

**[Report 1946] / Medical Officer of Health, Darwen Borough.**

**Contributors**

Darwen (England). Borough Council.

**Publication/Creation**

1946

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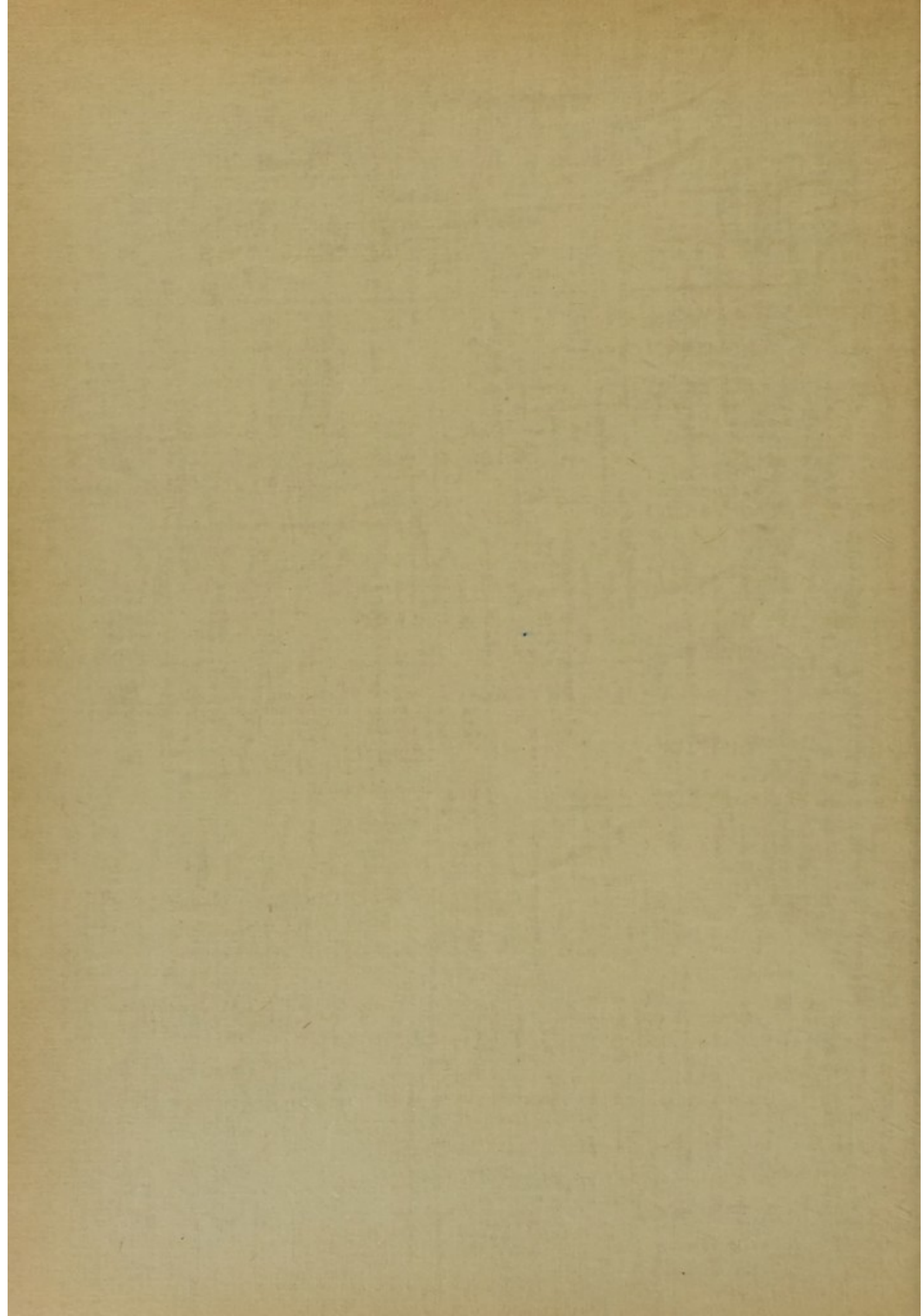
BOROUGH OF DARWEN



ANNUAL REPORT  
OF THE  
MEDICAL OFFICER OF HEALTH  
FOR THE YEAR 1946

JANE O. MILLAR

M.D., D.P.H., D.Obst.R.C.O.G.



BOROUGH OF DARWEN

REPORT

ON THE

Health and Sanitary  
Administration

OF THE BOROUGH

FOR THE YEAR 1946

By JANE O. MILLAR, M.D., D.P.H., D.Obst.R.C.O.G.,

*Medical Officer of Health.*



# Members of the Public Health Committee.

1946-47.

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CHARLES COUTTS BYERS, TOWN CLERK.

\* Members of the Public Health Sub-Committee.



## Staff of the Public Health Department.

### WHOLE-TIME OFFICERS:

Medical Officer of Health .....	{	R. C. WEBSTER, B.Sc., M.D., D.P.H. (Returned from H.M. Forces and resumed duty 29/7/46. Resigned on taking up further appointment 31/12/46)
Medical Officer of Infectious Diseases Hospital .....		JANE O. MILLAR, M.D., D.P.H., D.OBST.R.C.O.G. (Appointed 6/1/47).
Divisional School Medical Officer .....		
Senior Sanitary Inspector .....	{	EDMUND P. McGLYNN, C.S.I.B., Cert. Insp. Meat and Other Foods, Smoke Insp. (Cert.), M.S.I.A.
Inspector of Meat and Other Foods .....		C. ASHTON WHITTLE, A.R.San.I. (Commenced 6/5/46; Resigned 5/3/47)
Director of Public Cleansing .....		C. R. PALING, C.S.I.B., Cert. Insp. Meat and Other Foods, A.R.San.I., M.S.I.A. (Commenced 1/6/47).
District Sanitary Inspectors .....	{	H. RAMSBOTTOM, C.S.I.B., A.R.San.I. (Commenced 9/6/47).
Matron, Infectious Diseases Hospital .....		Miss M. STEWART, S.R.N., S.R.F.N.
Senior Health Visitor .....	{	Miss G. WADDICOR, S.R.N., S.C.M., S.R.F.N., H.V. Cert.
Non-medical Supervisor of Midwives .....		Miss A. WALTON, S.R.N., S.C.M., HV. Cert. (Resigned 31/7/46).
Health Visitors and School Nurses .....	{	Miss M. A. MOORE, S.R.N., S.C.M., H.V. Cert.
		Miss M. PARKINGTON, S.R.N., S.C.M., H.V. Cert.
		Miss A. M. BARNETT, S.R.N., S.C.M. H.V. Cert. (Commenced 14/4/47).
Municipal Midwife .....	{	Miss F. B. RIMMER, S.R.N., S.C.M. (Recommended, on return from H.M. Force 1/8/46).
Chief Clerk .....		W. HAWORTH. (Deceased 2/10/46). W. ATKINSON, D.P.A., A.R.San.I., C.S.I.B. (Commenced 23/12/46).
Clerical Staff .....	{	J. BAMFORD.
		N. RILEY.
		P. WYATT. (Absent in H.M. Forces).
		Mrs. M. BURY.
		Miss K. E. HARRIS. Miss E. BARON.

### PART-TIME OFFICERS:

Consultant Obstetrician .....	S. W. LIGGETT, M.B., Ch.B., F.R.C.S. (Edin.), M.R.C.O.G.
Orthopædic Surgeon .....	S. M. MILNER, M.A., M.B., F.R.C.S.
Ophthalmic Surgeon .....	J. M. WISHART, M.B., F.R.C.S. (Edin.)
Dental Surgeon .....	R. V. CLARKE, L.R.C.S., L.R.C.P., L.D.S.
Dental Anaesthetist .....	M. SELLARS, M.B., Ch.B.
Orthopædic Nurse .....	Miss B. HUXTABLE, C.S.P., Orth. N. Cert.



## Clinics and Treatment Centres.

Name of Clinic or Centre.	Situation.	Day and Time.	By whom provided.
Child Welfare.	Civic Health Centre.	Monday, 2 p.m. Thursday, 2 p.m.	Darwen Corporation.
Ante-Natal.	Civic Health Centre.	Tuesday and Thursday, 9-30 a.m. Wednesday, 2 p.m. Alternate Tuesdays, 2 p.m. (Specialist).	Darwen Corporation.
Maternity and Child Welfare Dental.	Civic Health Centre.	Alternate Fridays, 2 p.m., and first Thursday in month at 2 p.m.	Darwen Corporation.
Diphtheria Immunisation.	Civic Health Centre.	Monday, 3-30 p.m.	Darwen Corporation.
Ultra-Violet Light.	Civic Health Centre.	Monday, 10 a.m. Friday, 2 p.m. Or by appointment.	Darwen Corporation.
School Dental.	Civic Health Centre.	Monday to Friday by appointment.	Lancashire County Council.
School Clinics.	Civic Health Centre.	Minor Ailments. Monday to Friday, 9 a.m. and 4 p.m. Saturday, 9 a.m. Tuesday and Friday, 2 p.m.	Lancashire County Council.
Ophthalmic.	Civic Health Centre.	Wednesday, 2 p.m.	Lancashire County Council.
Orthopædic.	Civic Health Centre.	Wednesday, 10 a.m.	Lancashire County Council.
Tuberculosis Dispensary.	20, Railway Road.	Monday, 10 a.m.	Lancashire County Council.
Venereal Diseases	Royal Infirmary, Blackburn.	Males—Tuesdays, 5 p.m. Friday, 7-30 p.m. Females—Monday, 5-30 p.m. Thursday, 5-30 p.m.	Lancashire County Council.



CIVIC HEALTH CENTRE,  
DARWEN.

September, 1947.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH COMMITTEE.

LADIES AND GENTLEMEN,

I have pleasure in presenting to you the Annual Report of the Public Health Department for 1946. The duties of Medical Officer of Health for the year were carried out by Dr. G. Pickering until August, when he demitted office on the return of Dr. R. C. Webster from service with H.M. Forces. Dr. Webster was warmly welcomed on his return to Darwen, and it was a matter of regret to all when he obtained an appointment in the South, and left Darwen again at the end of the year. A presentation was made to Dr. Webster at the end of December, when he received the good wishes of all sections of the Health Department.

