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**Contributors**

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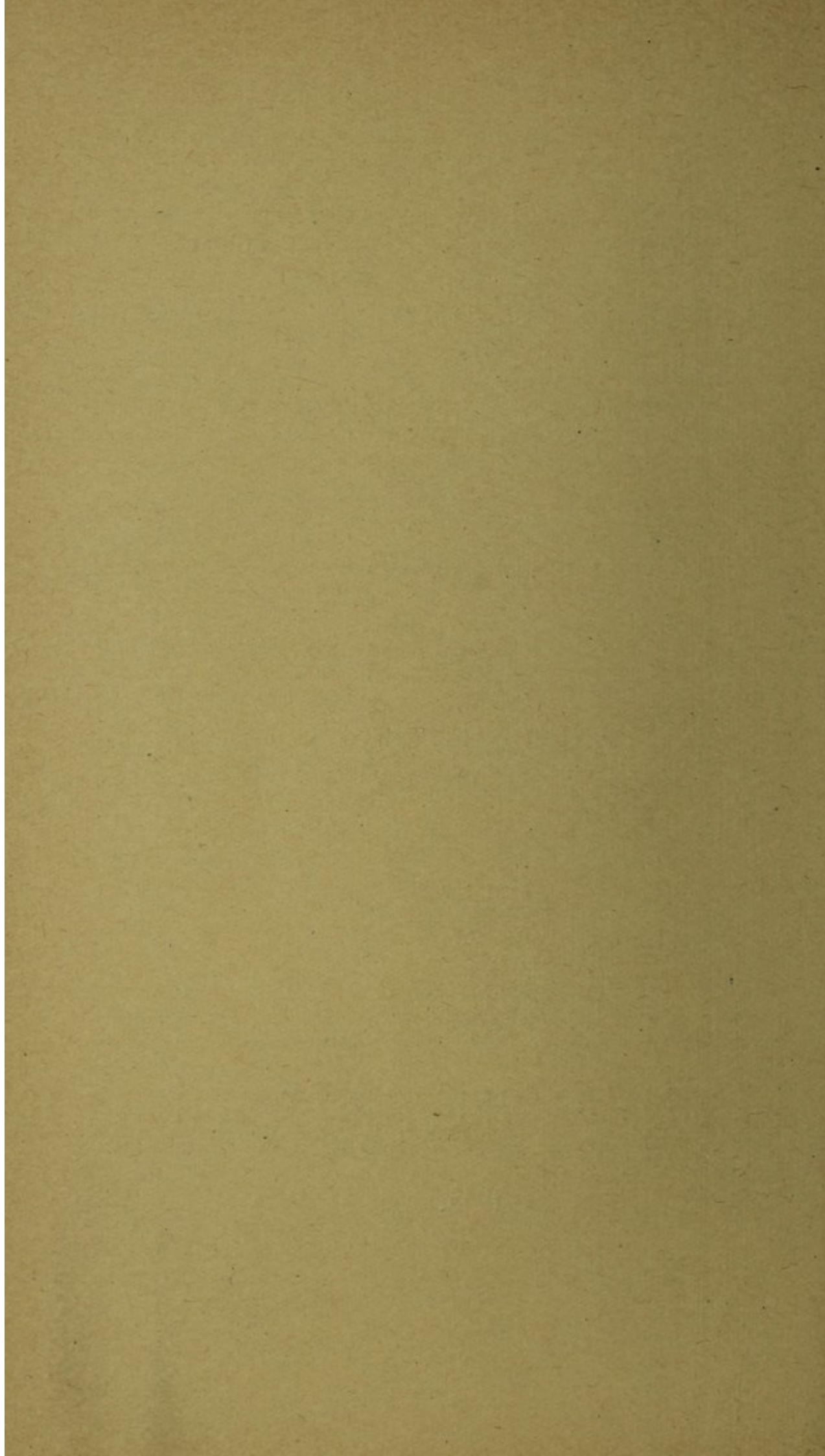


COUNTY BOROUGH  
OF  
BARROW-IN-FURNESS.

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Medical Officer's Report,

1945.





COUNTY BOROUGH OF BARROW-IN-FURNESS.  
PUBLIC HEALTH DEPARTMENT.

ANNUAL REPORT OF THE  
MEDICAL OFFICER OF HEALTH.  
1945.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH  
COMMITTEE.

Ladies and Gentlemen,

I have the honour to present my Annual Report on the health of the Borough for the year 1945. Although it is not possible to prepare the report on pre-war lines, some information has been re-introduced which was prohibited during the period of hostilities.

The health of the community generally can be regarded as good and the only outbreak of infection which requires special comment was the outbreak of Paratyphoid B. Fever which occurred in August and persisted intermittently until November. This outbreak is dealt with more fully in the body of the Report.

