

[Report 1937] / Medical Officer of Health, Darwen Borough.

Contributors

Darwen (England). Borough Council.

Publication/Creation

1937

Persistent URL

<https://wellcomecollection.org/works/dm5tqdkx>

License and attribution

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

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

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



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



BOROUGH OF DARWEN




ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE
YEAR ENDING DECEMBER 31st 1937.

G. McCLOSKEY, M.B., B.Ch., B.A.O., D.P.H.,

MEDICAL OFFICER OF HEALTH AND
SCHOOL MEDICAL OFFICER







Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29152148>

BOROUGH OF DARWEN.



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

YEAR ENDING DECEMBER 31st, 1937.

G. McCLOSKEY,

M.B., B.Ch., B.A.O., D.P.H.,

MEDICAL OFFICER OF HEALTH
and SCHOOL MEDICAL OFFICER

DARWEN :

PRINTED AT THE " NEWS " OFFICE.

MCMXXXVIII.



HEALTH DEPARTMENT,

DARWEN,

June, 1938.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

LADIES AND GENTLEMEN,

I have pleasure in presenting to you the ANNUAL REPORT on the work of the Health Department.

The following were the features of interest during the year:—

VITAL STATISTICS.

Compared with the average of the previous five years, 1932-1936 inclusive, it is found that there were slight increases in the birth-rate, the death-rate from all causes and the death-rates from cancer and tuberculosis of the respiratory system in particular; there was a decrease in the maternal mortality rate—still excessive however—and in the Infant Mortality Rate—which is very satisfactory and less than the national rate.

MIDWIVES' ACT, 1936.

Considerable delay, due to protracted negotiations, has been experienced in carrying the provisions of this Act into force. Agreement has now been reached, and it is hoped to have the scheme in operation shortly.

NEW HEALTH CENTRE.

This was also the subject of much discussion, and eventually a new plan was evolved for a two-storied building to incorporate School Clinics, Health Clinics and Health Offices.

APPOINTMENT OF ADDITIONAL NURSE.

The necessity for this appointment is becoming more apparent, due to increased clinic activities during the year, which saw the establishment of a routine Ante-Natal Clinic, conducted by the Medical Officer of Health, and a Specialist Ante-Natal Clinic, conducted by the Obstetric Consultant (Dr. Potter), whose services became available from 1st October, 1937. Further, the volume of work at the Infant Clinics increased considerably, while the Dental Clinic for Mothers, which came into operation on 1st April, 1938, is throwing fresh burdens on the present staff.

SOCIAL CONDITIONS.

There was little or no improvement in economic circumstances during the year. Continued emigration resulted in a further considerable reduction of the population to 32,280, and a plethora of empty houses. That the work of the Health Department showed a considerable increase during the year in spite of the factors mentioned, is not paradoxical but eminently logical. The greater the economic distress, the more the health of the community is at risk, and that the people are availing themselves of the local health services to an increasing extent is a matter for great satisfaction.

I have pleasure in recording my appreciation of the courtesy and consideration shown by the Chairman and Members of the Health Committee to recommendations made for the maintenance and development of public health work in the Borough. I wish to acknowledge my indebtedness to Dr. Potter, the Nursing Staff, the Sanitary Inspectors and other members of the staff for their co-operation and service. In the preparation of this report, tribute must be paid to the valuable assistance rendered by Mr. J. C. Almond, Chief Sanitary Inspector. In conclusion, I must refer to the unstinted help afforded to me in my first year of office by Mr. Byers, Town Clerk, and the heads of the other departments.

I am, Ladies and Gentlemen,

Your obedient Servant,

MEDICAL OFFICER OF HEALTH.

Members of the Health Committee

1937-38.

COUNCILLOR MRS. ALYS HINDLE, J P., MAYOR.

Chairman :

* COUNCILLOR DR. T. J. COSTELLO.

Vice-Chairman :

* COUNCILLOR E. L. CARUS.

ALDERMAN F. C. DUCKWORTH.	COUNCILLOR *J. HARWOOD.
„ H. D. HOLLAND	„ *R. W. HILL.
„ *W. KNOWLES, J.P.	„ *MRS. A. HINDLE, J.P.
„ *R. MARSDEN, J P.	„ A. HOLDEN J.P.,
„ G. PICKUP, J P,	„ F. E. LIGHTOLLER, J.P.
„ *W. WORTH, J.P.	„ *J. D. W. SHAW, J.P.
COUNCILLOR J. BRAITHWAITE.	„ R. SHORROCK.
„ J. A. BROOKS	„ *MRS. B. THOMPSON, J P.
„ J. T. CLARK, J.P.	„ *G. E. WEBSTER.
„ R. ECCLES.	„ E. WESTWELL.
„ J. GREGORY.	„ E. YATES.

* MEMBER OF HEALTH SUB-COMMITTEE.

CHARLES COUTTS BYERS, Town Clerk

Staff of the Health Department.

MEDICAL OFFICER OF HEALTH	} G. McCLOSKEY, M.B, B.Ch., B.A.O. D.P.H.
SCHOOL MEDICAL OFFICER	
MEDICAL OFFICER OF INFECTIOUS DISEASES HOSPITAL	
SENIOR SANITARY INSPECTOR {	} J. C. ALMOND, M.R.S.I., M.S.I.A.
MEAT INSPECTOR	
SANITARY INSPECTORS..... {	} ... (North Division)—F. LITTLECOTT, A.R.S.I., M.S.I.A. (South Division)—T. W. MARSDEN, A.R.S.I., M.S.I.A.
VETERINARY OFFICER	
MATRON, INFECTIOUS DISEASES HOSPITAL...	MISS E. ANTHONY, A.R.R.C., S.R.N., S.C.M.
CONSULTANT OBSTETRICIAN	G. L. POTTER, M.D., M.R.C.S., M.C.O.G.
HEALTH VISITORS AND	} ... MRS. H. H. SHAWCROSS, CERTIFIED MIDWIFE. MISS D. M. JOHNSON, CERT. MIDWIFE, A.R.S.I., CHILD PROTECTION VISITORS... { CERT. H.V. AND S.N.
INSPECTOR OF MIDWIVES	
SCHOOL DENTIST (PART TIME)	R. V. CLARKE, L.R.C.S., L.R.C.P., L.D.S.
SCHOOL NURSE.....	MISS M. CRAINE, S.R.N., S.C.M., H.V. (R.SAN.INST.)
CLERKS... ..	W. HAWORTH, H. HUTCHINSON, J. BAMFORD.

Clinics and Treatment Centres.

NAME OF CLINIC OR CENTRE	ADDRESS	DAYS AND TIMES.	BY WHOM PROVIDED
Maternity and Child Welfare	43, Bolton Road	Toddlers' Clinic -- Daily 9—10 a.m. Consultative Clinic— Daily 9—10 a.m. and 4-30—5-30 p.m. (Saturdays--Mornings only). Routine Ante-Natal Clinic— Thursday at 10 a.m. Specialist Ante-Natal Clinic— Alternate Tuesdays at 10 a.m.	Darwen Corporation
do	Greenfield	Infant Clinics-- Tues. 2-30—5 p.m. Thurs. 2-30—5 p.m.	do.
do.	"Holker House," Railway Road	Dental Clinic— Alternate Fridays at 2 p.m.	do.
Orthopædic Clinic	43, Bolton Road	Wednesday, 10 a.m.	As per Lancs. C.C. Scheme
Tuberculosis Dispensary	20, Railway Road	Monday, 10 a.m.	Lancs. County Council
V.D. Clinic	Blackburn Royal Infirmary	Males :— Tuesday 5 p.m. Friday 7-30 p.m. Females :— Monday 5-30 p.m. Thursday 6 p.m.	As per Lancs. C.C. Scheme

SECTION I.

STATISTICS AND SOCIAL
CONDITIONS
OF THE AREA.

Statistics and Social Conditions.

Position	Lat. 53° 41' 25" N, Lon. 2° 28' 32" W.
Elevation above sea level	500 ft. to over 800 ft.
Geographical formation	Boulder clay and sand over coal measures.
Area (Acres)	5,959
Population—Census, 1931	36,012
Population—Registrar-General's Mid-yearly Estimate for 1937	32,280
Number of inhabited houses—Census, 1931	10,258
Number of inhabited houses at end of 1937	10,407
Number of families or separate occupiers at Census, 1931	10,385
Rateable Value	£186,635
Sum represented by a Penny Rate	£699

The inhabitants are of the artisan or working class, chiefly, and the principal industries are cotton weaving, paper making and staining, fireclay works and paint manufacturing.

The average percentage of unemployed insured adult persons during 1937 was 22 out of a total of 13,651. There were 1968 insured juveniles and the percentage of unemployed was 7.9.

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1937.

	Total.	Males.	Females.	Birth Rate.
LIVE BIRTHS—Legitimate	349	152	197	11.3
Illegitimate	16	6	10	
	<u>365</u>	<u>158</u>	<u>207</u>	
	Total.	Males.	Females.	Rate per 1000 Births
STILL BIRTHS	12	7	5	31
DEATHS	540	261	279	16.7

DEATHS FROM PUERPERAL CAUSES.

	Deaths.	Rate per 1000 Total Births.
From Puerperal Sepsis	0	0
From other Puerperal Causes	3	7.95
Total	<u>3</u>	<u>7.95</u>

DEATH RATES OF INFANTS UNDER ONE YEAR OF AGE.

All infants per 1,000 live births	20	(Rate 54)
Legitimate infants per 1,000 legitimate live births	19	(Rate 54)
Illegitimate infants per 1,000 illegitimate live births	1	(Rate 62)
Deaths from Measles (all ages)	1	(Rate 0.03)
„ „ Whooping Cough (all ages)	0	(Rate 0.00)
„ „ Diarrhoea (under 2 years of age)	0	(Rate 0.00)
„ „ Cancer (all ages)	74	(Rate 2.29)

Vital Statistics.

POPULATION.

The population of Darwen as enumerated at the Census in 1931 was 36,012, while the Registrar-General's estimate at mid-year 1937 is 32,280, a decrease of 780 from the previous year. The continuance of the decline may be chiefly attributed to migration as a result of persistent economic difficulties. This decrease is most marked in the North-East, South-East and North-West Wards as shown in following table—

POPULATION IN WARDS.

Wards.	Census, 1931.	Estimated, 1937.
Central	5,754	5,264
West-Central	2,991	2,896
North-East	8,312	7,515
North-West	6,554	5,791
South-East	6,779	5,710
South-West	5,622	5,104
	<u>36,012</u>	<u>32,280</u>

BIRTHS.

The number of births registered was 365, giving a birth rate of 11.3 per 1,000. The trend of this rate for the past ten years in comparison with the rate for England and Wales is shown in the following table—

Year	DARWEN				England and Wales
	No. of Births Male	Female	Total	Rate per 1000	Rate per 1000
1928	242	218	460	12.05	16.7
1929	250	239	489	12.94	16.3
1930	250	188	438	11.83	16.3
1931	191	222	413	11.33	15.8
1932	210	188	398	11.18	15.3
1933	171	188	359	10.29	14.4
1934	178	199	377	11.02	14.8
1935	199	172	371	11.01	14.7
1936	189	165	354	10.71	14.8
1937	158	207	365	11.30	14.9

The gradual decrease in the Darwen birth rate which has occurred during the last decade would appear to be arrested and, apart from the increased birth rate noted during 1937, there was an increase in the actual number of births. The rate is, however, still considerably below the national birth rate.

The increase was most marked in the case of female births.

DEATHS.

(a) GENERAL DEATH RATE.

The number of deaths of Darwen residents which occurred during the year 1937 after allowing for inward and outward transfers was 540, representing a death rate of 16.7 per 1,000.

(b) DEATH RATE IN WARDS.

The death rates in the various Wards for the past ten years are shown in the following table—

Year	C.	W.C.	N.E	N.W.	S.E.	S W.	Borough.
1927	16.19	22.51	15.23	12.26	12.73	14.89	15.01
1928	13.34	11.10	13.39	14.17	12.29	11.93	12.89
1929	15.42	15.34	16.71	12.68	15.86	11.55	14.68
1930	14.25	12.35	10.91	14.15	13.13	12.47	12.81
1931	16.16	11.93	13.56	16.22	16.29	18.57	15.59
1932	14.48	15.03	13.76	15.03	15.88	15.63	14.89
1933	15.48	12.78	13.05	16.31	12.65	15.96	14.39
1934	12.02	12.06	13.32	17.12	13.73	11.84	13.51
1935	18.76	10.92	16.32	15.90	13.44	13.90	15.26
1936	15.39	17.20	12.99	15.34	17.78	15.31	15.39
1937	18.43	13.81	16.63	16.58	15.59	18.23	16.73

(c) COMPARISON WITH THE NATIONAL DEATH RATE.