**Vital Statistics.** The birth rate has increased from 13.7 to 16.5 per thousand. Increases in the birth rate have been pretty generally recorded throughout the country for 1946. The death rate has also increased from 15.5 to 16.6 per thousand. It is not expected that in Darwen, at least, the recent unusually high birth rate will be maintained over many years.

Infant mortality has dropped again from 72 to 34 per 1,000 live births, the lowest ever recorded in Darwen. This is satisfactory, but it could be lower yet. The vigilance of the Maternity and Child Welfare Department must never be relaxed in its effort to keep the infantile mortality rate down to the lowest possible figure.

**Housing.** The position with regard to housing is bad, and shows little sign of improving. No permanent houses have been completed so far in Darwen and to date (September, 1947), only 50 temporary houses. The need for new houses continues to be very great. And not only that, but many old houses are in urgent need of essential repairs which cannot be done, owing to shortage of material and shortage of labour. This makes the work of the Sanitary Inspectors very difficult and lowers the standards which one would like to see maintained in these matters.

To add to these difficulties, which are not peculiar to Darwen, certain local difficulties have been very evident during the year. Mr. McGlynn did not at any time during 1946 have his full staff of two District Sanitary Inspectors, and it is a great credit to him that, in the circumstances, he has managed to get through so much work.



#### **Maternity Home.**

In October, 1946, Dr. Webster put before the Health Committee a scheme for the conversion of Bull Hill Hospital into a Maternity Home. It is yet too early to say whether this project will come to anything. Darwen undoubtedly needs a Maternity Home, but it is still uncertain whether this plan will be approved by the Ministry of Health. Even if the Minister gives approval before the National Health Service Act, 1946, comes into operation in July, 1948, the Regional Hospital Board might have other ideas. Furthermore, although infectious diseases generally are of low incidence at the present time, we have no prescience as to what will happen in the future. It may, therefore, be necessary to retain Bull Hill Hospital as a fever hospital even if it is only on a care and maintenance basis. It may well be argued that the hospital is inconveniently sited to act as a Maternity Home for an area of which, in any regional planning scheme, Darwen can only form a part, and furthermore there is no certainty that the difficulties in staffing (to which reference is made on page 28) would not continue. On the other hand, the buildings are sound, all the public utility services are available, and it would obviously be much less costly, and infinitely quicker, to adapt the existing premises to the suggested use, than to build a new Maternity Home in some other place. Considering everything, the IMMEDIATE needs of the neighbourhood could well be met by the conversion of Bull Hill Hospital to a Maternity Home, though whether this would be wise, taking a longer view is not certain.

**General Health.** No serious outbreaks of disease occurred during the year, and the general health of the community remains satisfactory.

**Public Health Department Staff.** It is with great regret that I have to record the death in October, 1946, of Mr. William Haworth, Chief Clerk in the Public Health Department since 1945. Mr. Haworth had spent 18 years in the Department, which he joined as a junior in 1928 and in which he had spent all his working life. He gave of his best during all these years, although handicapped by ill-health, which caused his untimely death at the age of 35. His kindly manner, ready wit and quiet humour endeared him to all he met, and to all his colleagues in the Department his passing was a matter of infinite regret.

During the year the Department welcomed with pleasure, on their return from the Forces, Dr. Webster, Mr. J. Bamford, Sanitary Inspector's Clerk, and Miss F. B. Rimmer, the Municipal Midwife.

To Mr. McGlynn and Miss Waddicor in particular, and to all the members of the staff, thanks are due for their good work during the year.

My grateful thanks are given for the continued confidence and support of the Committee.

I am, Ladies and Gentlemen,

Your obedient Servant,

JANE O. MILLAR,

MEDICAL OFFICER OF HEALTH.

## PART I.

Statistics and Social Conditions

General Provisions of the Health Services


Maternity and Child Welfare

Prevalence and Control of Infectious Diseases

BY

JANE O. MILLAR, M.D., D.P.H., D.Obst.R.C.O.G.

MEDICAL OFFICER OF HEALTH



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# Summary of Statistics and Social Conditions,

1946.

## GENERAL INFORMATION.

Geographical Position ...	Lat. 53° 41' 25" N. Lon. 2° 28' 32" W.
Elevation above sea level .....	500 ft. to over 800 ft.
Geological formation...	Boulder, clay and sand, over coal measures.
Area (in acres) .....	5,959
Population Census, 1931 .....	36,012
Population—Registrar-General's Mid-year Estimate for 1946 .....	29,830
Number of Inhabited Houses—Census, 1931 .....	10,258
Number of Inhabited Houses at end of 1946 .....	10,374
Number of families or separate occupiers at Census, 1931 .....	10,385
Rateable Value .....	£189,476
Sum represented by a Penny Rate .....	£757

The inhabitants are mainly of the artisan, or working, class, and the principal industries are cotton weaving, paper making and staining, plastic and paint manufacturing, and engineering trades.

Of a total of 10,721 insured adult persons, the average per cent. unemployed was 2.40, and of 1,047 insured juveniles, the average unemployed was 0.68 per cent.

## SUMMARY OF VITAL STATISTICS.

		Males.	Females.	Total.	
LIVE BIRTHS:	Legitimate .....	246	219	465	
	Illegitimate .....	19	11	30	Birth-rate per 1,000 estimated population mid-1946 .....
	Total .....	265	230	495	16.5
STILLBIRTHS:	Legitimate .....	4	7	11	Rate per 1,000 total (live and still) births .....
	Illegitimate .....	—	—	—	21
DEATHS:	.....	253	243	496	Death-rate per 1,000 estimated population mid-1946 .....
					16.6
MATERNAL DEATHS.					Rate per 1,000 Deaths. Total Births.
	From puerperal and post-abortion sepsis.	Nil	.....	0.00	
	From other maternal causes .....	1	.....	1.97	
	Total Deaths .....	1	.....	1.97	

**INFANTILE  
MORTALITY.**  
(Infants under  
the age of  
1 year.)

	Males.	Females.	Total	Rate per 1,000 Live Births.
Legitimate Infants .....	12	4	16	34
Illegitimate Infants .....	—	1	1	33
	—	—	—	—
Total Deaths .....	12	5	17	34
	—	—	—	—

**OTHER  
INFANT  
DEATHS.**

	Total.	Rate per 1,000 population.
Deaths from Measles (at all ages) .....	Nil	0.00
Deaths from Whooping Cough (at all ages) .....	Nil	0.00
Deaths from Diarrhoea (under 2 years) ...	2	0.067

**Births.**—The number of live births registered during the year was 495, giving a birth rate of 16.5 per 1,000 of the population. The trend of this rate over the past 18 years, in comparison with the rate for England and Wales, is shown in the following table:—

Year.	DARWEN.				ENGLAND AND WALES.
	No. of Births.			Rate per 1,000	Rate per 1,000
	Male.	Female.	Total.		
Average for 1929 to 1938	199	195	394	11.35	15.2
1939	161	181	342	10.9	15.0
1940	167	171	338	11.1	14.6
1941	190	173	363	12.1	14.2
1942	191	177	368	12.5	14.0
1943	213	212	425	14.9	16.5
1944	220	192	412	14.53	17.6
1945	205	183	388	13.72	16.1
1946	265	230	495	16.5	19.1

**Illegitimate Births.**—The following table shows the number of illegitimate live births and deaths for the period 1929 to 1946:—

Year.	No. of Births.	Rate per cent. of Live Births.	No. of Deaths under 1 year.	Death Rate per 1,000 Illegitimate Live Births.
Average for 1929 to 1938	14	3.61	1.6	114
1939	12	3.50	Nil	0
1940	10	2.95	1	100
1941	19	5.23	1	52
1942	14	3.80	1	71
1943	28	6.58	Nil	0
1944	28	6.79	4	142
1945	32	8.25	3	93
1946	30	6.45	1	33



**Stillbirths.**—The table given below sets out details relating to stillbirths for the past eight years:—

Year.	No. of Stillbirths.			Rate per 1,000 Live Births.	Rate per 1,000 Population.	
	Legitimate.	Illegitimate.	Total.		DARWEN.	ENGLAND AND WALES.
1939	23	2	25	68	0.80	0.59
1940	17	Nil	17	47	0.56	0.55
1941	6	6	12	32	0.40	0.51
1942	15	2	17	44	0.58	0.54
1943	22	2	24	53	0.84	0.51
1944	21	1	22	53	0.77	0.50
1945	13	Nil	13	32	0.46	0.46
1946	11	Nil	11	21	0.37	0.53

**Deaths.**—The number of deaths of Darwen residents which occurred during the year was 496, representing a death rate per 1,000 of the population of 16.6.

The trend of the death rate of the Borough for the past 18 years is shown below in comparison with the rate for England and Wales:—

Year.	DARWEN.		ENGLAND AND WALES. Rate per 1,000.
	Total Deaths.	Rate per 1,000.	
Average for—			
1929 to 1938	515	14.9	12.1
1939	495	15.7	12.1
1940	534	17.6	14.3
1941	462	15.4	12.9
1942	416	14.2	13.9
1943	497	17.4	12.1
1944	429	15.1	11.6
1945	440	15.5	11.4
1946	496	16.6	11.5



The following is a copy of the information supplied by the Registrar-General, of the causes and sex distribution of deaths of Darwen residents. This information does not include non-civilian deaths:—

Cause of Death.	Males.	Females.	Total.
Typhoid and paratyphoid fevers .....	—	—	—
Cerebro-spinal fever .....	—	1	1
Scarlet fever .....	—	—	—
Whooping cough .....	—	—	—
Diphtheria .....	—	—	—
Tuberculosis of respiratory system .....	4	3	7
Other forms of tuberculosis .....	3	1	4
Syphilitic diseases .....	—	—	—
Influenza .....	—	5	5
Measles .....	—	—	—
Acute polio-myelitis and polio-encephalitis ...	—	—	—
Acute infective encephalitis .....	—	—	—
Cancer of buccal cavity, and œsophagus (M) uterus (F) .....	5	5	10
Cancer of stomach and duodenum .....	6	7	13
Cancer of breast .....	—	7	7
Cancer of all other sites .....	29	14	43
Diabetes .....	1	1	2
Intra-cranial lesions .....	39	39	78
Heart disease .....	73	63	136
Other diseases of circulatory system .....	9	14	23
Bronchitis .....	17	22	39
Pneumonia .....	7	9	16
Other respiratory diseases .....	3	1	4
Ulcer of stomach or duodenum .....	3	—	3
Diarrhœa under 2 years .....	1	1	2
Appendicitis .....	1	1	2
Other digestive diseases .....	10	11	21
Nephritis .....	11	7	18
Puerperal and post-abortion sepsis .....	—	—	—
Other maternal causes .....	—	1	1
Premature birth .....	4	2	6
Congenital malformation, birth injuries, etc.	3	1	4
Suicide .....	3	2	5
Road traffic accidents .....	2	—	2
Other violent causes .....	6	6	12
All other causes .....	13	19	32
TOTALS .....	253	243	496

# General Provisions of Health Services.

## **PUBLIC HEALTH STAFF.**

Full particulars of the Public Health Officers of the Authority are given on page 3.

