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CITY OF BIRMINGHAM

REPORT OF THE
MEDICAL OFFICER
OF HEALTH

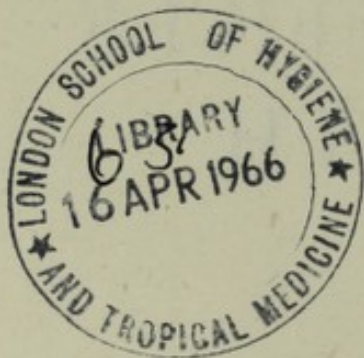
FOR THE YEAR

1942



BIRMINGHAM:
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3463



PUBLIC HEALTH DEPARTMENT,
THE COUNCIL HOUSE,
BIRMINGHAM, 3.

To THE CHAIRMAN AND MEMBERS,
PUBLIC HEALTH AND MATERNITY AND CHILD WELFARE
COMMITTEE.

On grounds of general policy, it continues inexpedient to publish figures as to population, and certain other items involving numbers as distinct from rates.

The year 1942 was an encouraging one in matters of the public health. The City was singularly free from any substantial prevalence of acute infectious disease, and no single noteworthy outbreak of infection occurred during the year. There were more babies born, and fewer mothers dying during child-birth, than in 1941, and in both directions the rates recorded in Birmingham are creditable; while the infant mortality dropped to a rate never previously attained in the City.

War conditions have necessarily had their effect in a number of directions. The housing problem has become an increasingly acute one. A deplorably large number of families live under conditions, whether of houses shared with others, of lodgings, of bombed and blasted dwellings made merely wind and weather-tight, or under circumstances of overcrowding which make the heaviest calls on their fortitude and cannot fail to react on health, as they do on happiness. The most urgent need now, and in our post-war reconstruction programme, the need entitled to priority over every other requirement, is emphatically that of thousands of houses in which the privacy and decency of family life may be resumed.

One effect of this war-time aggregation, though only an accentuation of conditions existing before the war, has been the increase in prevalence of verminous conditions, and of scabies. The report will indicate that much attention has been given to these conditions, and considerable progress made in dealing with them. We have been fortunate in enlisting the hearty co-operation of industry in this campaign.

The care of the young child whose mother is needed in industry has been one of our major pre-occupations during the year, by the end of which 62 out of our objective of 80 War-time Nurseries had been opened, with a further 7 ready to open as soon as the staffs could be found. I should like to express my admiration of the work both of the central administrative staff, and of the matrons and staff of these nurseries.

Their work has been carried on under most difficult conditions of pressure and often of improvisation, by staffs who had to be trained and had to gain their experience even while carrying on, always shorthanded, with this most heavy and difficult task. In particular, mention must be made of the young girls who form the bulk of the nursery staffs ; for they have done an outstandingly fine piece of work for the nation.

The war has made its mark in other directions. There has again been a material increase, though not an extreme one, in the number of new cases of tuberculosis of the lungs, though this has been associated with a lowered death-rate from this disease. In the sphere of the venereal diseases, a 50 per cent. increase occurred in the number of cases of syphilis attending the City Clinics, and a 10 per cent. increase in the number of cases of gonorrhoea. This latter figure probably gives no adequate representation of the increase in gonorrhoea, by reason of the ease with which chemotherapy can now be applied to it in private medical practice, so that probably many do not come up to the clinics. In still another direction, the laxity of morals which war brings in its train is reflected in the increase in illegitimacy. The number of unmarried mothers coming under the care of the Department in the three years 1940-42 totalled successively, 527, 750, and 934 ; and of the latter nearly a quarter occurred in married women. It should be added that of the total of illegitimate pregnancies known to the Department in 1942, over a quarter were in women not normally resident in Birmingham, but living here unattached and without home ties, in relation to the calls of war industry.

In all aspects of the work of the Department, the staff have had many calls, not always easy to meet with their depleted numbers. I should like to express my gratitude for the cheerful and effective way in which invariably those calls have been met. With that I should wish to associate my cordial thanks to you, Mr. Chairman, and to the members of the Public Health and Maternity and Child Welfare Committee, for the kindness so consistently shown and the support so readily given throughout the year.

I am,

Your obedient servant,

H. P. NEWSHOLME,
Medical Officer of Health.

SECTION A

SUMMARY OF STATISTICS

For the Year 1942

Area (in acres)	51,147
Population (Census, 1931)	1,002,603
Pre-war population, estimated by Medical Officer (1938)	1,048,000
Pre-war population, estimated by Registrar-General (1938)	1,041,000

Extracts from Vital Statistics of the year 1942 :

Birth-rate per 1,000 population	19.3
Stillbirth rate per 1,000 total live and stillbirths	28
Crude Death-rate per 1,000 population	11.8

Maternal Mortality :—

	<i>Excluding maternal deaths after abortion</i>	<i>Including maternal deaths after abortion</i>
From sepsis :		
Rate per 1,000 live and still births	0.62	1.09
From other causes :		
Rate per 1,000 live and still births	1.20	1.25
Total Maternal Mortality	1.82	2.34

Infant Mortality :—

Deaths of infants under one year of age per 1,000 live births :

Legitimate	54
Illegitimate	83
Legitimate and illegitimate	56

POPULATION AND MORTALITY STATISTICS

Population

As last year, no estimate of the City's war-time population is being published. After consultation with the Ministry of Labour and the Ministry of Food, as well as with other sources of information, an estimate of population has been made on which the various rates in the report are based.

Births (see page 14)

Deaths

The death-rate for 1942 was 11·8. The average for the ten years prior to 1942 was 11·7, while that for 1941 was 13·2. The death-rates for 1940 and 1941 were swollen by air raid deaths.

The changes in the death-rate in England and Wales and in Birmingham during the past forty-two years can be seen from the figures below, although the figures for 1940 and 1941 obviously cannot fairly be compared with others.

DEATH-RATES IN BIRMINGHAM AND ENGLAND AND WALES

		<i>Birmingham.</i>	<i>England and Wales.</i>
1901-1905	.....	16·5	16·0
1906-1910	.....	15·0	14·7
1911-1915	.....	14·6	14·3
1916-1920	.....	13·4	14·4
1921-1925	.....	11·5	12·1
1926-1930	.....	11·6	12·1
1931-1935	.....	11·2	12·0
1936	.....	11·3	12·1
1937	.....	11·7	12·4
1938	.....	10·9	11·6
1939	.....	11·4	12·1
1940	.....	14·3	14·3
1941	.....	13·2	12·9
1942	.....	11·8	11·6

The death-rate in Birmingham and in England and Wales from the more prominent causes of death over a series of years is shown in the table below :—

Cancer

	<i>Birmingham.</i>	<i>England and Wales.</i>		<i>Birmingham.</i>	<i>England and Wales.</i>
1933	1·43	1·53	1938	1·59	1·66
1934	1·43	1·56	1939	1·55	—
1935	1·52	1·59	1940	1·61	—
1936	1·57	1·62	1941	1·70	—
1937	1·62	1·63	1942	1·77	—

There was no notable variation as to site of disease from the usual distribution of the cases of cancer.

Diseases of the Heart and Blood Vessels

The death-rates during the past ten years have been as follows :

	<i>Birmingham.</i>	<i>England and Wales.</i>		<i>Birmingham.</i>	<i>England and Wales.</i>
1933	2·94	3·30	1938	3·45	3·79
1934	3·04	3·33	1939	3·65	—
1935	3·14	3·46	1940	3·31	—
1936	3·43	3·78	1941	3·10	—
1937	3·40	3·83	1942	2·87	—

The reduction this year, as in 1940 and 1941, is more apparent than real, for it is related essentially to a change in the Registrar-General's system of coding deaths.

Bronchitis, Pneumonia and other Respiratory Diseases

The mortality in 1942 and in recent years has been as follows :

	<i>Birmingham.</i>	<i>England and Wales.</i>		<i>Birmingham.</i>	<i>England and Wales.</i>
1933	1.32	1.39	1938	1.18	1.05
1934	1.26	1.24	1939	1.16	—
1935	1.09	1.16	1940	2.21	—
1936	1.22	1.23	1941	1.94	—
1937	1.40	1.27	1942	1.51	—

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES

1. General Services.

(a) Laboratory facilities

I—City Bacteriological Laboratory

The work done in the City Bacteriological Laboratory is set out in detail below :

(a) GENERAL LABORATORY	<i>No. of Specimens.</i>
Diphtheria Swabs :	
(a) For Practitioners	4,346
(b) For Fever Hospitals	3,856
(c) For virulence test	1,037
Swabs for staphylococci	346
Swabs for streptococci	387
Fæces	2,379
Milks	1,199
Milk for tuberculosis	2,493
Precipitin tests	324
Sputum for tuberculosis	1,985
Shell-fish	48
Water samples	831
Vaccines prepared	1
Widal's reaction	1,590
Miscellaneous	10,260
TOTAL	31,082
(b) VENEREAL DISEASES LABORATORY	
Blood for Wassermann reaction	27,467
Cerebro-spinal Fluid—	
(a) For Wassermann reaction	952
(b) For cell count	171
Films for gonorrhœa	14,367
Urine Examinations :	
(a) Microscopic	1
(b) Chemical	193
Gonococcal fixation tests	3,999
Vaccines prepared	486
Cultures prepared	13,732
Van den Bergh's tests	52
Sigma tests	171
Kahn tests	26,907
TOTAL	88,498

II—City Analytical Laboratory

The following statement indicates the samples analysed in the City Analyst's Department :

<i>Samples Analysed :</i>				
Food and drug samples	.....	.....	.....	6,077
Soot gauge samples	.....	.....	.....	24
Fertilisers and feeding stuffs	.....	.....	.....	27
Miscellaneous samples	.....	.....	.....	971
				<hr/>
		TOTAL	.....	7,099
				<hr/> <hr/>

<i>Samples Adulterated, etc. :</i>				
Samples adulterated	.....	.....	.....	283
False labels	.....	.....	.....	22
Number of vendors of incorrect samples	.....	.....	.....	174
Number of prosecutions	.....	.....	.....	4
Number of fines	.....	.....	.....	4
Amount of fines and costs	.....	.....	.....	£58/17/6
Number of cautions	.....	.....	.....	135

Details of this work are given in the Report of the City Analyst, printed separately.

III—Hospital Laboratories

Laboratories are provided at :

Dudley Road Hospital : General and biochemical.

Selly Oak Hospital : General and biochemical.

Little Bromwich Hospital : Bacteriological, infectious diseases.

Yardley Green Road Sanatorium : Bacteriological, etc., tuberculosis.

Carnegie Institute : General and biochemical.

(b) Ambulance Services

The Public Health Committee have four ambulances for acute infectious diseases (Little Bromwich Hospital) and two for tuberculosis. The ambulance services for the general hospitals are supplied through the Birmingham Hospitals Contributory Association in conjunction with the St. John Ambulance Brigade.

The Watch Committee have eight police ambulances for accidents and other casualties.

There are also ambulances at some of the large voluntary hospitals and at certain works.

(c) Nursing in the Home

Arrangements have been in force, over a period of years, for the home nursing of a number of conditions by the district nurses of the Birmingham District Nursing Association, and 663 cases were thus nursed during 1942. This figure includes 497 cases of pneumonia and 154 of puerperal pyrexia, and 80 children under five years old are included in the total of 663 cases.

Apart from hospital treatment, cases of ophthalmia neonatorum and of other forms of ophthalmia or eye injury capable of leading to blindness are visited in their homes, as far as necessary, by nurses from the Eye Hospital, an annual grant being paid to the hospital in respect of this service.

Removal of Aged and Infirm

During 1942, 30 cases were investigated with a view to possible removal to an institution under either Section 38 of the Birmingham Corporation (General Powers) Act, 1929, or Section 48 of the 1935 Act. Twelve of the cases were voluntarily admitted to institutions or otherwise relieved, and 18 failed to fulfil the requirements of either section. In no case was it found necessary to obtain a Magistrate's Order under either Section for removal to an institution.

The problem of providing suitable care for aged persons in their own homes is becoming increasingly difficult, as relatives are called away to other work, and are less able to visit and assist owing to lack of transport ; and paid domestic assistance is no longer readily obtainable.

(d) **Treatment Centres and Clinics**

Anti-Tuberculosis Centre. (See page 74).

Maternity and Child Welfare Centres. (See page 20).

Public Dispensaries (Voluntary)

Dispensaries for the treatment of the sick poor are provided by five different voluntary societies in the City, chief among which is the Birmingham General Dispensary. This latter with different branches treated some 26,500 patients during the year, while the others provided treatment in a lesser proportion.

(e) **Hospitals**

PUBLIC GENERAL HOSPITALS

General Statistics

The statistics relating to the work of Dudley Road and Selly Oak Hospitals and Selly Oak Infirmary are given below.

(a) IN-PATIENTS

	<i>Acute Sick.</i>		<i>Chronic Sick.</i>
	<i>Dudley Road Hospital.</i>	<i>Selly Oak Hospital.</i>	<i>Selly Oak Infirmary.</i>
Total number of admissions (including infants born in hospital)	13,331	10,592	2,536
Number of women confined in hospital	1,293	981	—
Number of live births	1,227	956	—
Number of stillbirths	96	36	—
Number of deaths among the newly-born (under four weeks, born in hospital)	125	49	—
Number of maternal deaths	8	4	—
Total number of deaths	1,037	452	1,052
Total number of discharges (including infants born in hospital)	12,362	10,332	1,489

The situation of Dudley Road Hospital, and the general type of patient received, accounts for the higher rate of stillbirths and of deaths in infants under four weeks of age, as well as of general deaths, compared with Selly Oak Hospital.

(b) OUT-PATIENTS

	<i>Acute Sick.</i>	<i>Chronic Sick.</i>
	<i>Dudley Road Hospital.</i>	<i>Selly Oak Hospital Infirmary.</i>
Number of persons seen in out-patient department	19,729	15,900
Total number of attendances	99,440	77,323
Number of women seen at ante-natal clinic	1,620	1,042
Total attendances at ante-natal clinic	3,769	6,675

Dudley Road Hospital

This is a municipal general hospital for the acute sick, and is situated in the north-western portion of the City.

DR. T. M. ANDERSON, Medical Superintendent of the Hospital, reports as follows :

Our total admissions for this year have increased by more than a thousand over 1941, and patients now coming under the E.M.S. scheme have more than doubled in number during the same period.

It is worth noting that in pre-war years rheumatism in mild or severe form has figured prominently amongst our medical admissions. A change has occurred in the last few years, and there has been a steady and progressive diminution of cases admitted with this crippling disorder. The attached figures speak for themselves. A forecast made in Birmingham at the outbreak of war would not unreasonably have allowed for a probable increase of rheumatism. That the very opposite has apparently occurred should have a heartening effect upon her citizens. It is easy to generalise about the probable causes of such an effect ; these are no doubt multiple. We do know, however, that a more even and general distribution of good food, not in excess, with adequate vitamin substances, have been brought to the general population since the war. This alone is beneficial and is surely capable of powerful effect.

The accommodation at present available for our Massage, Electrotherapy, and Light Departments is far from satisfactory, but we recognise that this situation has been imposed by the priority of War demands. The nursing staff in these departments are working under difficulties, but have all shown a disregard of comfort and convenience in continuing to work cheerfully.

The recruitment of nurses has continued to be satisfactory and the health of the nursing staff generally has been excellent during the past year.

The new Pre-nursing School, which was started as an experiment, is proving to be very satisfactory indeed. The first group of students

have gone through the school—two passing on to Little Bromwich Hospital to commence training as fever nurses and five remaining for training at Dudley Road Hospital. The scheme is necessarily limited by the housing accommodation at this Hospital. The experiment, however, is proving its worth, and the scheme is an excellent method of bridging the gaps between the school leaving age of girls and the age at which they can enter for full training.

I am glad to place on record that in the past year I have had the competent and willing help of all members of the Staff.

Admissions for the year	13,331	} <i>Excluding E.M.S cases, such as War casualties, members of H.M. Forces, A.R.P. Services, transferred war workers, etc.</i>
Total Discharges	.....	.....	12,362
Total deaths	.....	.....	1,037
Number of women confined in hospital			1,293	
Number of live births	.....	.....	1,227
Maternal deaths	.....	.....	8

Duration of Stay

Under four weeks	.....	.....	11,773
Four weeks and under thirteen weeks			1,418
Thirteen weeks or more	.....	.....	208
Average number of beds occupied	.....		575.4
Highest number, on 12th January, 1942			744
Lowest number, on 4th August, 1942			546

Operations

Number of major operations	.....	.....	4,807
(Dental operations excluded).			

Out-Patients

Total number of Out-Patients	.....	19,729
Total Attendances	.....	99,440
Ante-Natal Clinic (Mothers)	.....	1,620
Ante-Natal Clinic (Attendances)	.....	3,769

THE INCIDENCE OF RHEUMATISM FOR YEARS 1938—1942

Year.	Total Admissions.	No. of Medical Admissions.		Rheumatism and Rheumatic Carditis		Chorea.	
		16 and over	Under 16	16 and over	Under 16	16 and over	Under 16
1938	16,520	4,046	2,423	232	124	7	74
1939	13,402	3,757	2,064	142	96	8	60
1940	12,575	3,932	1,809	108	48	2	25
1941	11,994	2,431	2,293	99	34	1	8
1942	13,331	2,959	2,307	36	27	—	8

Selly Oak Hospital

This is a municipal general hospital for the acute sick, and is situated on the border of Bournville, in the southern sector of the City.

Mr. H. CARSON, Acting Medical Superintendent, reports as follows :

The Hospital has worked at high pressure throughout the year, and at times its accommodation has been severely strained. The admissions

and the number of out-patients have both increased. The accommodation for children and ear, nose and throat cases remains inadequate and unsatisfactory, and these two types of case continue to be worrying problems, particularly as amongst them there is a high incidence of infectious disease.

All sections of the Staff have shouldered the increased burden of work cheerfully. Special mention must be made of the Medical and Nursing Staffs, on whom the strain has chiefly fallen. Despite the difficulties of staffing, due to war conditions, the standard of treatment and general efficiency has been maintained.

Duration of Stay

Under four weeks	.....	.....	.....	.....	.....	10,056
Four weeks and under thirteen weeks	.....	.....	.....	.....	.....	1,071
Thirteen weeks or more	.....	.....	.....	.....	.....	69
Average number of beds occupied	415

Operations

Number of major operations	4,582
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Special Departments

Pathological Department

Examinations	15,799
Autopsies	350

Bio-chemical Department

Examinations	4,357
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Radiological Department

Radiographic Examinations	21,013
Fluoroscopic Examinations	2,035

Massage and Electro-therapeutic Department

Cases	5,783
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Dental Department

Attendances	1,872
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Selly Oak Infirmary.