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

Year	DARWEN		England and Wales
	Total Deaths	Rate per 1000	Rate per 1000
1928	492	12.89	11.7
1929	555	14.68	13.4
1930	474	12.81	11.4
1931	568	15.59	12.3
1932	530	14.89	12.0
1933	502	14.39	12.3
1934	462	13.51	11.8
1935	514	15.26	11.7
1936	509	15.39	12.1
1937	540	16.73	12.4

The death rate has been calculated upon a population of 32,280 as estimated by the Registrar-General for mid-year 1937. The death rate however, in any community is determined to some extent by the age and sex distribution of the population. To equalise returns for accurate comparison

with other areas the crude death rate has to be multiplied by a factor supplied by the Registrar-General. This factor for Darwen is 1.02 which gives a Corrected Death Rate of 17.06.

(d) DEATHS IN RELATION TO SEX.

The number of deaths of males was 261 and of females 279.

(e) DEATHS IN RELATION TO AGE.

The percentage of deaths in the various age groups for the past ten years is shown in the table below—

	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Under 1 year	20	26	18	17	25	19	34	31	42	31
1—5 years	4	12	14	4	14	12	15	12	14	14
5—25 years	23	13	22	16	25	24	23	27	22	21
25—65 years	218	176	195	186	191	212	221	186	236	233
Over 65 years	275	282	265	239	247	263	275	218	241	193
Total	540	509	514	462	502	530	568	474	555	492

The percentage of deaths over 65 years has gradually increased showing that people are surviving longer.

(f) INFANTILE DEATHS.

The number of deaths of infants under twelve months of age was 20, representing a rate of 54 per 1,000 births. How this rate has improved since the institution of the Child Welfare movement at the beginning of the present century is illustrated by the table below—

DEATHS OF INFANTS UNDER ONE YEAR.

Years	Deaths	Rate per 1000 births	Rate for England & Wales	Number of Deaths if 1901-1910 Rate still prevailed	Saving
1911—1920	717	110	...	856	139
1921—1930	441	78	...	760	319
1931	34	82	65	56	22
1932	19	47	65	54	35
1933	25	69	64	48	23
1934	17	45	63	51	34
1935	18	48	57	50	32
1936	26	73	59	48	22
1937	20	54	58	49	29

This table shows that since 1911 Darwen has saved 655 infant lives over and above what would have been saved if the Infantile Mortality Rate for the decennium 1901-1910 had been maintained.

INFANTILE DEATHS.—CAUSES.

Analysis of the causes of mortality in infants under one year gives the following results for the past ten years—

Year	Premature Birth	Con- vulsions	Bronchitis and Pneumonia	Diarr- hoeal Diseases	Measles	Inanition	Con- genital Defects	Other Causes	Total
1928	5	4	9	0	0	0	5	8	31
1929	11	3	11	0	0	0	3	14	42
1930	6	0	5	1	2	4	5	8	31
1931	10	1	5	0	0	0	4	14	34
1932	4	1	2	0	0	1	4	7	19
1933	10	0	4	1	0	1	3	6	25
1934	4	1	3	0	0	2	0	7	17
1935	5	0	1	0	0	0	0	12	18
1936	7	0	6	0	0	1	5	7	26
1937	2	0	2	0	1	1	11	3	20

INFANTILE DEATHS.—WARD DISTRIBUTION.

Investigation of the mortality of infants in the different Wards of the Borough is shown below—

Year	Central	West- Central	North- East	North- West	South- East	South West
1927	114	111	46	48	26	102
1928	37	106	81	45	102	301
1929	173	93	66	62	48	139
1930	68	24	52	126	51	101
1931	113	83	81	103	70	57
1932	83	0	41	16	85	17
1933	76	83	85	102	35	54
1934	33	0	21	81	95	0
1935	44	142	51	0	38	57
1936	72	43	72	46	90	104
Average 10 years	80	68	59	62	64	93
1937	80	76	86	0	45	53

While this table shows fluctuation in the various Wards from year to year, the average for ten years which is a more accurate guide, shows a definite tendency towards a high mortality in Central and South-West Wards, although in the latter case this can be accounted for by the abnormally high figure for the year 1928. The most constant low levels are furnished by North-East Ward.

CAUSES OF DEATHS.

The first table in the appendices gives a complete statistical summary of the causes of death (classified as to age and sex). A more concise picture is given in the following table, which sets out the diseases most fatal to Darwen residents—

Diseases	No. of Deaths	Proportion per 1000 Deaths			
		DARWEN		England and Wales	
		1937		1936	
i. Disease of Heart and Circulatory System.	218	...	403	...	311
ii. Cancer—Malignant Disease	74	...	137	...	134
iii. Bronchitis, Pneumonia and other Respiratory Diseases	46	...	85	...	102
iv. Diseases of Nervous System	42	...	77	...	82
v. Tuberculosis—all forms	17	...	31	...	57

The above table shows that the diseases which to Darwen residents were most fatal during 1937 were diseases of the heart and circulatory system and cancer, the rate for these being higher than the national ones. On the other hand Darwen appears to be more immune to Respiratory affections and Tuberculosis which points towards a healthy climate.

SECTION II.

GENERAL PROVISION OF
HEALTH SERVICES
FOR THE AREA.

General Provision of Health Services for the Area.

PUBLIC HEALTH STAFF.

Full particulars of the Public Health Officers of the Authority are given on page 5.

LABORATORY FACILITIES.

There were no developments or changes during 1937 in the arrangements for laboratory work generally which was performed by the Public Health Laboratory, Manchester. Under the Lancashire County Council Tuberculosis scheme Sputum Examinations were carried out by the Tuberculosis Department under Dr. MacPhee.

An interesting experiment was carried out at the Darwen Public Health Offices with the Lederle quick culture method for diagnosis of Diphtheria. By this method a result was obtained in 4 hours instead of 48 hours required by the Laboratory. As the results were almost parallel with those obtained by the more lengthy method, the experiment showed much promise but involved microscopic examinations at times varying from 5-30 p.m. till 9-30 p.m., and as a routine method would involve additional work which the department could not cope with. Tribute must be paid to the Chief Sanitary Inspector without whose co-operation the experiment could not have been undertaken.

In February, 1938, an arrangement was concluded with the Clinical Research Association, London, to undertake some of the Laboratory work of the department.

AMBULANCE FACILITIES.

(a) INFECTIOUS DISEASE.

The Darwen Corporation provide and maintain a Motor Ambulance which is used exclusively for removing patients to the Infectious Diseases Hospital at Bull Hill.

This service is on the whole satisfactory, but there is some difficulty in providing relief for the only ambulance driver employed, as the porter at Bull Hill Hospital, who retires shortly, is not capable of undertaking this duty.

(b) ACCIDENT AND SICK CASES.

The usual arrangement with a local garage to supply a motor ambulance day and night was maintained. Although the service was generally satisfactory, there has been some agitation to provide a public ambulance. The situation will probably be met by concluding additional arrangements with another garage so that there will be a dual service.

NURSING IN THE HOME.

There have been no developments or changes in this service which is satisfactorily maintained by the Darwen District Nursing Association.

TREATMENT CENTRES AND CLINICS.

These are set out in tabular form on page 6.

HOSPITALS.

I. GENERAL, SURGICAL AND MEDICAL CASES.

There is no hospital accommodation in Darwen for the treatment of these cases which are referred to the Royal Infirmary, Blackburn, an institution maintained by voluntary subscriptions.

II. INFECTIOUS DISEASES.

Cases of Diphtheria, Scarlet Fever, Erysipelas, Primary Pneumonia, etc., are admitted to the Darwen Corporation Isolation Hospital at Bull Hill (48 beds). Cases are admitted to the institution from surrounding areas, Turton, Oswaldtwistle and Blackburn Rural. The Medical Superintendent of Bull Hill is the Medical Officer of Health of Darwen.

SMALLPOX.

For Smallpox cases the Corporation have an arrangement with the County Borough of Blackburn whereby beds are retained at Finnington Hospital. Under the Lancashire County Council scheme this provision was increased during 1937 from three to four beds.

TUBERCULOSIS.

Cases of Tuberculosis are admitted to various Sanatoria under the Lancashire County Council scheme.

PUERPERAL PYREXIA.

The arrangements whereby cases of Puerperal Pyrexia, Eclampsia, and other obstetrical emergencies were admitted to Blackburn Royal Infirmary under the care of a part-time consultant obstetrician, ceased with the appointment on 1st September, 1937, of a full-time consultant to serve Blackburn, Blackburn Rural District and Darwen. A detailed account of the new scheme will be found in the Maternity and Child Welfare Section, page 24.

VENEREAL DISEASES.

These cases are treated at Blackburn Royal Infirmary under the Lancashire County Council's scheme.

PUBLIC ASSISTANCES CASES.

Queen's Park Hospital, Blackburn, is the Public Assistance Infirmary for medical cases. There are also Maternity and Orthopædic Sections. The Public Assistance and Mental Services are administered by the Lancashire County Council.

HEALTH EDUCATION.

The subject of Health Education assumed great prominence during the year because of the Minister of Health's campaign for national fitness, which stressed the necessity for the dissemination of health knowledge and the education of the public regarding local health services.

Advantage was taken of the Mayor's cinema treat to school children to show short health films at each of the five cinemas in the town. A more ambitious but less appreciated programme for adults was subsequently shown. Generous tribute must be paid to Miss Rhodes, Organising Secretary for Health Education for Lancashire County Council, who made all arrangements for the film shows, and who, during the year, freely gave of her services as a lecturer to various social organisations in Darwen.

A series of six lectures was also given to the Mothers' Club under the patronage of the Ladies' Voluntary Committee by the Medical Officer of Health, who also gave papers and talks on health matters to educational and social societies.

Displays of posters supplied by the Health and Cleanliness Council were made in public buildings, schools, clinics, etc.

The following valuable lessons were learned from the year's Health Education efforts—

1. Considerable apathy on the part of the public was experienced. The subject requires an expert to make it have even slight appeal, and like all forms of education, requires time and patience.

2. Children fortunately are more susceptible, and it would appear desirable to strive for a health-conscious coming generation.

3. Personal talks achieve more than mass demonstrations. Advice given at school medical inspections and welfare clinics is apparently very effective.

4. While the Darwen public appear apathetic to Health Education propaganda, they are wide awake to the uses of the local health services. The fact that 93 out of every 100 new-born infants attend the clinics is only one example of an appreciation which is almost embarrassing.

WORKMEN'S COMPENSATION ACT, 1923.

Number of cases examined and reported upon by the Medical Officer of Health to the Local Authority—four.

LOCAL GOVERNMENT AND OTHER OFFICERS' SUPERANNUATION ACT, 1922.

Number of cases examined and reported upon by the Medical Officer of Health to the Local Authority—twenty-one.

SECTION III.

MATERNITY AND
CHILD WELFARE.

Maternity and Child Welfare.

(1) MATERNAL WELFARE.

The most important developments in this section of the work were consideration of a scheme under the Midwives Act, 1936 ; appointment of an Obstetrical Consultant ; establishment of routine and specialist Ante-Natal Clinics and infant consultations.

MIDWIVES' ACT, 1936.

This Act which came into operation on 31st July, 1936, was intended to secure the establishment by Maternity and Child Welfare Authorities of a domiciliary service of salaried midwives under the control of the Local Supervising Authority, in the hope of aiding in the reduction of maternal mortality. By offering satisfactory conditions of service, equitable remuneration and opportunities for refresher courses, it was intended to attract highly qualified midwives. The Act also gave powers to prohibit unqualified persons from taking any part in midwifery and to compensate midwives who voluntarily relinquished their certificates or who were retired compulsorily by the Local Authority on the grounds of old age and infirmity.

Very protracted negotiations and discussions continuing throughout the year were required before a satisfactory scheme for Darwen was evolved. This was due to the difficulty of reconciling two of the fundamental provisions of the Act, namely, the establishment of a Municipal Midwifery Service and the obligation to give due representation in making appointments to local voluntary associations. The position in Darwen was unique in that the local branch of the District Nursing Association had such an extensive (though admittedly declining) midwifery practice. It was necessary eventually to submit to the arbitration of the Minister of Health who directed that the Local Authority should employ the equivalent in service of one and a half midwives of the District Nursing Association. The scheme was completed by the decision of the Local Authority to appoint in addition two Municipal Midwives. Allowing 80 cases per midwife provision is thereby made for 280 cases per year. The view that this provision is ample would appear to be supported by the falling birth rate and the fact that only three private midwives have retired on compensation, leaving six still in practice. Two of these private midwives retired voluntarily, the other being compulsorily retired on the grounds of old age and infirmity. The amounts involved were £394 3s. 6d. and £177, giving a total of £571 3s. 6d.

