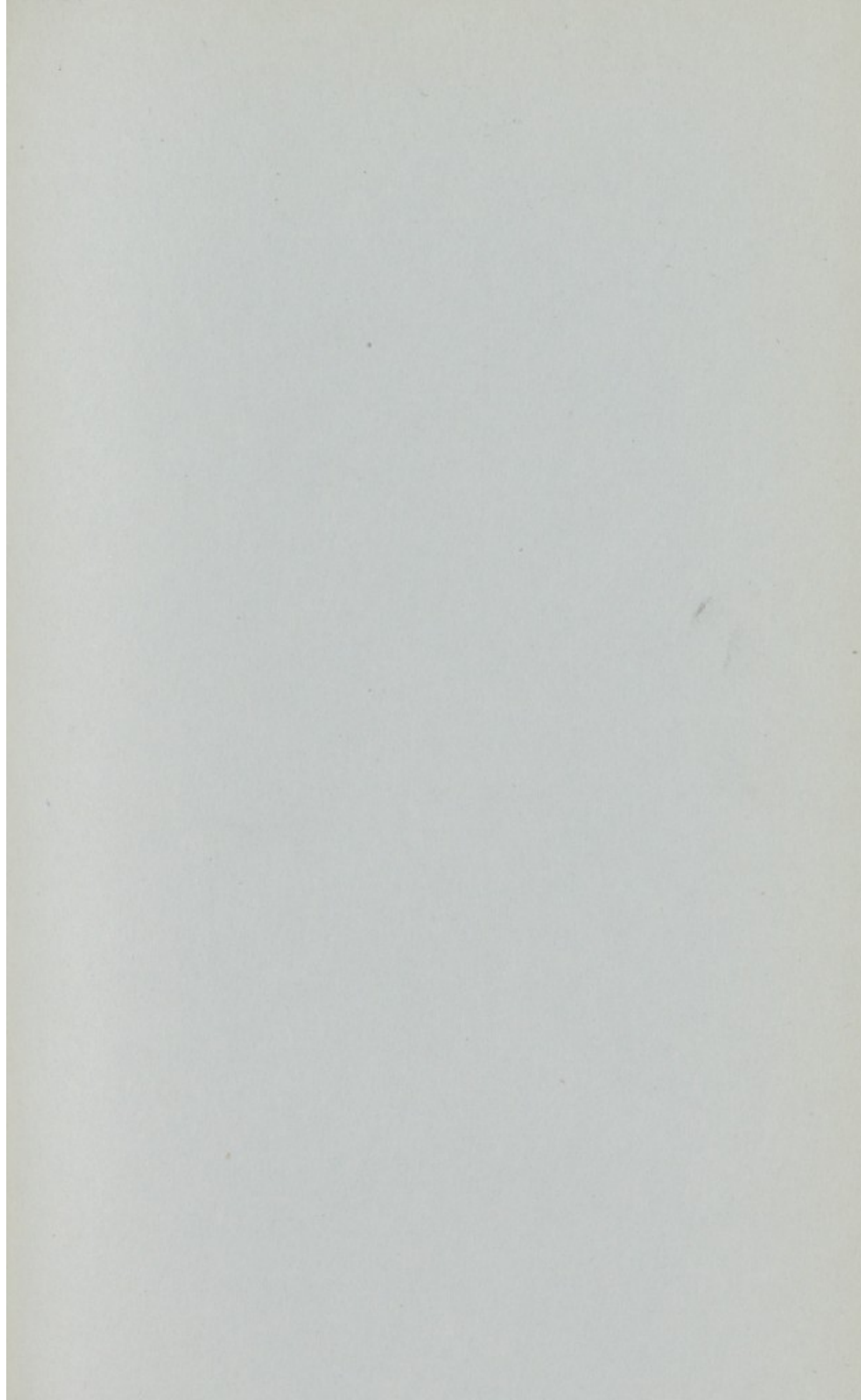


CAUSE OF DEATH	Under 1 year		Over 1 and under 2		Over 2 and under 5		Over 5 and under 15		Over 15 and under 25		Over 25 and under 35		Over 35 and under 45		Over 45 and under 55		Over 55 and under 65		Over 65 and under 75		Over 75		TOTAL		Registrar-General's Allocations	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Typhoid fever ... ..	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	1	1	1	1
2. Measles ... ..	—	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	2	3	
3. Scarlet fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
4. Whooping cough ... ..	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4	
5. Diphtheria ... ..	—	—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	2	
6. Influenza ... ..	—	—	—	—	—	—	1	—	—	—	2	—	—	2	—	—	—	—	1	2	4	4	4	4	6	
7. Encephalitis lethargica ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	2	4	3		
8. Cerebro-spinal fever ... ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—		
9. Respiratory tuberculosis ... ..	—	—	—	—	1	—	8	3	4	19	7	11	4	5	1	8	—	—	1	—	47	25	47	25		
10. Other tuberculosis ... ..	—	1	1	—	1	2	1	5	—	1	1	1	—	—	—	—	—	—	—	—	9	5	9	5		
11. Syphilis ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12. General paralysis of the Insane	—	—	—	—	—	—	—	—	—	—	—	1	2	—	1	—	1	—	—	—	4	1	4	1		
13. Cancer ... ..	—	—	—	—	—	—	—	1	—	3	2	4	13	10	15	12	30	20	29	10	20	60	109	60	110	
14. Diabetes ... ..	—	—	—	—	—	1	1	—	—	—	—	1	1	—	—	4	—	1	—	—	2	7	3	9		
15. Cerebral hæmorrhage ... ..	—	—	—	—	—	—	—	—	—	—	—	2	—	1	6	2	2	8	5	5	13	18	13	18		
16. Heart disease ... ..	—	1	—	—	—	3	—	2	1	4	1	2	5	12	10	24	23	42	49	35	65	126	155	130	157	
17. Aneurysm ... ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	1	—	—	1	2	2	2		