This institution adjoins Selly Oak Hospital, and is for the accommodation of the chronic sick of both sexes, of all ages.

MR. H. CARSON, Acting Medical Superintendent, reports as follows :

The bed accommodation for the treatment of the chronic sick in the Infirmary has, as usual, been utilised to its fullest extent. A tribute must be paid to the Nursing Staff who undertake this important and exacting work, for having maintained a high standard of efficiency, despite the difficulties of staffing, etc.

Total admissions, including E.M.S.	.....	.....	.....	.....	.....	2,558
Number of discharges	„	„	.....	.....	.....	1,510
Number of deaths	„	„	.....	.....	.....	1,055

Duration of Stay

Under four weeks	.....	.....	.....	.....	.....	1,586
Four weeks and under thirteen weeks	.....	.....	.....	.....	.....	600
Thirteen weeks or more	.....	.....	.....	.....	.....	379
Average number of beds occupied	.....	.....	.....	.....	.....	607

REPORT ON MATERNITY AND CHILD WELFARE

CHIEF STATISTICS, 1942.

Birth-rate, 19·3 per 1,000.

Illegitimate Birth-rate, 5·4 per cent. of total live births.

Infant Mortality Rate, 56 per 1,000 live births.

Stillbirths, 28 per 1,000 live and still births.

Neo-natal Mortality, 30·1 per 1,000 live births. (Infant deaths in the first four weeks of life).

Maternal Mortality in Childbirth, 2·34 per 1,000 live and still births.

Excluding deaths from abortions, 1·82 per 1,000 total births.

GENERAL COMMENTS

Births

There was a marked rise in the birth-rate from 16·8 in 1941 to 19·3 in 1942. In the illegitimate birth-rate the rise was from 4·8 per cent. of the total in 1941 to 5·4 in 1942, which is again the highest figure since 1918.

Infant and Child Mortality

The *infant mortality* has fallen from 69 in 1941 to 56 per 1,000 births in 1942 ; this is the lowest rate recorded in the City.

The *neo-natal death-rate* (30·1 per 1,000 live births) is higher than the rate for 1941 (29·1).

The *stillbirth* rate has dropped from 29 per 1,000 of the live and still births in 1941 to 28 per 1,000 in 1942.

The *death-rate among illegitimate infants* is higher (83 per 1,000 illegitimate live births) than in the previous year (75).

Maternal Mortality in Childbirth

In Birmingham the maternal mortality for the year shows a slight decrease as compared with 1941. Since 1940 the maternal mortality figure for England and Wales has excluded deaths following abortions, and the rates per 1,000 total births on this basis are set out below :

		<i>England and Wales</i>	<i>Bir- mingham</i>			<i>England and Wales</i>	<i>Bir- mingham</i>
1941	.....	2·23	1·95	1942	.....	2·01	1·82

Puerperal Sepsis and Puerperal Pyrexia

Each case notified has been investigated in detail and any necessary action taken.

Births

During 1942 the live births were equal to a birth-rate of 19.3, against one of 16.8 in 1941.

Illegitimate Births

During 1942 the illegitimate births were in the proportion of 54.3 per 1,000 of the total live births, as against 48.2 for 1941.

The figures for recent years were as follows :

<i>Illegitimate Births per 1,000 live births.</i>			<i>Illegitimate Births per 1,000 live births.</i>		
1929	.....	36.6	1936	.....	33.7
1930	.....	35.8	1937	.....	37.0
1931	.....	33.8	1938	.....	40.0
1932	.....	32.9	1939	.....	36.1
1933	.....	36.8	1940	.....	36.8
1934	.....	36.6	1941	.....	48.2
1935	.....	33.3	1942	.....	54.3

Infant Mortality

The deaths of infants under one year of age were equal to an infant mortality rate of 56 per 1,000 births, the lowest figure recorded in Birmingham.

The infant mortality rates for a number of years are shown in the table below :

INFANT MORTALITY RATE

	<i>Bir- mingham.</i>	<i>England and Wales.</i>		<i>Bir- mingham.</i>	<i>England and Wales.</i>
1901-05	157	138	1935	64	57
1906-10	131	117	1936	62	59
1911-15	126	110	1937	60	58
1916-20	94	90	1938	61	53
1921-25	80	76	1939	60	50
1926-30	70	68	1940	70	55
1931-35	67	62	1941	69	59
			1942	56	49

Infant Mortality and Illegitimacy

The following figures show the relative mortality among legitimate and illegitimate infants for the past year :

	<i>Infant Mortality per 1,000 live births</i>				
Legitimate	54
Illegitimate	83

The infant mortality rates during recent years were as follows :

	<i>Infant Mortality Rates per 1,000 Births</i>	
	<i>Legitimate.</i>	<i>Illegitimate.</i>
1921-25 (average)	78	149
1926-30 ".....	68	128
1931-35 ".....	66	113
1936-40 ".....	61	88
1941	69	75
1942	54	83

Neo-natal Mortality

The following table shows that over a sequence of years there has been a decline in the mortality rate amongst children under four weeks of age, though the rates for the last three years have risen somewhat above those for 1938 and 1939.

	<i>Rate per 1,000 live births.</i>	
	<i>Birmingham.</i>	<i>England and Wales.</i>
1912-15 (average)	40.6	38
1916-20 ".....	36.3	37
1921-25 ".....	33.5	33
1926-30 ".....	31.0	33
1931-35 ".....	32.3	31
1936	29.8	30
1937	31.0	30
1938	26.6	28
1939	26.3	—
1940	28.8	—
1941	29.1	—
1942	30.1	—

Stillbirths

The net number of stillbirths for the year represented a rate of 28 per 1,000 of the live and still births, which is the lowest rate recorded in the City since 1913.

The following table shows the proportion of stillbirths over a period of years :

	<i>Proportion per 1,000 Total Births.</i>
1912-15 (average)	32
1916-20 ".....	35
1921-25 ".....	33
1926-30 ".....	35
1931-35 ".....	37
1936	35
1937	35
1938	35
1939	36
1940	33
1941	29
1942	28

Stillbirths and Neo-natal Deaths

The stillbirth-rate (28 per 1,000 total births) was the lowest since 1913. The chief ante-natal cause was toxæmia, but this cause has been reduced to 16.6 per cent. of all causes, as against 22 per cent. in 1940 and 18 per cent. in 1941.

During 1942, 37 per cent. of all stillbirths occurred before the 37th week, compared with 40 per cent. in 1941. Breech delivery accounted for 10 per cent. of the total number of stillbirths, and foetal abnormalities for 16 per cent.

The neo-natal death-rate for 1942 was 30 per 1,000 live births, this being slightly higher than has been experienced since 1937. As usual, roughly one-third of the deaths occurred within 24 hours of birth, one-third between two to six days, and one third at seven days or over. Ante-natal causes (toxæmia accounting for one-half of these) have risen from 11 per cent. to 15 per cent.; intra-natal causes have also risen slightly, the rise being accounted for entirely by an increase in the number of deaths from birth injury, following breech delivery. Post-natal causes remain at 18 per cent., two-thirds of these being due to infections. Sixty per cent. of all neo-natal deaths occurred in infants born before the 37th week of pregnancy.

Maternal Mortality in Childbirth

The deaths of women classed to pregnancy and child-bearing in Birmingham during 1942 gave a maternal mortality rate per 1,000 live births of 2.41. If the deaths following abortions are excluded, the rate falls to 1.88.

The maternal mortality in previous years is shown in the table below :

		<i>Rate per 1,000 LIVE Births</i>	
		<i>Birmingham.</i>	<i>England and Wales</i>
Average 1911-15	.....	3.51	4.03
Average 1916-20	.....	3.06	4.10
Average 1921-25	.....	3.49	3.91
Average 1926-30	.....	3.79	4.28
Average 1931-35	.....	3.72	4.31
1936	.....	3.67	3.81
1937	.....	3.07	3.23
1938	.....	2.81	3.08
1939	.....	2.58	—
1940	.....	2.21	—
1941	.....	2.57	—
1942	.....	2.41	—

The rates calculated on live and still births, but excluding deaths from abortion, for 1942 were :

Birmingham	.....	1.82
England and Wales	.....	2.01

Maternal Mortality

At the request of the Ministry of Health, an enquiry has been made into every maternal death in childbirth since 1929. The information so obtained, direct from doctors, midwives and hospitals, makes it possible to classify the deaths more accurately than from consideration of the death certificate alone, but only a very curtailed summary can be given here.

The maternal deaths in 1942 were such that the proportion :

(a) <i>Due to pregnancy and childbirth :</i>				
(i) Not associated with a notifiable birth was	.....	16%		
(ii) Associated with a notifiable birth was	.....	55%		

	TOTAL	.....	71%	
(b) <i>Due to associated conditions was</i>	.....	29%		

Puerperal Sepsis and Puerperal Pyrexia

The following table shows the number of cases of puerperal pyrexia during 1942 and the preceding four years :

The out-of-City cases are those not normally resident in Birmingham, but coming into the City for the confinement .

	1938.	1939.	1940.	1941.	1942.
Total puerperal pyrexia	..... 408	331	292	290	381
Out-of-City cases	..... 56	31	17	20	22
Birmingham cases	..... 352	300	275	270	359

The 359 Birmingham cases have been investigated with a view to discovering the cause of the pyrexia. The pyrexia was due to infection of the genital tract in 179 cases (in 39 of these cases infection followed abortion), and in 163 cases the cause was extra-genital.

There have been 20 deaths from puerperal sepsis, nine of these following abortion, and 11 following child-birth. Of these 11 deaths following child-birth, three occurred after caesarean section, four after abnormal labour, and four after normal spontaneous delivery.

Ophthalmia Neonatorum

There were 1,203 cases of discharging eyes notified to this Department during 1942. Although approximately 90 per cent. of these cases show a purulent discharge (sometimes very slight) considerably less than 1 per cent. are due to gonococci.

Sixteen cases were admitted to the Eye Hospital.

There was no impairment of vision in any case notified during 1942.

Pemphigus Neonatorum

Forty-six cases of pemphigus were reported during 1942. Of these, 30 occurred in institutions and 16 in their own homes. Of the 16 attended by district midwives, 5 were admitted to hospital, 2 were attended by district nurses, and the remaining 9 were nursed by the mother or a relative.

Five deaths occurred, but in all 5 cases, prematurity was the primary cause of death.

MATERNITY AND CHILD WELFARE SERVICE

Health Visitors' Training Course

The twentieth course of training for the health visitors' certificate was held from September 7th, 1942, to April 13th, 1943, with a total of 33 students in attendance, of whom 20 were assisted pupils, training within the Public Health Department Scheme, and 11 were independent students. Two candidates took the course as private students.

Thirty-three candidates sat for the examination in April, 1943, and of these, 29 or 87·8 per cent. were successful.

Health Visiting in the Home

Health Visiting was carried out in the homes on the usual lines during 1942, children under 5 years being visited as soon after the 14th day as possible, monthly up to 1 year of age, quarterly from 1—2 years, and half-yearly from 2—5 years. In this latter group, many cases of unsatisfactory health or home conditions call for more frequent visiting than this half-yearly period. Also under war-time conditions many special visits are required.

Visits were also paid to expectant mothers, and to certain infectious cases, including ophthalmia neonatorum.

The number of visited children has increased during the year by 4,749.

Total number of visits to children under 5 years	297,789
Total number of visits to expectant mothers	23,666
Other visits	23,886
All visits	345,341

Children visited during 1942.

Number of individual children visited	70,008
Number of individual children who attended Centres	40,576
Percentage of visited children attending Centres.....	58 per cent.

VISITED CHILDREN GROUPED ACCORDING TO AGE

<i>Age.</i>	<i>Year of Birth.</i>	<i>% Visited.</i>	<i>% of Visited Children attending Centre during 1942</i>
Under 12 months	1942	92%	81%
1—2 years	1941	88%	81%
2—3 years	1940	75%	77%
3—4 years	1939	76%	33%
4—5 years	1938	74%	27%

Child Welfare Centres

Number of Centres provided and maintained by the City Council	32
Total number of attendances at infant and children's consultations at all Centres during the year	
(1) By children under 1 year of age	133,955
(2) By children between 1 and 5 years	42,259
Total number of children who attended post-natal and ordinary consultations for the first time during the year :	
(1) Children under 1 year of age	16,270
(2) Children between 1 and 5 years	3,295
Total number of children who were in attendance at the Centres throughout the year :	
(1) Children under 1 year of age	13,893
(2) Children between 1 and 5 years	26,683
Number of fresh children attending special medical inspection clinics for children between 2 and 5 years (with 16,625 attendances).	5,442
Number of home visits made by Health Visitors :	
<i>To Infants and Children :</i>	
Primary visits	17,736
Re-visits (infants and children)	280,053
Total visits and re-visits	297,789
<i>To Mothers :</i>	
Primary visits	5,582
Re-visits	18,084
Total visits and re-visits	23,666

ATTENDANCES AT CHILD WELFARE CENTRES DURING 1942.

Children's Consultations :

Number held (excluding post-natal clinics)	3,280
*Fresh children attending (including those at post-natal clinics)	19,565
*Total attendances	221,413
Number of these seen by doctor	92,623

Special Medical Inspections (1-5 years) :

Number held	1,226
Total attendances	19,020

Mothers' Consultations :

Ante-natal :

Number held	3,489
Fresh mothers attending	14,183
Total attendances	74,421

Post-natal :

Number held	1,384
Number of individual mothers attending	3,199
Total attendances of mothers	3,341
*Total attendances of infants (included above)	45,199

Attendance at

● Sewing classes	12,182
Cookery classes	10
Health talks	51,544

MATERNITY AND CHILD WELFARE CENTRES, 1942

CENTRES	INFANTS AND CHILDREN				CHILDREN'S CONSULTATIONS				SPECIAL MEDICAL INSPECTIONS				MOTHERS' CONSULTATIONS (Ante-natal)				POST-NATAL CLINICS						
	Births Reported	Primary Visits	Re-Visits	Total Visits	Ante-natal Visits to mothers	Number Held	Fresh Children Attending	Total Attendances	Average per Consultation	Number seen by Doctor	Number Held	Total Attendances	Average per Consultation	Number of Mothers Examined	Average per Consultation	Number of Infants Attending	Average per Consultation	Number of Infants seen by Doctor	Average per Consultation				
																				Number Held	Fresh Mothers Attending	Total Attendances	Average per Consultation
ACOCKS GREEN	662	657	11,987	12,644	833	100	448	6,635	66	2,353	51	1,014	20	190	450	2,177	22	149	3	1,592	32	667	13
BROMFORD	554	499	6,926	7,425	542	138	346	5,991	43	2,276	101	719	15	101	349	2,124	21	10	5	375	38	89	9
CARNEGIE INSTITUTE	970	938	14,547	15,485	1,292	145	542	8,649	60	3,434	47	719	16	209	859	3,952	19	51	3	1,684	33	754	15
ERDINGTON	673	660	7,915	8,575	841	149	410	9,068	61	3,270	49	767	16	138	544	3,236	23	50	2	1,864	37	674	13
FLOODGATE STREET	200	193	3,852	4,045	537	48	240	2,044	43	1,247	51	923	18	51	162	923	18	19	2	1,303	27	810	17
GREET	655	651	10,209	10,860	802	100	484	6,157	62	2,348	—	—	—	96	414	1,784	19	49	2	1,470	30	697	14
HANDSWORTH	452	446	6,490	6,936	523	99	240	5,218	53	1,980	50	766	15	100	307	1,853	19	49	2	1,470	30	697	14
HARBORNE	182	171	1,735	1,996	68	48	192	2,597	54	1,099	24	1,014	15	24	103	470	20	81	2	1,470	30	697	14
HAY MILLS	582	570	9,197	9,767	918	142	458	8,853	62	3,347	50	969	19	111	574	3,171	29	51	4	2,068	41	887	17
HOPE STREET	615	617	10,345	10,962	925	101	416	4,566	45	2,121	—	—	—	149	560	2,953	20	50	2	1,809	32	807	16
HORRELL ROAD	523	493	7,914	8,407	570	96	198	5,222	54	2,056	49	865	18	174	305	1,874	25	50	3	1,918	38	772	15
IRVING STREET	405	348	5,933	6,281	522	96	403	4,351	45	2,355	11	230	21	50	164	929	19	—	—	—	—	—	—
KETTLEHOUSE	558	504	10,030	10,534	837	149	320	5,744	59	2,923	47	747	16	152	527	3,165	21	49	3	1,428	29	982	20
KING'S HEATH	527	497	4,917	5,414	514	94	465	5,174	55	2,146	51	724	14	76	280	1,362	18	51	2	2,056	40	1,088	21
KINGSTANDING	627	555	9,038	9,593	677	97	319	5,552	57	2,309	48	620	13	114	546	2,988	26	50	3	1,845	37	945	19
LANCASTER STREET	600	610	11,485	12,095	1,135	99	521	5,033	51	1,767	49	671	14	151	722	2,722	18	80	2	1,645	33	792	16
LAWSOWNE STREET	571	560	10,481	11,041	1,223	100	325	6,012	60	2,800	51	826	16	100	386	2,058	21	48	2	1,559	32	619	13
LEA HALL	616	612	11,735	12,347	993	51	247	8,857	56	1,280	46	942	20	99	517	2,549	26	50	2	1,963	39	723	14
MONUMENT ROAD	928	843	12,526	13,369	843	151	430	7,293	48	2,894	50	660	13	164	645	3,466	21	50	3	1,697	34	690	14
NORTHFIELD	754	732	11,351	12,083	682	96	326	6,466	67	2,263	47	802	11	98	439	2,221	23	49	2	1,404	29	743	16
SELLY OAK	367	327	3,518	3,845	282	92	208	4,366	47	1,630	50	679	14	80	263	1,309	16	48	2	1,814	38	692	14
STEECHFORD	623	592	7,783	8,375	743	146	302	7,457	51	2,815	48	899	19	104	458	2,458	24	51	3	1,602	31	534	10
STIRCHLEY	707	712	10,478	11,190	619	99	322	3,582	36	1,788	48	738	15	97	317	1,508	16	48	2	1,500	31	832	17
STRATFORD ROAD	521	455	7,711	8,186	749	97	485	5,028	52	2,253	50	804	16	101	482	2,295	23	32	3	804	25	454	14
SUTTON STREET	721	725	11,655	12,380	832	98	507	6,689	68	2,497	50	804	16	198	777	4,166	21	51	2	1,248	24	804	16
TENNAL ROAD	317	301	6,235	6,536	320	51	159	2,590	51	1,079	48	735	15	50	184	1,073	21	49	1	2,014	41	966	20
TOWER HILL	734	725	10,432	11,157	767	147	494	8,246	56	3,150	144	854	17	144	477	3,102	22	49	3	1,265	26	721	15
TRINITY ROAD	594	500	7,201	7,701	771	100	365	5,579	56	2,203	48	765	16	119	546	2,859	24	48	3	1,692	35	863	18
WASHWOOD HEATH	645	638	9,750	10,388	770	101	379	5,574	55	2,235	35	582	17	133	566	2,748	21	50	2	1,303	26	702	14
WEOLLY CASTLE	294	296	6,161	6,457	539	99	111	2,173	44	1,064	54	671	13	54	250	1,490	28	50	2	866	17	673	13
WRIGHT STREET	755	736	10,572	11,308	1,264	99	486	5,405	55	2,523	51	435	9	149	687	3,654	25	51	2	1,835	36	943	18
YARDLEY WOOD	604	573	9,944	10,517	733	102	380	6,053	59	2,001	52	825	16	78	353	1,782	23	80	3	1,796	36	829	17
TOTALS	18,536	17,736	280,053	297,789	23,666	3,280	11,538	176,214	52	70,871	1,226	19,020	16	3,464	14,183	74,421	21	1,384	2	45,199	33	21,732	16

The work of the Child Welfare Centres has proceeded on the established lines.