While the Act does not promise immediate and startling results and contains anomalies, it must be pointed out that its object is to gradually improve the personnel of the midwifery service without inflicting undue hardship on private midwives and its benefit cannot be measured in a mercenary way. Even if the maximum fee for the services of a midwife was to be charged in every case, the scheme would shew a financial loss, while it must be realised that in many cases a small charge only will be possible—in others nil.

APPOINTMENT OF OBSTETRICAL CONSULTANT.

The appointment of a full-time Obstetrical Consultant to serve Blackburn County Borough, Blackburn Rural and other County Districts, and Darwen Municipal Borough became effective as from 1st October, 1937. The object of the appointment was to raise the standard of midwifery practice by placing at the disposal of the medical practitioners in the stated areas, the skilled services of a specialist for all obstetrical emergencies arising during pregnancy, the lying-in period or six weeks subsequent to the latter. In addition, he was made responsible for the conduct of two pre- and post-natal clinics per month in Darwen. A further development of the scheme was the organisation of a "Flying Squad" consisting of the Obstetrical Consultant, a skilled Nurse and the necessary equipment. This was based on Springfield Nursing Home, Blackburn, and was to meet cases of extreme emergency where it was considered unsafe to remove the patient to hospital. The Obstetrician was required to supervise arrangements at Springfield Nursing Home, to which Darwen patients are admitted, and was appointed on the Honorary Staff of the Royal Infirmary, Blackburn, with use of the necessary beds.

In regard to the cost of the scheme, this was arranged by apportionment among the constituent authorities. Darwen's contribution towards salary was assessed at £107 per annum. A charge of 3½ guineas per bed-week was agreed to cover admissions under the scheme to Blackburn Royal Infirmary, the sum to include all treatment services except X-Ray examinations.

It is only to be expected that such a comprehensive scheme will entail greater cost than the incomplete one it was designed to replace. For the six months ending 31st March, 1938, the cost was £102 0s. 0d. (approx.), which includes Consultant's salary and hospital treatment. The old scheme taken over a period of five years averaged £53 6s. 0d. per six months.

During the period 1st October, 1937, to 31st March, 1938, the Consultant Obstetrician was called out by local practitioners on 11 occasions. There is every evidence that the appreciation of this service will increase as it becomes better known to those for whose benefit it was created.

THE CONSULTATIVE PRE-NATAL CLINIC.

During the six months from 1st October, 1937, to 31st March, 1938, 13 consultative pre-natal clinics were held. The number of individual cases seen was 53, the total attendances being 80, or six per session. These numbers may seem small, but it was intended not to overburden a specialist clinic with routine examination of normal cases.

THE ROUTINE PRE-NATAL CLINIC.

This was established in April, 1937, is held weekly, and is conducted by the Medical Officer of Health. The work of this Clinic is summarised below—

(a) Number of Clinics held April—December, 1937	31
(b) Number of Individual Women who attended	89
(c) Total number of attendances	287
(d) Percentage of Total Notified Births	29.8
(e) Percentage of Total Notified Births (England and Wales)	50

In comparing the percentage shown above in (d), with the country as a whole, it must be remembered that the clinic was in operation barely nine months during 1937. The Darwen percentage for a full year would be shown more correctly as 40 per cent. against 50 per cent. for the country as a whole. This may be considered a very satisfactory appreciation of a new service, to the advantages of which the public require a certain amount of educating. Further, it must be remembered that the pre-natal clinics are held in one centre only and therefore inconvenient to some mothers. And lastly, the fact that so many of these mothers continue working in the mills militates to some extent against their attendance. In spite of these adverse factors, it is confidently anticipated, as a result of the experience of the first quarter, that the current year will see greatly increased attendances.

Economic distress in Darwen in the great percentage of cases prevents expectant mothers engaging a doctor in addition to a midwife thus foregoing the advantages of medical pre-natal supervision. The custom of "booking

a doctor if necessary," is a measure which has little or no value at all. Pre-natal supervision does not aim at preventing maternal deaths only, but in lessening morbidity and invalidity of the expectant mother. Obviously the care of the mother should begin long before the actual confinement and continue after the baby is born.

At the Pre-Natal Clinic the mother is given a thorough medical and obstetrical examination. Any abnormalities found are noted and the patient referred for suitable treatment to the obstetrical consultant or to the private medical practitioner whichever is appropriate. If the case is normal or a minor ailment only is present, suitable advice is given at the Clinic. Subsequent examinations are made at arranged intervals, the examination including urine testing and blood pressure estimation. Advice re diet, rest and exercise are given, and a suitable health regime prescribed. Further, the patient is assisted in making arrangements for the confinement. The problem of the nutrition of the pregnant woman receives particular consideration as she has special needs in order to maintain a satisfactory level even during a normal pregnancy. What is required is an adequate supply of calcium and other minerals and vitamins A and D. This can be obtained naturally in a diet containing a sufficiency of milk, eggs and butter, fresh fruit and vegetables, but these sources are not always available. In necessitous malnourished cases a gratuitous supply of milk (one pint daily) is supplied through the Clinic and in some instances Ostocalcium tablets, which contain in addition to the mineral constituents, protective amounts of vitamin D.

DENTAL CLINIC.

The establishment of the Ante and Pre-Natal Clinic with its opportunities for bringing a considerable number under supervision also demonstrated the frequency of dental disease among pregnant women. Towards the end of the year the Committee approved the Medical Officer of Health's recommendation to establish a Dental Clinic with fortnightly sessions for the treatment of recommended cases. The scheme which came into operation on 1st April, 1938, restricted these facilities to necessitous expectant or nursing mothers. It is not possible to give a detailed report on the working of the Clinic, but there is already sufficient evidence of its appreciation. Great emphasis is to-day laid on dental fitness as an aid to health, and in the case of expectant women, there is the further desirability of avoiding every possible source of infection.

MATERNAL MORTALITY.

The Ministry of Health published in April, 1937, the Report of a Special Investigation into Maternal Mortality in England over a period of two years and involving 770 deaths. Broadly the conclusions arrived at were that "in a number of cases the chances of recovery would have been greater had a practitioner experienced in midwifery been in attendance, had the doctor been assisted by an obstetric expert, or had the patient been admitted to hospital sufficiently early." It was also borne out that an important single factor is the standard of midwifery practice and accordingly there was introduced at once the Midwives Act, 1936, to ensure a national service of trained midwives for domiciliary practice.

Further light on the problem of Maternal Mortality generally is shown by analysis of the Confidential Reports of Medical Officers of Health concerning 1,945 maternal deaths which occurred during 1936. It would appear that in 889 of these cases death might have been prevented, the major causes being as follows—

Lack or inadequacy of ante-natal care	341
" " obstetric facilities	180
" " hospital or specialist treatment	218
Lack of co-operation of the patient	428
Miscellaneous	69

These figures are not mutually exclusive as more than one factor exists in individual cases.

One striking fact which emerges from a study of this group of deaths is that only a limited use of the services of obstetric consultants in the patients own homes is recorded. In only 128 cases out of a total of 1,945 is there reference to such expert advice being sought.

MATERNAL MORTALITY IN DARWEN.

Each maternal death is thoroughly investigated by the Medical Officer of Health in consultation with private practitioners, nurses or midwives and the relatives. These reports which are forwarded to the Ministry of Health are of a confidential nature and it is permissible only to make general references. Three maternal deaths have been allocated to Darwen for the year 1937 by the Registrar-General giving a Maternal Mortality Rate of 7.95 per 1,000 births compared with 5.42 for the year 1936, and 10.92 which was the

mean of the five years 1932-1936. The three maternal deaths which occurred were due to Ante-partum Hæmorrhage; Pulmonary Embolism following premature labour; Self-Induced (non-septic) Abortion. While it is regrettable that the improvement which was obtained in 1936 compared to the previous five years was not sustained, it must be observed that excluding the case of abortion for prevention of which it is impossible to make provision, the rate would have been 5.3. Further, where there is a very low birth-rate—as in Darwen—each maternal death considerably aggravates the Maternal Mortality Rate, and marked fluctuations are to be expected. Still, it must be admitted that taken over a number of years the position is decidedly disappointing and remains one of the most prominent and urgent of our problems as reference to the table below shows.

Year	Puerperal Fever Notific.	Total Births	Deaths		Still Births	Infantile Mortality Rate
			Puerperal Sepsis	Other Accidents or Diseases of Pregnancy		
1929	4	489	2	2	28	85
1930	3	438	1	2	24	70
1931	1	413	0	3	17	82
1932	3	398	4	2	32	47
1933	3	359	3	1	26	69
1934	4	377	2	5	30	45
1935	2	371	2	1	19	48
1936	1	354	0	2	15	73
1937	3	365	0	3	12	54

It is not to be expected that industrial centres in general should show a maternal mortality rate as favourable as other areas or the country as a whole, and particularly is this to be expected where the staple industry is cotton, which implies the employment of a considerable percentage of married and even pregnant women. Although the working conditions have improved enormously in the last decade or two, still it must be conceded that they do not form the optimum environment for these women. Then there is the additional burden of the care of a home and children, and it is not surprising that of the various household arts cookery is most neglected and malnutrition readily develops in these over-worked and underfed women, to complete the vicious circle which predisposes to maternal mortality and maternal invalidity in general.

INSTITUTIONAL PROVISION FOR MOTHERS.

The keystone of the complete maternity scheme is the Municipal Maternity Hospital. There is no such provision in Darwen, this being the

one gap in a now otherwise satisfactory service. Accommodation was further restricted during 1937 by removal from the register of two private maternity homes, leaving one only, which, however, was extended during the year and has now 4 beds. Queen's Park (Public Assistance) Hospital, Blackburn, continues to receive the great majority of normal cases. Others are accommodated in Blackburn Municipal Home (Springfield), while there is provision in the Royal Infirmary for obstetrical emergencies. These latter two institutions are visited by Dr. Potter, Obstetric Consultant.

During the year an arrangement was effected whereby Darwen maternity cases would be received into Springfield at the reduced rate of 3 instead of 4½ guineas per week, on condition that such cases were recommended by the Medical Officer of Health of Darwen, and the Local Authority made themselves financially responsible.

The institutional accommodation on the whole cannot be said to be completely satisfactory—particularly in view of the increasing difficulty of obtaining admission into the Royal Infirmary, Blackburn, of obstetrical emergencies, especially Puerperal Sepsis. This condition—the most serious to which a parturient woman is liable requires skilled nursing and constant medical supervision. Owing to difficulties of obtaining staff it has not been possible to receive these cases in Darwen Isolation Hospital at Bull Hill, where furthermore it would be difficult to give them the requisite medical attention.

HOME HELPS.

There is no scheme at present for providing Home Helps for expectant mothers, but there are indications that the Ladies (Voluntary) Committee will take up this matter during the ensuing year.

INSPECTION OF MATERNITY AND NURSING HOMES AND MIDWIVES.

Two routine inspections were carried out by the Medical Officer of Health accompanied by the Supervisor of Midwives during the year to each midwife and nursing home. Special visits are paid on notification of Ophthalmia Neonatorum, Puerperal Pyrexia or Puerperal Sepsis.

A similar inspection of all practising midwives was also carried out on two occasions.

MIDWIVES ACT, 1918.

This Act requires medical help to be sought by the midwife in all cases of illness of the patient or the child, or any abnormality occurring during pregnancy, labour or the lying-in period.

One hundred and thirteen records of sending for medical help were received and fees were paid amounting to £43 16s. 0d.

(II) CHILD WELFARE.

INSTITUTIONAL PROVISION AND ORTHOPÆDIC TREATMENT.

There is no hospital accommodation in Darwen for children's ailments. These cases are treated at Queen's Park Hospital and the Royal Infirmary, Blackburn. The former has an Open-air Section for Crippled Children.

The Lancashire County Council Orthopædic Scheme which was adopted by the Darwen Council and became operative in April, 1932, supervises crippling defects in pre-school and school children. Cases requiring institutional treatment are referred by the visiting Orthopædic Consultant to Ancoats Hospital, Manchester, or Biddulph Grange Hospital. The volume of work carried out at the Clinic during 1937 is shown below.

Number of Individual Children attended	77
Attendances made	510
Splints supplied	40
Remedial Exercises given	156
Plasters Applied	13

BIRTHS NOTIFIED AND REGISTERED.

The Births Notification Acts requires the notification to the Local Authority within 36 hours of births, *i.e.*, live and still-births. In the great majority of cases the responsible person is the midwife. The object of the Acts is to secure supervision of mothers and infants by the officers of the Local Welfare Authority. The first visit is paid on the 15th day when the midwife and doctor have ceased attendance, except in the case of still-births, where immediate visitation is made. The number of births notified during 1937 was 365.