## **LABORATORY FACILITIES.**

The Pathological and Bacteriological Department of the Blackburn and East Lancashire Royal Infirmary undertake the laboratory work of the Borough of Darwen under a scheme which came into operation on September 1st, 1943; since its inception the scheme has at all times worked very successfully.

Sputum examinations for tuberculosis are still carried out by the Lancashire County Council, under their tuberculosis scheme.

Urine for pregnancy diagnosis test is sent to the University of Edinburgh.

The following is a summary of the specimens examined during the year:—

Diphtheria (Throat and Nose Swabs) .....	257
Glucose tolerance test .....	1
Blood Count .....	6
Pus .....	1
Fæces .....	4
Urine .....	10
Cerebro-spinal Fluid .....	6
Sputum (for tubercle bacillus) .....	93
Vaginal swabs .....	3
Eye Swabs .....	2

## **AMBULANCE FACILITIES.**

1. **Infectious Diseases.**—The Darwen Corporation provide and maintain an ambulance, which is used exclusively for removal of cases admitted to the Infectious Diseases Hospital at Bull Hill, Darwen.

2. **Accident and Non-Infectious Diseases.**—Arrangements exist with two local garage proprietors to provide and maintain ambulances for the conveyance of accident, non-infectious and maternity cases. By this arrangement, a day and night service of three ambulances is placed at the disposal of the public. In cases where the financial circumstances of those requiring the use of an ambulance are such that payment for the service would cause hardship, the service is provided free, and to avail themselves of this service, in cases other than accident, patients must produce a medical certificate.

The Public Assistance Institution, Queen's Park Hospital, Blackburn, maintain ambulances for the removal of their cases to or from the Institution.



## **NURSING IN THE HOME.**

The Darwen and District Nursing Association provide a home nursing service for all cases of sickness, other than certain infectious diseases. The service so provided is satisfactory.

The Corporation make an annual grant of £10 10s. 0d. to the funds of the Association, and also make a payment at the rate of one shilling per visit to cases of the following diseases nursed at home: Puerperal pyrexia, ophthalmia neonatorum, measles, whooping cough, pneumonia (cases under five years) diarrhoea, and to such other cases as are approved by the Medical Officer of Health.

## **TREATMENT CENTRES AND CLINICS.**

A table of the treatment centres and clinics is set out on page 4.

## **HOSPITALS.**

1. **General, Surgical and Medical Cases.**—There is no hospital accommodation in Darwen for the treatment of such cases, which are mainly referred to the Blackburn and East Lancashire Royal Infirmary, and to the Queen's Park Hospital, Blackburn.

2. **Infectious Diseases.**—Cases of Infectious disease are admitted to the Bull Hill Infectious Diseases Hospital, Darwen, which is provided and maintained by the Corporation. Cases are also admitted from the areas of the Turton Urban District Council and the Accrington and District Joint Hospitals Board, by agreement with these authorities. These agreements were approved by the Lancashire County Council in their scheme under Section 63 of the Local Government Act, 1929, for the provision of hospital accommodation for cases of Infectious Disease within the Administrative County Area.

3. **Maternity Cases.**—Maternity cases are admitted, according to their requirement, to Queens' Park Hospital, Blackburn, by an arrangement with the Blackburn Corporation. In addition, a maximum of two cases per month can be admitted to Springfield Maternity Home, Blackburn, by Darwen patients' own arrangements.

## **SMALLPOX.**

Accommodation for cases of smallpox is provided for under an agreement with the County Borough of Blackburn, whereby four beds are retained at their Finnington Isolation Hospital. The Darwen Corporation pay a retaining fee of £80 per annum for retention of these beds.

## **TUBERCULOSIS.**

Cases of tuberculosis are admitted to various sanatoria under the Lancashire County Council scheme.



**PUERPERAL  
PYREXIA.**

Under the Puerperal Pyrexia Regulations, 1939, satisfactory arrangements have been made for the hospital treatment and home nursing of cases. The hospital arrangements provide for cases of puerperal pyrexia, difficult confinement, etc., to be under the personal supervision of the Consultant Obstetrician, Mr. S. W. Liggett.

**VENEREAL  
DISEASES.**

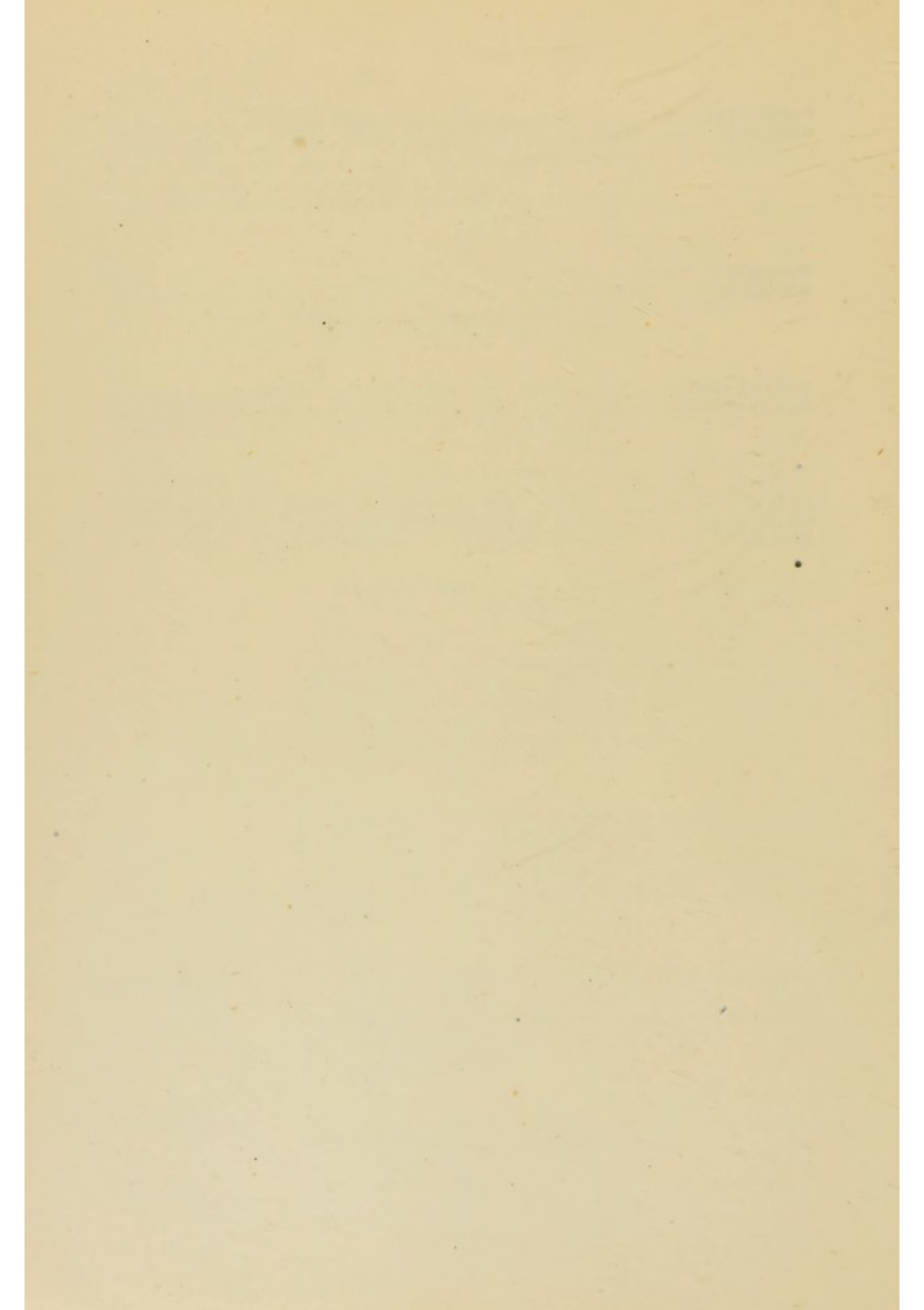
The venereal diseases authority for Darwen is the Lancashire County Council. Cases are therefore treated under the County Council's scheme, through which a treatment centre has been provided at the Royal Infirmary, Blackburn.

**OPHTHALMIA  
NEONATORUM.**

Under the Public Health (Ophthalmia Neonatorum) Regulations, 1926 to 1937, satisfactory arrangements have been made for hospital treatment, home nursing and services of consultant.

**PUBLIC  
ASSISTANCE  
CASES.**

The Public Assistance and Mental Services are administered by the Lancashire County Council. The Queen's Park Hospital, Blackburn, is the Public Assistance Institution.



# Maternity and Child Welfare.

## MIDWIFERY AND MATERNITY SERVICES.

During the year 495 live births and 11 stillbirths were registered: 42% of the births took place outside the Borough—mostly in Queen's Park Hospital, Blackburn. The domiciliary births have thus increased by about 10% during the year, and that, without any adverse effect on mortality or morbidity. The domiciliary service throughout the year was run by the Darwen District Nursing Association, as in recent years.

Miss F. B. Rimmer, the Municipal Midwife, who was in H.M. Forces, resumed practice in April, 1947.

There are also two independent midwives practising in the Borough.