The number of attendances at children's clinics has increased considerably in spite of the increase in the number of mothers who are engaged on war-time work. The actual rise in attendances at all clinics for children under 5 years, including post-natal clinics, has been 38,278, though the number of clinics has only increased by 120.

The Centres have been used for the distribution of Vitamin Supplies and National Dried Milk, also for the registration for milk under the National Scheme, the Food Office providing clerks for the distribution of the supplies.

Medical Inspection of Children

Special sessions are devoted to the medical examination of children from 2 to 5 years at Child Welfare Centres. Quarterly appointments are given for these sessions, though the mother may bring the child in the interim to the children's consultation clinic, if not satisfied with progress made. The child is also visited at home, when more detailed advice can be given in relation to environment.

The number of sessions held during 1942 was 1,226, and the total attendances were 19,020, the average attendance being 15.5. The total number of individual children attending these clinics was 9,426. The defects noted at these examinations are shown on the accompanying table. Of 9,426 children examined, 6,994 were suffering from one or more defects, i.e., 74 per cent. The proportion of children examined who had suffered from acute illness during the year was 16 per cent.

TODDLERS' MEDICAL INSPECTION, 1942

Number of individual children who attended Medical Inspection Clinics during 1942	9,426
Total number of attendances	19,020
Number of <i>children</i> noted as suffering from one or more of the defects or diseases in the attached list. (N.B.— <i>Not</i> number of <i>defects</i>)	6,994
Number of children suffering from environmental conditions	3,033
Number of children noted as having had an acute illness during 1942— <i>e.g.</i> , pneumonia, infectious diseases, etc.	1,546
Eye conditions (defect or disease)	449
Skin conditions	321
Ear, nose and throat conditions	2,752
Defective teeth	1,672
Gland conditions	980
Heart conditions	99
Anaemia	235
Lung conditions	127
Active rickets	119
Deformities	1,742
Poor mentality	90
Speech defects	155
Unsuitable or inadequate clothing	447
<i>Rest.</i>	
Bed-time later than 7 p.m.	4,023
No day-time rest	4,808

Ante-natal Clinics at Child Welfare Centres

The average number of ante-natal clinics held weekly is 67, and the average attendance is 21 per clinic. The number of women attending has increased by 1,997, and the total attendances by 14,429.

Ante-natal clinics are held at Dudley Road and Selly Oak Hospitals, at the Maternity Hospital, and at the City Maternity Homes, to all of which consultation cases can be sent.

Post-natal Clinics

These clinics are held for the purpose of the mother obtaining a physical examination after the birth of her child. She is invited to bring her baby to this clinic up to the age of 3 months, and her own examination is arranged for between the 6th and 8th week after confinement. The total number of women examined during 1942 is 3,058, an increase of 888 over the previous year, and representing 21·5 per cent. of the women attending ante-natal clinics. It must be borne in mind that many women attending ante-natal clinics are examined post-natally at the hospital where they were confined, or by the private doctor who attended them at confinement.

The following table shows the importance of these examinations, 62 per cent. of cases showing abnormality.

Number of cases showing no abnormality	.....	.....	1,160
Number of cases showing abnormality	.....	.....	1,898

Abnormal conditions found in Mothers.

Breasts—mastitis	.....	.....	.....	50
Genital tract	.....	.....	.....	1,893
Urinary tract	.....	.....	.....	113
White leg	.....	.....	.....	3
General conditions	.....	.....	.....	2,047

Note.—More than one abnormality may be found in the same mother.

Total attendances of infants	.....	.....	.....	45,199
Average attendance of infants per clinic	.....	.....	.....	32
Number of individual infants attending these clinics	.....	.....	.....	8,027

Ultra Violet Light Clinics at Child Welfare Centres

These clinics were held at 17 Centres. In addition to the usual clinical conditions dealt with, treatment was also given as a prophylactic measure to prevent the harmful results of blacked-out homes and other detrimental factors of life in war-time. Attendances were well maintained and the children responded well to treatment.

ATTENDANCES

Number of new cases	.....	.....	.....	.....	3,527
Total attendances	.....	.....	.....	.....	42,262

Remedial Exercise Clinics

Remedial Exercise Clinics have been held at 9 Child Welfare Centres and at 4 Day Nurseries.

Much good work has been done, and attendances have been fairly well maintained. The mother attends these classes with her child, watches the routine, and is encouraged to put the child daily through the same exercises at home.

In addition, the Remedial Gymnasts attend at Canwell Hall for 7 sessions weekly. They have also given post-natal exercises to mothers in the Maternity Homes during the puerperium.

The number of children treated at Maternity and Child Welfare Centres during the year was :

Individual children attending	.....	.....	.....	728
Total attendances	.....	.....	.....	6,976
Number of sessions held	.....	.....	.....	433
Average per session	.....	.....	.....	16

Dental Treatment

	<i>Carnegie.</i>	<i>Stratford Road.</i>	<i>Lancaster Street.</i>	<i>Selly Oak.</i>	<i>Totals</i>
Number of clinics held	265	203	143	43	654
Total attendances (mothers)	4,200	2,981	2,175	421	9,777
Total attendances (children)	748	606	372	258	1,984
Dentures supplied	958	588	421	No Denture Clinic	1,967
Number of inspection clinics held				35	
Number inspected				1,975	

Treatment of Ear, Nose, Throat and Eye Conditions

Cases referred from Child Welfare Centres and examined during 1942 at the Children's Hospital for the treatment of the above conditions were as follows :

Eye, ear and throat cases	368
Tonsils and adenoids (operation required)	396
Tonsils and adenoids (examination only)	219
TOTAL	983

The Provision of Food for Necessitous Mothers and Children

With the improved income in the majority of homes, the necessity for the continuance of the dinner Centres has largely disappeared. They have, therefore, been gradually discontinued at all Centres, with the exception of Monument Road.

The Municipal Kitchen has been used for the supply of meals to War-time Nurseries since Easter, except for this one Centre.

The number attending for meals at Child Welfare Centres during 1942 was :

	<i>At Monument Road Centre.</i>	<i>At Centres where dinners were discontinued during year.</i>	<i>Total.</i>
Individual Mothers	94	133	227
Individual Children	83	189	272
<i>Total Attendances :</i>			
Mothers	5,447	2,385	7,832
Children	6,261	3,709	9,970

Total dinners served during 1942 = 17,802.

Carnegie Infant Welfare Institute

During the year work has proceeded normally. Numbers at all baby clinics have been well up to the average, while those at the ante-natal clinics were so heavy during the summer that the toddlers' clinic had to be cancelled, and an extra ante-natal clinic substituted. Post-natal clinics

for mothers and babies under three months have proved very popular. The numbers at the diphtheria immunisation clinics have maintained an average of 80, of whom the great majority are under one year of age. The only additional class being held at present is a sewing class, with an average attendance of 12. Further additional work is being carried on by mothers holding talks and demonstrations.

As usual the Institute has been visited by various groups of students attending courses.

The Toddlers' Rooms are still being used as part of a War-time Nursery.

Carnegie Observation Ward

This has been used throughout the year as part of a War-time Nursery.

Parents' Guidance Clinic, Lancaster Street Child Welfare Centre

During the year, 46 sessions were held, the medical psychologist being assisted by a special health visitor. Forty-six new cases were referred to the clinic during the year.

ATTENDANCES.

Girls	.....	61
Boys	.....	59
Mothers	.....	36
Fathers	.....	18

Two hundred and eighteen home visits were paid during 1942.

Home Helps

The number of cases attended during 1942 was 417.

This figure is considerably lower than that of either 1941 or 1940, when the number of cases attended was 742 and 1,002 respectively.

During the year the average number of Home Helps employed has fallen to 17. Owing to the difficulty in keeping Home Helps, a retaining fee of 3s. per day is being paid during intervals between cases.

Canwell Hall Babies' Hospital. 84 Beds

This institution admits sick children from infancy up to five years of age, referred mainly from Welfare Centres and War-time Nurseries. During the year there were 602 admissions, 576 discharges, and 22 deaths.

There were 108 cases of infectious disease during the year, including cases developing whilst in hospital.

Of the discharges, six were removed by the parents against medical advice.

The cases treated during the year were again more acute in type, and there were 22 deaths.

The cases admitted included 114 chest conditions, 104 of gastro-enteritis, 64 ear, nose and throat conditions, 25 cases of anæmia, and 14 of rickets.

Twenty-seven children were found to be suffering from tuberculosis.

Residential Nursery, Red House, Overbury, nr. Tewkesbury (Number of Beds, 48).

(Evacuated from Lordswood Nursery, Harborne).

This institution admits children under the age of two years, who are in need of care under the Public Assistance Committee regulations.

The Nursery was evacuated from Birmingham shortly after the outbreak of war. During 1942, 94 children have been admitted, and 92 children discharged. There was an outbreak of whooping cough early in the year, affecting 20 children, and in December 40 children developed chicken pox.

Two children have died at Red House during 1942, but on the whole the children have done well.

Seven of the Nursery Staff sat for the Nursery Nurses' Diploma ; all passed in the practical, and 5 in the theoretical part of the examination.

Children's Home Service

The Ministry of Labour " Daily Minding Scheme " commenced on June 23rd, 1941, and was replaced by the Children's Home Service on December 1st, 1941. The former scheme from the commencement was found unsatisfactory. The dual control by the Ministry of Labour and the Public Health Department did not make for easy working. The method of claiming payment, with the numerous and complicated forms, was too much trouble for many " minders," and mothers, and the maximum payment of 6s. less than the usual amount paid for minding.

The new scheme, directly supervised by the Public Health Department, has met with good response.

Homes inspected	2,816
Homes refused or withdrawn	607 (22%)
Homes used	2,209
Children who could be accommodated	2,662
Children placed	1,977 (74%)
Children known to be returned to care of parents	53

The majority of " minders " have been relatives or friends of the mothers, and these have proved the most satisfactory arrangements. " Minders " and mothers have been encouraged to make arrangements mutually agreeable.

The standard of care is variable, but in no case has a child been allowed to stay in a home if it is considered to be detrimental to the child in any way.

War-time Nurseries

The War-time Nursery programme which aims at 80 nurseries in Birmingham, made rapid headway during the year. Fifty-three new nurseries were opened in 1942, with accommodation for approximately 3,000 children.

At the end of 1942 there were 62 nurseries in use, and another seven were completed, but owing to lack of staff were unable to be opened until 1943.

In April the question of providing meals for the increasing number of children became a serious problem, as the central kitchen at Bacchus Road had expanded to its limit.

The Ministry of Health agreed to equip Witton Hospital as a small kitchen unit, but its existence was short-lived, as Witton Hospital had to be put to another use. The Ministry of Health then agreed to provide and equip two new hutted kitchen units, situated in the grounds of Yardley Green Road Sanatorium and of Selly Oak Hospital respectively. These did not open until 1943.

The health of the children at the Nurseries has been good on the whole, but the attendance has varied greatly, owing to recurring epidemics of infectious diseases, particularly measles.

In June there was an outbreak of enteritis at Bloomsbury Street Day Nursery, which accommodates 30 children, but appropriate precautions were taken, and the outbreak was quickly under control.

The Nursery in Islington Row, which was opened on April 20th, was damaged in an air raid on July 27th, and had to be closed.

Thirty-five Nursery matrons attended the matrons' course for state registered nurses, held in Birmingham in August, at the request of the Ministry of Health, in co-operation with the Education Department.

On August 5th the first wardens' course was given at Garrison Lane, under the auspices of the Canadian teaching unit, led by Dr. Blatz. The purpose of this course was to train child care reserve personnel to act as wardens in the Nurseries.

The training course for nursery assistants also began in 1942, Nursery assistants under the age of 16 attending Bournville Continuation School for the continuation of their education.

A few of the Nurseries were opened as 24 hour nurseries, a number of the children remaining in the Nursery from Monday morning until Saturday mid-day, when they are taken home by their parents for the week-end.

The first floor of the Y.W.C.A. Hostel at Selly Oak was opened as a sick bay for ailing children from other nurseries. Here children suffering from minor ailments may be treated as long as the mothers remain at work.

The Nursery at 298, Birchfield Road had the honour of a visit by the King and Queen, and toys and honey were subsequently received at the Nursery as a kindly and thoughtful gift from their Majesties.

Pype Hayes Convalescent Home, Erdington

This Home has been used as a twenty-four-hour War-time Nursery, with accommodation for 60 children, 35 of whom can be resident.

During 1942, 130 children attended daily, and 68 were resident.

Apart from some cases of measles, chicken pox and diarrhoea, there has been little infection, the general health of the children being good.

Wassell Grove, Residential Nursery, Nr. Stourbridge.

(No. of beds, 52).

This institution admits children under five years of age, whose mothers are taking part in the national effort.

Formerly the Public Health Committee's convalescent home for women and girls, it was decided to open it as a Residential Nursery in December, 1940.

During 1942, 75 children were admitted, and 86 discharged.

There have been isolated cases of infection, but no epidemics. Thirty-one children were transferred to hospital (23 to general hospitals and 8 to fever hospitals).

Six of the nursing staff sat for the nursery nurses' diploma. Three passed and obtained the diploma, two passed in theory but failed in the practical, and one failed in both parts.

"Oaklands," Residential Nursery, Droitwich. (No. of beds, 52).

This institution was formerly the Public Health Committee's convalescent home for men and boys. After the necessary alterations it was opened in April, 1941, as a Residential Nursery for children under five years of age, whose mothers are taking part in the national effort.

During 1942, 68 children were admitted, and 63 discharged.

There was an epidemic of measles in December, affecting 23 children. They were nursed in the Nursery and all recovered without complications. Otherwise the health of the children has been good. Thirteen children were transferred to hospital (five to general hospitals, and eight to fever hospitals), during the year.

Twelve of the nursing staff sat for the diploma of the National Society of Day Nurseries, and eight passed and obtained the diploma.

City Maternity Home (Sorrento), Wake Green Road, Moseley.

(86 Beds).

This institution admits maternity cases (40 beds), ante-natal cases (30 beds), and premature infants (16 beds), and is a training school for pupil midwives (first period of training).

Early in 1942, the Central Midwives' Board approved the senior officers at this home as lecturers. This has eased the nursing situation considerably, as the nurses are now only away from the wards for one hour, whereas previously attendance at a lecture in the City entailed several hours off duty.

During the early part of 1942, the institution worked in conjunction with Lordwood Post-delivery Home, 172 cases having been transferred on or about the fifth day of the puerperium. Any abnormality arising in these mothers and babies during their stay at the post-delivery home has been included in the report of this maternity home.

The number of deliveries in the Home during 1942 was 1,329; of these, 1,190 were booked and 139 unbooked cases. Seventy-six per cent. were primiparae.

There was no case of puerperal septicæmia, but 11 cases of pyrexia were notified. Twelve cases of breast abscess occurred during the year. Three maternal deaths occurred—the causes of death were: heart failure in a woman suffering from valvular disease of the heart; septicæmia following severe pyelitis; heart failure due to latent toxæmia.

There have been two epidemics of a mild form of pemphigus, one in July and the other in November. Fourteen infants were affected.

The Premature Baby Ward has been well filled throughout the year. The admissions show a marked increase in the proportion of the smaller and less mature babies.

When Lordswood Home was opened as a delivery home in March, there was a demand for more ante-natal beds in order to cope with abnormalities arising in cases booked for Lordswood. It was decided to increase the accommodation for ante-natal cases at Sorrento. A house was acquired which backs on to the grounds and this was equipped and opened in December.

City Maternity Home, 134, Heathfield Road, Handsworth. 46 Beds (Including Bourne House Annexe).

This institution admits maternity and ante-natal cases, and is a training school for pupil midwives (second period training).

During 1942, it has worked in conjunction with Bourne House Annexe (14 beds), giving a total of 33 lying in beds and 13 ante-natal beds.

During the early part of the year, 75 cases were transferred to Lordswood Post-delivery Home on or about the fifth day of the puerperium. Any abnormality arising in these mothers and babies during their stay in the Post-delivery Home has been included in the report of this maternity home.

There were 933 deliveries during 1942. Of these 856 were booked cases and 77 unbooked cases. There was no case of puerperal septicæmia but 35 cases of pyrexia were notified. There were 3 cases of breast abscess during the year. One maternal death occurred. This was due to heart failure from post-influenzal myocarditis, complicated by toxæmia of pregnancy. Four cases of pemphigus occurred in July, but all recovered.

Bourne House Annexe. (14 Beds)

This Home has been used as an Annexe to Heathfield Road Home throughout the year.

ADMISSIONS.

Ante-natal patients	.....	.....	.....	.....	.....	127
Mothers with babies	.....	.....	.....	.....	.....	313
Mothers without babies	.....	.....	.....	.....	.....	19

These admissions are included in the report of the Heathfield Road Maternity Home.

Lordswood Maternity Home, Harborne. (27 Beds)

During the early part of the year, this Home was used as a Post-delivery Home, cases being transferred from Heathfield Road and Wake Green Road Maternity Homes, by ambulance on or about the fifth day of the puerperium.

(a) As Post-delivery Home

Two hundred and forty-seven cases were admitted, 172 of these being from the Wake Green Road Home and 75 from Heathfield Road Home. On March 9th, Lordswood became a maternity home, and commenced to deliver their own booked cases.

(b) As Maternity Home

This Home is intended for women who have already had one child, and in whom no abnormality is expected, but where institutional treatment is required because of home difficulties.