Registration of births is a much older statutory obligation dating from 1837, and requires the registration with the local Registrar within 42 days of all live births. The number so recorded during 1937 was 365.

STILL-BIRTHS.

The number of still-births notified in Darwen during 1937 was 11. This figure, supplied by the Registrar-General, when corrected for outward and inward transfers, gives a net result of 12, or a rate of 31 per 1,000 births.

Each case is fully investigated and a permanent record kept of the associated circumstances.

INFANT DEATHS.

There were recorded 20 deaths of infants under one year of age during 1937, giving a mortality rate of 54 per 1,000 births.

INFANT WELFARE CLINICS.

(a) Nursing and Medical Supervision.

There are three infant clinics held weekly, one at the Greenfield Centre and two at the Bolton Road Centre. In April, 1937, there was established by the Medical Officer of Health an Infant Consultation at set times at each of these sessions, with a view to providing regularly medical supervision and advice on feeding and minor ailments. The time of the health visitors is so fully occupied particularly at the Bolton Road Centre in weighing babies (frequently more than 100 at a session), and dealing with the Milk Assistance Scheme which was considerably extended during the year that little or no time is available for giving nursing advice. Accordingly it has become increasingly necessary for supervision by the Medical Officer. At the consultations it was the practice to examine all babies at first attendance, babies who had lost weight and babies suffering from any defect.

(b) Summary of Infant Clinic Work.

	1937.	1936.
Number of Individual Children who first attended—		
Under 1 year	330	304
1—5 years	70	23
Total number of Attendances of Children—		
Under 1 year	5525	4735
1—5 years	4718	4170
Total number of weighings	10243	8905
Total number of Examinations by Medical Officer of Health	958	248
Total number of Defects found by Medical Officer of Health	781	226

Total number of Cases referred by Medical Officer of Health to—

(1) Blackburn Royal Infirmary for Examination and Treatment	11	12
(2) Queen's Park Hospital for Examination and Treatment	9	2
(3) Ophthalmic Surgeon	2	0
(4) Own Doctor	12	5
(5) Orthopædic Clinic	19	14
(6) School Dentist	0	1

It is pleasing to note that the volume of work was increased due in some measure to the increased number of births, 365 for 1937, compared with 354 for 1936.

The actual extent of the appreciation of this service is illustrated by the fact that of the total notified live births of infants in 1937, 93.2 per cent. attended the Infant Clinic compared with 59 per cent. for the country as a whole.

(c) Supervision of Toddlers.

Although it was not possible to establish a special Toddlers' Clinic, such as is prevalent in many areas, for children from 1 to 5 years old whereby the "toddler" receives a periodic full medical inspection by the Medical Officer, considerable attention was paid to this aspect of the work. The object of a Toddlers' Clinic is to bridge the considerable gap which exists in child welfare work between the Infant Clinic and School Medical Inspection. Too often after the child is "put on its feet" it is lost trace of until discovered in the Infants' School, where the good work has been considerably neutralised as is borne out by the discovery of many preventable defects when examined in school.

At the Bolton Road Centre a morning clinic is held daily for the treatment of minor ailments in pre-school children for whom other facilities are not available.

(d) Weighing of Babies.

It must be further observed that overmuch value is attached to the weighing of babies. While periodic weighing of apparently healthy babies is desirable, weekly recording should be reserved for those whose condition is unsatisfactory. Particularly when the weighing takes place with the child fully dressed as is the custom in Darwen. An attempt to remedy this during the year met with some success, but until a properly equipped clinic is available the mothers will have some excuse for persisting in their attitude.

(e) *Feeding—Natural and Artificial.*

During the year much attention was paid to encouraging breast feeding of infants. Artificial feeding is resorted to overmuch where a little patience and persistence would yield better results. In these cases where the mother is malnourished and necessitous grants of milk and galactogogues were provided. There is no completely satisfactory substitute for human milk, but undoubtedly the worst form of artificial feeding is raw and unclean milk, while the best is any of the brands of modified dried milk. Dried milks are clean and of uniform consistence, while even pasteurised milk may be subsequently contaminated and varied in its constituents. The particular need for safeguards is due to the fact that for practical purposes the infants sole diet is milk.

(f) *Dispensing of Foods, etc., at the Clinic.*

Early in 1937 a Circular received from the Ministry urgently requested Local Authorities to review their arrangements for the supply of milk, cod liver oil, etc., to mothers and children, with a view to augmenting the amounts already given and extending the scheme to toddlers between 1 and 5 years. As a result of the wise decision of the Maternity and Child Welfare Committee to accede to this request, the amount of milk supplied gratis increased considerably as shown below—

		Liquid Milk. Gallons.		Dried Milk. Pounds.
1937	.....	7358	.....	260
1936	.....	2640	.....	69

The milk was supplied free only in necessitous cases, and in the consideration of these, the scale adopted by the Committee was a sliding one ranging from 4/- to 8/- per head after rent deduction.

The Committee wisely decided that the remedy for prevention of bad nutrition in school children was to prevent its occurrence in infants and toddlers.

The following is a summary of foods, other than liquid milk, supplied through the Maternity and Child Welfare Centre:—

(1)	Proprietary Dried Milks	2080 lbs.
(2)	Glucose D	896 lbs.
(3)	Virol	1008 lbs.
(4)	Cod Liver Oil, Parrish's, etc.	73 W.Qt.

Apart from gratuitous supplies, considerable quantities, as shown above, of dried milks, cod liver oil, Virol, etc. were dispensed at cost price

in necessitous cases where additional supplies were required, or where the case bordered on the necessitous. This course can be defended on the ground that previously these commodities, if obtainable elsewhere, to the vast majority were unattainable, and in the conviction that if they were not supplied by the Clinic they would be done without.

HOME VISITING.

The aspect of the work described above, which is particularly valuable and practically universal in operation, necessarily threw considerable additional work on the Health Visitors, which, coupled with further work at the Centre, entailed by the establishment of Routine and Consultative Pre-Natal Clinics, allowed less time for home visiting. The operation of the Dental Clinic, initiated in April, 1938, will to some extent militate further against this most valuable branch of the work—indeed, as the title suggests, home visiting is the primary function of the health visitor. The appointment of the contemplated additional nurse-health visitor is urgently necessary.

HOME VISITATION OF MOTHERS AND INFANTS.

The following table summarises the work of the two health visitors in this branch of welfare work during 1937 compared to 1936:—

Visits to Expectant Mothers—

	1937.	1936.
First visits	125	78
Total visits	359	224

Visits to Children under 1 year—

First visits	407	354
Total visits	4018	2704

Visits to Children 1-5 years—

Total visits	4903	3286
--------------------	------	------

Special Visits—

Still-birth Enquiries	12
Infant Deaths	14
Maternal deaths	3
Infectious Diseases	203
Miscellaneous	23

INFANT LIFE PROTECTION.

The provisions of the Child Life Protection Sections of the Public Health Act, 1936, were administered through the two Health Visitors, who supervised the care of nine children who are on the Darwen Register as being nursed for reward by six persons.

CONCLUSION.

I desire to place on record my appreciation of the interest shown by Mrs. Preston, Mayoress of the Borough for the Municipal year 1936-37, and Councillor Mrs. Hindle, J.P., our present Mayor, and also for their assistance in making the social functions held successful.

Thanks must also be given to (1) the Women's Free Church Council, Blackpool, for again providing four poor mothers with a week's holiday at Blackpool; (2) the members of the Longfield Women's Institute, Kent, for the many parcels of clothing, etc., received from them for distribution to the needy; (3) many organisations and individuals who have so kindly forwarded gifts, and (4) to the members of the two local Voluntary (Ladies) Committees for their constant attendance and service at Centres on Clinic days, and for the many grants made by them to necessitous families during the year.

SECTION IV.

SANITARY CIRCUMSTANCES
OF THE AREA.

SECTION IV

SANITARY CIRCUMSTANCES
OF THE AREA

Sanitary Circumstances of the Area.

WATER.

RESERVOIRS.

Water is supplied on the constant system from the following reservoirs:

Reservoir.	Altitude (above O.D.)	Capacity in Gallons.	Gathering Ground.
Sunnyhurst Hey (open)	920 ft.	96,000,000	662 acres (moorland) situated about two miles from Centre of Town. Supplied from Bolton.
Earnsdale (open)	705 ft.	100,000,000	
Bull Hill (covered)	880 ft.	450,000	

Sunnyhurst, Earnsdale and Bull Hill Reservoirs have a combined capacity of 196,450,000 gallons.

The amount of water consumed for the year 1937 was 330,000,000 gallons, 40,308,000 gallons being for trade purposes. The remainder for domestic use at the rate of $24\frac{1}{2}$ gallons per head per day.

THE SAND FILTERS.

Those serving Sunnyhurst Reservoir have an aggregate area of 1,970 square yards. The depth of the water resting on the filtering area is usually about three feet. The rate of filtration is $\frac{2}{3}$ gallons per square foot per hour when both are working together.

Earnsdale Reservoir filters have an aggregate area of 1,947 square yards, and the rate of filtration when both are working is $\frac{5}{9}$ ths of a gallon per square foot per hour.

The surface of the sand layer in the filter beds is scraped periodically and clean sand substituted each Spring. At intervals the whole of the filtering media is taken out and cleaned.

SUPPLY.

The approximate number of dwelling-houses supplied direct is 10,653. There is no supply by standpipe, and there is no possibility of contamination in the vicinity of dwelling-houses.

SAMPLING.

In view of the tendency to acidity, two samples of water have been submitted for chemical analysis each quarter; these were obtained from taps

of private houses between the hours of seven and eight o'clock in the morning, and were representative of water supplied from each Reservoir. Five samples proved to be satisfactory, whilst in three there was evidence of lead as shown in the following table:—

Date of taking sample.	Result of examination.
20th January, 1937.	This sample contained 1/70 of a grain of lead per gallon and had an alkalinity equivalent to 1.2 parts of calcium carbonate per 100,000 of water.
20th April, 1937.	This sample contained an amount equivalent to about 1/40th of a grain of metallic lead per gallon. Water not quite sufficiently alkaline to prevent all action on lead pipes. Alkalinity expressed as parts per 100,000 of water is 2.1 of calcium carbonate.
16th August, 1937.	This sample contained 1/140th of a grain of lead per gallon, and had an alkalinity equivalent to 1.9 parts of calcium carbonate per 1,000,000 of water.

The Water Engineer took steps to correct the acidity. Six samples were taken from private supplies—of these four were satisfactory, one contained vegetable matter. The attention of the owner was directed to the necessity for cleaning out and protection of the service reservoir. This work has been done, and a further sample will be obtained. In the sixth case three houses deriving supply from one source were involved. The water upon examination revealed an abnormal amount of lead, as follows:

Date of taking sample.	Result of examination.
8th December, 1937.	This water contains 1/13th of a grain of lead per gallon.

The Local Authority have been recommended to request that a supply of town's water be laid on to the houses without delay, and negotiations with the owners have begun.

CIRCULAR 1684, 12th MARCH, 1938.

Samples will in future be examined bacteriologically at intervals of six months in addition to chemical analysis quarterly, and all samples from private supplies will be subjected to both examinations.

SEWERAGE AND DRAINAGE.

The pail system still operates for several houses, but the possibility of adoption of Septic Tank systems where practicable is being investigated.

The standard of drainage work is much improved, and all drain alterations and new drainage systems are tested.

RIVERS AND STREAMS.

The River Darwen has been cleared of debris for a greater part of its length within the Borough. Inspections have been made of culverted portions in order to examine pipes discharging into the river.

CLOSET ACCOMMODATION.

The following constitutes the accommodation in this respect at the end of the year—

Pails	154
Water Closets	9274
Waste Water Closets	2280
Cesspools	1
Total	11709

Conversions and Installations during 1937—

New Water Closets fixed	103
Premises with one New Closet fixed	101
Premises with more than one New Closet fixed	1
Waste Water Closets converted to Water Closets...	29
Baths installed during the year	63
Urinals installed during the year	1

Comparative Conversions—	During year.	Five years.
No. of Pail Closets—	1937	1932-1936.
To Fresh W.C.'s	4	30
To Waste W.C.'s	—	—
No. of Waste W.C.'s to Fresh W.C.'s	29	147

The whole Borough is now served with 11,724 portable refuse receptacles owned by the Corporation.

The Corporation, under the provisions of a Local Act, contribute half cost of conversions of pails to fresh water closets. In new property fresh water closets only are allowed to be fixed.

There is an increased tendency to convert existing waste water closets to fresh water closets, and it is hoped that the provisions of Section 47 of the Public Health Act, 1936, will be utilised in the future.

PUBLIC CLEANSING.

REFUSE COLLECTION AND DISPOSAL.