According to the estimate of population furnished by the Registrar-General, the population figure rose by 2,300 to 66,690. There was a decrease of 38 registered births as compared with 1944. The number registered being 1,284, giving a birth rate of 19.2 per 1,000 population. The number of deaths registered was 839—an increase over 1944 of 48—giving a death rate of 12.5 per 1,000 population. The infant mortality rate fell from 60.51 to 58.4 per 1,000 births. There were 5 maternal deaths against 8 the previous year, producing a maternal mortality rate of 3.8 compared with 6.0 for 1944.

Cancer deaths fell from 117 to 109 with a consequent variation in the death rate due to this cause of 1.63 compared with 1.8. Deaths from Pulmonary Tuberculosis fell from 45 to 37 and, although this is not the lowest figure on record for the Borough, it is one of the lowest. The death rate for this disease is 0.55 per 1,000 population.

I wish to record my appreciation of the loyal help and co-operation of the medical, hospital, inspectorial, nursing and clerical staffs, by whose efforts the work of the Department has been carried out in an efficient and practical manner.

My thanks are due to the Members of the Council, the Chairman and Members of the Health Committee and the Maternity and Child Welfare Subcommittee, and the Chief Officials for the help and support which has been accorded to me during the year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

A. ROBB FORREST,  
Medical Officer of Health.

## STAFF.

The following staff is employed on the work of Public Health in the Borough :—

## Medical Officer of Health, Tuberculosis

Officer and Port Medical Officer .... A. R. Forrest, M.D., D.P.H.

## Deputy Medical Officer of Health, Assistant Tuberculosis Officer and Assistant Port Medical Officer

..... J. A. Guy, M.D., D.P.H. (In H.M. Forces).

## Assistant Medical Officer in charge of Maternity and Child Welfare Work and Inspector of Midwives

..... Dorothy G. Stewart, M.B., Ch.B.

## Assistant Medical Officer and Assistant School Medical Officer

..... G. G. Dickie, M.B., Ch.B., D.P.H. (In H.M. Forces).

do. .... F. Klopstock, M.D. (Temporary).

do. .... Mary B. McCulloch, M.B., Ch.B. (Temporary).

Obstetric Officer ..... G. Stoneham, M.B., Ch.B., M.R.C.O.G.

Public Vaccinator ..... J. W. Magill, L.R.C.P., L.R.C.S. Ed., L.R.F.P.S. Glas.

Chief Sanitary Inspector ..... J. Shanks, Cert. R.S.I. & Joint Board. Cert. R.S.I. (Meat & Food Inspection). Cert. R.S.I. (Smoke Inspection).

Assistant Chief Sanitary Inspector ..... T. E. Pollock, Cert. R.S.I., Cert. R.S.I. (Meat and Food Inspection).

Sanitary Inspector for Meat Inspection ..... T. Limbert, Cert. R.S.I. & Joint Board, Cert. R.S.I. (Meat and Food Inspection).

Senior Housing Inspector ..... G. Thompson, Cert. R.S.I. and Joint Board.

District Sanitary Inspectors .... E. Adams, Cert. R.S.I. (until March, 1945).

S. Thompson, Cert. R.S.I. & Joint Board, Cert. R.S.I. (Meat and Food Inspection).

G. S. Morris, Cert. R.S.I. and Joint Board. (until April, 1945).



Rodent Officer	....	....	H. Williams.
Trainee Sanitary Inspectors	....	....	J. J. O'Neill.
			A. Rodgers (from 10/12/45).
Health Visitors	....	....	Mrs. B. Kevany, S.R.N., S.C.M.
			Miss E. Cunliffe, S.R.N., S.C.M.
			Miss K. Imeson, S.R.N., S.C.M.
			Miss M. K. Burns, S.R.N., S.C.M.
			Miss E. M. Harper, S.R.N., S.C.M.
Tuberculosis Health Visitor	....	....	Miss C. Roberts, S.R.N.
Matron of Fever & Tuberculosis Hospital	....	....	Miss A. M. Gidden, Fever Cert.
Matron of Maternity Hospital	....	....	Miss G. Tunstall, S.R.N., S.C.M.
Chief Clerk	....	....	Mr. W. Knox (retired 31/3/45).
			Mr. W. Yates (appointed 1/4/45).

## VITAL STATISTICS, 1945.

[illegible]

## TUBERCULOSIS.

The increase in the number of notified cases of Pulmonary Tuberculosis was maintained during the past year as shown in the following table :—

Year .....	1945.	1944.	1943.
Pulmonary cases .....	70	69	58
Non-pulmonary cases .....	13	19	27
Deaths, Pulmonary .....	37	45	31
Death Rate .....	0.55	0.69	0.48

## CLINICS.

Clinics are held at the Corporation Dispensary, 64, School Street, as follows :—

Males .....	Monday, 2-0 p.m.
Females .....	Wednesday, 2-0 p.m.
Children .....	Friday, 2-0 p.m.