Ante-natal and post-natal clinics in connection with this home are held at the Harborne Child Welfare Centre in Wentworth Road. There are no ante-natal beds, but abnormal ante-natal cases are dealt with by the Wake Green Road Maternity Home.

Since opening as a maternity home, there have been 525 deliveries. There was no case of puerperal septicæmia, but four cases of pyrexia were notified.

The City Maternity Homes

Maternity Wards

MOTHERS

	Wake Green Road Home.	Heathfield Road Home.	Lordswood Home.
Number of confinements	1,329	933	525
Booked cases	1,190	856	(All booked)
Unbooked cases	139	77	—
Primiparae	1,015	647	31
Multiparae	314	286	494
Puerperal sepsis	—	—	—
Puerperal Pyrexia	11=0.8%	25=2.7%	4=0.8%
Maternal deaths	3=0.2%	1=0.1%	0= —
Forceps deliveries	54=4.0%	57=6.1%	3=0.6%

INFANTS

	Wake Green Road Home.	Heathfield Road Home.	Lordswood Home.
Number of births	1,345	913	525
Stillbirths	36=2.7%	38=4.2%	4=0.8%
Deaths in first ten days	37=2.8%	20=2.2%	5=0.9%
Ophthalmia neonatorum	7	2	4
Pemphigus	14	4	—
<i>Ante-Natal Ward</i>			
Admissions	778	402	} Nil
Booked cases	584	359	
Unbooked cases	194	43	

Clinics

ANTE-NATAL

	<i>Wake Green Road Home.</i> (5 sessions weekly)	<i>Heathfield Road Home.</i> (4 sessions weekly)	<i>Lordswood Home.</i> (2 sessions weekly)
<i>Doctors' Clinics :</i>			
New patients	1,620	1,080	671
Re-visits	5,819	5,724	1,138
Consultation cases	645	351	—
	(1 session weekly)	(1 session weekly)	
<i>Midwives' Clinics :</i>			
Attendances	529	113	—
	<hr/>	<hr/>	<hr/>
	8,613	7,268	1,809
	<hr/>	<hr/>	<hr/>

POST-NATAL

	<i>Wake Green Road Home.</i> (1 session weekly)	<i>Heathfield Road Home.</i> (1 session weekly)	<i>Lordswood Home.</i> (1 session weekly)
Individual attendances	665	654	100
Attendance rate	50.0%	70.0%	19.0%

Post-natal Consultation Clinic

This clinic was held by a consultant gynæcologist every first and third week at the Heathfield Road Maternity Home, and every second and fourth week at Wake Green Road Maternity Home, cases being sent from the Child Welfare Centres for advice and treatment. These clinics were, however, given up in June as the consultant found that she could not spare the time. Arrangements have now been made for Child Welfare Centres to send post-natal cases requiring treatment to the gynæcological clinics at Dudley Road and Selly Oak Hospitals.

Ante-natal Consultation Clinics

These were started in November. The Senior Medical Officer in charge of maternity homes attends Heathfield Road on Wednesday mornings and Wake Green Road on Thursday mornings to see cases sent from the Child Welfare Centres for a second opinion.

Premature Baby Ward, Wake Green Road Maternity Home

Admissions	284
Premature babies	258
Feeble, but full-term babies	26

Survival rate for premature babies for 1942—46 per cent.

This survival rate is the lowest yet on record here, but is due to the fact that a greater proportion of the smaller infants was admitted during this year.

Care of the Unmarried Mother

During the year 734 unmarried mothers and 200 married women with illegitimate children came under the care of the Department. Six hundred and thirty were first cases of illegitimacy. The total number of cases was 934, compared with 750 in 1941 and 527 in 1940, these figures showing a further increase during 1942. Two hundred and fifty of the total 934 cases were not Birmingham residents.

<i>Dealt with at :</i>	<i>First Cases.</i>	<i>Multiple Cases.</i>	<i>Married Women.</i>
Hope Lodge	71	2	1
Woodville	13	—	—
Francis Way	11	—	1
Cleveland House	3	—	—
Lyncroft House	14	2	—
Hostel	18	3	—
Homes out of City	12	—	—
Birmingham Infirmary	6	7	6
Left City before confinement	4	3	6
Own home except for confinement.....	379	73	128
Own home entirely	99	14	58
	<hr/>	<hr/>	<hr/>
	630	104	200
	<hr/>	<hr/>	<hr/>

Report on total 934 cases at end of the year.

	<i>Percentage</i>
51 mothers and babies still in the Homes	5.5
78 babies have died	8.3
123 babies have been adopted	13.2
24 babies are in Homes (without the mother)	2.6
33 babies are with foster mothers	3.5
30 girls have married the babies' fathers	3.2
112 mothers and babies have left the city	12.0
483 mothers at home with their babies	51.7
<hr/>	
934	
<hr/>	

Girls under age of consent

14 years old	1
15 years old	8
16 years old	2
	<hr/>
	11
	<hr/>

During the year, 2,141 home visits were paid and 680 cases were visited in hospital. There were 3,267 interviews at the Council House, excluding first applications.

There have only been 26 cases of venereal disease. Six attended at the General Hospital and 8 at Lancaster Street, for treatment. Three cases were sent to Cleveland House. The other 9 cases were admitted to Birmingham Infirmary.

Lodging Money Grant. The grant of £20 per month made by the Committee to assist in paying for lodgings for the unmarried mother, has been of great help to the work. Of the 934 cases dealt with, 264 were living in lodgings, 68 of these were found more suitable lodgings where their babies could be "minded daily," and 46 were helped financially under this new scheme.

During the year, £117 18s. 9d. was spent on lodgings, but £24 3s. 0d. has been refunded. Therefore, the actual cost to the Department was £93 15s. 9d., an average of £7 16s. 3½d. per month.

Infant Life Protection and Scheme for Foster Mothers

The work for infant life protection has proceeded satisfactorily during the year.

There has been a marked increase in the number of cases coming outside the Foster Mother Scheme, many of the war workers having found their own foster homes. Only 31 per cent. of the total fostered children were placed with foster mothers under the Birmingham Scheme during 1942, as compared with an average of 40 per cent. in 1940 and 1941.

During 1942, the special workers paid 1,961 visits and gave 3,038 interviews.

Total foster children dealt with during 1942 :

Foster mother scheme	.....	.....	.....	.....	.....	194=32%
Other	.....	.....	.....	.....	.....	418=68%

						612

Illegitimate Children :

Placed with foster mothers under Birmingham Scheme	.....	.....	.....	.....	.....	173
Placed with foster mothers otherwise	.....	.....	.....	.....	.....	185

Legitimate Children :

Placed with foster mothers under Birmingham Scheme	.....	.....	.....	.....	.....	21
Placed with foster mothers otherwise	.....	.....	.....	.....	.....	233

Eight foster children have reached the age of five, and 20 the age of nine years, and all but one are remaining in the care of their foster mothers. One returned to his own mother.

Cost of Foster Mother Scheme :

Amount paid to foster mothers	.....	.....	.....	.....	.....	£2,826 18 9
Amount contributed by mothers	.....	.....	.....	.....	.....	£1,495 17 9=53%
Average cost to Public Health Committee						
per child per week	.....	.....	.....	.....	.....	5 2

The average weekly cost to the City of 5s. 2d. per child is the lowest since the inception of the scheme, and was due to the better financial position of the mothers, which enabled them to pay 53 per cent. of the total costs.

Adoptions of Children in Birmingham

Of the total number of 316 adoption orders granted by the courts in Birmingham during 1942, 165 (52 per cent.) were referred from the Public Health Department.

The Department received 285 applications to adopt children, and 44 of these requests were rejected.

Children placed by the Public Health Department numbered 116, while 46 foster children were adopted by their foster parents.

Private arrangements were made regarding 71 children whose adopting parents applied to the Public Health Department for advice.

Medical examination at the Carnegie Institute revealed a serious defect in one child only, but the adopting parents proceeded with their application in spite of this.

The work has involved 1,062 office interviews and 505 home visits.

District Midwifery

At the end of 1942, 102 city midwives were in practice, also 3 relief midwives and 5 midwives who were used as maternity nurses. Twenty-nine independent midwives were in practice (6 residing outside the City), 6 midwives worked on the Maternity Hospital and Queen Elizabeth Hospital district, and 6 midwives under the Birmingham Hospital Contributory Association.

City Midwives

During the year 1942, City midwives have attended 9,354 cases, acting as maternity nurses in 2,009 of these cases. The average number of deliveries per month, per midwife, was 7.4, or 89 cases per year. This makes no allowance for 106 weeks lost by sick leave, and shows an increase on the averages of 88 for 1940 and 78 for 1941. There have been 20 resignations and 27 appointments made during the year.

Supervision of Midwives

During the year 259 midwives notified their intention to practise in the City. Of these 6 resided outside the City, and, therefore, did not come under routine inspections.

Midwives sent for medical help in 2,902 cases, for the mother in 2,058 cases and for the child in 844.

Reasons for sending for medical help.

<i>Mothers.</i>			<i>Children.</i>		
Delayed labour	.....	373	Ophthalmia	.....	574
Laceration of perineum	.....	925	Prematurity	.....	43
Haemorrhage	.....	145	Convulsions	.....	6
Adherent placenta	.....	55	Jaundice	.....	19
Abnormal presentation	.....	106	Deformity	.....	31
Abortion or miscarriage	.....	33	Skin eruptions	.....	39
Rise of temperature	.....	162	Other causes	.....	132
Other causes	.....	259			
		<hr/>			<hr/>
TOTAL	.....	2,058	TOTAL	.....	844
		<hr/>			<hr/>

Midwives were temporarily suspended for the following reasons :
Influenza, 4 ; bronchitis, 3 ; accidents, 6 ; other causes, 21.

The following visits were paid during the year by the Supervisors of
Midwives :

Routine visits to midwives	.....	.....	.....	.....	613
Special visits to midwives	.....	.....	.....	.....	140
Visits to stillbirths	.....	.....	.....	.....	104
Visits after neo-natal deaths	.....	.....	.....	.....	85
Visits to ophthalmia neonatorum cases.....	.....	.....	.....	.....	1,585
Visits to puerperal pyrexia cases	.....	.....	.....	.....	133
Other visits	.....	.....	.....	.....	544
Unsuccessful visits	.....	.....	.....	.....	719
Number of interviews with midwives	.....	.....	.....	.....	1,620

Emergency Maternity Service

This is a service whereby a doctor and nurse from the Maternity Hospital proceed to the patient's home by ambulance with equipment for the treatment of shock and hæmorrhage. A consultant can also be called by the general practitioner, if he thinks advisable.

This service was used for the domiciliary treatment of 28 cases in 1942 (23 cases of post-partum hæmorrhage and 5 cases of shock).

Six of these patients died, four being moribund on arrival of the service, and dying during treatment. The other two (both cases of morbidly adherent placenta) were removed to hospital after suitable treatment at home, and died in hospital after manual removal of the placenta.

It is interesting to note that there was no case of maternal mortality due to hæmorrhage, in which the facilities of this service had not been sought.

Training of Midwives

The City Hospitals (Dudley Road and Selly Oak) and the City Maternity Home, 15, Wake Green Road, together with the Birmingham Maternity Hospital, are recognised for the first period of training ; while the City Maternity Home, Heathfield Road, is recognised for the second period of training

District Training

Sixteen midwives were recognised as teachers for the second period of training, and during the year 54 pupils were dealt with by these midwives for part of their training.

Recognised Refresher Course

The City Maternity Home, Wake Green Road, is recognised for this purpose in the West Midland area, and although these courses have, to a very great extent, been in abeyance since the outbreak of hostilities, an abbreviated Refresher Course was given to 4 City Midwives, at the same time enabling them to obtain their Obstetric Analgesic Certificate.

Inspection and Registration of Nursing Homes

At the end of 1942 there were 31 nursing homes in the City. During the year one nursing home was closed for reasons associated with war conditions. One new nursing home has been temporarily registered, pending alterations and final registration, for six chronic medical cases. One home was re-registered for 7 chronic medical cases instead of 3.

The total number of visits paid to nursing homes during the year 1942 was 63.

Total number of beds in homes	356
Number of homes which are equipped for surgical work	7
Number of homes which take chronic or senile cases only	14
Number of Homes which take maternity cases only	3*
Number of homes which keep some beds for maternity cases	13†

* with 16 beds.

† with 62 beds.

Residential Schools

There were 14 residential schools on the register at the end of 1942. These are schools which take boarders under 9 years of age, and which therefore come within the provision of Section 219 of the Public Health Act, 1936. Four of these schools were evacuated for the whole of the year.

Voluntary Homes

These are homes which take any children under nine years of age apart from their parents for maintenance and care. There were 14 such homes on the register at the end of 1942. Six homes were evacuated for the whole of the year.

Middlemore Homes

All the children under five returned from evacuation during 1942, and are now back in the Babies' Home. The Ministry of Aircraft Production continued to occupy part of the home, with the result that some of the older children were evacuated during the whole of the year.

Maryvale Convent

This home continues to take children between the ages of two and five years.

Evacuation of Expectant Mothers

These mothers are sent by special transport to hostels in reception areas two to three weeks before their confinement is due. They are then admitted to local maternity homes or hospitals for the confinement, after which they return home.

Notes on the Birth Control Clinic at Selly Oak Hospital

During 1942 there were 295 attendances at the Birth Control Clinic.

Eighty-nine new cases were sent to the Clinic, and of these 7 were rejected. All the new cases seen were sent by a doctor, and had a doctor's letter.

Of the 82 new cases 41 were suffering from serious medical disorders. The others were gynæcological and obstetrical cases and included 26 cases of eclampsia and toxæmia of pregnancy.

No cases of pregnancy occurred among the new cases.

Two hundred and seven old cases attended during 1942, and among these there were 8 cases of pregnancy.

Three of these had suffered from toxæmia and, after satisfactory kidney tests were obtained, they discontinued birth control. In one case toxæmia recurred towards the end of this second pregnancy, and she was advised to continue to attend the Clinic after delivery.

In 3 cases the women acknowledged that they had not taken precautions, in one case the apparatus was torn, and one case could not be accounted for.

SECTION C

SANITARY CIRCUMSTANCES

Water Supply

No changes have occurred in the general water supply of the City during the year.

Routine Sampling of Corporation Water Supply

Routine weekly visits are paid to the waterworks at Frankley and Whitacre, and to the deep wells at Longbridge, Aston and Shortheath, and appropriate samples are submitted to bacteriological investigation and chemical analysis. In addition, routine monthly samples are taken from the three levels of supply in the City.

Close co-operation with the Water Department is maintained, particularly when it is necessary to carry out structural alterations, so as to ensure that no unwholesome water passes into supply.

The number of samples of Corporation water, including those from Elan Valley, taken for examination during 1942 were :—

Chemical	.....	.....	.....	.....	.....	.....	189
Bacteriological	.....	.....	.....	.....	.....	.....	539

Sampling of Well Waters

There are still on the Department's list some 250 wells which are in regular use for drinking purposes. The premises supplied include private dwellings, farms and factories.

During the year 66 wells were inspected, and 97 bacteriological and 102 chemical samples were taken. Many of these wells are situated in factories, and are not at present in use for drinking purposes. The investigations were made in some cases as a result of applications under Section 41 of the Factories Act, 1937, and in others as part of a survey of sources of drinking water for use in an emergency. Well water was sampled from three institutions which are outside the City, but are under the control of the Public Health Committee.

Sanitary Inspection

Upwards of 74,000 visits were made during the year by the depleted staff of sanitary inspectors, despite the many calls made on their services in other capacities, both national and local.

Of this total, 36,026 house inspections were made for various reasons, and investigations of infectious diseases and miscellaneous complaints caused 12,636 visits.

The summonses taken out during the year were as follows :

General nuisances	.....	.....	.....	.....	.....	31
Miscellaneous	.....	.....	.....	.....	.....	9
						—
				TOTAL	.....	40
Magistrates' order obtained in 14 instances.						—

Offensive Trades

Premises registered for the carrying on of offensive trades in the City were visited on 19 occasions, of which 11 were made to rag, bone and skin dealers.

Common Lodging Houses

At the end of the year there were fourteen registered common lodging houses in the City, affording accommodation for 870 males and 46 females. These premises have continued under regular supervision during the year.

Number of houses on register (for males only)	13
Number of houses on register (for females only)	1
Number of lodgers allowed	916
Number of visits	813

Houses Let in Lodgings

At the end of the year there were 370 houses let in lodgings on the register, containing 2,480 rooms. They were let as follows :

Number of lets of single rooms	945
Number of lets of two or more rooms together	591
Certified accommodation (persons)	4,901

The visits and re-visits paid during the year numbered 365.

Tents, Vans and Sheds

Very few complaints were received during the year with respect to tents, vans and sheds, and the powers delegated to the City Surveyor under the Birmingham Corporation (General Powers) Act, 1929, have been of value as regards the indiscriminate drawing of caravans on to land.

Canal Boats

The number of boats inspected on the canals within the City area was 1,328.

These boats were registered for the accommodation of 3,981 persons, and when inspected were found to be carrying persons represented in terms of adults to the number of 2,585½.

Of the 1,328 boats inspected during the year it was found that 1,190, or 89·6 per cent. were in good condition and conforming with the Act and Regulations, while in 138, or 10·4 per cent. of the total, various contraventions were found.

Complaint notes were duly served on the owners in all cases. There were 39 contraventions outstanding at the end of 1941, and a further 138 were found during 1942. Of these, 131 were remedied during the year, leaving 46 still outstanding at the end of December.

It has not been necessary during the year to take any Court proceedings under the above Act or the Canal Boat Amendment Regulations, 1925.

Factories Act, 1937

The number of visits paid to factories with mechanical and non-mechanical power was 2,032. Difficulty of obtaining labour and materials has slowed up suggested alterations or improvements, with the result that many re-visits are necessary.

The survey of premises within the scope of the Factories Act, 1937 is being slowly carried out, the classification figures now being :

Factories with mechanical power	.....	.....	.....	4,007
Factories with non-mechanical power	.....	.....	.....	992

The substitution of female for male labour continues, and in most cases advisory visits between the inspectors of the department and the managements concerned have resulted in the re-arrangement of sanitary conveniences to accommodate the change-over. In other cases new schemes have been drawn up and new sanitary accommodation constructed.

Rats

Owing to the display of posters by the Ministry of Food with respect to the damage caused by rats, and to the exhibition held in the Market Hall, Birmingham, where the Department had a stall, the number of complaints received by the Department during 1942 increased considerably. During the year 1,795 inspections of premises were made with 995 re-visits, 129 premises were rat-proofed after service of a notice by the Department, and 361 premises rat-proofed without service of a notice. Smoke tests were applied to the drains of 29 premises.