Additions have been made to the Mechanical Transport by the purchase of one 5½-6 cubic yard Scammell 3-wheeled self-contained wagon, and one 7-8 cubic yard S & D. Freighter. Five horses were disposed of, leaving only four horses in the establishment, two of which are used in connection with gully emptying tanks, one for the shop refuse collection wagon, and one for pail collection and house refuse vehicle. It is hoped that during 1938 these horses will also be displaced by a mechanical vehicle.

Under the provisions of Section 73 of the Public Health Act, 1936, a scheme is being prepared for the collection of trade refuse. Tins, etc., are still being sorted from refuse and are disposed of after pressing.

The present Destructor is not regarded as meeting modern requirements, and the Local Authority are giving consideration to the matter. Two methods of disposal are receiving their attention, namely: incineration and controlled tipping.

STREET CLEANSING.

The sweeping of streets is carried out by 12 Street Orderlies, each of which is provided with a hand truck having pneumatic tyres. Although the trucks have been in use less than five years, an endeavour is to be made as soon as time permits, to reduce the unladen weight and improve the design from an aesthetic point of view. It would appear essential to study the design of these trucks in order to reduce fatigue. In practice the use of pneumatic tyres has materially helped in this direction.

GULLY CLEANSING.

The emptying of gullies is still being carried out by hand. The perforated type of scoop is being used. This is not considered to be satisfactory,

and the Committee are giving consideration to the adoption of a Mechanical System of gully cleansing, which it is hoped will be in operation before the end of 1938.

SNOW REMOVAL.

Adequate provision has now been made for dealing expeditiously with snow and ice-bound roads. There are two mechanical gritters provided, whilst for removal of snow a modern snow plough for attachment to a mechanical vehicle has been purchased. At the depot a large salt and grit store (capacity 40 tons) has been erected, and wagons are rapidly loaded by means of a chute. Arrangements are in operation whereby keymen can be called out at any time during the night when winter conditions prevail.

LITTER.

The public in general appear to appreciate the provision of litter receptacles, the number of which is being increased. On account of the damage done by the overhanging loads of motor vehicles to the standard type of receptacles attached to tramway standards, a new narrow type of receptacle is being designed in the hope that the difficulty may be overcome.

DEPOT.

The Central Depot is being improved to meet the needs of mechanical transport. During the year, modern garage accommodation was provided for the present vehicles, and it is hoped during the early part of 1938 to complete the provision for future mechanical equipment.

SUMMARY.

The following is a summary of the work done during 1937—

It will be noted that the weights given below are estimated.

	Tons.	Cwts.	Qrs.
House Refuse to Destructor (6,293 loads) ...	7687	16	1
Market Refuse to Destructor (436 Loads) ...	92	13	0
Trade Refuse to Destructor (1,544 Loads)...	917	6	2
	8697	15	3

Receptacles (House Refuse)	537973
Receptacles (Trade Refuse)	30134
Clinker Removed from Destructor	3784 Tons.
Excreta	152 Loads.
Excreta Pails Emptied	5227
Sludge from Street Gullies	1414 Loads.
Street Gullies Emptied	36231
Sweepings from Streets	171 Loads.
Sweepings: Bins from Street Orderly Trucks	16237
Miles of Streets Swept	3872
Salt Scattered on Streets	125 Tons.
Grit Scattered on Streets	42 Tons.
Length of Streets Salted or Gritted	582 Miles.
Snow Removed from Streets	526 Loads.
Dust Bins added during the year	97
Number of Portable Refuse Receptacles	11724

PUBLIC CONVENIENCES.

The fourteen public urinals are cleansed daily, a whole time caretaker, together with his wife acting as Lady Attendant, supervise Public Conveniences situated at Belgrave Square. Those at the Public Market Hall and Ground are under the supervision of the Market Attendants.

LETHAL CHAMBER.

This apparatus provided for destroying animals painlessly has been installed at the Cleansing Depot, having been removed from the Destructor.

During the year the following were dealt with—

Dogs	269
Cats	13
	<hr/>
	282
	<hr/>

Coal gas is used for the purpose of an anæsthetic.

SANITARY INSPECTION OF THE AREA.

Number of houses visited	4989
Number of houses visited (Housing Consolidated Regulations, 1925)...	113
Number of inspections of Schools	167
Number of inspections of Factories and Workshops	204
Number of inspections of Municipal Hostel	52
Number of inspections of Bakehouses	142
Number of inspections of Dairies and Cowsheds	74
Number of inspections of Refuse Tips	58
Complaints received and investigated	147
Number of re-inspections made	1750
Visits paid to houses (Re cases of Infectious Diseases)	180
Number of houses disinfected	285
Number of articles disinfected	564
Number of smoke observations taken	34 32
Number of drains, etc., tested	685
Total number of defects discovered	2076
Letters written respecting nuisances	198
Informal notices served	1430
Statutory notices served	17
Number of nuisances abated, including outstanding nuisances from previous year	1734
Legal proceedings	0

THE FOLLOWING IS A LIST OF NUISANCES DISCOVERED.

Defective drains	153
Choked sewers	9
Defective soilpipes and water closets	59

Defective downspouts, easing troughs, roofs and external falls	217
Defective plastering	25
Dirty houses and premises	158
Rats, etc., Infestation	7
Dirty and dilapidated closets	7
Accumulations of refuse	109
Defective wash boilers	8
Defective or uneven gullies	21
Defective Sinks	15
Defective fire ranges	34
Broken slop-pipes	18
Choked waste water closets	73
Defective tipplers of waste water closets	18
Choked water closets	47
Insanitary wards	19
Defective internal floors	27
Insufficient ventilation	35
Dangerous buildings	12
Burst water pipes	6
Waste water closets converted to water closets	28
Pail closets converted to water closets	4
Miscellaneous nuisances	90

During the year 224 forms of agreement were signed by owners of property for Corporation workmen to open and repair choked and defective water and waste water closets and do other drainage work. All repairs, etc., were supervised by the Inspectors. Nuisances were abated by owners and occupiers after the service of informal notices except in three cases where it was necessary to serve statutory notices.

SHOPS.

Progress in connection with the provisions of the Shops Act, 1934, has been satisfactory. The attention of the occupiers of business premises has been directed to the provision of suitable ventilation and heating arrangements, and the response has been very encouraging.

The matter of Sanitary accommodation is at present receiving attention in cases where arrangements are not considered satisfactory.

SMOKE ABATEMENT.

Thirty-two observations were taken during the year, each of one hour's duration. The Local Authority are co-operating with owners of two works in order to reduce nuisance, in one case due to grit from a sanitary pipe works chimney, and in the other black smoke from a reheating furnace using a very low stack. The co-operation of mill owners is sought in cases where observations are proved unsatisfactory.

SWIMMING BATHS AND POOLS.

There is only one Public Swimming Bath in the town. This is of modern construction, erected in 1933, having one large and one small plunge.

The water is treated with Alumina Ferric, with Soda-ash as a base. To ensure the satisfactory condition of the water, it is aerated and also chlorinated by chlorine gas.

There are no Privately-owned Swimming Baths or Pools in the Borough.

One sample of water was submitted for bacteriological examination during the year. The result was satisfactory. It is proposed to extend the sampling of water from the Public Baths during the 1938 season.

The water is tested daily for pH value by the Phenol Red Test and the Tintometer Comparator. Tests are also carried out daily for Chlorine Content.

ERADICATION OF BED BUGS.

Houses found to be infested—

Council houses	2
Other houses	35

No. disinfested—

Council houses	2
Other houses	35

DISINFESTATION.

Hydro-cyanic acid gas was used in two cases, whilst in others sulphur-dioxide gas was used in combination with very efficient insecticides. Visits were in all cases paid subsequently in order that the recommendations of the Ministry of Health contained in Memo. 180 Med. might be put into effect.

Before any applicant is permitted to move into a Corporation house a visit is paid to the residence which the applicant is to leave. The Sanitary Inspector examines thoroughly all furniture and bedding, together with the general condition of the premises. If, as a result of examination, bugs are found, or their presence suspected, the applicant is classed as unsuitable, and the programme for disinfestation put into operation.

With the exception of the use of Hydro-cyanic acid gas, all disinfestation is carried out by the Local Authority, in the former case, however, the work is carried out by competent contractors.

In all cases where disinfestation has taken place, the premises are re-visited from time to time in order to ensure as far as possible that no re-infestation occurs.

SCHOOLS.

At the school mentioned in the last Annual Report as being in an unsatisfactory condition, extensive repairs have been carried out to the building. The closet accommodation has been reconstructed, and the yard areas paved with sandstone flags.

It is hoped that in the near future, Schools having trough latrine closets will be provided with water closets having separate flushing cisterns.

HOUSES LET IN LODGINGS.

During 1937 no legal action was necessary. Bye-laws were granted to the Corporation in 1929 and these are adequate.

UNDERGROUND SLEEPING ROOMS.

There is no need for regulations as we have no such rooms in Darwen.

TENTS, VANS AND SHEDS.

One van was brought into the District. A licence was applied for but was not granted. The caravan was removed.

OFFENSIVE TRADES.

A licence has been granted during the year for the establishment of lard refining plant in the district. In connection with the working of a fat extractor about which complaints were received, these have received attention, and the results of investigation have been satisfactory. Three firms carry on the work of Gut Scraping and Tripe Boiling, and another firm those of Fat extracting and Lard refining.

RAC FLOCK ACTS, 1911 AND 1928.

We have no works to which these Acts are applicable in this District, and bed manufacturers and upholsterers here do not use this material.

INSPECTION OF PUBLIC BUILDINGS.

Attention has been given particularly towards the improvement of the air conditions of Public Buildings, and it is hoped to give further details in the next report.

MUNICIPAL HOSTEL.

During the year there has been an increase of 1.80 in the monthly average number of lodgers compared with 1936. This is the only common lodging house in the town, a distinct advantage from a public health standpoint. The two top rooms, containing 65 cubicles, remained closed during the year.

The following Table shows the daily average number of occupants for each month during the last 10 years—

	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Jan.	78.80	88.19	80.74	60.48	60.12	56.16	55.51	56.06	53.48	53.80
Feb.	85.62	87.67	74.89	61.21	58.48	56.10	55.89	57.75	52.17	54.14
March	87.77	89.32	74.67	66.64	58.58	54.06	56.25	59.29	51.45	55.48
April	84.00	92.30	80.33	65.23	58.43	54.13	53.83	59.66	54.00	58.30
May	77.90	82.83	76.87	61.38	57.64	52.25	54.06	57.38	53.83	54.67
June	86.20	79.10	74.00	61.36	60.73	51.00	53.46	54.42	50.60	54.73
July	88.32	77.54	71.77	63.38	59.80	49.12	52.19	58.35	54.35	53.29
August	78.51	70.09	67.03	59.09	55.67	50.64	52.16	52.74	52.35	53.09
Sept.	78.06	78.03	65.53	56.63	55.00	50.93	53.83	48.33	51.06	52.56
October	77.51	80.19	61.35	57.48	56.61	54.32	53.25	50.35	51.32	51.80
Nov.	83.06	78.16	58.23	55.66	58.70	53.26	52.20	52.33	52.76	54.16
Dec.	88.48	79.41	59.09	58.16	59.58	58.35	53.03	53.67	51.41	54.29
Average	82.85	81.98	70.37	60.55	58.27	53.36	53.80	55.02	52.39	54.19

The daily average number of female lodgers for 1937 was 6.04 as against 7.47 during 1936.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

I.—INSPECTIONS MADE BY SANITARY INSPECTORS.

Premises.	Inspections.	Number of		
		Written Notices.	Prosecutions.	
Factories (including Factory Laundries)	222	...	—	—
Workshops (including Workshop Laundries)	117	...	—	—
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	7	...	—	—
Total	346	...	—	—

II.—DEFECTS FOUND.

	Found.	Remedied.	Referred to H.M. Inspector.	No. of Prose- cutions.
Nuisances under the Public Health Acts—				
Want of cleanliness	9	8	—	—
Want of ventilation	1	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other Nuisances	8	4	—	—
Sanitary Accommodation—				
Insufficient	3	3	—	—
Unsuitable or defective	6	4	—	—
Not separate for sexes	—	—	—	—
Offences under the Factory and Workshop Acts—				
Illegal occupation of underground bakehouses (s 101)	—	—	—	—
Other offences [excluding offences re- lating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers Orders, 1921)] ...	—	—	—	—
Total	27	19	—	—

III.—HOME WORK.—Nil.

IV.—REGISTERED WORKSHOPS.

	Number.
Non-Textile Factories	186
Textile Factories	31
Workshops	227
Workplaces	38
Total Workshops on Register	482

V.—OTHER MATTERS.

Number.

Matters notified to H.M. Inspector of Factories—

Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	—
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s 5, 1901)—	
Notified by H.M. Inspector	4
Reports (of action taken) sent to H.M. Inspector	4
Other	—
Underground Bakehouses (s 101) in use at the end of the year ...	3

The Workshops and Workplaces are on the whole in a fairly good condition.