An evening clinic is held on the second Friday of the month, at 6-0 p.m., to enable patients who are at work to attend without loss of working time. Recently it has been found necessary to hold an additional clinic on Wednesday mornings at 10-30.

Domiciliary visits are carried out by the Tuberculosis Nurse and the Clinical Tuberculosis Officer in charge of the Dispensary. The latter devotes one afternoon per week to this occupation. It is the object of domiciliary visits and clinic work to see every notified case at regular intervals so that advice may be given where necessary and institutional treatment arranged for in unsatisfactory cases.

## CLERK.

The part-time use of a clerk in the Dispensary has been greatly appreciated. The increase of work in the Dispensary has been encroaching on the visiting time of the nurse, and the help of a clerk has enabled this to be rectified.

## FINANCIAL ASSISTANCE.

Under Memo. 266/T. financial assistance continues to be given to suitable cases as shown in the table below :—

	Maintenance Allowances.	Discretionary Allowances.	Special Payments.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1944....	1813 7 10	64 13 4	8 10 6	1886 11 8
1945....	1857 0 5	67 0 11	12 8 0	1936 9 4

No. of patients who received payment during 1945 :—

Males—46 ; Females—3. Total—49.



## HOSPITALS.

Full use has been made of Devonshire Road Hospital (16 beds) and Meathop Sanatorium (14 beds) during the past year. The former is used for advanced cases and also where a patient is waiting a bed in Meathop Sanatorium, and it is desirable to commence sanatorium treatment as soon as possible. The cubicle arrangement of the hospital makes this quite feasible.

## NON-PULMONARY CASES.

The disposal of non-pulmonary cases remains the same as last year. Cases of bone and joint tuberculosis are sent to the Robert Jones and Agnes Hunt Orthopædic Hospital at Oswestry. Cases of skin tuberculosis are referred to the Manchester and Salford Hospital for Skin Diseases, whilst cases of cervical and abdominal tuberculous adenitis are sent to the North Lonsdale Hospital.

## GENERAL.

The interchange of information and help continues with the Medical Officer at Messrs. Vickers-Armstrongs Limited.

During domiciliary visiting it has been noticed that an increased number of cases of children live in the same room with open cases of tuberculosis. In these cases efforts have been made to improve the conditions by re-housing, and, where this was not possible, by advice. This problem seems far from solution until the new housing programme gets under way.

The position with regard to X-Ray plant is still far from satisfactory, and the practice continues of referring patients to the North Lonsdale Hospital for an X-Ray and screening. The absence of an X-Ray unit often necessitates a delay in giving a final diagnosis and prevents any attempt at commencing or maintaining Artificial Pneumothorax, a recognised and valuable means of treatment now widely employed. Cases requiring this form of treatment are referred to Meathop Sanatorium. The very few cases who are found suitable for Thoracoplasty are admitted to High Carley Sanatorium with the kind permission of Lancashire County Council.

## MATERNITY AND CHILD WELFARE.

### (a) RISEDAL MATERNITY HOSPITAL.

The Municipal Maternity Hospital of 28 beds is still inadequate for the number of cases requiring institutional confinements. The number of deliveries was again over 500 for the year. The bookings have been so heavy that the beds are booked for seven months in advance. The scheme in operation is to accept normal bookings up to 30 per month and an additional 10 beds kept for medical emergencies and bad home conditions.

The scheme for the erection of a temporary building has been discontinued owing to the difficulties encountered during war time in obtaining labour and materials for building. The Council purchased a large house—



No. 1, Prospect Road—adjoining the Hospital, which had been badly damaged by enemy action, and had it repaired. This house will provide an additional six beds for patients, a babies' nursery and staff accommodation. The emergency Maternity Home at Arnside is still in operation and has accommodation for ten patients. The Home ceased to operate under the Evacuation Scheme, but the Council was still able to obtain accommodation on a per capita basis.

The Clinics have been well attended and there has been an increase in the number of women attending the Post-Natal Clinic, though it would be gratifying to see still more women availing themselves of the opportunities. The Birth Control Clinic, which has been brought up to date, has proved of very great help in genuine cases requiring guidance, but there have also been a large number of women coming to the Endocrine Clinic seeking advice with regard to sterility.

There were four cases of Eclampsia during the year, and three of these patients were delivered of living infants.

There were, unfortunately, three maternal deaths. All of these patients had attended the Clinic, but their deaths were due to unavoidable complications. There were again seven patients requiring blood transfusions, mostly emergencies, and the fact that there is now always two pints of blood in store in the Hospital ready for such emergencies is a great asset, and has been responsible for saving at least one life.

It is very interesting to note that the incidence of stillbirths is reduced, though there has been a bigger number of foetal abnormalities which had caused a rise in the number of neonatal deaths.