## MIDWIVES.

It is fitting, now that the War is over and more normal conditions prevail, to record the very great appreciation felt in Darwen to the District Nursing Association midwives and to their Matron, Miss Grafton, for the very efficient and kindly manner in which they have carried out the domiciliary midwifery service since 1944. The service given has not only been as good as that provided by the Corporation's pre-war scheme, but probably better, in that with the pool of trained midwives available in the Nurses' Home, an adequate service can be maintained at all times, irrespective of holidays, off-duty times and sickness, or midwives' emergencies (e.g., suspension following contact with a source of infection). To the midwife, this means that her health and well-being are assured by regular off-duty periods and adequate sleep; to the patient that she knows there will always be a trained midwife to care for her, even if her "own" midwife is for any reason not available. Conditions are far otherwise in the case of municipal midwives practising in a town the size of Darwen, where the number of domiciliary births to be attended would scarcely merit the full-time employment of more than three midwives, and at the moment, there is only one. Thanks alone to the courteous co-operation of the District Nursing Association, relief is provided one half day weekly, one Sunday half day per month, one week-end monthly, and in case of illness; these times the midwife may usually call her own. Apart from that, she is on duty, or on call for a full 137 hours per week. I sometimes wonder if the lay public realise what this means—if they know, for instance, that the midwife can never go for a long walk in the fresh air, that she can never visit a theatre, a cinema or a concert, or even visit her friends, unless they happen to have a telephone. Where conditions like this prevail, even in spite of implementing the Rushcliffe conditions, is it any wonder that there is a serious shortage of nurses and midwives, or an unwillingness on the part of young women to take up such a profession?

There is one improvement in the conditions of the District Nursing Association and Municipal midwives in Darwen which I would like to see at an early date, and that is the provision of



cars or taxis when going to, or from, a confinement, and even for their subsequent visits when these are numerous. Now that gas and air analgesia is becoming popular, transport will obviously have to be provided for the apparatus—why not, then, for the midwife who has to administer it?

#### CONSULTING OBSTETRICIAN.

Mr. S. W. Liggett, M.B., Ch.B., F.R.C.S. (Edin.), M.R.C.O.G., appointed consulting obstetrician and gynaecologist to Blackburn County Borough, Blackburn Royal Infirmary, Queen's Park Hospital, Borough of Darwen and Lancashire County Council, commenced on 1st August, 1946. This appointment is a great step forward in the maintenance of efficient ante-natal and midwifery services. Mr. Liggett is in personal charge of all the abnormal midwifery of the district which is received into the wards at Queen's Park Hospital, and is also available for consultation in patients' own homes upon the application of any doctor. He also conducts a fortnightly ante-natal clinic in Darwen. His services are very greatly appreciated and make the efficient running of the midwifery services and ante-natal work a great deal easier.

#### ANTE-NATAL AND POST-NATAL SERVICES.

The routine ante-natal clinics held by the Medical Officer of Health have, as usual, been very well attended. The total number of women who attended the routine ante-natal clinic for the first time during the year was 394, and they made 1,972 attendances—an average of five per mother.

The post-natal clinic was poorly attended—seven mothers only, came to it, making one attendance each. The success of this clinic depends almost entirely on the interest of the Medical Officer running it.

#### DENTAL SERVICES.

A brief summary of the work carried out is given below:—

Number of patients who received treatment .....	10
Treatment given—	
(a) Conservative .....	Nil
(b) Extractions .....	10
(c) Number of patients supplied with dentures .....	8
(d) Number of dentures supplied .....	10

#### MATERNAL MORTALITY.

One maternal death was allocated to Darwen for the year 1946, and was investigated and reported upon. The cause of death was given as acute uræmia and toxæmia of pregnancy. The patient was delivered at home by the District Nursing Association midwife and later admitted, as an emergency, to Queen's Park Hospital, where death occurred. The patient had not co-operated well during the ante-natal period.

#### CHILD WELFARE.

495 babies were born alive during the year. Attendances at the Welfare Centre were as follows:

	Individual Attendances.	Total Attendances.
Under 1 year	305	2,970
1 to 5 years	135	701



The following table gives statistical details relative to Maternal Mortality and a comparison with the mortality in previous years:—

Year.	Total Live and Still Births.	Notification of Puerperal Pyrexia, etc.	Deaths.			Mortality Rate per 1000 Total Births.
			Puerperal Sepsis.	Other Causes.	Total.	
1934—1938	367	4.2	1	2.6	3.6	9.16
1939	369	2	1	0	1	2.72
1940	355	1	0	4	4	11.08
1941	376	2	0	0	0	0.00
1942	385	1	2	2	4	10.86
1943	449	1	0	1	1	2.88
1944	434	1	0	1	1	2.42
1945	401	1	0	1	1	2.49
1946	506	0	0	1	1	1.97

#### INFANT LIFE PROTECTION.

The Health Visitors are appointed as Child Protection Visitors for the purposes of Part VII. of the Public Health Act, 1936, and the Adoption of Children Act, 1926. A considerable number of children are "minded" during the day only, by persons who undertake the work for reward. Details are given below of the numbers of children adopted, and also in the care of foster parents:—

Six legal adoptions were carried out during the year.  
 Number of persons receiving children for reward at the end of the year ..... 182  
 Number of children being received for reward at the end of the year ..... 192

#### ULTRA-VIOLET LIGHT CLINIC.

This Clinic was very popular. The number of children who attended for treatment was 174 and the number of treatments 1,695.

#### ORTHOPÆDIC CLINIC.

This Clinic is run by the Lancashire County Council, the Orthopædic Nurse attending each Wednesday, and Mr. Milner, the Surgeon, attending once monthly. Cases have been admitted to Biddulph Orthopædic Hospital without difficulty.

The following is a brief summary of the work carried out:—

Number of individual school children who attended ..... 256  
 Number of individual pre-school children who attended... 104  
 Number of attendances made ..... 583  
 Splints supplied ..... 5  
 Remedial Exercises given ..... 146  
 Plasters applied ..... 14  
 Number of school children who received Institutional Treatment ..... 5  
 Number of pre-school children who received Institutional Treatment ..... 2



**OTHER  
MEDICAL  
AND  
SURGICAL  
CONDITIONS.**

**HOME  
VISITING.**

Ophthalmic and ear, nose and throat cases are referred to Dr. J. M. Wishart either at the School Clinic or at Blackburn Royal Infirmary. The numbers are small, and the commonest conditions are squint and cases for tonsillectomy. Other cases are dealt with, for the most part, at Blackburn Royal Infirmary.

This is by far the most important duty of the Health Visitor in her capacity as adviser, health educator and propagandist. The routine visits have been pretty well covered, even though for a good part of the year only three Health Visitors were available, instead of four. Nevertheless, one could wish that there were more time for special visiting of special cases, e.g., babies who are not thriving and "problem families." The problem families, however, would occupy several Health Visitors full time attention for the whole year, and would show very little improvement in consequence, so although these unfortunates need much help, it is hardly a practical proposition that the Health Visitor should devote much time to them. She will reap a richer harvest of good results in devoting her time to helping those who wish to be helped, in teaching those who are educable, and in letting her health propaganda fall on more receptive ears. It would appear that some nation-wide scheme, possibly financed by central government, will have to be instituted to deal with problem families.

The table below summarises the work of the Health Visitors during 1946—

<b>VISITS TO CHILDREN.</b>	Under 1 year: First visits .....	490
	Total visits .....	1384
	Aged 1 to 2 years: Total visits .....	980
	Aged 2 to 5 years: Total visits .....	2197
<b>SPECIAL VISITS.</b>	Re Infant death inquiries .....	14
	Re still-births .....	11
	Re Infant Life Protection .....	4
	To expectant mothers .....	117
	Re maternal death inquiries .....	1
	To midwives .....	5
	Re infectious disease .....	39
	Miscellaneous .....	109
<b>TOTAL VISITS.</b>	.....	5351

**LOSS OF  
INFANT  
LIFE.**

In 1946, the infantile mortality rate of 34 per 1,000 live births was the lowest ever recorded in Darwen, which is satisfactory. Seventeen babies under twelve months died during the year. In a small population, however, the infantile mortality rate is easily upset by chance occurrences—for instance if two sets of premature twins were to die during the year, the figure for that year would be adversely affected, and conversely, a year in which the number of premature births happened to be small would probably show a good infantile mortality rate. It is more informative, therefore, to compare the Darwen figures over a period with those of England and Wales as a whole, and with those of the smaller towns, as is shown in the table below for the years 1937-1946 inclusive. From this it will be seen that



**LOSS OF  
INFANT LIFE  
(continued).**

while the infantile mortality rate in the smaller towns is considerably less than that of all England and Wales, the infantile mortality rate in Darwen is consistently higher than that of the small towns, and only in four years of the ten-year period under review has it equalled, or been less than, that even of England and Wales as a whole. This tends to destroy any feeling of gratification that might come from recording an unusually low figure in 1946.

Why should Darwen's infantile mortality rate be constantly unsatisfactory? Many reasons could be held to account for this—bad housing, overcrowding, economic circumstances and the like, but these are common to most urbanised communities and in these respects, Darwen is no worse off than many other places. There is, however, one defect in the Health Services of the area that may not be present in all others, and that is a lack of adequate hospital accommodation for young children, and particularly for premature babies. It is true that there is a very pleasant children's ward at Blackburn and East Lancashire Royal Infirmary, but this is chiefly for acute surgical cases and accidents. And not only is there practically no hospital accommodation for babies, but there is no pædiatrician in the area—a want which has been commented upon before in reports to this committee (vide Annual Report for 1945, page 32). I personally feel sure that every year young lives are wasted by the lack of these facilities, and, furthermore that short of dying, many babies must be condemned to invalidism which may continue throughout life for the lack of readily-available skilled assistance in dealing with some of their childish illnesses.

It is to be hoped that under the National Health Service Act, very early attention will be given to the provision of a good pædiatric service for the area of which Darwen is a part.

**INFANTILE MORTALITY RATES.**

Year.	Darwen.	England and Wales.	Smaller Towns 20,000 to 50,000.
1937	54	58	55
1938	58	53	51
1939	61	50	40
1940	72	55	54
1941	64	59	56
1942	57	49	46
1943	47	49	46
1944	46	46	44
1945	72	46	43
1946	34	43	37

The tables on page 23 give details for 1946 of stillbirths, neo-natal deaths (i.e., deaths of infants in the first four weeks of life), and infant deaths, i.e., deaths of infants from one month to one year), together with a summary of the total loss of infant life.