18. Other circulatory diseases ... ..	—	—	—	—	—	—	—	—	—	—	—	1	1	2	2	14	7	13	7	11	16	41	33	41	30	
19. Bronchitis ... ..	3	—	1	—	—	—	—	—	—	—	—	1	—	4	1	2	3	6	4	6	6	22	14	21	14	
20. Pneumonia ... ..	17	7	1	—	3	—	3	1	—	4	2	4	2	7	2	7	5	7	11	7	10	60	40	60	40	
21. Other respiratory diseases ... ..	—	—	2	—	—	—	1	—	—	—	—	1	—	1	3	1	1	—	—	—	5	5	3	5		
22. Peptic ulcer ... ..	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	3	—	1	2	—	1	6	4	6	4	
23. Diarrhœa (under 2 years) ... ..	8	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	5	9	4		
24. Appendicitis ... ..	—	—	—	—	—	2	—	—	—	—	—	—	—	2	1	1	3	1	—	—	6	4	6	3		
25. Cirrhosis of liver ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	1	—	1	4	1	4	—		
26. Other diseases of liver ... ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	1	1	—	3	—	2	1	9	1	9	
27. Other digestive diseases ... ..	2	—	—	—	—	—	—	1	1	1	1	—	1	—	2	1	2	2	3	—	7	10	10	19		
28. Nephritis ... ..	—	—	—	—	—	—	—	—	—	1	1	3	—	3	2	5	3	1	9	1	3	14	18	14	18	
29. Puerperal sepsis ... ..	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2		
30. Other puerperal causes ... ..	—	—	—	—	—	—	—	2	—	6	—	2	—	—	—	—	—	—	—	—	—	10	—	10		
31. Congenital debility ... ..	33	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	6	16	26	23	32	21	30	
32. Senility ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
33. Suicide ... ..	—	—	—	—	—	—	—	—	—	6	—	2	4	1	2	1	—	—	—	1	10	7	10	7		
34. Other violence ... ..	—	2	—	—	1	3	2	4	2	4	3	3	—	—	1	4	2	—	1	3	5	21	19	24	23	
35. Other defined diseases ... ..	7	7	—	2	2	2	4	6	1	3	3	2	6	10	1	6	8	7	12	5	6	49	55	52	47	
36. Causes ill-defined ... ..	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	1	1	1	
Total ... ..	71	58	5	5	6	5	21	22	17	13	45	31	40	48	57	53	100	96	118	139	103	168	583	637	593	647











---

KING AND HUTCHINGS, LTD.  
PRINTERS :: UXBRIDGE

---