OPEN SPACES.

The Borough Engineer has supplied the following particulars:—

Public Parks—

Whitehall	16.25	acres.
Bold Venture	18.5	,,
Sunnyhurst	49.5	,,
	<hr/> 84.25	<hr/> ,,

Corporation Recreation Grounds—

Blacksnape	35.25	acres.
Olive Lane	1.57	,,
Everton Street	0.853	,,
Rosehill	13.513	,,
Cross Street	0.65	,,
	<hr/> 51.836	<hr/> ,,

Allotments—

Rented	7.0	acres.
Held for other purposes but used as allotments...	5.0	,,
Let by private owners	12.0	,,
	<hr/> 24.0	<hr/> ,,

In addition to the above there are the Moors, which are traversed by public footpaths.

The children using the Recreation Grounds are free from the dangers of the roadways.

NOTABLE SANITARY IMPROVEMENTS.

There have been no outstanding sanitary improvements during the year.

CHIEF SANITARY REQUIREMENTS OF THE DISTRICT.

The practice of erecting temporary buildings in backyards was mentioned in the last report, and little has been achieved towards reducing the number of such erections. This is regrettable, as in most cases the backyards are small in size.

Some progress has been made with respect to the filling up of disused mill reservoirs, but the matter requires still further attention.

It is felt that a reduction in the number of private water supplies is desirable, and this is now receiving the attention of the Department.

The repaving of many back streets would result in a great improvement.

SECTION V.

HOUSING.

HOUSING.

STATISTICS.

Number of new houses erected during the year—

(a) Total (including numbers given separately under (b)	39
(i) By the Local Authority	1
(ii) By other Local Authorities	0
(iii) By other bodies and persons	38
(b) With State assistance under the Housing Acts—	
(i) By the Local Authority	0
(ii) By other bodies or persons	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)	4989
(b) Number of inspections made for the purpose	6739
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	113
(b) Number of inspections made for the purpose	150
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	10
(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	103

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 ..	66
--	----

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	11
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) By Owners	0
(b) By Local Authority in default of owners	0

B.—*Proceedings under Public Health Acts—*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	0
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By Owners	0
(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	3

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

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

(a) (i) Number of dwellings overcrowded at end of year	5
(ii) Number of families dwelling therein	5
(iii) Number of persons dwelling therein	33
(b) Number of new cases of overcrowding reported during year	1
(c) (i) Number of cases of overcrowding relieved during year	4
(ii) Number of persons concerned in such cases	8½

GENERAL OBSERVATIONS AS TO HOUSING CONDITIONS.

The majority of the houses are in street formation, provided with yards and back streets, with four rooms, about 28% have baths. Of these houses over 5 per cent. are over 100 years old. The prevailing defect is dampness.

A further survey is being made with a view to the representation of additional houses to be dealt with individually or as Clearance Areas.

SUFFICIENCY OF SUPPLY OF HOUSES.

There were empty in the Borough on the thirty-first December, 1937, about 190 houses suitable for occupation by persons of the working classes, and of these about 60 per cent. were available at a reasonable weekly rent.

There are suitable sites available for new houses.

OVERCROWDING.

The incidence is still very low, as will be seen by the figures on page 6.

The number of houses of suitable size which are unoccupied provide accommodation necessary to relieve such families as become overcrowded.

FITNESS OF HOUSES.

The inspection of houses of the Working Classes continues, and in most cases where defects are discovered, informal action has been successful in securing the required repairs. In all cases where defects exist, a specification of the work required is forwarded with the informal notice; this appears to

have met with general approval from property owners, as they are able to hand this directly to a contractor for his use in tendering. Brief extracts from bye-laws which might be of assistance to owner or builder are also forwarded as occasion requires. The quality of workmanship steadily improves, and this is regarded as a satisfactory result of co-operation with owners and contractors.

Houses having joint closet accommodation or pail closets are receiving attention. Every opportunity will continue to be used to provide fresh water closets for each house. Those having pail closets present some difficulty, but many will disappear in certain instances as a result of demolition of houses.

Improvements have been carried out during the year to several houses previously having an inadequate internal water supply, and the others are being dealt with as opportunity arises.

UNHEALTHY AREAS.

A further number of unfit houses are to be represented during 1938. This programme is at present being prepared.

BYELAWS RELATING TO HOUSES, ETC.

The present Byelaws have proved to be adequate.

GENERAL OBSERVATIONS.

No difficulties have been experienced in housing administration.

SECTION VI.

INSPECTION AND
SUPERVISION OF FOOD.

Inspection and Supervision of Food.

MILK SUPPLY.

It has been possible during the year to devote more time to this work, and every endeavour is being made to secure the improvement of certain farms.

Producers are beginning to realise the necessity for bringing their farms up to the standards required in order to obtain licence to produce Accredited Milk. Every assistance is being offered by the Department to such persons.

In all cases where bottles are being used, vigilance has been increased in order that the Local Authority may be satisfied that proper cleaning arrangements are provided.

It is noted with regret that the practice by farmers of using the saloon type of motor-car for the distribution of milk is steadily increasing. By reason of the construction of such a vehicle the adequate cleaning of the interior is almost impossible, and the time cannot be far distant when the use of such a vehicle will have to be restricted.

There were 81 cowkeepers on the register in 1937, and 196 retail purveyors of milk other than cowkeepers. The number of inspections made during the year was 174. There are approximately 900 cows in the Borough.

The water supplies of the farms and dairies are carefully watched and attention paid to the cleaning of shippens, dairies, utensils, etc. There is a continued improvement in their condition.

The work of improvement to farms carried out during the year is estimated to have cost about £400.

Where important alterations to shippens and dairies are necessary, measurements are taken, suggestions offered, and blue prints of suitable dairies forwarded to the farmers.

The cowkeepers and milk sellers have been kept informed of the various regulations in force.

SAMPLING.

Particular attention has been devoted to examination of milk supplied to infants and school children.

Six samples were submitted for examination for the presence of Tuberculosis—in one case a positive result was returned. Following receipt of this result the Veterinary Officer of the District in which the cows were kept, duly examined the herd suspected and discovered the affected cow.

Nineteen samples were submitted for Methylene Blue reduction test—15 were satisfactory, and 4 were found to be unsatisfactory. Warnings were given regarding attention to cleanliness.

DISEASES OF ANIMALS ACTS.

When required, the Veterinary Surgeon is called in to inspect dairy cows. The number of cows examined by him was twelve, and none were found to be suffering from Tuberculosis.

MEAT AND OTHER FOODS.

Shops, stores, market stalls, vehicles and places where food is prepared, are under the control of the Inspectors. The premises are visited regularly and strict supervision maintained.

Market stalls used for the sale of meat continue to be under supervision. Attention is given to those stalls exposing fowl for sale. The use of glass shields on the front of meat stalls has been continued.

There have been no cases of food poisoning during the year.

All animals were killed at the Public Abattoirs, where there is ample lairage and slaughtering accommodation. Supervision was maintained throughout the year; the slaughtering was carried out in accordance with the provisions of the Slaughter of Animals Act, 1933, and in as expeditious and humane manner as possible. Further improvements to the Abattoir buildings have been carried out during the year.

The following table shews the number of animals slaughtered at the Public Abattoirs during this and the preceding year:—

	BEASTS.		SHEEP AND LAMBS		CALVES		PIGS		TOTAL	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	147	128	1010	827	3	3	97	46	1257	1004
February	138	122	870	750	—	11	109	15	1117	898
March	126	108	822	630	2	11	84	19	1034	768
April.....	108	105	789	686	4	3	88	24	989	818
May	95	69	853	546	—	—	65	25	1013	640
June	96	79	894	749	—	—	36	25	1026	853
July	83	55	950	640	—	3	36	6	1069	704
August	97	58	875	611	1	—	55	22	1028	691
September	95	89	939	867	21	5	40	19	1095	980
October ...	128	96	941	842	21	4	61	22	1151	964
November	125	98	863	851	15	4	55	26	1058	979
December	119	114	763	862	5	2	81	61	968	1039
Total	1357	1121	10569	8861	72	46	807	310	12805	10338

The total amount of meat condemned and destroyed during the year under review was as follows:—

	BEASTS	SHEEP & LAMBS	CALVES	PIGS
<i>All Diseases except Tuberculosis —</i>				
Whole Carcases Condemned	3	1	1	—
Carcases of which some part or organ was Condemned... ..	185	26	—	12
Percentage of the number inspected affected with disease other than Tuberculosis	32.0	0.3	2.1	3.8
<i>Tuberculosis Only —</i>				
Whole Carcases Condemned	5	—	—	3
Carcases of which some part or organ was Condemned	81	—	—	42
Percentage of the number inspected affected with Tuberculosis	14.9	—	—	14.5

On the occasions when it was found necessary to slaughter animals after the usual hours, either during the evenings or week-ends, the Senior Sanitary Inspector attended at the Abattoir.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

The County Police have from time to time taken samples as Officers under the Act within the Borough. It was intended that samples should be taken by the Local Authorities Inspectorial Staff, but owing to pressure of other duties, this has not been found possible. Also no action has been taken during the year in respect of the other food regulations.

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.

No action has been taken in respect of the chemical and bacteriological examination of food (excluding milk). It is intended to submit samples for examination in the future.

BAKEHOUSES.

There are 112 bakehouses in the Borough. The premises have been regularly inspected, and on the whole can be considered to be in a satisfactory condition.

RATS AND MICE DESTRUCTION ACT, 1919.

In cases where reports of infestation were received, the premises were visited and detailed examinations made. In certain instances special smoke rockets were used to trace runs, and in an endeavour to exterminate the rodents. The results have not in all cases been entirely satisfactory.

In two cases it was necessary to carry out extensive work in order to make premises rat proof. Concrete reinforced with expanded metal was used in casements and foundations.

During National Rat Week, literature was forwarded to 156 occupiers of premises likely to be most affected. With the following summary of the results returned by such occupiers:—

At 9 premises the number of Rats killed during the week was—

Number Baited (Harley's Rodine)	4
Number trapped	28
Number killed by dog, ferret or cat	43
	—
Total	75
	—

At 12 premises the following types of bait were used with result unknown—

Klearwell (supplied by Public Health Dept.)...	2
Ratbane	2
Liverpool Virus	4
Harley's Rodine	3
Red Squill	1

From 71 returns were received claiming the premises to be free from rats.

From 64 premises no information was received.

SECTION VII.

PREVALENCE AND CONTROL
OF
INFECTIOUS DISEASES.

Prevalence and Control of Infectious Diseases.

The age incidence of Infectious Diseases other than Tuberculosis is shown in the following table which includes particulars of Darwen cases removed to hospital and mortality from these diseases.

What are termed the Minor Infectious Diseases, *i.e.*, Measles, Whooping Cough and Chicken-pox, are not included in the table as they are not Notifiable Diseases in Darwen and therefore statistics as to their prevalence are not available.

PREVALENCE OF NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS), 1937.

TABLE I.

D. SEASE.	CASES NOTIFIED.													Total Deaths	Hospital.		
	Total Cases at all Ages.	YEARS.													Total Cases removed to Hospital	Deaths in Hospital of persons belonging to district.	
		Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 and over				
Smallpox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	41	...	...	2	3	5	18	6	3	4	...	...	...	...	35	...
Diphtheria, including Membranous Croup	61	...	...	1	...	3	34	11	7	3	1	1	...	2	59	2
Enteric Fever (including Paratyphoid) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Primary Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Influenzal Pneumonia	34	1	1	1	...	1	5	2	2	3	6	6	6	10	8	6	
Puerperal Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	3	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...
Cerebro-Spinal Fever	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
Acute Poliomyelitis ...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Dysentery ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	5	1	...	...	...	...	...	...	...	...	...	2	2	...	1	...
Malaria ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals... ..	147	3	1	5	3	9	57	20	13	12	7	9	8	14	104	10	

It will be observed that Scarlet Fever, Diphtheria and Pneumonia are the most prevalent and this follows the experience of past years. The other

infections notified were Puerperal Pyrexia, Cerebro-Spinal Fever, Acute Poliomyelitis, Ophthalmia Neonatorum and Erysipelas. The comparative incidence of these diseases during the past five years is shown below.

TABLE II.

Disease.	1937	1936	1935	1934	1933
Scarlet Fever	41	119	212	260	230
Diphtheria	61	57	136	8	29
Pneumonia	34	27	15	14	33
{ Puerperal Fever.....	...	1	2	4	3
{ Partial Pyrexia	3	...	6	6	4
Cerebro-Spinal Fever	1	...	...	...	...
Acute Poliomyelitis...	1	...	...	...	...
Ophthalmia					
Neonatorum ...	1	2	5	2	3
Erysipelas	5	5	10	7	8
Total	147	238	408	360	336

Table II. shows a considerable decrease in the incidence of Notifiable Infectious Diseases generally compared with the previous four years. The decrease was most marked in the case of Scarlet Fever which had been unduly prevalent in recent years.