**Discussion.** All the neo-natal deaths, and four of the deaths from one month to one year were due to causes that were related to ante-natal conditions, and therefore are etiologically akin to the stillbirth group. It thus follows that of the total loss of infant life at 28, 24 deaths were due to conditions which arose before birth.

The prevention of stillbirths appears to be a field in which much remains to be done. Ante-natal care is the crux of this problem, and is available, without cost, to all the women in the town. None of the five mothers whose stillbirths were in the "preventable" category had availed themselves of the services provided. All the doctors in the town and all the midwives employed by, or on behalf of, the Corporation, use the ante-natal and maternity services provided, particularly since the Consultant Obstetrician



**LOSS OF  
INFANT LIFE  
(continued).**

started work in August, 1946. The only midwives who do not use the service as fully as might be are the independent midwives. It is to be regretted that two mothers had stillborn babies delivered at home without any doctor having been in attendance at any time during the pregnancy or labour. This is a deplorable state of affairs. It is to be hoped that the excellent facilities and services available at the Clinic will be utilised more fully by everyone concerned in maternity and child welfare.

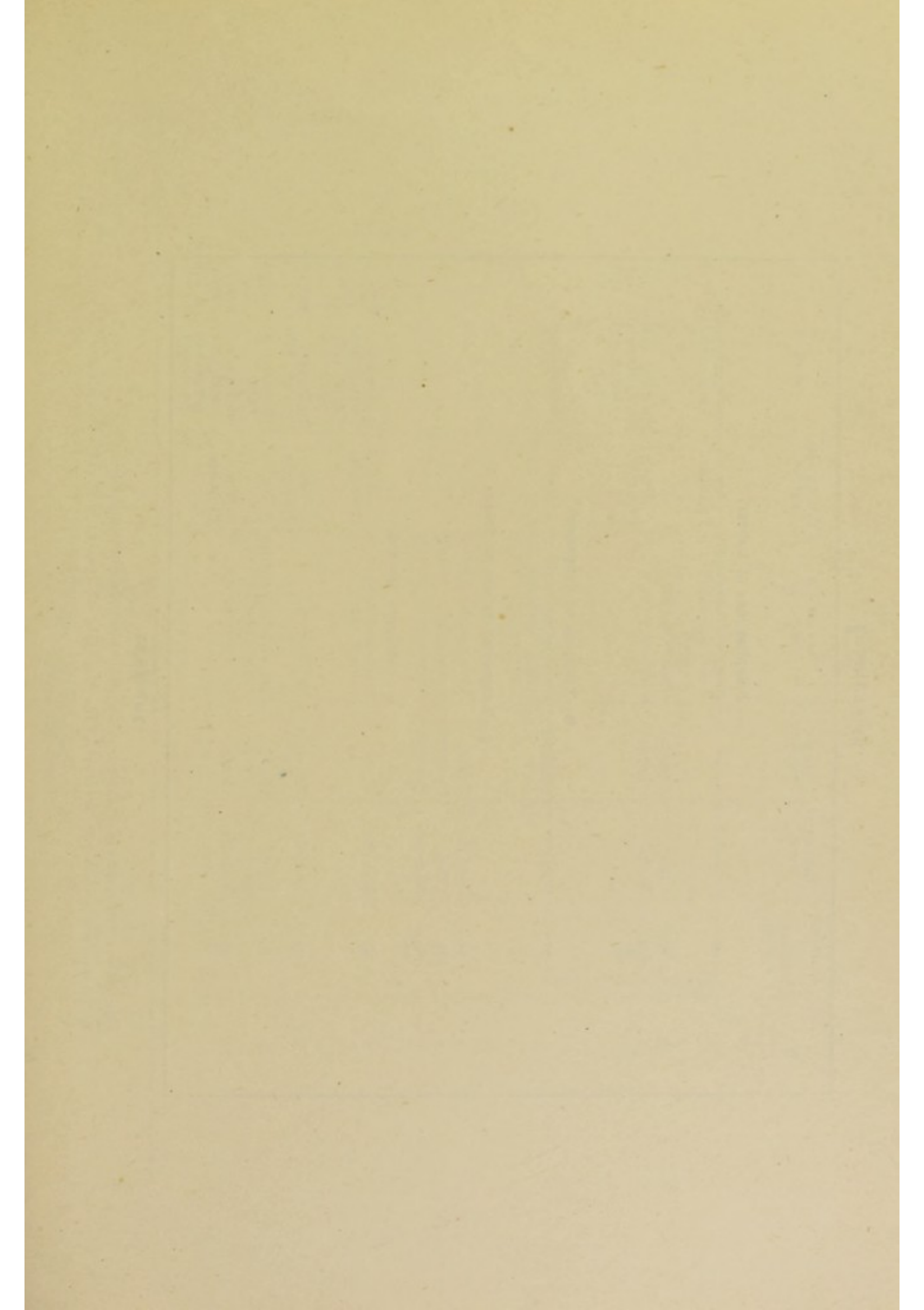
With regard to the nine neo-natal deaths, it is probable that all were related to conditions arising before birth—even in the one case where a degree of carelessness or ignorance on the part of the mother may have contributed, the baby had been premature and was rather small (5½ lbs.) at birth. It does not appear to me that better routine ante-natal care could have saved any of these babies, who were mostly premature in any case, but here there is obviously a great field for research directed at finding the causes, and means of preventing, premature births. The toll of prematurity and congenital malformations is carried on into the next group of deaths—those occurring from one month to one year—in which period four further deaths from these causes were recorded. The remaining four deaths are equally pitiful and mainly constitute the legacy bequeathed to every health department annually by the so-called “problem families.” Three of the deaths were investigated by the coroner but no further legal action followed the inquest. In all but one case the maternal care given was of a low order, and in all cases the mothers knew of the help that could be given them, without cost, by the Health Visitors and the maternity and child welfare department generally. Some were too lazy and indifferent to make the least move towards improving the well-being of their children.

This discussion on the loss of infant life always make somewhat gloomy reading. In conclusion it may be reassuring to point out that in Darwen during 1946, 40 babies were born, whose birth weight was under 5½ lbs., and of these, 30 survive. Although we must make every possible effort to prevent premature births, the deaths of premature babies need not in all cases cause undue alarm, as it is possible that had they survived, they would have been severely handicapped physically and/or mentally throughout life. Details are given below of the deaths of premature infants and number surviving:—

Total live births during 1946 .....	495
Total number of babies born alive weighing 5½ lbs. or less .....	40=8.0% of total births.
Number of babies surviving at end of year .....	30 (75% survival).
Number of babies dying under 1 year .....	10 (25% non-survival).

The premature babies died at the following ages:—Six before the third day; one on the eighth day; one in the second month; one in the third month; and one in the fifth month.

All those who died in the first month died of prematurity, per se. Of the three who survived beyond the first month, two died of infections (gastro-enteritis; bronchopneumonia) and one of a congenital abnormality.





# STILLBIRTHS.

No.	Duration of pregnancy (weeks).	Ante-natal care.	Where confined.	Reason for stillbirth.	Preventable Yes/No.	Remarks.
<b>A—Complications of Labour.</b>						
1	40	Own doctor	Home.	Breech presentation not diagnosed till labour.	Yes. Probably.	Inadequate ante-natal care.
2	40	Clinic	Hospital.	Prolapsed cord.	No.	...
3	circa 34	None.	Hospital.	Placenta praevia.	Yes. Probably.	Patient made no arrangements for confinement and sought no ante-natal care.
<b>B—Toxaemia of Pregnancy.</b>						
4	37	Clinic	Hospital.	Chronic nephritis and toxæmia of pregnancy.	No.	...
<b>C—Congenital defects of Foetus.</b>						
5	36	Own doctor	Home.	Anencephalic foetus.	No.	...
6	36	Clinic	Hospital.	Anencephalic foetus.	No.	...
7	circa 36	Midwife.	Hospital.	Anencephalic foetus.	No.	...
<b>D—Indefinite Causes.</b>						
8	36	Midwife.	Home.	Prolonged labour in small twin.	Yes. Probably.	Inadequate ante-natal care. Twin pregnancy not diagnosed.
9	34	Midwife.	Home.	Not known.	Yes. Probably.	Inadequate ante-natal care.
10	40	Clinic	Home.	Not known (possibly Rh. factor).	No.	Adequate ante-natal care.
11	38	Midwife.	Home.	Twin pregnancy.	Yes. Probably.	Inadequate ante-natal care. Twin pregnancy not diagnosed.

## SUMMARY.

Stillbirths considered preventable and due to inadequate ante-natal care ..... 5

Stillbirths not considered preventable in the light of present medical knowledge ..... 6

TOTAL STILLBIRTHS ..... 11

**NEO-NATAL DEATHS.**  
(i.e., Deaths in first four weeks of life.)

No.	Age at death.	Cause of death.	Death related to ante-natal causes? Yes/No.	Birth weight, lbs. oz.	Died at home or hospital.	Home conditions.	Death preventable? Yes/No.	Remarks.
1	1st day.	Prematurity.	Yes.	2 4	Home.	Good home.	No.	Good ante-natal care; twin pregnancy; 2nd twin.
2	1st day.	Prematurity.	Yes.	4 4	Home.	Good home.	No.	...
3	1st day.	Prematurity.	Yes.	2 12	Hospital.	Poor home.	No.	Good ante-natal care; ante-partum hemorrhage.
4	2nd day.	Prematurity.	Yes.	4 11	Hospital.	Good home.	No.	Good ante-natal care.
5	2nd day.	Anaphylaxis; atelectasis.	Yes.	5 14	Hospital.	Good home.	No.	Cesarean section.
6	2nd day.	Prematurity.	Yes.	1 10	Hospital.	Good home.	No.	Baby born in hospital and going to home; pink.
7	2nd day.	Prolapsed placenta; forceps delivery.	Yes.	5 8	Home.	Good home.	No.	...
8	8th day.	Prematurity.	Yes.	3 5	Hospital.	Poor home.	No.	Ante-partum hemorrhage.
9	2nd day.	Broncho-pneumonia.	Probably, Yes.	5 12	Home.	Good home.	Yes.	Premature baby; apparently healthy at birth; died from an infection; first death acquired.