It has been found that in the main owners and occupiers are very willing to carry out the suggestions made by the Department, and there is a marked desire on the part of the general public to assist in dealing with the rat menace.

The Department has again acted in close co-operation with the City Engineer and Surveyor's Department, and the Ministry of Food, with respect to the clearance of properties damaged by enemy action which were found to be rat infested.

Supervision of Shops

Routine inspection was carried out on the same basis as in 1941.

Defence Regulation 60A was in operation from 2nd November, 1941, to 28th February, 1942, and again from 18th October, 1942, till 20th February, 1943.

The Regional Commissioner again introduced the Shops (Winter Closing), (Birmingham) Order under Defence Regulation 60AC. It was in force from 16th November, 1941, till 28th February, 1942, and again from 18th October, 1942, till 20th February, 1943, and required closure at 4 p.m. (Saturdays 7.30 p.m.), in a defined area in the City Centre.

Contraventions of the Shops Acts have been few, for the reasons stated last year.

The work of the inspectors during the year is summarised as follows :

NUMBER OF VISITS PAID

General inspection visits	.....	5,774
General inspection re-visits	.....	2,182

Special Visits regarding :

Sunday Trading Restriction Act, 1936	.....	1,155
Night closing of shops (1928 Act and Young Persons Employment Act, 1938)	.....	599
Half-day closing of shops (1912 Act)	.....	456
Appointments (various Acts)	.....	251
Number of streets patrolled by day (1912 Act)	.....	1,068
Number of streets patrolled by night (1928 Act and Defence Regulations)	.....	1,110
Sunday patrol (Sunday Trading Restriction Act, 1936)	.....	128
Special visits <i>re</i> " Rat Circulars "	.....	157

SUMMARY OF OFFENCES REPORTED.

Failure to exhibit statutory forms and notices	.....	1,788
Contraventions of closing hours	.....	142
Other offences	.....	47
		<hr/>
TOTAL	.....	1,977
		<hr/>
Warning letters sent	.....	38

Noise

There has been a slight increase in the number of complaints received during the year. In some cases the remedy has been simple, such as the removal of machinery from party walls or the overhauling of gearing and holding-down bolts. In some cases, such as stamping and heavy pressings, no practical means of preventing noise appears possible without removal of the plant, and interference with vital war production.

Fumes

A variety of complaints have been dealt with, such as the fumes associated with aluminium castings, hot tinning processes, cellulose paint spraying, non-ferrous metal casting and coke slow combustion stoves. By advisory visits, and co-operation on the part of the various managements, the introduction of hoods, extracting fans and outlet pipes, the cause of complaint has to a great extent been removed in most instances.

Swimming Baths and Pools

Close supervision of the following baths has been continued :

Corporation indoor swimming baths	12
Outdoor bath in use by Corporation	1
Education Department	3
Home Office schools	1
Business firms	1
Private open-air baths	1
	—
	19
	—

Public Baths

Three Corporation swimming baths which had been closed since the outbreak of war were re-opened during the summer months in connection with the Holidays at Home scheme ; also one privately owned lido was taken over by the Corporation and opened during the same period.

Chlorination by addition of a chlorine solution has been continued, and 174 samples of bath water were submitted to bacteriological and chemical examination. The standard of 0·2—0·5 parts of chlorine per million was not consistently attained, but in only five of the samples was there an absence of free chlorine.

Private Baths and Swimming Baths in Institutions

In accordance with the Bye-laws issued under the Public Health Act, 1936, Section 233, the local authority continues to supervise private baths. Two such baths were in use in 1942 (one during the summer season only), and monthly samples were taken. Samples from four baths in institutions (three under the control of the Education Department, and one under the Home Office) were taken monthly throughout the season. In all these baths the water, as judged by bacteriological findings, was, as a rule, satisfactory, though the adopted chlorine standard was frequently not attained.

Verminous Conditions and Scabies

There is no reliable means of assessing the incidence of either head or body-louse infestation in the adult population. Reports received from various sources have suggested that an increase has occurred in the case of head lice, and to a smaller extent as regards body lice, the latter condition appearing to be related largely to imported labour.

Inspectors have visited regularly premises where persons were reported to be verminous by reason of lice, and action has been taken under Section 84 of the Public Health Act, 1936, for the disinfestation of clothing and bedding at the Corporation Cleansing Station, Bacchus Road. In a very few cases premises were sprayed with insecticide on account of lice (Section 83). Under Section 85 persons infested with body lice were

treated at the Cleansing Station, but there was no occasion to make use of the powers for compulsion provided.

Since April, 1942, the preparation known as "Lethane 384 Special" has been used at the City Cleansing Station, and also in common lodging houses and war-time nurseries, for the treatment of both head and body lice. This drug is an advance over previous preparations used, in that it has a maintained effect, and so prevents the patient from becoming rapidly re-infested on his return to verminous surroundings.

There has been some evidence of an increasing incidence of head lice, particularly among young women employed in factories. In the past the view has been taken that the elimination of head lice is a matter of personal hygiene, to be undertaken by the patient in her own home. This is not, however, always an easy matter, particularly for persons living in lodgings or billets, and accordingly, in December, 1942, a centre for the treatment of head lice, intended to meet the needs of employees in the nearby factories was opened at the Bromford First Aid Post. The gas decontamination block is used for the purpose and the work is carried out voluntarily by the personnel of the Post; the matter will be reported on more fully in 1943.

Information has been received from time to time from laundries that bundles of louse-infested clothing have been left for washing. In December, 1942, all laundering and dry-cleaning establishments in the City were asked to notify the Public Health Department of the receipt of any such infested clothing, and this has proved a useful subsidiary method of tracing verminous persons.

TREATMENT FOR LICE (BACCHUS ROAD STATION ONLY).

	<i>Men.</i>	<i>Women.</i>	<i>Children.</i>	1942 <i>Total.</i>	1941 <i>Total.</i>
Number of treatments for head lice	—	83	—	83	65
Number of treatments for body lice	347	21	—	368	146

The high prevalence of scabies, noted in 1941, has continued in 1942. Additional treatment centres, as indicated in the table, were opened at intervals throughout the year, and with the exception of that at Witton, all have been used to capacity. At those centres where men are treated, a male part-time attendant is employed. Women and children are treated by the nursing staff of First Aid Posts working voluntarily, and I would draw attention to the excellent service that has been given.

Arrangements have been made for women in advanced pregnancy to be treated in their own homes, if they so wish; and this facility has also on occasion been extended to other persons who by reason of age or illness have been unable to attend the treatment centres.

TREATMENT OF SCABIES

<i>Centre.</i>	<i>Patients and Contacts Treated</i>				<i>Total Attends</i>	<i>Method</i>		<i>Second or Subsequent Treatments</i>
	<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>		<i>BB</i>	<i>S</i>	
Bacchus Road	1,020	1,072	811	2,903	3,475	2,601	302	108
Sheep Street	—	1,555	1,042	2,597	3,645	2,503	94	290
Floodgate Street	1,170	—	70	1,240	1,374	1,240	—	118
Church Road	760	1,459	1,764	3,983	4,480	3,310	673	165
(Commenced Dec., 1941)								
Slade Road	380	644	800	1,824	2,001	1,552	272	92
(Commenced Dec., 1941)								
Birchfield Road	547	1,131	1,038	2,716	3,065	2,240	476	258
(Commenced Dec., 1941)								
Witton	71	184	377	632	648	632	—	12
(Commenced July, 1942)								
Little Bromwich	—	281	423	704	762	704	—	6
(Commenced Sept., 1942)								
Chequers Walk	—	299	220	519	583	519	—	9
(Commenced Oct., 1942)								
TOTAL	3,948	6,625	6,545	17,118	20,033	15,301	1,817	1,058

The number of attendances per week (all centres) rose from about 250 at the beginning of the year to 500 at the end. This is no doubt due in part to a real increase in the prevalence of the disease, but improved ascertainment and increased facilities for treatment would also account for the rising figures. Centres were of course opened where scabies was known to be prevalent. There has been some difficulty in ascertaining the precise distribution of the disease, which is not notifiable, but information from the School Medical Officer, and other sources, has suggested that there is now no large aggregation of infection which is not served by an easily accessible treatment centre, though probably there is scattered scabies throughout the whole City.

In all, 20,033 attendances (representing 17,118 courses of treatment), were made by 16,060 patients during the year. Many of these "patients" were, in fact, contacts of patients, and there is no information as to how many were actually infected.

The standard method of treatment was by Benzyl Benzoate (two applications on a single occasion) preceded by a hot bath. Until June, a 33 per cent. lotion in spirit and soft soap was used; and thereafter a 25 per cent. aqueous emulsion. As in 1941, sulphur ointment (5 per cent.) was used in a few cases when benzoate was unobtainable.

No serious complications of treatment have been reported. Minor dermatitis, commonly of the flexures of the elbows, has occurred with some frequency, and has almost invariably been related to prolonged treatment with other medicaments before attending the centres—or occasionally after. Sulphur ointment and Dettol have been noted especially to be associated with this condition. Recently instances have been reported of patients purchasing benzyl benzoate from the chemist and applying it haphazardly to their skins—a procedure fraught with all the undesirable consequences hitherto associated with self-medication by sulphur ointment.

Disinfestation of bedding and clothing from all patients treated was carried out as a routine measure at Bacchus Road Cleansing Station. This involved a heavy strain on transport and staff, and it became increasingly difficult to keep up-to-date with the work. Investigations elsewhere than in Birmingham have suggested that failure to disinfest bedding, etc., is an unimportant source of re-infestation, and the results obtained do not justify the heavy expenditure, use of petrol, and wear on tyres, etc., involved. Routine disinfestation has subsequently (February, 1943) been discontinued.

The success of treatment can only be estimated, since patients are diagnosed and referred for treatment by general practitioners, and there is no doctor at the centres and no comprehensive follow-up scheme. The following observations are relevant: they relate to treatment by benzyl benzoate only.

(1) Of 15,301 patients and contacts treated, 971, or 6·3 per cent. returned for a second treatment within six months of the first. Many of these had undoubtedly become re-infested from home contacts. It is considered that patients returning between two weeks and two months for re-treatment are likely to include nearly all the genuine failures (as well as many re-infestations). The returns from one centre (Church Road), were analysed on this basis, and it was found that 2·3 per cent. of all patients (3,310) treated there were "failures" in this sense.

(2) Over a period of several months patients returning for examination or re-treatment on account of continued irritation, have been examined by an Assistant Medical Officer at two centres. The unit in this investigation was the household, not the individual. Of 94 households 69 (73 per cent.) showed no evidence of scabies. The remaining 25 households were infected, and in 18 of these there were untreated home contacts. Of the other seven, four were found infected three or more months after previous treatment, and in these cases re-infestation was more probable than failure of treatment. There remained three families in respect of whom failure of treatment must be presumed.

(3) By arrangement with the School Medical Officer, school children treated at any of the Public Health Department's scabies treatment

centres were re-examined at varying intervals (average about six weeks) after treatment. 1,370 such children were examined, and 1,226 (89·5 per cent.) were found to be cured; 64 (4·7 per cent.) were returned as "not cured"; and 80 (5·8 per cent.) as "doubtful." Active burrows (the most reliable criterion of diagnosis) were seen with certainty in only 38 children (2·8 per cent.), who were drawn from 28 families. In view of the considerable period of time that elapsed in many cases between treatment and examination, it is probable that many of these cases were instances of re-infestation.

From these data it would seem that failure of treatment of the individual is of very infrequent occurrence—certainly under 5 per cent. and probably well under 1 per cent.—but that re-infestation due to failure to treat the entire household occurs with much greater frequency, and is indeed the essential bar to successful treatment. Steps have been taken during 1942 to overcome this difficulty, and all staff at treatment centres are urged to impress upon every person treated the importance of dealing with home contacts. The essential weakness in this method is that it requires the co-operation of patient and contacts; as in a sample enquiry early in 1943 it was found that in half the households there were untreated contacts, frequently sharing beds with treated patients. All cases of scabies in school children are notified to the Public Health Department, and a note is made on the notification form as to whether there has been re-infestation or other evidence of infection among home contacts. All cases in which such a note is made are followed up, and treatment is arranged for the whole family where expedient. The weaknesses in this procedure are, firstly, the fact that in most cases a relapse has already occurred before the case has become eligible for home visiting, and, secondly, that there is inevitably a lapse of time between the treatment of the school children and that of the home contacts. Shortage of staff has precluded the possibility of visiting the homes of all infected school children.

The powers given in the Scabies Order, 1941, to require contacts to undergo medical inspection and, if necessary, treatment, have proved of considerable assistance. There have been no prosecutions under the Order.

Disinfection

The following table gives details of the work done during 1942:

Houses disinfected after small-pox	.....	.....	.....	—
Houses disinfected after scarlet fever	.....	.....	.....	15
Houses disinfected after diphtheria	.....	.....	.....	1,597
Houses disinfected after enteric fever	.....	.....	.....	21
Houses disinfected after tuberculosis	.....	.....	.....	1,471
Houses disinfected after cancer (on request)	.....	.....	.....	91
Houses disinfected after miscellaneous diseases (on request)	.....	.....	.....	945
Beds disinfected	.....	.....	.....	4,110
Miscellaneous articles of clothing and bedding disinfected	.....	.....	.....	72,395
Library books disinfected	.....	.....	.....	1,430
Public conveyances disinfected	.....	.....	.....	2

SECTION D

HOUSING

Housing Act, 1936

Housing difficulties in an acute form come to the notice of the Department almost daily. The general condition of working class dwellings compares very unfavourably with pre-war standards by reason of progressive deterioration and the inability or neglect of many owners to provide reasonably effective maintenance. Associated with this there is an acute scarcity of dwelling houses and resultant overcrowding. During the year the housing shortage has made it impossible to enforce overcrowding notices. While the population has been swollen by the influx of workers absorbed in war-work, house building has ceased. Further, a large number of houses have been damaged by raiding, to such an extent as to be beyond repair. The progressive deterioration of houses in the poorer parts of the City may be expected in the ordinary course, but since the outbreak of the war many have suffered abnormal wear. Scarcity of labour and building materials, and the fact that action has already been in progress under the Housing Act, have prevented work being carried out on any but the most urgent conditions.

The undesirable conditions under which numbers of people have been living, in houses in Clearance Areas already approved by the City Council and officially confirmed by the Ministry of Health, have been a cause of serious concern, particularly in the light of a ruling from the Ministry of Health that local authorities may not take action *de novo* under Section 11 of the Housing Act, 1936, in respect of houses which have been properly included in Clearance Areas.

In the light of this ruling, and of the acute housing shortage, the Estates Committee in collaboration with the Public Health and Public Works Committees are exploring the possibility of acquiring and altering suitable dwelling houses of a larger type, for adaptation for use as working class accommodation, in order to help towards the re-housing of families in dwelling houses within Clearance Areas where urgent circumstances for alternative accommodation have arisen, and again to deal with the most imperative cases of re-housing arising from grossly unfit dwellings in such areas.

During the year individual action has been taken in 106 cases under Section 11 of the Housing Act, and in two cases under Section 12 of the Act. Demolition Orders were made in all the former, and Closing Orders in the latter, with the exception of two properties involving three houses, where schemes were accepted by the Estates Committee under Section 11 (3) of the Act, allowing the owner to carry out such works as

would render the properties reasonably fit for human habitation as a temporary war-time measure.

<i>Number of Houses represented under Section 11 or 12 of the Housing Act, 1936.</i>	<i>Number of Families rehoused as a result of this action.</i>	<i>Number of Houses rendered fit under Section 11 (3) H.A.</i>
108	23	2

Overcrowding

The adverse trend in overcrowding that was noted in 1940 and 1941 has continued during 1942; the amount of statutory overcrowding is not known, but is undoubtedly severe both in extent and degree. Unfortunately, owing to lack of alternative accommodation, little can be done except to refer the worst cases to the Estates Department for such measure of relief as they are in a position to arrange.

This overcrowding was intensified in 1940 by the destruction of houses by enemy action, the re-distribution of the population in the City owing partly to raiding and partly to the requirements of industry, the tendency of married women whose husbands are in the armed forces to return and live with older relatives, taking their families with them, and the importation of labour into the City. An additional factor has become increasingly evident in recent applications for re-housing. This is the effect of the increased birth-rate; many applications are based on the pregnancy of the mother, or the birth of a new child, in an already overcrowded household.

There has been a further increase in the practice of letting and sub-letting in lodgings, the houses in many cases being unregistered and not conforming to the bye-laws.

During the year 116 applications for assistance in re-housing, based on ill-health or overcrowding, or both, were received by the Department. These were all investigated and 36 were passed on to the Estates Department.

Sanitary Supervision of Public Shelters

This work was continued on the same general lines as in the last quarter of 1941. Very few persons used the public shelters for sleeping purposes during 1942. During the raids of the 27th—30th July, the shelters were used extensively, and many persons continued to sleep in the shelters for a few nights subsequently; but no "shelter habit" was created.

The medical aid posts were not brought into use during 1942.

Officers of the Department continued to assist, in an advisory capacity, the Air Raid Precautions Officer in maintaining and improving the standards of hygiene in public shelters. In particular a number of investigations were made of rat infestations.

SECTION E

INSPECTION AND SUPERVISION OF FOOD

Food Premises

The inspection of retail food premises under Section 13 of the Food and Drugs Act, 1938 has been continued. Various defects have been found in the premises visited; these have in all cases been remedied without recourse to prosecution.

Eleven "eating houses" were added to the register required by Section 54 of the Birmingham Corporation Act, 1935, and eleven "transfer registrations" were made during the year.

In November, 1942, an Order was made whereby Section 14 (b) of the Food and Drugs Act, 1938, requiring the registration of food preservation premises, was applied to Birmingham. Registration was previously required by Section 33 of the Birmingham Corporation Act, 1914, which is now repealed. The section has been allocated to the Public Health Committee jointly with the Markets and Fairs Committee, and in practice it will for the most part be implemented by the latter Committee.

Ice Cream

A small number of registrations were made during the earlier part of the year, but owing to restrictions on the materials required for manufacture, little ice cream was produced, and in September the sale of ice cream was prohibited.

In November an Order was made whereby Section 14 (a) of the Food and Drugs Act, 1938, requiring registration of premises used for the sale, manufacture or storage of ice cream, was applied to Birmingham. This requirement was already in force under Section 54 of the Birmingham Corporation Act, 1935, which also required the registration of manufacturers and vendors of ice cream. This section has not been repealed. Neither section will have practical application until the sale of ice cream is resumed.