WARD INCIDENCE.

The following table illustrates the prevalence of the commoner Infectious Diseases in the various Wards during the past 10 years.

TABLE SHEWING WARD INCIDENCE OF THE MORE PREVALENT INFECTIOUS DISEASES DURING 1937 AND THE PAST TEN YEARS.

	1927						1928						1929					
	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.
Scarlet Fever...	5	1	26	18	9	6	2	8	3	2	4	...	5	10	10	12	11	6
Diphtheria .....	...	...	2	2	1	...	...	...	1	1	...	...	6	14	4	4	9	9
Pneumonia	16	4	16	14	18	9	23	7	21	13	16	12	11	12	10	13	18	8
Puerperal Pyr. and Fever	1	2	3	4	4	1	1	...	3	3	1	...	1	2	3	4	2	...
Erysipelas ...	2	1	2	2	1	2	3	1	5	1	1	...	1	...	2	3	3	2

	1930						1931						1932					
	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.
Scarlet Fever...	7	...	20	13	36	26	5	7	17	14	3	8	6	8	9	6	2	6
Diphtheria	17	20	8	14	14	25	5	5	10	14	12	6	2	1	1	6	3	1
Pneumonia	15	6	14	12	11	9	3	3	9	8	9	4	5	4	5	7	11	6
Puerperal Pyr. and Fever	2	1	1	3	2	5	1	...	2	1	1	...	2	...	1	1	2	1
Erysipelas	1	1	1	2	3	5	...	...	2	1	1	4	1	...	1	4	1	1

	1933						1934						1935					
	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.
Scarlet Fever...	52	13	70	30	35	30	42	32	50	48	44	44	41	15	36	25	57	38
Diphtheria	5	3	9	...	7	5	...	2	...	...	3	3	19	16	20	17	40	24
Pneumonia	1	5	11	5	6	5	1	2	3	2	2	4	...	1	3	2	5	5
Puerperal Pyr. and Fever	2	1	1	...	2	1	2	...	2	...	5	1	...	1	...	...	4	3
Erysipelas	1	2	...	2	2	1	1	1	...	2	1	2	1	2	1	1	2	3

	1936						1937					
	C.	W.C	N.E.	N.W	S.E.	S.W.	C.	W.C	N.E.	N.W	S.E.	S.W.
Scarlet Fever..	27	9	42	14	20	7	5	4	8	9	10	5
Diphtheria	3	5	7	6	16	20	11	2	27	4	11	6
Pneumonia	4	2	2	2	8	9	9	2	3	2	7	11
Puerperal Pyr. and Fever	...	...	...	...	...	1	1	...	1	...	1	...
Erysipelas	1	1	1	1	1	...	1	...	2	...	1	1

SCARLET FEVER.

It will be observed by reference to Table II. that there was a considerable reduction in this disease which had been unduly prevalent during the previous four years. Forty-four per cent. of the cases occurred in the age group 5—10 years.

TYPE OF DISEASE.

Most cases were mild in character, and were discharged on the 28th day. The more severe types of cases were given Anti-Scarlatinal Serum with apparently beneficial results evidenced by the absence of complications. Such complications as did occur were usually Adenitis and Otitis Media, while Scarlatinal Rheumatism and Nephritis were very rare.

While Scarlet Fever is a Streptococcal infection it is not specific in the sense that the same type of streptococcal is always present, and it has been shown that cross-infection may occur in hospital, a patient who is recovering from Scarlet Fever of one type may contract infection with another type of

streptococcus resulting in the occurrence of complications or even a second attack of Scarlet Fever. Therefore, it is permissible—even desirable, for these cases to be nursed at home if the conditions are suitable.

MORTALITY.

There were no deaths from Scarlet Fever during 1937.

DIPHTHERIA.

INCIDENCE.

There were 61 cases compared with 57 in 1936, and 136 in 1935; 56 per cent. occurring in the age group 5—10 years.

TYPE OF DISEASE.

There was no outstanding feature as regards the type of infection beyond the fact that cases generally were very mild or very severe. It would appear that some of the mild cases were really examples of tonsillitis occurring in Diphtheria carriers, while a few were merely examples of bacteriological infection without clinical symptoms.

MORTALITY.

There were two deaths from Diphtheria during 1937.

DIPHTHERIA IMMUNISATION.

As mentioned in the School Medical Report for 1937, considerable attention was paid to the prevention of Diphtheria by Immunisation of infants, toddlers and schoolchildren. While the immediate response was very satisfactory and resulted in the inoculation of 883 cases by the Health Department, considerable apathy on the part of the public in the meantime has been experienced (in spite of continued propaganda), due no doubt to a false sense of security arising from the absence of the disease except in sporadic instances.

Immunisation has now passed the experimental stage : its technique has almost been perfected and the results so successful that there is a strong case for universal adoption. As an interval varying in individuals from three to six months is required to develop immunity after inoculation, the

optimum time to secure protection is not during epidemics or seasonal incidence, but in the interim. The Report of the British Medical Association Committee on Immunisation states that while "publicity campaigns are the function of the local authority, the general medical practitioner can do more than anyone else to educate the public in this matter."

The technique of immunisation adopted in Darwen was the modern one of a single injection of alum-precipitated toxoid as opposed to the older method of three injections at fortnightly intervals which had the disadvantage of being cumbersome and resulted in some children not completing treatment. There is considerable evidence recently that the best method for efficacy of protection and economy of time is the division of the immunising dose into two fractions, the larger portion being received two to three weeks later. It is hoped to adopt this technique during the ensuing year.

PUERPERAL FEVER AND PYREXIA.

INCIDENCE.

It is very satisfactory to record the absence of notification of Puerperal Fever, while there were three cases of Pyrexia (Rise of Temperature). The Public Health Act, 1936, stipulates that Puerperal Fever should be no longer notifiable as a separate entity, but as Puerperal Pyrexia. The reason for this change is that there was some evidence that cases of Puerperal Pyrexia were frequently not notified unless and until the condition revealed itself as the more serious one of Puerperal Fever, much valuable time being meanwhile wasted. The revised method aims at securing immediate notification of any case in which there occurs over a period of 24 hours or recurs during that period, a temperature of 100.4 or over.

MORTALITY.

There were no deaths due to Puerperal Sepsis during 1937.

OPHTHALMIA NEONATORUM.

It may appear satisfactory to note that there was only one notification of this disease—Suppurative Inflammation in the eyes of the new-born—the lowest incidence during the past nine years. As, however, there is definite evidence that more cases occur than notifications received, the position is not so gratifying; as the condition, a prolific source of blindness in past years, is completely preventable, its elimination should not be impossible.

OTHER INFECTIOUS DISEASES.

The incidence of Pneumonia and Erysipelas does not call for any comment, but the occurrence of one case of Cerebro-Spinal Fever and one of Acute Poliomyelitis was exceptional, the previous notifications of these diseases dating back to 1926 and 1927 respectively. Poliomyelitis is rarely diagnosed in its acute stage owing to the insidious nature of onset, and is usually only discovered when the resultant Infantile Paralysis appears.

PROVISION FOR SMALLPOX.

Under the County Scheme, Darwen's provision for Smallpox was increased during the year from three to four beds which are retained at Finnington Hospital, Blackburn, the cost rising from £60 to £80.

There have not been any notifications of Small-pox since 1907. One important result of this desirable state of affairs is the consistent decrease in the number of children vaccinated—a further example of public apathy and a want of appreciation of the elements of prevention.

The following table exemplifies the decrease in vaccination during the past 10 years—

RETURN OF VACCINATION FOR THE PAST 10 YEARS.

Year	Births	Successfully Vaccinated	Rate per cent Vaccinated
1928	460	124	26.95
1929	489	128	26.18
1930	438	96	21.91
1931	413	101	24.45
1932	398	82	20.60
1933	359	80	22.28
1934	377	85	22.54
1935	371	59	15.90
1936	354	57	16.10
1937	343	61	17.78

BULL HILL HOSPITAL.

There was no change in the arrangements by which cases of infectious disease are received at Bull Hill Hospital from Turton, Oswaldtwistle, Blackburn and Blackburn R.D. Only in the case of Turton, however, is a retaining fee paid—£50 per annum for eight beds.

The following table gives particulars of the cases admitted during 1937 from Darwen and the other authorities—

DARWEN.					
	No of Cases in at 1/1/37	No of Cases		Mortality	No. of Cases Remaining in at 31/12/37
		Admitted	Discharged		
Scarlet Fever	7	35	38	...	4
Diphtheria	5	63	59	2	9
Pneumonia .....	...	3	3	1	...
Erysipelas .....	...	1	1	...	...
Suspect Typhoid ...	...	1	1	...	...

TURTON.					
Scarlet Fever .....	...	5	2	...	3

OSWALDTWISTLE.					
Scarlet Fever .....	...	3	3	...	...
Diphtheria .....	...	13	12	2	1

BLACKBURN RURAL DISTRICT.					
Scarlet Fever .....	...	1	1	...	...
Diphtheria .....	...	2	1	...	1

CROSS-INFECTION.

A case of Scarlet Fever admitted from Mellor was incubating Measles, and although isolated at the very earliest sign, infected several other children in the Ward. Shortly after this a Darwen case was admitted incubating Chicken-pox, and the rest of the Ward became infected—these children then having the three diseases simultaneously.

One child developed Broncho-Pneumonia as a complication of Measles which proved fatal.

No cross-infection occurred in the Diphtheria Wards.

NURSING.

HEALTH OF STAFF.

One nurse contracted Diphtheria of a mild type, resuming duty after six weeks. One Probational Nurse was off duty one week with tonsilitis. Otherwise the health of the Nursing Staff was uniformly good.

It is the practice to immunise against Diphtheria if necessary new probationer nurses.

STAFF SHORTAGE.

Very considerable difficulty was experienced during 1937 in keeping the Nursing Staff up to normal strength which, in addition to Matron, consists of one Sister, two Fever-trained Nurses and four Probationers. This shortage is not confined to Darwen, is universal, and has gradually become acute over a number of years. The position, however, is more urgent in the smaller fever hospitals like Bull Hill which not being recognised Training Schools fail to attract probationers. Again depletion of a small staff is obviously a greater problem than in the large hospitals where the increased duties necessitated can be spread over a larger personnel.

For routine and holiday relief it has been necessary to engage temporary staff, but in the early part of this year the Committee recognising the administrative and economic disadvantages of the policy decided to increase the salaries of all grades of the Nursing Staff in the hope of attracting applicants. While this should in some measure tend to alleviate matters it must be remembered that the problem is not a temporary one and is universal.

TUBERCULOSIS.

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

The following table shows the age group incidence of new cases of Tuberculosis notified and the deaths from the disease during 1937.

Age Periods.	New Cases.				DEATHS			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
Years.								
0-1...	...	...	...	...	...	...	...	...
1-5...	...	...	...	...	...	...	...	...
5-10	1	...	...	2	...	...	...	...
10-15	...	...	...	...	...	...	...	...
15-20	...	1	...	1	1	1	...	...
20-25	2	2	...	...	1	...	...	...
25-35	5	1	...	...	2	2	...	...
35-45	2	3	...	...	2	2	...	...
45-55	1	2	...	...	...	2	...	...
55-65	2	...	...	...	2	...	...	...
65 and upwards	..	...	...	...	...	...	...	...
.....	...	...	...	...	...	...	*2	...
Totals ...	13	9	...	3	8	7	2	...
	22		3		15		2	

* Adjusted to agree with Registrar-General's figure.

OCCUPATIONAL INCIDENCE.

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

WARD INCIDENCE.

The following table shows the incidence of Tuberculosis during the past 10 years classified as to Wards.

	Central	West-Central	North-East	North-West	South-East	South-West
1928	5	3	5	2	6	9
1929	6	2	5	4	5	4
1930	0	1	2	8	8	5
1931	3	2	4	4	3	6
1932	3	1	2	2	1	5
1933	5	0	7	5	6	3
1934	6	1	5	2	5	5
1935	4	0	6	4	4	3
1936	6	3	5	6	4	3
1937	6	3	1	5	5	5
Total	44	16	42	42	47	48

PREVENTION OF BLINDNESS.

The Public Health (Ophthalmia Neonatorum) Amendment Regulations, 1937, requires notification of cases to be made by the notifying practitioner direct to the Medical Officer of Health of the Local Authority.

Every opportunity is taken to impress upon midwives the need for careful prophylaxis of the eyes of the new-born and the necessity for renewing eye-drops at least once per month.