**SUMMARY.**

Neo-natal deaths due to causes that might have been prevented ..... 1  
 Neo-natal deaths that were considered unpreventable ..... 8  
**TOTAL** ..... 9

**INFANT DEATHS.**  
(i.e., Deaths from one month to one year.)

No.	Age at death.	Cause of death.	Death related to ante-natal causes? Yes/No.	Birth weight, lbs. oz.	Home conditions.	Died at home or hospital.	Death preventable? Yes/No.	Remarks.
1	2nd month.	Broncho-pneumonia.	Yes.	4 0	Good.	Hospital.	No.	...
2	2nd month.	Hydrocephalus; spina bifida.	Yes.	7 3	Good.	Hospital.	No.	...
3	2nd month.	Acute broncho-pneumonia.	No.	7 8	Good.	Home.	Yes.	Sudden death; no ante-natal care; death due to natural causes.
4	2nd month.	Gastro-enteritis.	Yes.	4 15	Good.	Hospital.	No.	Twin—other child surviving.
5	4th month.	Anaphylaxis due to regurgitation of milk; due to intestinal obstruction; due to acute gastric dilation.	No.	8 0	Very poor.	Home.	Yes.	A very bad standard of living; Crocker's verdict—A case of natural causes.
6	4th month.	Acute purulent meningitis; broncho-pneumonia.	No.	7 4	Poor.	Home.	Yes.	A low standard of living; Crocker's verdict—A case of natural causes.
7	4th month.	Spina bifida.	Yes.	5 0	Fair.	Home.	No.	...
8	8th month.	Acute primary broncho-pneumonia.	No.	Not known (born in hospital).	Very poor.	Hospital.	Yes.	A very poor standard of living; Crocker's verdict—A case of natural causes.

**SUMMARY.**

Deaths which might have been prevented in all cases by a higher standard of material care ..... 4  
 Deaths considered unpreventable ..... 4  
**TOTAL** ..... 8

**TOTAL LOSS OF INFANT LIFE, 1946.**

	Preventable.	Not Preventable.	Total.
Still-births	5	6	11
Neo-natal deaths	1	8	9
Deaths 1 month to 1 year	4	4	8
<b>TOTALS</b>	<b>10</b>	<b>18</b>	<b>28</b>





**CARE OF  
PREMATURE  
INFANTS.**

The arrangements in the Borough to carry out the suggestions contained in Ministry of Health Circular 20/1944 are as follows:—

Outfits for premature babies born at home are immediately available upon the request of a medical practitioner or midwife. These outfits are kept at the District Nurses' Home and can be obtained at any time, day or night. They consist of a wicker cot, with all the necessary bedding, rubber hot-water bottles, etc., also "Belcroy" feeders, pipettes, mucus extractors, breast pump and brandy. Cotton wool wadding is supplied in place of napkins, and gamgee tissue jackets (with hoods) are supplied. Four outfits are available—more than is likely to be required at any one time, but the birth of small twins was kept in mind. Upon application to the Medical Officer of Health arrangements can be made to have premature children admitted to the Royal Manchester Children's Hospital, Pendlebury. The hospital authorities have not so far indicated willingness to enter into any arrangement to accept all such cases when required, presumably owing to shortage of accommodation.





# Prevalence and Control of Infectious Diseases.

The numerical and age incidence of infectious diseases, other than tuberculosis, is shown in the following table, which includes particulars of Darwen cases notified and accepted, cases removed to hospital, and mortality. The so-called minor infectious diseases, other than measles and whooping cough, are not included in the table, as they are not notifiable in Darwen and, therefore, statistics as to their incidence are not reliable.

Disease.	Cases Notified and Accepted.													* Total Deaths	Hospital.	
	Total Cases at all Ages.	Years.													† Total Cases removed to Hospital from di. trict	Deaths in Hospital of persons belonging to district.
		Un- der 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 and over			
Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever .....	42	...	...	3	5	9	18	7	...	...	...	...	...	...	36	...
Diphtheria, includ'g Membranous Cr'p. ....	2	...	...	...	...	...	...	1	...	...	1	...	...	...	2	...
Enteric Fever (incl'd Paratyphoid) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles (excl'd. Ger- man Measles) ....	27	1	5	2	7	...	12	...	...	...	...	...	...	...	...	...
Whooping Cough ...	14	...	1	1	5	...	7	...	...	...	...	...	...	...	...	...
Acute Pneumonia (Primary and Influenzal) .....	9	...	...	...	1	...	...	...	...	2	1	3	2	...	...	...
Puerperal Pyrexia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio- encephalitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery .....	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum .....	5	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Erysipelas .....	2	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...
Malaria— Contracted in: This Country ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abroad .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS .....	102	6	6	6	18	9	37	9	...	2	2	5	2	...	40	...

No diseases could be described as widely prevalent in 1946, and such cases as occurred were mild and recovered rapidly. Five cases of ophthalmia neonatorum were notified during the year—none was found to be due to *N. Gonorrhœae*.

The following table gives the comparative incidence of infectious diseases during the past five years:—

Disease.	1942	1943	1944	1945	1946
Scarlet Fever .....	88	148	165	54	42
Diphtheria .....	21	36	18	2	2
Enteric Fever .....	...	...	2	1	...
Measles .....	51	345	43	107	27
Whooping Cough .....	15	83	35	18	14
Pneumonia (Acute primary and Acute influenzal) ...	4	8	3	4	9
Puerperal Pyrexia .....	1	1	1	1	...
Cerebro-spinal Fever .....	1	...	2	1	...
Cerebro-spinal Meningitis.....	...	1	...	...	...
Ophthalmia Neonatorum .....	1	2	...	1	5
Erysipelas .....	1	4	1	4	2
Dysentery .....	...	...	...	...	1
TOTALS .....	183	628	270	193	102

#### **SMALLPOX.**

For the fortieth successive year, no case of smallpox occurred. The vaccination rate, though still very low, was slightly higher than in previous years, 55 babies being vaccinated, i.e., 11% of the 495 infants born during the year. No doubt the 40 years' immunity that Darwen has enjoyed contributes to this apathetic attitude.

#### **DIPHTHERIA IMMUNISATION.**

Three hundred and three—243 pre-school and 60 school, children—were immunised by the Medical Officer of Health during the year. The immunisation clinic was held weekly on Monday afternoons.

The material used for immunisation is A.P.T. of which two injections (0.2 c.c. and 0.5 c.c.) are given at intervals of four weeks.

In addition to the immunisation carried out at the Health Centre, a scheme exists in the Borough, whereby parents may have their children immunised by the family doctor, the Corporation paying the doctor for this service, when necessary. All immunisations carried out by private practitioners are requested to be notified to the Public Health Department, but this is not always done. It is apparent, nevertheless, that general practitioners are doing a good deal of immunisation themselves.

#### **TUBERCULOSIS.**

The Tuberculosis Scheme is administered by the Lancashire County Council, but the Area Tuberculosis Officer and Nurse maintain close co-operation with the Public Health Department, furnishing particulars about housing conditions, and environment generally. The necessary disinfection is carried out by the Public Health Department.

There is no evidence of excessive incidence or mortality from Tuberculosis in any particular occupation in Darwen.



The following table shows the age group incidence of new cases of tuberculosis notified, and the deaths from the disease, during 1946:—

Age Periods.	NEW CASES.				DEATHS.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years.								
0—1 .....	...	...	...	...	...	...	...	...
1—5 .....	...	...	...	...	...	...	1	...
5—10 .....	...	...	2	...	...	...	...	...
10—15 .....	...	...	1	...	...	...	...	...
15—20 .....	1	...	...	1	...	...	...	...
20—25 .....	...	2	...	1	...	1	...	...
25—35 .....	2	2	...	...	1	...	...	...
35—45 .....	2	2	...	...	...	1	...	...
45—55 .....	2	1	...	...	1	2	2	...
55—65 .....	...	...	...	...	...	...	...	1
65 and upwards...	...	...	...	...	1	...	...	...
TOTALS .....	7	7	3	2	3	4	3	1
	14		5		7		4	

#### SCABIES.

During the year, 224 persons received 306 treatments.

#### BULL HILL HOSPITAL.

There was no change in the arrangements by which cases of infectious disease are admitted from outside districts. Agreements with Turton Urban District Council, and the Accrington and District Joint Hospitals Board provide for the admission of cases of infectious disease, and these Authorities agree to pay minimum sums of £50 and £80 per annum respectively.

Bull Hill Hospital was opened for the reception of infectious diseases in 1889. For 57 years, it has filled a useful function in the prevention and treatment of infectious diseases, but the time has now come to consider whether it is any longer advisable to keep the hospital open, especially since the hospital was adversely commented upon in the Hospital Survey of the Ministry of Health in 1943. Infectious diseases generally have shown a pretty steady decline in recent years and, consequently, the demand for hospital accommodation has decreased. There is another reason, however, why the hospital is less used than formerly, namely, that new methods of treatment of certain diseases have made it much simpler to treat patients in their own homes—pneumonia, erysipelas, and the milder forms of puerperal pyrexia are good examples of these. The average number of patients in Bull Hill Hospital during 1946 was three, in 1945, five, and in 1944, six. However small the number of patients at any given time, a minimum number of nurses MUST be employed in a hospital which is open to receive cases of acute infectious disease. In the case of Bull Hill Hospital, the minimum number of nurses is seven, of whom at least two, exclusive of Matron, should be fully trained fever nurses, so that the hospital is not at any time left without a trained nurse on the premises. I have to point out that these conditions regarding trained staff have never been fulfilled at Bull Hill Hospital since October, 1943. It thus follows that there have been times when no trained nurse has been in the hospital at all—for instance, when either Matron or Sister has been on holiday and the other has been out. This state of affairs could probably be justified during the war when there were many trained nurses in H.M. Forces,



**BULL HILL  
HOSPITAL  
(continued).**

but the war has now been over for more than two years, and though the position regarding nurses, trained and otherwise, appears to have got steadily worse, it does not seem to justify the maintenance of a hospital with nursing staff inadequate both as to numbers and training.