Milk and Dairies Administration

Close contact has been maintained with the dairy trade, and much practical advice has been given to dairymen on the handling and care of milk and milk products, and wherever possible, planning the reconstruction and improvement of premises.

The following table shows the alterations in the Milk and Dairies Register during 1942:

	1940.	1941.	1942.
Number of wholesale purveyors	64	62	65
Number of retail purveyors	339	295	192
Number of milkshops	1,902	1,892	1,888
Number of bottled milk purveyors	4,219	4,263	4,265

Milk (Special Designations) Regulations, 1936-1941

Principal Licences.

Producers of tuberculin tested milk	.....	.....	.....	.....	1
Dealers in tuberculin tested milk	.....	.....	.....	.....	13
Producers of accredited milk	.....	.....	.....	.....	16
Dealers in accredited milk	.....	.....	.....	.....	6
Producers of pasteurised milk (Holder process)	.....	.....	.....	.....	14
Producers of pasteurised milk (H.T.S.T. process)	.....	.....	.....	.....	2
Dealers in pasteurised milk	.....	.....	.....	.....	99

Supplementary Licences

Dealers in tuberculin tested milk	.....	.....	.....	.....	5
Dealers in accredited milk	.....	.....	.....	.....	6
Dealers in pasteurised milk	.....	.....	.....	.....	4
TOTAL					166

Systematic bacteriological examinations of these designated milks and their containers were carried out, 451 samples being taken for this purpose. Relative to the standard laid down in the Regulations, 26 per cent. failed by reason of the presence of *B.coli* in 1/100th of a millilitre ; 6.4 per cent. failed the bacterial count test ; 11 per cent. failed the methylene blue test, and in the case of pasteurised milk, 14 per cent. failed to pass the phosphatase test.

These results show in every instance a definite improvement over the figures for the previous year. This is particularly gratifying in view of the fact that the previous war years had shown a progressive deterioration. This improvement indicates that dairymen are to some extent overcoming their many war-time difficulties, and are making a strong effort to produce clean and wholesome milk. Very close supervision has been maintained over the process of pasteurisation, and it is satisfactory to be able to record that in practically every instance it has been carried out with care and efficiency.

The year under review has seen the introduction of the High Temperature Short Time process as an official means of pasteurisation and two plants have been installed in the City. These plants work on the principle that the milk is retained at a temperature of not less than 162°F. for at least 15 seconds, and that an automatic device diverts the flow of any milk which has not been so treated. The margin of error would appear to be less than with the holder process, but so far the two plants have worked efficiently.

The Inspection of Cows and Cowsheds within the City Area

Extracts from Report by MR. BRENNAN DE VINE, F.R.C.V.S., Chief Veterinary Officer.

City Dairies

At the end of 1942 there were forty-five dairy farms housing 743 milch cows in 109 registered sheds in the City area.

The Milk and Dairies Order requires the registration of cowkeepers and enforcement of general requirements as to structure and cleanliness of cowsheds, and for this purpose a monthly inspection is made of all City cowsheds; and, in addition, all cows in City dairies are examined. During the year 1,248 visits of inspection were made to cowsheds.

Dairy Herds

Despite shortage of labour, and other war conditions, the health and cleanliness of the cows in City dairies remains good. The cows are regularly examined, with a view to preventing danger to health from the sale of infected, contaminated or dirty milk, and in particular, for prohibiting the supply or sale of milk suspected of being infected with tuberculosis.

Mastitis

During the year there were twenty-four cows affected with acute catarrhal mastitis, and the milk produced from these cows was prohibited from sale.

Tuberculosis

In addition to the clinical examination of the dairy cows, bulk samples of milk were taken from each City dairy herd during the year; also individual samples of milk were taken from suspected cows.

			<i>Taken.</i>	<i>Infected.</i>
Mixed samples from dairy herds	.....	.....	73	8
Individual samples	.....	.....	15	4
			<hr/>	<hr/>
TOTALS	.....	.....	88	12
			<hr/>	<hr/>

As a result of clinical examination and the sampling of milk twelve cows affected with tuberculosis were removed from City dairy herds during the year and dealt with under the Tuberculosis Order.

In addition, at the request of the Ministry of Agriculture and Fisheries, post-mortem examinations were made on thirteen cows dealt with under the Tuberculosis Order and which had been sent to the City Meat Market from farms outside the City.

Inspection of Cowsheds

Regular inspection has been maintained of all registered cowsheds, attention being paid to the provisions of the Milk and Dairies Order for

securing adequate lighting, ventilation and a clean water supply, also the cleansing of cowsheds and removal of dung and offensive matter.

In spite of labour shortage every effort has been made to keep the cowsheds properly limewashed or sprayed with lime at least twice during the year.

Milk and Dairies (Consolidation) Act, 1915

In connection with the ascertainment of the source of supply of milk, the consumption of which is likely to cause tuberculosis, notification under Section 4 of this Act was sent in 182 cases to the Medical Officer of Health of the county or county borough in which the cows yielding the milk were kept.

Comparative Return

The following table shows the number of samples of milk, sent in from outside sources, taken during the past ten years and the percentage infected :

<i>Year.</i>	<i>Samples Taken.</i>	<i>Samples Infected.</i>	<i>Percentage Infected.</i>
1933	1,694	108	6.4
1934	1,699	109	6.4
1935	1,668	134	8.0
1936	1,648	166	10.1
1937	2,267	232	10.2
1938	2,386	208	8.7
1939	1,867	173	9.3
1940	2,237	244	10.9
1941	2,377	189	8.0
1942	2,408	182	7.5
AVERAGE FOR PERIOD			8.6

SUMMARY OF SAMPLES OF MILK TAKEN DURING 1942

<i>From Outside Dairies :</i>	<i>No. taken.</i>	<i>No. Infected.</i>
Tuberculin Tested, Accredited, and Non-designated	2,408	182
<i>From City Dairies :</i>		
Mixed samples	73	8
Individual samples	15	4
TOTAL	2,496	194

Tuberculin Testing of City Dairy Herds and of Herds belonging to Corporation Institutions

Three breeding herds, comprising 269 animals, were tested by the Department during 1942 as follows :

	<i>Approx. No. in Herd.</i>
1	58
2	130
3	81
TOTAL	269

SECTION F

PREVALENCE OF, AND CONTROL OVER INFECTIOUS AND OTHER DISEASES

GENERAL

The mortality figures for 1942 are compared with the decennial (1932-1941) averages in the statement below :

<i>Disease.</i>	<i>Deaths in 1942 above or below the average for 1932-41.</i>
Enteric Fever	+ 2
Smallpox	—
Measles	— 23
Scarlet fever	— 7
Whooping cough	— 34
Diphtheria	— 13
Pulmonary tuberculosis	— 32
Other forms of tuberculosis	+ 4
Influenza	—150
Cerebro-spinal fever	— 1

The prevalence of the notifiable diseases is shown in the next table :

<i>Disease.</i>	<i>Cases noti- fied in 1942 above or below the average for 1932-41.</i>
Enteric fever	— 36
Smallpox	—
Scarlet fever	—685
Diphtheria	+250
Erysipelas	—144
Puerperal pyrexia	+ 85
Ophthalmia neonatorum	+477
Pulmonary tuberculosis	+ 34
Other forms of tuberculosis	— 1
Acute primary or influenzal pneumonia	—523
Cerebro-spinal fever	+ 42
Acute poliomyelitis	—
Polioencephalitis	+ 1
Encephalitis lethargica	— 17
Malaria	— 4
Dysentery	+ 27

The cases of cerebro-spinal fever were much less than in 1941 (140 against 342), and the deaths fell from 83 to 31.

The incidence of cerebro-spinal fever was slightly lower than the average for the previous ten years, and the deaths less than in 1941, although still above the average of the ten years 1932-1941.

Diphtheria was less prevalent than during 1941, and the type less severe, the case mortality falling to 4.2 per cent.

The increased incidence of tuberculosis was apparent in both pulmonary and other forms as compared with 1941.

The apparent prevalence of "ophthalmia neonatorum" is illusory; only a trivial proportion are due to gonococcal infection, the increase in numbers being due to an increasingly strict notification of even the slightest case capable of coming within the elastic definition of this condition.

Enteric Fever

There were 23 cases notified as enteric fever, and of these 15 proved negative, thus giving a total of 8 true cases notified during 1942. Two of these cases ended fatally.

Undulant Fever

No cases of undulant fever came to the notice of the Department during the year.

Glandular Fever

No cases of this disease came to the notice of the Department during the year 1942.

Smallpox

No cases of smallpox occurred in the City during the year.

Vaccination

Following are tabulated statistics relating to this work for the current year, together with similar figures relating to each year since 1933.

1942 showed the highest figure (59.9), in this table, and in fact the highest rate of successful vaccination since 1929.

	VACCINATION									
	1942.	1941.	1940.	1939.	1938.	1937.	1936.	1935.	1934	1933
Conscientious objectors										
per cent. of total births	21.2	22.6	27.5	31.2	31.8	31.2	31.0	30.6	29.5	28.0
Successful vaccinations	59.9	51.2	49.9	52.9	52.6	51.9	51.7	50.8	53.1	55.4
Insusceptible percentage of survivors.....	0.6	0.8	0.4	0.5	0.6	0.3	0.5	0.4	0.5	0.9
Postponed by medical certificate	0.4	0.4	0.6	0.4	0.3	0.3	0.5	0.3	0.5	0.4
Removed	4.4	5.3	4.3	3.9	3.9	3.8	3.4	4.9	4.1	3.8
Lost sight of	3.8	7.4	5.0	3.5	3.2	3.5	3.0	2.6	2.6	2.6
Still under notice	8.5	10.9	10.9	6.1	5.9	7.3	8.1	8.7	8.0	7.6

Measles

Cases notified to the Department have been visited when appropriate by health visitors, and advice as to nursing and general hygiene given.

During the year 633 cases were admitted to Little Bromwich Hospital for treatment.

Immunisation has been carried out on 235 children during the year with satisfactory results. The inoculations were for prevention in 36 cases, and for attenuation in 199.

Scarlet Fever

The number of cases notified were about 300 more than in 1941, although the case mortality remained at the same level of .01 per cent.

As in previous years, the cases were treated in hospital where home conditions made this advisable, otherwise they were treated at home.

The report on cases treated at the Infectious Diseases Hospital will be found on page 64.

Whooping Cough

Whooping Cough showed some decline compared with the previous year.

During the year 480 cases were admitted to the Infectious Diseases Hospital.

All cases of whooping cough were visited, and advice given on hygienic measures. Where appropriate the services of a district nurse are supplied under an arrangement made with the District Nursing Association.

Diphtheria

The total number of cases notified, and of cases confirmed in diagnosis, was slightly lower than in 1941.

There were 42 cases treated in the City Hospital on behalf of other authorities.

DIPHTHERIA CASE MORTALITY

						<i>Case Mortality per cent.</i>
1901-10 (average)	.....	.....	.....	.....	.....	14.1
1911-20	..	.....	.....	.....	.....	13.6
1921-30	..	.....	.....	.....	.....	5.8
1931-35	..	.....	.....	.....	.....	6.9
1936	.....	.....	.....	.....	.....	5.5
1937	.....	.....	.....	.....	.....	5.9
1938	.....	.....	.....	.....	.....	6.5
1939	.....	.....	.....	.....	.....	7.3
1940	.....	.....	.....	.....	.....	6.0
1941	.....	.....	.....	.....	.....	6.0
1942	.....	.....	.....	.....	.....	4.2

A report on the cases treated at the Infectious Diseases Hospital will be found on page 64.

Diphtheria Anti-toxin

Diphtheria anti-toxin is distributed free of charge to medical practitioners for the treatment of their patients, and can be obtained from the Public Health Department, the Bacteriological Laboratory, and eighteen police stations.

Diphtheria Immunisation

As a result of the national and local publicity campaign in 1942, there was a substantial increase in the number of children inoculated against diphtheria in the City.

Children under 5 years of age immunised with T.A.M. by the Public Health Department Staff	13,905	Total under 5 years—	16,037	} 25,894
Children under 5 years of age immunised by General Practitioners with T.A.M. supplied free by the Public Health Department	2,132			
Children from 5 to 15 years of age immunised with T.A.M. by the Public Health Department Staff	9,052	Total 5-15 years :	9,857	
Children from 5 to 15 years of age immunised by General Practitioners with T.A.M. supplied free by the Public Health Department	805			

In addition 362 adolescents and adults were inoculated—most of them institution and day nursery staff. T.A.F. is used for these cases.

The routine visiting of schools, which had been suspended because of the unstable school attendance during the evacuation and bombing periods was started again, 109 schools being visited, many of them having nursery classes. The numbers in the individual schools are low and complicate the carrying out of the programme by necessitating the visiting of several schools in one session in order to economise on staff and transport.

The same difficulties are experienced in the scheme for day nurseries—54 day nurseries are visited, usually at fortnightly intervals, and 871 children and 94 adults, were inoculated during the year. In some of the nurseries 100 per cent. of the children over 8 months of age have now been immunised. Material was supplied for two institutions outside the City—114 cases being immunised.

Pre-school immunisation at Welfare Centres showed a satisfactory increase—63 per cent. of the children between 8 months and 5 years of age visited by the Health Visitors having been inoculated by the end of 1942. As these figures are based on the Health Visitors' records, they are corrected for migrations and deaths.

Of 31 Child Welfare Centres one has over 80 per cent. of the children (8 months to 5 years) on the district inoculated, six have 70 to 80 per cent., fourteen have 60 to 70 per cent., and ten between 40 per cent. and 60 per cent. No Centre has less than 40 per cent.

The advance in recent years is shown in the following table of pre-school immunisation :

			<i>Children</i> 8 months to 5 years.	<i>Children</i> 0-5 years.
1938	.....	.....	32·6%	27·7%
1939	.....	.....	37%	31·7%
1940	.....	.....	38%	34·5%
1941	.....	.....	52·5%	44·8%
1942	.....	.....	63%	51%

The 0—5 years figure in 1942 has been influenced by the increase in births resulting in an increase in the children under 8 months who are not available for immunisation.

It was estimated that at the end of 1942, 63 per cent. of the children under 15 years had been immunised—the figures for children from 5—15 years cannot be corrected for migrations and deaths.

Approximately 203,000 children have been inoculated since the scheme was started at the end of 1925.

During the year 165 cases of diphtheria occurred in inoculated children under 15 years of age, the majority of them extremely mild. There was one fatal case, a child of 5 years, inoculated in 1938. This was apparently a mixed infection, the case having a quinsy and not being admitted to hospital for diphtheria until about the eighteenth day of illness, when she was moribund.

There were 16 further cases of diphtheria over 15 years of age who had been inoculated in childhood. There were no deaths.

CHILDREN AND ADULTS IMMUNISED IN 1942

No. of Clinics	Age (years)	0-1	1	2	3	4	Totals 0-5 yrs.	5	6	7	8	9	10	11	12	13	14	Totals 5-15ys.	Adults	Totals
31	Maternity and Child Welfare Centres	5,275	3,301	1,405	1,160	1,034	12,175	720	488	374	293	286	262	367	413	349	21	3,573	21	15,769
1	The Council House Clinic	104	128	50	54	38	374	37	26		27	29	24	40	35	52	19	323	89	786
54	War Time Day Nurseries	185	285	169	150	82	871										10	10	84	965
109	SCHOOLS: Special, Elementary and Nursery	1	2	44	58	153	258	980	1,064	1,002	412	316	350	178	134	171	22	4,629	41	4,928
14	Institutions and Residential Nurseries	30	44	54	45	26	199	24	18	14	5	23	25	44	27	19	4	203	58	460
5	School Clinics		4	9	3	12	28	37	20	13	37	21	28	53	64	39	2	314	5	347
	General Practitioners	625	779	301	205	222	2,132	173	128	93	61	79	78	65	51	58	19	805	64	3,001
	Totals	6,220	4,543	2,032	1,675	1,567	16,037	1,971	1,744	1,530	835	754	767	747	724	688	97	9,857	362	26,256

Dysentery

One hundred and three cases were notified during the year, but on investigation 29 of these proved not to be dysentery, while 2 patients notified as some other disease were found to be suffering from dysentery, making a total of 76 clinical cases.

Malaria

No case of malaria was reported during the year.

Food Poisoning

During the year under review 263 cases of food poisoning were notified to the Department. The majority were of a trivial nature not calling for any specific action by the Public Health Department.

Acute Anterior Poliomyelitis

Sixteen cases of this disease were notified, but five of these proved not to be anterior poliomyelitis, while one notified as another disease was found to be poliomyelitis.

There were five deaths from this disease during the year.

Polioencephalitis

No cases of this disease were notified during the year, but one patient notified as cerebro-spinal fever, and one as anterior poliomyelitis were in fact suffering from polioencephalitis, and the former patient died.

Encephalitis Lethargica

During the year two fresh cases of this disease were notified in the City, of which one proved not to be encephalitis lethargica. There were 19 deaths from this disease, all having an onset prior to 1942.

Cerebro-Spinal Fever

There were 196 cases notified as cerebro-spinal meningitis during the year. In 57 cases the diagnosis was afterwards revised, and one case admitted as some other disease was found to be suffering from cerebro-spinal fever. Of the 140 actual cases, 27 succumbed to the attack, giving a case mortality rate of 19.3 per cent.

<i>Age Distribution.</i>		<i>Cases.</i>
Under 1 year	.....	15
1 and under 2 years	.....	7
2	5	12
5	10	20
10	15	16
15	20	14
20	25	5
25	35	24
35	45	11
45 years upwards	.....	16

REPORT ON THE CITY INFECTIOUS DISEASES HOSPITALS FOR THE YEAR 1942

By DR. J. MCGARRITY, *Medical Superintendent.*

STATISTICS

Little Bromwich

(a) DIPHTHERIA. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1941	.....	.....	.....	254
Admitted during 1942	.....	.....	.....	1,666
Discharged during 1942	.....	.....	.....	1,606
Died during 1942	.....	.....	.....	56
Remaining on December 31st, 1942	.....	.....	.....	258

(b) SCARLET FEVER. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1941	.....	.....	.....	61
Admitted during 1942	.....	.....	.....	525
Discharged during 1942	.....	.....	.....	530
Died during 1942	.....	.....	.....	3
Remaining on December 31st, 1942	.....	.....	.....	53

(c) MISCELLANEOUS. (*Uncorrected for diagnosis*)

In hospital on December 31st, 1941	.....	.....	.....	113
Admitted during 1942	.....	.....	.....	2,433
Discharged during 1942	.....	.....	.....	2,230
Died during 1942	.....	.....	.....	96
Remaining on December 31st, 1942	.....	.....	.....	220

(d) MISCELLANEOUS. (*Uncorrected for diagnosis*)

Bronchitis	.....	.....	.....	.....	1
Chicken-pox	.....	.....	.....	.....	249
Dysentery	.....	.....	.....	.....	69
Enteric fever	.....	.....	.....	.....	23
Erysipelas	.....	.....	.....	.....	118
Influenza	.....	.....	.....	.....	1
Measles	.....	.....	.....	.....	633
Meningitis	.....	.....	.....	.....	129
Miscellaneous observations	.....	.....	.....	.....	338
Mumps	.....	.....	.....	.....	201
Otitis Media	.....	.....	.....	.....	1
Pemphigus	.....	.....	.....	.....	41
Pneumonia	.....	.....	.....	.....	14
Poliomyelitis	.....	.....	.....	.....	7
Puerperal pyrexia	.....	.....	.....	.....	47
Rubella	.....	.....	.....	.....	80
Vincent's angina	.....	.....	.....	.....	1
Whooping cough	.....	.....	.....	.....	480

TOTAL 2,433

Scarlet Fever

Five hundred and twenty-five patients were admitted during the year with a notified diagnosis of scarlet fever ; of these 57 cases were finally diagnosed as suffering from other complaints. One of these patients died from broncho-pneumonia.