Facilities exist for the admission of cases of Ophthalmia Neonatorum into hospital under the care of an Ophthalmic Surgeon.

The services of the Ophthalmic Surgeon appointed to the Education Committee are available to pre-school children and treatment provided where necessary at the School Clinic. Some cases of slight external eye conditions are treated at the welfare centre minor ailments clinic for pre-school children held daily.

SECTION VIII.

METEOROLOGY.

Meteorology.

The Meteorological Observatory is at Bold Venture Park in Lat. $53^{\circ} 41' 25''$ N., and Lon. $2^{\circ} 28' 32''$ W., and is at an altitude of 728 feet above mean sea level.

Observations are taken twice daily at 9 a.m. and 9 p.m.

This station is connected with the Meteorological Office, and is called a Normal Climatological Station. A report, giving all details of readings, is sent each month to the Meteorological Office, London.

The total rainfall for the year was 987.8 millimetres, or 38.9 inches being recorded on 218 days; the average for the last twenty years being 55.91 inches. The greatest monthly fall was in February, 184.0 millimetres; and the lowest in September, 51.7 millimetres. The greatest daily fall was 34.6 millimetres, on January 5th.

The total sunshine registered on 236 days during the year was 1171.4 hours, the average for twenty years is 1140.5 hours. May registered the highest monthly total, 176.1 hours; and January the lowest, 18.2 hours. The highest daily reading was 14.5 hours on June 21st.

The mean minimum temperature in shade was 40.8° , the average for the last twenty years is 40.7° . The lowest monthly mean was in March, 31.0° , and the lowest reading for the year 23.0° on December 10th.

Maximum wind velocities of 38 miles per hour were recorded on January 28th and 29; March 11th, November 17th, and December 2nd, directions N.E., E., S.E., E.N.E., and E.

Twenty-six observations of snow, 22 observations of snow lying, 49 observations of fog, 75 observations of ground frost, 12 observations of hail, 10 observations of thunder, 1 observation of thunder and lightning, 1 observation of rainbow, 3 observations of dry air, 43 observations of dew, and sleet on 6 occasions.

Meteorology

The meteorological conditions at the time of the storm were very unfavorable. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough.

Observations were taken from the ship at intervals of one hour.

The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

The total amount of rain which fell during the storm was 1.5 inches. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

The total amount of rain which fell during the storm was 1.5 inches. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

The total amount of rain which fell during the storm was 1.5 inches. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

The total amount of rain which fell during the storm was 1.5 inches. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

The total amount of rain which fell during the storm was 1.5 inches. The wind was from the north-east at a velocity of 15 to 20 miles per hour, and the sea was very rough. The temperature of the air was 55° F., and the temperature of the water was 50° F.

MEAN METEOROLOGICAL READINGS FOR 1936 AND 1937.

MONTH.	Barometer Corrected.		Thermometers.												Hu- midity.		Sunshine (hours).		Rain (m.m.)		Wind Velocity.		Wind Direction, 1937.												Cm.
			Maxi- mum.	Mini- mum.	Mean.	Earth.																													
						1 Foot.		4 Feet.																											
	1936 ins.	1937 ins.	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.									
January	29.423	29.637	39.0	43.0	33.0	35.0	36.0	39.0	36.8	38.9	40.4	42.3	88	90	24.3	18.2	184.5	112.3	12	17	0	1	7	7	25	7	13	2	0						
February	29.663	29.484	39.0	42.0	30.0	34.0	34.5	38.0	34.6	38.9	38.4	41.0	83	90	70.0	37.6	95.9	184.0	10	13	2	0	2	4	16	8	14	10	0						
March	29.774	29.623	47.0	40.0	37.0	31.0	42.0	35.5	40.4	37.6	39.6	39.7	80	86	38.4	67.6	104.9	61.5	9	10	3	14	10	6	10	4	4	11	0						
April	29.956	29.793	49.7	53.0	34.6	40.0	42.1	46.5	44.2	46.6	42.9	42.7	75	86	155.6	96.8	35.9	122.2	8	9	2	7	10	9	9	1	19	3	0						
May	29.999	29.943	61.0	61.0	42.0	43.0	51.5	52.0	52.1	53.6	47.2	48.2	70	79	190.6	176.1	22.7	61.5	13	12	0	11	2	6	12	9	20	2	0						
June	29.940	29.982	65.9	64.0	49.1	47.0	57.5	55.5	57.0	58.6	50.9	53.0	79	80	135.1	131.8	126.6	63.0	11	10	1	1	3	2	8	6	26	13	0						
July	29.706	29.919	64.0	67.0	51.0	52.0	57.5	59.5	59.5	59.0	55.1	55.6	82	84	110.1	102.8	134.2	57.0	12	8	1	0	1	2	11	6	35	6	0						
August	30.026	29.972	67.0	70.0	51.0	51.0	59.0	55.5	60.7	61.2	56.3	57.6	84	81	136.7	175.9	80.3	59.9	9	11	0	4	3	2	10	8	27	8	0						
September.....	29.965	29.948	62.0	62.0	50.0	46.0	56.0	54.0	58.0	56.4	55.0	56.0	84	84	81.7	105.1	158.2	51.7	11	10	3	3	4	1	19	8	18	4	0						
October	30.021	29.934	54.0	55.0	41.0	43.0	47.5	49.0	49.6	50.9	51.4	53.0	83	87	79.7	67.9	160.7	73.7	14	9	2	3	11	7	11	6	17	5	0						
November	29.815	30.001	45.0	45.0	36.0	36.0	40.5	40.5	42.6	42.6	46.7	47.9	87	85	46.1	64.3	186.2	57.3	11	12	0	8	11	6	13	3	5	14	0						
December	29.931	29.864	44.0	39.0	36.0	32.0	40.0	35.5	39.6	38.6	42.8	43.2	87	89	25.8	27.3	148.9	84.7	15	14	5	5	10	2	21	3	8	8	0						
Totals.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1094.1	1171.4	1428.8	987.8	...	...	19	57	74	54	165	69	206	86	9
Mean	29.851	29.833	53.1	53.4	40.8	40.8	47.0	46.7	47.9	48.6	47.2	48.3	81	85	91.1	97.6	119.9	82.3	11	11	...	...	...	...	...	...	...	...	...

APPENDICES.

APPENDIX I.

CAUSES OF DEATH IN DARWEN, M.B., 1937.

Causes of Death (Civilians only).	Males.	Females.
All Causes	261	279
1. Typhoid Fever, etc.	—	—
2. Measles	—	1
3. Scarlet Fever	—	—
4. Whooping Cough	—	—
5. Diphtheria	—	2
6. Influenza	15	10
7. Encephalitis Lethargica	1	—
8. Cerebro-Spinal Fever	1	—
9. Respiratory Tuberculosis	7	8
10. Other Tuberculosis	2	—
11. Syphilis	—	—
12. General Paralysis of the Insane, etc.	—	—
13. Cancer	32	42
14. Diabetes	1	5
15. Cerebral Haemorrhage	15	27
16. Heart Disease	65	82
17. Aneurysm	—	—
18. Other Circulatory Diseases	22	7
19. Bronchitis	5	8
20. Pneumonia	22	9
21. Other Respiratory Diseases	2	—
22. Peptic Ulcer	6	1
23. Diarrhoea, etc. (under 2 years)	—	—
24. Appendicitis	—	1
25. Cirrhosis of Liver	—	1
26. Other Liver Diseases	2	2
27. Other Digestive Diseases	7	8
28. Nephritis	12	10
29. Puerperal Sepsis	—	—
30. Other Puerperal Diseases	—	3
31. Congenital Debility: Premature Birth, etc.	5	9
32. Senility	5	12
33. Suicide	6	3
34. Other Violence	9	10
35. Other Defined Diseases	19	18
36. Ill-defined Causes	—	—
Diarrhoea (2 years and over)	—	—
Special Causes (included in No. 35 above)—		
Smallpox	—	—
Poliomyelitis	—	—
Polio-encephalitis	—	—

APPENDIX 2.

Vital statistics of whole District during 1937 and previous years.

Year.	Population	Births.		Deaths.		Infantile Mortality.		Maternal Mortality Rate per 1000 live and still Births.
		Number.	Rate per 1000 Population	Number.	Rate per 1000 Population	Number.	Rate per 1000 live Births.	
1928	38150	460	12.05	492	12.89	31	67	13.04
1929	37780	489	12.94	555	14.68	42	85	8.17
1930	37000	438	11.83	474	12.81	31	70	6.49
1931	36012	413	11.33	568	15.59	34	82	6.97
1932	35580	398	11.18	530	14.89	19	47	13.04
1933	34870	359	10.29	502	14.39	25	69	10.38
1934	34180	377	11.02	462	13.51	17	45	17.19
1935	33670	371	11.01	514	15.26	18	48	7.69
1936	33060	354	10.71	509	15.39	26	73	5.42
1937	32280	365	11.30	540	16.73	20	54	7.95

INDEX.

	PAGE.
Introduction	3, 4
Members of Health Committee	5
Staff	5
Clinics and Treatment Centres	6

SECTION I.

Statistics and Social Conditions of the Area	7-14
Births	10
Deaths	11-14
Extracts from Vital Statistics	9
Population	10

SECTION II.

General Provision of Health Services for the Area	15-20
Ambulance Facilities	17
Health Education	19
Hospitals	18
Laboratory Facilities	17
Local Government and Other Officers' Superannuation Act, 1922...	20
Nursing in the Home	18
Public Assistance Cases	19
Puerperal Pyrexia	19
Smallpox	18
Staff	17
Treatment Centres and Clinics	18
Tuberculosis	18
Venereal Diseases	19
Workmen's Compensation Act, 1923	20

SECTION III.

Maternity and Child Welfare	21-35
<i>Maternal Welfare</i>	23-30
Appointment of Obstetrical Consultant	24
Consultative Pre-Natal Clinic	25
Dental Clinic	26
Home Helps	29
Inspection of Maternity and Nursing Homes and Midwives	29

	PAGE.
Institutional Provision for Mothers	28, 29
Maternal Mortality	27
Maternal Mortality in Darwen	27, 28
Midwives Act, 1918	30
Midwives Act, 1936	23
Routine Pre-Natal Clinics	25
<i>Child Welfare</i>	30-35
Births Notified and Registered	30
Home Visitation of Mothers and Infants	34
Home Visiting	34
Infant Deaths	31
Infant Life Protection	34
Infant Welfare Clinics	31-34
Institutional Provision and Orthopaedic Treatment	30
Stillbirths	31
Conclusion	35

SECTION IV.

Sanitary Circumstances of the Area	37-53
Chief Sanitary Requirements of the District	53
Closet Accommodation	41
Disinfestation	48
Eradication of Bed Bugs	48
Factories, Workshops, Workplaces and Homework	50-52
Houses Let in Lodgings ..	49
Lethal Chamber	44
Municipal Hostel	49, 50
Notable Sanitary Improvements	53
Nuisances Discovered	45, 46
Offensive Trades	49
Open Spaces	52, 53
Public Buildings	49
Public Cleansing	42-44
Depôt	43
Gully Cleansing	42-43
Litter	43
Snow Removal	43
Street Cleansing	42
Refuse Collection and Disposal	42
Summary	43, 44

	PAGE.
Public Conveniences	44
Rag Flock Acts, 1911 to 1928	49
Rivers and Streams	41
Sanitary Inspection of the Area	45
Schools	48
Sewerage and Drainage	41
Shops	47
Smoke Abatement	47
Swimming Baths and Pools	47
Tents, Vans and Sheds	49
Water	39, 40

SECTION V.

Housing	55-60
Byelaws Relating to Houses, etc.	60
General Observations	60
General Observations as to Housing Conditions	59
Overcrowding	59
Statistics	57-59
Sufficiency of Supply of Houses	59
Unhealthy Areas	60

SECTION VI.

Inspection and Supervision of Food	61-67
Bakehouses	66
Chemical and Bacteriological Examination of Food	66
Diseases of Animals Acts	64
Food and Drugs (Adulteration) Act, 1928	66
Meat and Other Foods	64, 65
Milk Supply	63
Rats and Mice Destruction Act, 1919	66, 67
Sampling	64

SECTION VII.

Prevalence and Control of Infectious Diseases	69-80
Bull Hill Hospital	76, 77
Diphtheria	74, 75
Nursing	78

	PAGE.
Other Infectious Diseases	76
Ophthalmia Neonatorum	75
Prevention of Blindness	80
Prevalence of Notifiable Diseases (other than Tuberculosis)	71, 72
Puerperal Fever and Pyrexia	75
Scarlet Fever	73, 74
Tuberculosis	78-80
Ward Incidence	72, 73

SECTION VIII.

Meteorology	81-86
Appendices	87-89