This was well demonstrated at a recent time, when for a short period, there were, including Matron, only three nurses available in the hospital for day and night duty and to cover each others' off-duty periods. It was obviously impossible to carry on in these circumstances and during this "crisis" the patients had to be hurriedly transferred home, or to other hospitals, and admissions stopped temporarily. The position has since been somewhat eased by the employment of two part-time nurses, but in my opinion, part-time nurses have little place in the acute infectious diseases hospital, and in any case, are usually not available when most needed, e.g., for night duty, and evening and week-end duty. Taken all in all, the nursing position at Bull Hill Hospital is bad, and has been bad for a long time. In June, 1947, the Health Committee considered the advisability of closing the Hospital, the County Medical Officer having informed me that it would satisfy the requirements of the hospital arrangements made under Section 63 of the Local Government Act, 1929, if the hospital were retained merely on a care and maintenance basis. The Committee decided not to close the hospital, but appointed a sub-committee of six members to meet when necessary, and having power to close the hospital should further circumstances demand it.

Although Matron and the present staff make every effort to give adequate nursing attention (Matron in particular, works very long hours and often goes many days without ever being really off duty) there is another, and not purely local, aspect of the question to consider. Assuming that in all, seven full-time nurses (the estimated minimum number) were always on the staff of the hospital, is it fair to utilise their services in a hospital where the average number of patients per day is only three? At a time when nurses are so scarce throughout the country, it appears to me that it would be wiser not to do so. A better contribution to the national effort could be made by releasing these nurses for work in a hospital where their services could be more extensively utilised.

Another aspect of the question of running Bull Hill Hospital—not purely a medical matter—but a very cogent one, nevertheless, is its cost. During the financial year 1945-46 the cost per patient per day was £3 13s. 6d., and the net cost of the hospital to the Corporation, after allowing for grants from the Ministry of Health and the County Council, income from other authorities, etc., was £5,600, which is equivalent to a sevenpenny rate—and hospital maintenance costs are still rising! It is difficult to see how this can be justified, considering the very limited use that is being made of the hospital.

No discussion on the closure of Bull Hill Hospital would be complete without making reference to the treatment of Darwen infectious disease cases if the hospital should close. It is becoming evident that the day of the small fever hospital is over, and local authorities owning these are having increasing difficulty in running them. There is, therefore, little expectation of receiving much help from other authorities in the neighbourhood of Darwen and although the Medical Officers of Health of both Bolton and Blackburn gave most courteous and helpful assistance during Darwen's recent period of extreme difficulty, it appears that it is impossible for either of these authorities to enter into any formal commitments regarding acceptance of cases of infectious disease from outside.

Although the Health Committee of Darwen did not close Bull Hill Hospital, it was decided that it would be necessary to make additional provision for treatment of cases of infectious diseases elsewhere, in case the hospital had to be closed in the future. A formal agreement is to be entered into with the City of Manchester for the reception of cases of infectious disease from Darwen into Monsall Hospital. This is a wise course to take,



**BULL HILL  
HOSPITAL  
(continued).**

having regard both to local difficulties and to regional policy, as Darwen is in the Manchester area of the regional hospital administration recently set up under the National Health Service Act, 1946. It will be interesting to see what is the fate of Bull Hill

Hospital under the management of the Regional Hospitals Board considering the adverse comment made about it in the Report of the Hospitals Survey of 1943, the difficulties that have been encountered in staffing, the high cost, and the relatively small use that has been made of the hospital's accommodation in recent years.

The following table gives particulars of cases admitted from Darwen and from other authorities:—

Disease.	No. of Cases in at 31/12/45	No. of Cases.		Mortality	No. of Cases Remaining in at 31/12/46
		Admitted.	Discharged		
<b>Darwen.</b>					
Scarlet Fever .....	4	34	38	...	...
Diphtheria .....	...	2	2	...	...
Erysipelas .....	...	1	1	...	...
Puerperal sepsis .....	...	1	1	...	...
Ophthalmia Neonatorum....	...	1	1	...	...
Meningitis .....	...	2	2	...	...
Meningococcal septicæmia.	...	1	1	1	...
Miscellaneous .....	...	9	8	...	1
<b>Blackburn R.D.C.</b>					
Scarlet Fever .....	...	11	10	...	1
Miscellaneous .....	...	1	1	...	...
<b>Church U.D.C.</b>					
Diphtheria .....	...	1	1	1	...
Puerperal sepsis .....	...	1	1	...	...
<b>Clitheroe Borough.</b>					
Diphtheria .....	...	1	1	...	...
<b>Clitheroe R.D.C.</b>					
Scarlet Fever .....	1	4	4	...	1
Meningitis .....	...	1	1	...	...
<b>Oswaldtwistle.</b>					
Diphtheria .....	1	...	1	...	...
Cerebro-spinal meningitis..	1	...	1	...	...
Pneumonia .....	...	1	1	...	...
Meningitis .....	...	1	1	1	...
Observation case .....	...	1	1	...	...
<b>Turton U.D.C.</b>					
Scarlet Fever .....	1	3	4	...	...
Diphtheria .....	...	1	1	...	...
Erysipelas .....	...	1	1	...	...
<b>TOTALS</b> .....	8	79	84	3	3

## PART II.

Sanitary Circumstances of the Area  
(including Public Cleansing)  
Housing, and  
Inspection and Supervision of Food

BY

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SENIOR SANITARY INSPECTOR AND  
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# Sanitary Circumstances of the Area.

## WATER.

**Reservoirs.**—Water is supplied on the constant system from the following reservoirs: Sunnyhurst Hey, Earnsdale and Bull Hill, of which the first two are open, and the last, closed. All the water is from moorland gathering grounds. Water in the Bull Hill Reservoir is supplied from Bolton.

**Purification.**—All water is sandfiltered and chlorinated.

**Supply.**—The approximate number of dwelling houses supplied direct is 10,285.

There is no supply by standpipe, and there is no possibility of contamination in the vicinity of dwelling houses.

## SAMPLING.

**Chemical.**—Seven samples of water were submitted for analysis during the year. All were from public supplies and all were satisfactorily reported upon.

**Bacteriological.**—Sixteen samples of drinking water were submitted for bacteriological examination, twelve from public supplies and four from private supplies. Of the first group all were satisfactory.

Of the private supplies, two samples contained excessive numbers of coliform bacilli, the other two were satisfactory.

Sources of doubtful or unsatisfactory water are kept under observation.

## SEWERAGE, DRAINAGE AND CLOSET ACCOMMODA- TION.

The table below gives the closet accommodation in the Borough.

Pails .....	148
Water Closets .....	9915
Waste Water Closets .....	1970
Cesspools .....	1
<b>TOTAL</b> .....	<b>12034</b>

### Conversions and Installations during 1946—

New Water Closets fixed .....	34
Premises with one New Closet fixed .....	25
Premises with more than one New Closet fixed....	2
Waste Water Closets converted to Water Closets.	49
Latrine Closets converted to Water Closets .....	37
Pail Closets converted to Water Closets .....	1
Baths installed during the year .....	48
Urinals installed during the year .....	1



Routine testing, inspection, repair and renewal of existing drains and sewers continued within the limits of availability of staff, material and labour.

It is hoped that closet conversions, on an increasing scale as labour and materials become available, will result in the total abolition of the 1,970 waste water closets.

During the year a new detritus tank was installed at the Sewage Works at Hoddlesden.

## RIVERS AND STREAMS.

The chief sources of pollution are mainly industrial wastes from factories lying on the riverside, plus a certain small amount of material dumped by children and careless householders.

Periodical inspection and pretreatment of effluents from factories where possible, were carried out.

## SANITARY INSPECTION OF THE AREA.

Number of houses visited .....	1935
Number of houses visited (Housing Consolidated Regulations, 1925) .....	0
Number of inspections of Schools .....	98
Number of inspections of Factories and Workplaces .....	240
Number of inspections of Municipal Hostel .....	52
Number of inspections of Bakehouses .....	15
Number of inspections of Dairies and Cowsheds .....	62
Number of inspections of Refuse Tips .....	86
Complaints received and investigated .....	391
Number of re-inspections made .....	1009
Visits paid to houses (re cases of Infectious Diseases) .....	54
Number of rooms disinfected .....	110
Number of articles disinfected .....	715
Number of smoke observations taken .....	0
Number of drains, etc., tested .....	245
Total number of defects discovered .....	1631
Informal notices served .....	1631
Statutory notices served .....	9
Number of nuisances abated, including outstanding nuisances from previous year .....	698

## LIST OF NUISANCES DISCOVERED.

Defective drains .....	132
Choked sewers .....	0
Defective soilpipes and water closets .....	51
Defective downspouts, easing troughs, roofs and external walls .....	363
Defective plastering .....	276
Dirty houses and premises .....	46
Dangerous buildings .....	16
Dirty and dilapidated closets .....	36
Accumulations of refuse .....	48
Defective or uneven gullies .....	49
Insanitary sinks .....	20

Defective fire ranges .....	19
Broken slop-pipes .....	17
Choked waste water closets .....	74
Defective tipplers of waste water closets .....	30
Choked water closets .....	42
Insanitary yards .....	7
Defective internal floors .....	27
Insufficient ventilation .....	36
Burst water pipes .....	33
Defective wash boilers .....	8
Miscellaneous nuisances .....	319

#### **SHOPS.**

Routine inspections are made and special inspections as occasion requires, but shortage of staff has limited visitation far below the level considered necessary.

#### **SMOKE ABATEMENT.**

No official smoke observations were taken during the year, but advice and instruction to stokers on firing and use of fuel, to secure as far as possible the prevention of black or heavy smoking, were given.

#### **DISINFESTATION.**

During the year 17 houses were found to be infested with bedbugs and/or vermin, and of these 16 had been disinfested by the end of the year, gaseous fumigation and spraying being the methods employed.

#### **SCHOOLS.**

Arrangements are now nearing completion for the conversion of the latrine closets at Schools and it is hoped that by the end of 1947 they will all have been converted.

#### **OFFENSIVE TRADES.**

The following are established in the district:—two tripe boilers, one fat extractor, and one fat melter.

#### **MUNICIPAL HOSTEL.**

This is the only common lodging house in the town and is municipally owned and managed. The average daily number of lodgers for the year was:—Males 8.71. Females 8.44.

#### **FACTORIES.**

Two hundred and forty routine and special visits were paid to factories with and without mechanical power during the year for purposes of the provisions as to health. Defects found (chiefly in connection with sanitary conveniences) were notified to occupiers and by the end of the year were either completed or in hand. Shortage of staff and pressure of other work reduced routine visiting far below the level considered necessary.