Actually 506 cases of true scarlet fever were treated in the wards ; of these 27 were notified as diphtheria, 6 as rubella, 3 as measles, 1 as mumps and 1 as cerebro-spinal fever.

The type of scarlet fever continued to be mild, but there were two deaths, one in a case of simple scarlet fever in a female child aged 4 years, who was admitted from another hospital where she had a rib-resection for empyema. She died 24 hours after admission. The second death occurred in a female of 49, who died from toxic scarlet fever, pulmonary embolism and thrombophlebitis.

The hospital mortality was 0.4 per cent.

The principal complications were as follows : 57 adenitis, 30 otitis, 10 nephritis, 7 abscess formation, 1 broncho-pneumonia, 5 arthritis, 1 myocarditis, 2 rheumatism, 5 late albuminuria, 4 rhinitis, 3 mastoiditis.

Diphtheria

One thousand, six hundred and sixty-six patients were admitted to the hospital with a notified diagnosis of diphtheria. Of these 447 required revision of diagnosis, and 11 were found to be suffering from diphtheria concurrently with another disease. Actually 1,224 true cases of diphtheria were treated in the wards during the year, including one notified as scarlet fever and four for observation.

Concurrent infections occurred in 11 cases.

Revision of diagnosis was found necessary in 447 cases, of which 233 suffered merely from tonsillitis.

Ten of the revised cases died, the cause being : 2 tuberculous meningitis, 1 septic parotitis and hypostatic pneumonia, 1 uraemia, 1 hemiplegia, 1 marasmus, 3 broncho-pneumonia and 1 gastro-enteritis.

Forty-six cases died from diphtheria during the year representing a hospital mortality of 3.76 per cent. compared with 5.35 per cent. in 1941, and 6.43 per cent. in 1940.

Analysis of the cause of death in the 46 cases showed that 44 were due to circulatory collapse, 1 to respiratory paralysis and 1 to laryngeal diphtheria with subcutaneous emphysema and bilateral pneumothorax.

Post diphtheritic paralysis occurred as follows : 164 palatal, 51 lower limbs, 25 neck, 8 facial, 26 ciliary, 12 oculomotor, 17 pharyngeal, 2 diaphragm..

Laryngeal Diphtheria

Thirty-five cases of diphtheria had laryngeal involvement and of these 15 required operative interference for relief of obstruction. In 5 cases intubation alone was successful. In 2 cases tracheotomy was performed when intubation was found to give no relief and one of these patients died. Tracheotomy alone was performed in a further 8 cases, of which 3 got no relief and died.

Measles

Six hundred and thirty-three patients were admitted with a notified diagnosis of measles, and of these 97 required revision of diagnosis.

Actually 583 cases of measles were treated in the hospital, including 47 notified as suffering from other conditions.

Concurrent infections occurred in 31 patients.

The principal complications were 113 broncho-pneumonia, 12 conjunctivitis, 1 convulsions, 12 gastro-enteritis, 9 laryngitis, 48 otitis media, 2 stomatitis and 6 tonsillitis.

Eleven deaths occurred with complications, 8 broncho-pneumonia, and 3 gastro-enteritis.

The hospital mortality was 1.9 per cent.

Mumps

Two hundred and one cases were admitted with a notified diagnosis of mumps, and of these 29 required revision of diagnosis.

Actually 176 cases of mumps were treated including 2 notified as erysipelas, 1 as diphtheria and 1 sent in for observation. All cases recovered.

Pemphigus

Forty-one cases were admitted with a notified diagnosis of pemphigus. In 23 of these the diagnosis was confirmed. The remaining 18 were revised.

Altogether 27 cases of pemphigus were treated during the year, including 4 sent for observation. There were 5 deaths from pemphigus.

Hospital mortality 18.5 per cent.

Bronchitis

One case was notified as bronchitis. The diagnosis was confirmed and the patient recovered.

Chickenpox

Two hundred and forty-nine cases were admitted with a notified diagnosis of chickenpox. Of these 16 required revision of diagnosis.

Actually 239 cases of chickenpox were treated, including 3 patients admitted for observation, 2 notified as measles and 1 as erysipelas.

Concurrent infection occurred in 11 cases. There were no deaths.

Dysentery

Sixty-nine cases were admitted with a notified diagnosis of dysentery. Of these 36 required revision of diagnosis.

Actually 35 cases of dysentery were treated including one patient sent in for observation and one notified as measles. The causative organism in 24 of the dysentery cases was : 7 B. Dysentery Flexner, 13 B. Dysentery Sonne, 4 B. Dysentery Morgan. In the remaining 11 cases of dysentery the organism was not isolated. There were no deaths.

Enteric Fever

There were 23 patients notified as enteric fever, and of these 12 required revision of diagnosis.

Actually 13 cases of enteric fever were treated in the wards, 2 being admitted for observation. The causative organism in 12 cases was B. typhosus and in 1 case B. paratyphosus B.

There was one death from typhoid fever.

Hospital mortality 7.7 per cent.

Influenza

One patient notified as influenza. The diagnosis was confirmed and the patient recovered.

Otitis Media

One patient was admitted with otitis media, and a good recovery was made.

Erysipelas

One hundred and eighteen cases were notified as erysipelas and in 105 of these the diagnosis was confirmed. The remaining 13 required revision.

Actually 109 cases of erysipelas were treated, including one case notified as mumps and three sent into hospital for observation.

There was one death in a patient aged 64 years, who had facial erysipelas, complicated by auricular fibrillation with right heart failure.

Hospital mortality 0.9 per cent.

Vincent's Angina

One case of Vincent's Angina admitted was confirmed and recovered uneventfully.

Cerebro-spinal Meningitis

One hundred and twenty-nine cases were admitted with a notified diagnosis of cerebro-spinal meningitis, and of these 76 required revision of diagnosis, of which one died from streptococcal meningitis, 10 died from tuberculous meningitis, 1 encephalo-myelitis, 1 meningitis (secondary to

acute mastoid), 1 miliary tuberculosis and 1 pneumococcal meningitis.

Actually 60 cases of cerebro-spinal meningitis were treated in the wards.

There were 8 deaths from cerebro-spinal fever.

The principal complications were 1 arthritis of knee, 2 nerve deafness, 2 squint and 1 facial paralysis.

Hospital mortality 13.3 per cent.

Whooping Cough

There were 480 admissions notified as whooping cough and of these 104 required revision of diagnosis, of whom three died, one from miliary tuberculosis, 1 tuberculous meningitis, 1 influenzal meningitis.

In all 380 cases of whooping cough were treated in the wards.

Concurrent infection occurred in 35 cases.

The principal complications were broncho-pneumonia (81 recovered, 16 died), gastro-enteritis (18 recovered, 10 died), 43 bronchitis, 15 otitis, convulsions (3 recovered, 4 died), marasmus (3 recovered, 1 died).

Hospital mortality 8.2 per cent.

Pneumonia

There were 14 admissions notified as pneumonia and of these 7 required revision of diagnosis. There were no deaths.

Poliomyelitis

There were 7 cases admitted with a diagnosis of poliomyelitis. In 3 of these the diagnosis was confirmed. Four needed revision of diagnosis. There was one death.

Hospital mortality 33.3 per cent.

Puerperal Pyrexia

Forty-seven cases were notified as puerperal pyrexia, and of these 8 required revision of diagnosis.

There were two deaths due to puerperal fever, one caused by pulmonary embolism and one endocarditis with pulmonary embolism.

Hospital mortality 5.1 per cent.

Rubella

There were 80 admissions notified as suffering from rubella. In 42 of these the diagnosis was confirmed. In 38 the diagnosis was revised.

Actually 78 cases of rubella were treated in the hospital.

There were no deaths from rubella.

Miscellaneous Observations

Three hundred and thirty-eight cases were admitted for observation, and of these 27 were found to be suffering from various kinds of infectious disease.

The remaining 311 included 46 healthy babies accompanying their mothers and 20 healthy mothers accompanying their infants. There was one baby born in the hospital during the year.

Operations

There were 96 operations performed in the theatre during the year.

Of the major operations Mr. Scott Mason performed 11, Mr. Gemmill 15, and Mr. McMillan 10.

In addition to the above the surgeons attended on numerous occasions for consultation. Mr. McMillan pays a weekly visit to the hospital to advise on puerperal cases.

Laboratory

The following is a summary of the work conducted in the hospital laboratory during 1942.

BACTERIOLOGICAL EXAMINATIONS

K.L.B. positive	1,468
K.L.B. Negative	3,324
Vincent's Angina Positive	49
Vincent's Angina Negative	82
Haemolytic Streptococci positive	55
Haemolytic Streptococci negative (non-haemolytic)	84
Streptococci present (not classified as above)	87
Streptococci absent	572
Blood bacteriological examinations	29
Blood Widal tests	58
Cell counts and haemoglobin estimations	42
Faeces bacteriological examinations	305
Urine bacteriological examinations	46
Cerebro-spinal fluid bacteriological examinations	293
Cerebro-spinal fluid chemical examinations	600
Cerebro-spinal fluid cell counts	307
Cerebro-spinal fluid microscopic examinations	280
Urine chemical examinations	869
Urine microscopic examinations of deposit	212
Tubercle bacilli positive	1
Tubercle bacilli negative	10
	<hr/>
	8,773

Sickness of Staff

There was no undue sickness among the staff during the year.

Staff Prophylaxis

The immunisation of the Nurses was carried out as usual in relation to diphtheria and scarlet fever, and they were all inoculated against the enteric group of infections.

PREVENTION OF BLINDNESS

General Outline of Facilities Available in the City

The arrangements continue substantially on the lines and over the same range of services as immediately before the war, except for the provision of a war bonus, and an increase in the amount of grants for the financial year 1943-44. Further information on these increases will appear in the report for 1943.

The number of Birmingham residents on the blind register at the end of 1942 was 637 males and 696 females, a total of 1,333.

REPORT ON TUBERCULOSIS

Institutions and Accommodation Provided

The Birmingham Public Health Committee maintains a single dispensary which serves the whole of the City. In normal times it provides 611 beds for the treatment of pulmonary and other forms of tuberculosis, and for the observation and investigation of suspected cases of this disease. As a result of enemy action, and the shortage of nurses, the present number of beds available is 500.

The Anti-Tuberculosis Centre, situated centrally in the City, is open for five days during the week, and on Saturdays for half the day. A small number of sessions is reserved for patients attending for treatment, supervision and observation, but most of the sessions are set apart for consultations and examinations. Many consultations and examinations are undertaken at the homes of patients by members of the medical staff. The medical staff of the Tuberculosis Section of the Public Health Department, until the outbreak of the War, consisted of eleven medical men, and, with one exception, the staff is also responsible for the medical work of the various municipal sanatoria. To-day the total medical staff is eight.

The treatment undertaken in the different sanatoria includes lung collapse by means of artificial pneumothorax, and different forms of surgical treatment for patients suffering from pulmonary tuberculosis have been undertaken, such as thoracoplasty, and severance of adhesions in cases of artificial pneumothorax, etc.

During the year under review, owing to war conditions, and the shortage of nurses and the diminution in the number of beds, our operative work suffered some curtailment, 52 operations being undertaken in the theatre at Yardley Green Road Sanatorium.

At the Yardley Green Road Sanatorium, which is situated $3\frac{1}{2}$ miles from the centre of the City, patients are housed in eight detached pavilions. The kitchens, domestic stores, and medical officers' apartments, are included in a large central building. The cooking is undertaken in one kitchen, and food is conveyed to the four dining halls by means of electric trolleys.

The sanatorium buildings include an administrative office block, in which there is a laboratory, and there are occupational therapy shops,

a school, and three recreation halls, a department for X-ray work, a section for artificial light treatment, and artificial pneumothorax work, which is used both for in-patients and out-patients, and there is also a surgical block, including a theatre.

The clinical blocks at West Heath Sanatorium, situated eight miles from the centre of the City, normally accommodate 120 patients, but additional beds are now available. It includes one pavilion for males and four for females. In addition there is a rest room for female patients, a laboratory, and an occupational therapy shop.

Romsley Hill Sanatorium, situated twelve miles from the centre of the City, is a two-storey building providing accommodation for 120 patients. It includes a number of rooms for one, two, three, four and six beds, and there are wards for ten and eleven beds. It provides two recreation rooms, one for men and one for women, and has occupational therapy shops and a laboratory. Seventeen beds are rented to Smethwick, nine to West Bromwich, and six to Worcestershire.

Salterley Grange Sanatorium, equipped for sixty-eight patients of both sexes, is situated in the Cotswolds, forty miles from the centre of the City. It includes a large administrative block containing residential quarters for the staff, and in addition, a kitchen, stores, and a dining hall for the patients. There are two recreation rooms for patients, and a laboratory. The accommodation for patients includes forty single bedrooms, eleven rooms accommodating two beds, and two rooms which accommodate three patients.

In addition to the patients admitted to the City Sanatoria, during the year there were 7 male adults, 6 female adults, and 23 children who were admitted to various hospitals, including the Royal Cripples' Hospital, Moseley Hall, and the Children's Hospital, etc., for the treatment of non-pulmonary forms of tuberculosis. A grant towards the maintenance of these patients was made by the Public Health Committee.

During the year the home visits made by the medical staff numbered 876. The personal consultations between members of the medical staff and practitioners in the City during the year numbered 253; in addition there were 7,476 other consultations with medical practitioners during the year.

Many persons attended at the City Sanatorium, Yardley Green Road, as out-patients for artificial light treatment and artificial pneumothorax treatment. During the year under review the number of attendances for this purpose was 4,268.

Admissions to the Sanatoria are decided upon only after examination at the Centre, or at the patients' homes, and the sanatorium to which patients are sent depends on the condition of the disease. On returning from sanatoria patients are re-examined from time to time at the Centre.

The Anti-Tuberculosis scheme includes thirty-six beds at Yardley Green Road Sanatorium for the purpose of observation and investigation ; ten are reserved for boys, ten for adult males, eight for adult females, and eight are used for female children. The provision of these beds facilitates a correct diagnosis, which would in some cases be difficult to arrive at without them.

The scheme is also fortunate in having a large number of beds set apart for the care and treatment of the "hospital" type of case, the male patients being admitted to Yardley Green Road Sanatorium and the females to West Heath Sanatorium. These beds are essential on humanitarian grounds, and, in addition, are a prophylactic asset in connection with the public health of the City. For this reason it is desirable that as large a percentage as possible of the deaths occurring in the City from tuberculosis should take place in beds controlled by the Public Health Department.

During the period under review there was a death-rate of 0·86 per 1,000 of the population from all forms of tuberculosis. Of these deaths 52 per cent. occurred in the municipal sanatoria and hospitals controlled by the Public Health Committee.

The notified cases of tuberculosis show a considerable increase of 184 during the year 1942. Amongst the cases of tuberculosis notified during the year, 29 had resided in the City for less than one year, suggesting that they may have come to reside here from other districts whilst already suffering from the disease.

The case-rates and death-rates for past years are shown in the following table :

TUBERCULOSIS (ALL FORMS)					<i>New cases :</i>	
					<i>Rate per</i>	<i>Death-rate</i>
					<i>1,000</i>	<i>per 1,000</i>
					<i>population</i>	<i>population</i>
1901-1910 (Average)	.....	.....	.....	.....	—	1·65
1911-1920	..	.....	.....	.....	3·73	1·46
1921-1930	..	.....	.....	.....	1·92	1·08
1931-1935	..	.....	.....	.....	1·43	0·91
1936	.....	.....	.....	.....	1·10	0·78
1937	.....	.....	.....	.....	1·07	0·80
1938	.....	.....	.....	.....	1·15	0·78
1939	.....	.....	.....	.....	0·98	0·84
1940	.....	.....	.....	.....	1·03	0·84
1941	.....	.....	.....	.....	1·13	0·90
1942	.....	.....	.....	.....	1·30	0·86

The relative prevalence and mortality from pulmonary and other forms of tuberculosis, shown separately, is indicated in the two subsequent tables :

PULMONARY TUBERCULOSIS

	<i>New cases :</i>	
	<i>Rate per 1,000 population</i>	<i>Death-rate per 1,000 population</i>
1901-1910 (average)	—	1.25
1911-1920	3.27	1.20
1921-1930	1.61	0.94
1931-1935	1.20	0.80
1936	0.93	0.71
1937	0.93	0.72
1938	0.96	0.70
1939	0.82	0.77
1940	0.88	0.77
1941	0.97	0.81
1942	1.11	0.77

NON-PULMONARY TUBERCULOSIS

	<i>New cases :</i>	
	<i>Rate per 1,000 population</i>	<i>Death-rate per 1,000 population</i>
1901-1910 (average)	—	0.40
1911-1920	0.45	0.26
1921-1930	0.31	0.14
1931-1935	0.23	0.10
1936	0.17	0.07
1937	0.15	0.08
1938	0.19	0.08
1939	0.16	0.07
1940	0.15	0.07
1941	0.16	0.09
1942	0.19	0.09

Work of the Tuberculosis Visitors

There are ten nurses engaged as Tuberculosis Visitors in the Department, each having charge of a definite area of the City for purposes relating to tuberculosis. It is the duty of these Visitors to make contact with every notified case of tuberculosis in the City, and afterwards to keep in touch by subsequent visiting. They are also responsible for any care and after-care work that may be needed, and for ensuring that home contacts are examined and kept under supervision.

At the end of 1942 there were 4,943 cases of tuberculosis on the current register, all of whom have to be visited at more or less regular intervals. The visits paid during the year were as follows :

Primary visits (to new cases)	1,469
Routine re-visits	19,913
Special visits and re-visits	7,088

At the first visit to new cases it was found that 591 patients out of 1,469 were sharing a bed with some other person, while 251 shared a bedroom, but had a separate bed. Efforts are always made to secure a separate bedroom, or if this is out of the question, at least a separate bed for every patient. Unfortunately, owing to lack of accommodation, or unwillingness on the part of the patient, this is not always possible.

It is the duty of these visitors to bring to the notice of the Department every case of overcrowding in relation to pulmonary tuberculosis for representation to the Estates Department for special treatment, if considered advisable by the medical staff.

Action under Legal Enactments

It was unnecessary during the year to take action under the Public Health (Prevention of Tuberculosis) Regulations, 1925, relating to tuberculous employees in the milk trade, nor was Section 172 of the Public Health Act, 1936, employed to remove any patient compulsorily to a sanatorium.

Disinfection

During the year the disinfection was undertaken of 1,463 houses in which some member of the family had suffered, or died, from tuberculosis, or where a patient had changed his or her address.

Care Work

A considerable amount of care work is undertaken from the Centre in Great Charles Street, and its scope is varied.

During the year 1942 the tuberculosis health visitors made 28,470 visits (exclusive of useless calls) to the homes of patients, and care work was responsible for many of them. In addition, 876 visits were made to the houses of patients by members of the medical staff, many of them for a similar purpose.

In the same period 72 persons received a bed and bedding on loan or hire purchase from the Department ; 13 chalets were also loaned to patients. Opportunity for the use of these chalets is largely governed by the fitness of the patient to sleep or rest for prolonged periods out of doors unattended, and by the existence of a suitable site. Beds, bedding and sleeping chalets are loaned in order to provide more suitable accommodation for the patient and to lessen as far as possible the risk of infection to other members of the family.

Through the representation of the Care Department to the Estates Department we obtained better housing conditions, or promises of the same, for the families of ten of our patients. Grants of clothing and other personal items were made to patients in some 84 instances. Also a large number of recommendations for relief and assistance were made to various charitable organisations both within and without the City.

The Care Department has been instrumental in assisting our patients and their families to obtain suitable treatment for ailments other than tuberculosis, and grants of food have been made to 52 persons.

In addition to the activities already mentioned the Department has helped patients to obtain dentures, air-rings, and other nursing utensils, surgical appliances and splints, and has assisted in some instances in the provision of meals. It has obtained money to pay bus and tram fares to enable patients to attend for treatment and examination.

The close inter-communication existing between the Tuberculosis Section and the School Medical Officer's Department and the Infant Welfare Officer has provided opportunities for the Care Committee to function in a wider sphere than would have been possible otherwise.

The tuberculous individual is a damaged life, and however good the results of treatment may have been the sufferer can seldom be regarded as having a 100 per cent. economic value to the community. Unfortunately, industrial conditions present few openings for the partially disabled tuberculous person, a number of whom are able to work four or six hours daily in suitable environment, at their own pace. To help this type of patient workshops are provided at Yardley Green Road Sanatorium, where ex-patients attend and work under medical supervision in hygienic surroundings for a limited number of hours daily. As a result of this an appreciable sum of money derived from the sale of their work is paid out weekly.

Anti-Tuberculosis Centre

Attendances for Examination

The total number of attendances at the Anti-Tuberculosis Centre during the year 1942 made by patients for the purpose of diagnosis, consultation, observation, advice and treatment was 27,639, including 4,268 attendances at Yardley Green Road Sanatorium.

Attendances for supervision, observation and treatment	.....	696
Attendances for consultation and examination	.....	9,878
Attendances for light treatment :		
Yardley Green Road Sanatorium	.....	4,070
151, Great Charles Street	.....	1,036
X-ray examinations (screens)	.....	7,899
X-ray examinations (films)	.....	1,425
A P. Refill attendances	.....	2,635
		<hr/>
TOTAL	.....	27,639
		<hr/>

Of the total number of new cases of pulmonary tuberculosis notified 94.9 per cent. were examined at the Centre, while of the cases of non-pulmonary tuberculosis notified during the present year 49.4 per cent. were examined at the Centre.

The number of patients on the Dispensary Register on 1st January, was 4,847; the number of persons transferred to other areas during the

year and the cases "lost sight of" numbered 271; the number transferred to us from other areas and the "lost sight of" cases returned was 178.

At the end of the year 911 insured persons were receiving domiciliary treatment at the recommendation of the tuberculosis officers.

In the following table are set out treatment recommended for patients examined at the Anti-Tuberculosis Centre during the year :

	<i>First examinations.</i>			<i>Re-examinations.</i>	
	<i>Notified</i>		<i>Suspects.</i>	<i>Old</i>	<i>Contacts or</i>
	<i>Cases</i>	<i>Contacts.</i>		<i>Cases.</i>	<i>Suspects</i>
Sanatorium treatment	520	43	309	276	3
Dispensary treatment	11	—	—	12	—
Supervision	37	4	12	662	—
Out-patient light treatment	12	—	1	13	—
Domiciliary treatment	89	6	66	1,311	2
No treatment required	177	903	2,827	1,048	529
TOTALS	846	956	3,215	3,322	534

The table above shows that a large percentage of new attenders at the Centre received a primary period of sanatorium treatment. This is an advantage to the patient, inasmuch as his physical condition is benefited, and he acquires practical experience of the treatment which it would be to his advantage to carry out in a modified form in his own home afterwards.

In the succeeding table are set out briefly some details of those who were referred to us as suspects. Amongst those classified here as suspects are many who had been living in contact with known cases of tuberculosis, and who were, therefore, possibly referred to us mainly for this reason.

SUSPECTS EXAMINED DURING THE YEAR 1942

Definitely tuberculous	384
No signs of tuberculosis	2,831
	3,215

Contacts

Nine hundred and fifty-six contacts were examined during the year under review; 211 were under five years of age, and of these 13 or 6.16 per cent. were found to be suffering from tuberculosis; 9 of these were home contacts to patients whose sputum contained tubercle bacilli, the remaining 4 being contacts to cases with negative sputum.

Between the ages six to ten years, 148 children were examined, and 3 or 2 per cent. were found to be suffering from tuberculosis, all 3 being contacts to cases with positive sputum.

In the age period eleven to fifteen years 143 contacts were examined and 4 or 2.8 per cent. were found to be suffering from tuberculosis. Two of these 4 cases were contacts to cases with positive sputum.

Over the age of 16 years, 454 home contacts were examined, and 32 or 7.0 per cent. were found to be suffering from tuberculosis, 23 being contacts to positive sputum cases, and 9 were contacts to negative sputum.

Tuberculin Tests

During the year 787 patients were tested with tuberculin, the Mantoux method being used, and in a large majority of cases the test was commenced with an injection of 0.1 m.g. O.T.

The investigation of contacts at the Clinic has included a careful physical and radioscopic examination, followed in many instances by an X-ray film. Frequently a few weeks spent in an observation bed at the Sanatorium have also been devoted to investigation. An intradermal tuberculin test is applied to practically all children under ten years of age examined as contacts, and to older patients when necessary.

Faeces Examined

If patients in the sanatoria, either for treatment or diagnosis, could produce no sputum, or where sputum was persistently negative for tubercle bacilli, faeces were examined for acid and alcohol-fast bacilli.

Sputum was examined at frequent intervals by a variety of methods, including those of Ellerman and Erlandsen, and Lowenstein-Jansen. In no instances were faeces examined before the patient had been in the sanatorium for at least one week, during which only pasteurised milk was consumed.

Gastric Lavages

Sputum for examination is not always easy to obtain from children under ten years of age, as they rarely expectorate. To meet this difficulty the contents of a stomach lavage, taken first thing in the morning, from a fasting stomach, were investigated for acid fast bacilli in a number of instances ; whether or not these bacilli were found on smear examination alone some of the centrifuged deposit was injected into a guinea pig.

“ Contacts,” “ Suspects ” and “ Notified ” Cases

During the year under review the number of contacts examined was necessarily smaller than in pre-war years owing to war conditions, long working hours making it difficult for many to attend.

The work of the Tuberculosis Dispensary is greatly facilitated when patients in the general hospitals (voluntary and municipal) who are suffering from tuberculosis are advised to apply to us for further treatment and for the examination of their families as “ contacts.”

Unless the patient realises that he is suffering from tuberculosis when he leaves the hospital he is sometimes disinclined to accept further treatment in a sanatorium, because he imagines the time spent in the hospital is all the treatment he is likely to require.

During the past year 331 notifications of tuberculosis were received from the municipal and public assistance hospitals, having an aggregate of 4,412 beds. Of these patients 85 were acutely ill, and could not be examined for a variety of reasons ; 246 were examined, and of this number 23 refused treatment and 159 were admitted to sanatoria.

Dental Treatment

The part-time services of a dental surgeon are utilised at the Centre for the necessary treatment of our patients. The treatment is conservative in type, and consists mainly of extractions, fillings and scalings. Patients who wish to provide their own dentures can do so under conditions advantageous to themselves by arrangement with the dental surgeon.

During the year there were 184 extractions, 12 fillings, 2 scalings, and dentures were supplied in 11 instances.

Laboratory Work

A large number of sputum examinations was undertaken during the year on behalf of persons who are referred for an opinion. If the first examination gives a negative result, subsequent and repeated specimens are examined.

As soon as the patient is referred for examination a sputum outfit with instructions and a request for its early return, is posted. Amongst the new adult patients examined for the first time during the year, in whom a definite diagnosis of pulmonary tuberculosis was made, 57·7 per cent. presented tubercle bacilli in their sputum. Amongst the total number of children primarily examined in whom a definite diagnosis of pulmonary tuberculosis was made, there were 16·6 per cent. who presented tubercle bacilli in their sputum, gastric contents or fæces.

The difficulty of obtaining sputum from children, even when it exists, is recognised, so all children under ten years, whether admitted to sanatorium for observation or treatment, have the fæces and gastric lavage examined for acid fast bacilli; they are also submitted to a Mantoux tuberculin test. All adult patients who enter the observation pavilions have a blood sedimentation test undertaken and have their fæces examined for acid fast bacilli when sputum is persistently negative or cannot be procured. A blood sedimentation test is also undertaken periodically for those being treated by artificial pneumothorax.

During the year specimens of sputum were examined as follows :

At the Anti-Tuberculosis Centre	.....	.....	4,485
At Yardley Green Road Sanatorium	.....	.....	3,226
At Romsley Hill Sanatorium	.....	.....	1,686
At West Heath Sanatorium	.....	.....	1,195
At Salterley Grange Sanatorium	.....	.....	650

Completed Cases

During the year 2,320 patients completed a course of treatment or supervision, etc., at the Centre, of whom 2,076 were adults and 244 were children.

During the year under review 387 patients were examined and reported upon on behalf of the Recruiting Medical Boards. Of these 227 were new cases, 84 were cases already known to us, and 76 resided in areas outside the City.

Our records have also been inspected in connection with 1,733 female cases referred to us by the Ministry of Labour and National Service. Of this number only 5 were found to be on the tuberculosis register.

SUMMARY.

(1) Not less than 94·9 per cent. of the total number notified in the City as suffering from pulmonary tuberculosis were examined at the Centre.

(2) The number of patients who were visited and examined in their own homes by the medical staff was 876.

(3) During the year 7,899 screen examinations were made in the radiological section, and films were taken in 1,425 instances.

(4) Amongst new patients suffering from pulmonary tuberculosis examined during the year 57·7 per cent. of the adults presented tubercle bacilli in their sputum, and 16·6 per cent. of the children.

(5) Of the primary cases suffering from pulmonary tuberculosis examined during the year, 14·8 per cent. were classified as Group I; 50 per cent. were classified as Group II; and 28·5 per cent. as Group III; 6·7 per cent. were classified as Group IV, or non-pulmonary.

SANATORIA

Total Numbers Treated in Sanatoria and Duration of Stay

During the year 1942 1,342 patients were discharged from all the sanatoria. Included in this number are 36 patients suffering from non-pulmonary tuberculosis who were treated in institutions subsidised by the Public Health Department. Of the 1,342 patients, 787 were adult males, 437 were adult females, and 118 were children.

The average duration of stay was 122·5 days for adult males, 189 days for adult females, 203 days for male children, and 205·8 days for female children, excluding those admitted for observation and who, proving negative, remained only for a short time, and excluding those "hospital" cases with advanced disease who died within a few days of their admission.

Occupational Therapy in Sanatoria

In the Municipal Sanatoria attention is paid to the question of occupational therapy with the object of interesting, and employing suitably, a certain number of patients whose condition admits of it. The fitness of the patient to engage in occupational therapy is always judged by the medical officer, who has the patient under constant supervision. The occupation to be followed and the number of hours to be devoted to it are both decided upon by the doctor after careful consideration. At Salterley Grange Sanatorium the physical condition of the patients is usually so good and their disease so early, that temporary employment

suitable to their needs can be found in the gardens and upon the estate. At West Heath and Yardley Green Road Sanatoria facilities for occupational therapy have existed for many years. At West Heath the patients are employed in basket-making. At Romsley Hill Sanatorium patients are also instructed in basket and leather work. At Yardley Green Road Sanatorium patients are instructed in basket-making, leather work of different kinds, and in mat-making, etc. These facilities have been curtailed since the outbreak of war because of the increasing difficulty in obtaining material.

The children attending the Sanatorium School at Yardley Green Road Sanatorium are taught various forms of handicraft, including leather and pewter work, raffia work, basket-making, etc. Many children who are confined to bed are also taught handicrafts. Schooling at Yardley Green Road Sanatorium is provided for suitable children, whether ambulant or immobilised; three school teachers are employed.

Patients Admitted to Sanatoria for Observation and Investigation

The beds utilised for the purpose of observation are at Yardley Green Road Sanatorium. Observation patients are those who, after careful and repeated examinations at the Centre, are found to be indefinite; either as to the absence or presence of tuberculosis, or as to its activity or otherwise when present, and are usually admitted for a period varying from four to six weeks. Of the 1,306 patients discharged from the sanatoria, 100, or 7.6 per cent. were admitted primarily for observation to Yardley Green Road Sanatorium.

Sputum Results after Sanatorium Treatment

Of the 1,029 adult patients discharged from sanatoria suffering from pulmonary tuberculosis during the year, 820 or 78.16 per cent. presented tubercle bacilli in their sputum whilst in sanatoria.

SUMMARY

(1) The average duration of patients' stay for all sanatoria was 122.5 days for adult males, 189 days for adult females, 203 days for male children, and 205.8 days for female children.

(2) Of the patients from all sanatoria no less than 7.6 per cent. passed through the observation beds at Yardley Green Road Sanatorium.

(3) There were 78.16 per cent. of all patients discharged from sanatoria who presented tubercle bacilli in their sputum whilst in the sanatorium.

(4) Fifty-two per cent. of the deaths from tuberculosis occurred in "hospital" beds in the various sanatoria and in the hospitals controlled by the Public Health Committee.

Treatment in Light Clinic

The total number of patients completing a satisfactory course of treatment during the year 1942 was 39.

The number includes 14 adult males, 12 adult females, 8 male children and 5 female children.

On the 31st December, 1942, 48 patients were continuing treatment in the Light Clinics, and many showed improvement in their condition.

VENEREAL DISEASES

The effects of war conditions are again reflected in the records of the City Clinics, in a 50 per cent. increase in new cases of syphilis and a 10 per cent. increase in new cases of gonorrhœa, attending the Clinics, as compared with the records for 1941. We have reverted to the prevalences shown below in the 1934 figures. At the same time the publicity campaign has shown its effect in the large increase in the numbers attending for examination, and found not to be suffering from venereal disease.

	<i>New Cases.</i>			
	<i>Syphilis.</i>	<i>Soft Chancre.</i>	<i>Gonorrhœa.</i>	<i>Other Conditions.</i>
General Hospital	414	2	970	1,669
Children's Hospital	10	—	6	22
Lancaster Street	80	—	38	1,204
Birmingham Infirmary	11	—	16	11
TOTAL	515	2	1,030	2,906

The following table gives the corresponding data over a period of ten years :

	<i>Syphilis.</i>	<i>Soft Chancre.</i>	<i>Gonorrhœa.</i>	<i>Other Conditions.</i>
1933	454	19	944	1,248
1934	*511	*25	*998	*1,425
1935	428	20	882	1,887
1936	353	7	971	1,988
1937	326	1	1,011	2,233
1938	346	—	955	2,423
1939	330	1	948	2,282
1940	318	1	835	1,957
1941	343	4	940	2,261
1942	515	2	1,030	2,906

*These figures include those for the Birmingham Infirmary for the first time.

The total attendances are indicated below. The drop as from 1939 has been due to the discovery of the remarkable effect of the sulphonamide drugs on gonorrhœa.

1933	.....	103,925	1938	.....	131,611
1934	.....	*110,716	1939	.....	88,083
1935	.....	121,788	1940	.....	75,936
1936	.....	124,387	1941	.....	73,175
1937	.....	125,408	1942	.....	83,776

*These figures include those from Birmingham Infirmary for the first time.

Further particulars of the work done at the Centres in 1942 are as follows :

	<i>Syphilis.</i>	<i>Soft Chancre.</i>	<i>Gonorrhoea.</i>	<i>Other Conditions.</i>
No. of cases under treatment, Jan. 1st, 1942.....	1,014	5	771	541
New cases under treatment during year	515	2	1,030	2,906
Total attendances	27,251	12	24,251	32,262
No. discharged after completion of treatment and observation	106	4	591	2,784
No. transferred to other centres	193	1	193	41
No. who ceased to attend:				
Before completion of treatment	201	—	228	—
After completion of treatment but before final tests as to cure	46	—	188	—

No. of cases of congenital syphilis treated :

Under 1 year of age	8
Aged 1-5 years	—
Aged 5-15 years	13
Aged 15 years and over	43
	—
TOTAL	64

Publicity and Educational Work

The Birmingham Council for Social Health—formerly the Birmingham Branch of the British Social Hygiene Council—have maintained and extended their most helpful educational work. They have in particular enlarged their field of activities in youth organisations. Lectures have been given during the year, to men and women separately, to a total of 21,604—to students, refugees, nurses, factory workers, to many girls and boys on the point of leaving school ; to many religious and social organisations ; to members of H.M. Forces, to the A.T.C., the G.T.C., the N.F.S. and to groups of the British Red Cross Society. They have established among the youth a Junior League, aiming at a high standard of daily life, leading up to a healthier and happier community life. At the same time they have taken a practical interest in the prevention of excessive drinking among young people. The work done by the Council of Social Health has greatly reinforced the local authority's activities in the control of venereal disease.

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