As previously, the fullest co-operation was maintained between the Department and H.M. Inspector of Factories.



**CHIEF  
SANITARY  
REQUIREMENTS  
OF THE  
DISTRICT.**

The chief sanitary requirements of the district are:—

- A further reduction in the number of private water supplies;
- The conversion of pail and waste water closets;
- The conversion of latrine closets at schools and factories;
- The paving of back streets and unmade roads;
- The paving, culverting and embanking of the river;
- The clearance of derelict and neglected sites where buildings have been wholly or partially demolished.

**PUBLIC CLEANSING.**

The whole of this important sanitary service is under the control of the Public Health Department. It comprises the collection and disposal of household and trade refuse and the cleansing of streets.

**VEHICLES.**

The refuse collection and disposal service is now completely mechanised, the new tractor-drawn trailer tank for night-soil collection being now in use for one day per week.

**SNOW  
REMOVAL AND  
DEFROSTING  
OF ROADS.**

The department is now wholly responsible for the above. Main and secondary roads, bus routes, and factory approach roads are priorities for treatment.

Two Bunce Snowploughs and four gritters are kept at the Cleansing Depot for use as required. The department keeps at the Transport Depot a Heavy Duty V-shape Snowplough for attachment to the front of a single decker bus for use for deep snow on bus and tram routes. The fullest co-operation is maintained between both departments.

**REFUSE  
DISPOSAL.**

The system of controlled tipping continues to prove very successful. The Corporation-owned Bull Hill Tip is the only one now in use. It is situated near the Southern boundary of the Borough which makes the length of haul from the Northern half somewhat excessive. It is hoped to find a suitable tip-site nearer the centre of the town in order to lessen this.

**SALVAGE.**

The pre-separation of salvable material from household refuse is still conscientiously carried out by the bulk of householders.

The following is a summary of the materials sold during the year—

	Tons.	Cwts.
Clean Waste Papers .....	195	15½
Ferrous Metals—Baled Tins .....	93	½
„ „ Unflattened Tins .....	0	0
„ „ Black Scrap .....	14	12½
Non-Ferrous Metals .....	2	3½
Textiles—Rags, Carpets .....	15	17
„ Boots and Shoes .....	1	19½
Rubber .....	0	0
Waste Foods—Pigswill (after boiling).....	249	10
„ „ Household Bones .....	0	8½
Bottles and Jars .....	3	10½
<b>TOTAL</b> .....	<b>576</b>	<b>17½</b>

The total value of the salvaged materials sold was £1,953 15s. 0d.

#### SUMMARY.

The following is a summary of the work done during 1946. It should be noted that the weights given below are estimated.

	Tons.	Cwts.	Qrs.
House Refuse to Tip (3,982 loads) .....	5838	18	0
Market and Trade Refuse to Tip (227 loads)...	336	12	0
Receptacles Emptied (House Refuse) .....	434093		
Receptacles Emptied (Trade Refuse) .....	18457		
Excreta .....	148	Loads	
Excreta Pails Emptied .....	5505		
Sludge from Street Gullies .....	300	Loads	
Street Gullies Emptied .....	15754		
Sweepings: Bins from Street Orderly Trucks ...	9581		
Salt Distributed on Streets .....	75	Tons	
Grit Distributed on Streets .....	66	Tons	
Length of Streets Salted or Gritted .....	442	Miles	
Dust Bins added during the year .....	28		
Number of Portable Refuse Receptacles .....	11900		



# HOUSING.

The table below gives particulars of action taken specifically under the provisions of the Housing Acts in contradistinction to action under the Public Health Acts.

## STATISTICS.

Number of new houses erected during the year—

(a) Total (including numbers given separately under (b) .....	20
(i) By the local authority .....	20
(ii) By other local authorities .....	0
(iii) By other bodies or persons .....	0
(b) With State assistance under the Housing Acts—	
(i) By the local authority (included under (a) (i) above) .....	20
(ii) By other bodies (included under (a) (iii) above) .....	0

1. Inspection of dwelling-houses during the year—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .....	33
(b) Number of inspections made for the purpose...	75
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations 1925 to 1932 .....	0
(b) Number of inspections made for the purpose ...	0
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .....	0
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .....	33

2. Remedy of defects during the year without service of formal notices—

Number of defective dwelling-houses rendered fit in consequence of informal action by the local authority or their officers .....	7
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**STATISTICS**  
(continued).

3. Action under statutory powers during the year—

(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs .....	4
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) By owners .....	1
(b) By local authority in default of owners .....	2

(b) Proceedings under Public Health Acts—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .....	5
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By owners .....	4
(b) By local authority in default of owners .....	0

(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936—

(1) Number of dwelling-houses in respect of which Demolition Orders were made .....	0
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders .....	0

(d) Proceedings under Section 12 of the Housing Act, 1936—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made .....	0
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit .....	0



**STATISTICS**  
(continued).

4. Housing Act, 1936.—Part IV.—Overcrowding—

(a) (i) Number of dwellings overcrowded at the end of the year .....	0
(ii) Number of families dwelling therein .....	0
(iii) Number of persons dwelling therein .....	0
(b) Number of new cases of overcrowding reported during the year .....	0
(c) (i) Number of cases of overcrowding relieved during the year .....	0
(ii) Number of persons concerned in such cases.....	0

**OVERCROWDING.**

There are no cases of gross overcrowding known to the Department. Instances are frequent however, where, in houses in which the number of occupants is well below "the permitted number," the distribution of the sexes for sleeping purposes is attended with great inconvenience and difficulty, *e.g.*, in a four-roomed house (two living and two bedrooms) having a "permitted number" of 6 to 7½ persons, occupied by husband and wife with a son and a daughter each over ten years of age—a total of 4 persons. To overcome the difficulty (*e.g.*, by using a living room as a bedroom) is, in most cases, to increase the inconvenience. Most people so situated are anxious to obtain houses with three bedrooms. This again might increase the number of new houses required after the war, especially if the law on the point is revised, as it is generally agreed it should be.

**GENERAL  
OBSERVATIONS.**

The chief difficulties in action under Public Health and Housing have been the inescapable difficulties of shortage of labour, and inadequacy or inferiority of materials, and the position has shown little sign of improvement.

# Inspection and Supervision of Food.

## MILK SUPPLY.

There were 60 dairy farms on the register during the year, having a cattle population of approximately 800. Sixty-two visits of inspection were made.

## SAMPLING.

**Biological.**—Thirteen samples of milk were submitted for guinea pig inoculation. All proved negative.

**Bacteriological.**—Sixty samples were examined during the year, of which forty-four were satisfactory and sixteen unsatisfactory. The unsatisfactory samples were mainly of pasteurised milks failing to comply with one or other of the prescribed tests. Steps were taken to ascertain and remedy the cause but consistently good results are not yet being obtained. Further action is being considered.

**Chemical Analysis of Milk.**—See tables on pages 41 and 42.

## MEAT AND OTHER FOODS.

The Public Abattoir was closed in June, 1942, in pursuance of a Ministry of Food Scheme for further centralising slaughtering.

Butchers' and other food shops, stalls and vehicles, and premises used for the preparation of human food are regularly inspected, but shortage of staff reduces inspection below the level considered necessary.

The amount of food examined, certified unfit, and either destroyed or utilised after sterilisation for animal feeding stuffs, was as shown in the table on page 42.

No legal proceedings were necessary in respect of unsound food during the year.

There were no cases, or suspected cases, of food poisoning during the year.

## ICE CREAM.

Ten samples of Ice Cream were also submitted for bacteriological examination. Of these, nine were regarded as satisfactory and one as unsatisfactory.

## FOOD AND DRUGS SAMPLING.

The Local Authority by direction of the Minister is the Food and Drugs Authority for the Borough.

Close co-operation is maintained with the Public Analyst whose advice and help are always available and much valued.

The quality of the food sold in the district is generally good.

### SAMPLES REPORTED GENUINE.

No. of Samples.	Description.	Formal.	Informal.
58	Milk.	58	—



### SAMPLES REPORTED NOT GENUINE.

Cons. No.	No. of Samples.	Description.	Formal.	Informal.	Result.	Action taken.
1	1	Milk.	x	—	Deficient 20% milk solids other than fat. Contained not less than 15% extraneous water.	Vendors prosecuted. One defendant fined £5/-/- Two defendants fined £1/-/- each. Costs £6/6/-.
2	1	Cake flour.	—	x	Total Carbon Dioxide 0.18%.	Suggested return to manufacturers.

**TABLE SHOWING AMOUNT AND NATURE OF FOOD  
CONDEMNED DURING 1946.**

Amount.	Nature of Food.	Amount.	Nature of Food.	Amount. cwts. lbs.	Nature of Food.
2363 tins	Canned Meats and Meals.	732 tins	Tomato Paste.	6 108	Bread.
		47 tins	Beans in Tomato.	3 14	Fish.
206 tins	Soups.	382 tins	Pudding.	1 68	Sultanas.
783 tins	Fruit.	1 tin	Jam.	1 12	Raisins.
536 tins	Milk.	5 tins	Marmalade.	80	Beef.
422 tins	Vegetables.	5 tins	Treacle.	56	Stone Dates.
17 tins	Luncheon Meat.	605 tins	Pickles.	50	Barley.
84 tins	Fish.	123 pkts.	Cake Flour.	28	Mincemeat.
432 tins	Fish Paste.	60 pkts.	Dessert Mould.	8	Black Pudding.
1264 tins	Tomatoes.			5	Cheese.

### **RATS AND MICE DESTRUCTION.**

Investigation and disinfection proceeded steadily throughout the year, and it has become increasingly obvious that the initial survey and co-ordinated treatments, and especially the comprehensive and radical treatment of the sewers, have reduced to a very low level the degree of infestation in the town. This has been maintained now for two years, and it is expected that regular resurvey, sewer maintenance treatment and block control, will keep it there.

The following table gives a summary of the work done throughout the year—

No. of premises inspected.	No. of premises found infested.	No. of treatments carried out.	Estimated kill of rats.	Cumulative total of rats killed since inception of service.
	Killed prior to January, 1946,			
100	24	19	390	9057 9447



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