The premature babies have done very well. There were 38 premature infants born during the year, and in 22 cases the reason for the premature labour was obvious. 14 of these babies died, and, as is shown in the report, there was a definite cause for the death of the child in all cases.

Of the 24 who lived, two were under 3½ lbs. in weight, and six under 4 lbs. Several of the premature infants went home fully breast fed. There is now a service whereby premature babies born on the district can be brought into Hospital. Special cradle baskets have been provided for the purpose of transporting the infant. This service would be greatly improved if the mothers could be admitted with the infants because of the value of breast milk in the feeding of a premature baby.

Number of beds available	28
Total admissions	589
Number of Deliveries	508
Number of ante-natal patients treated as in-patients	170
Cases delivered by Midwives	455

Cases delivered by Doctors .....	53
(a) Obstetrician.....	22
(b) General Practitioners.....	31
Cases in which medical aid was summoned .....	132
(a) Obstetrician.....	88
(b) General Practitioners.....	44
Maternal Deaths .....	3
Infantile Deaths—	
(a) Stillbirths .....	8
(b) Neonatal deaths .....	22
(c) Babies admitted from district .....	5
Clinics—	
Ante-Natal :	
Number of individuals attended .....	713
Total attendances .....	4636
Post-Natal, Gynæcological and Endocrine—	
Number of individuals attended .....	522
Total attendances .....	858
(a) Post-natal ....	259
(b) Gynæcological ....	118
(c) Endocrine ....	31
(d) Birth Control ....	34
Normal Deliveries .....	450
Obstetrician.	General Practitioners.
255	L.O.A. 38
128	R.O.A. 17
8	P.O.P. 1
2	B.B.A. —
1	Precipitate —
—	—
394	56
—	—
Breech Deliveries .....	17
Obstetrician .....	14
General Practitioners .....	3
Twin Deliveries .....	10
Obstetrician .....	7
General Practitioners .....	3
Forceps Deliveries .....	39



Obstetrician.	Indication.	General Practitioners.
8	Delayed 2nd stage ....	12
4	Deep transverse arrest ....	1
—	Non-co-operation of patient ....	3
—	Unstated....	5
3	P.O.P. ....	1
—	Maternal distress ....	2
—		—
15		24
—		—
Perforation for Hydrocephalus	.....	2
Manual Removal of Placenta	.....	3
Obstetrician	.....	3
Blood Transfusion	.....	7
Indications—		
Placenta Prævia	.....	2
P.P.H. due to Atonic Uterus	.....	3
P.P.H. due to Retained Placenta	.....	1
Microcytic Anaemia	.....	1
Abnormal Presentations	.....	4
Face	.....	2
Prolapsed Cord and Face	.....	1
Brow	.....	1
Fœtal Abnormalities	.....	12
Hare Lip and Cleft Palate	.....	2
Anencephaly	.....	1
Hydrocephalus and Spina Bifida	.....	3
Spina Bifida	.....	5
Mongol	.....	1
Complications of Pregnancy : Delivered in Hospital—		
Hydramnios	.....	3
Treated with Artificial Rupture of Membranes	.....	1
Carditis	.....	1
Chest Conditions	.....	4
Pulmonary Tuberculosis	.....	4
Pre-Eclampsia and Chronic Nephritis	.....	27

Hæmorrhage after 28 weeks	20
Ante-Partum	14
Toxic Accidental	3
Non-Toxic Accidental	2
Incidental	6
Placenta Prævia	3
Post-Partum	6
Retained Placenta	2
Atonic	4
Hæmorrhage in early pregnancy	10
Threatened Abortion	6
Complete Abortion	3
? Ectopic	1
Induction of Labour (Surgical)	17
Indications—	
Eclampsia	1
Pre-Eclampsia	10
Hydramnios —	1
Chronic Nephritis	2
Ante-Partum Hæmorrhage	2
Acute Retention of Urine	1
Sterilization following normal delivery	1
Indication—Mitral Stenosis.	
Cæsarian Section	1
Indication—Disproportion.	
There was a trial labour in this case.	
Discharged Undelivered	28
Not in labour	23
Version as in-patients under general anæsthetic	3
Examination under anæsthetic	2
Complications of Pregnancy : treated and discharged undelivered....	42
Renal Functions	1
Threatened Miscarriage	6
Pyelitis	7
Hyperemesis	1
Pre-Eclampsia	19
Chorea	2
General Debility	4
Rheumatism	1
Phlebitis	1
Maternal Deaths	3
Ruptured Uterus	1
Exhaustion, puerperal mania, paralytic ileus	1
Obstetric Shock	1



## Infants—

Number of infants born alive .... 510

Premature Infants .... 38

(of these 14 died—see below).

Stillbirths ..... 8

Anencephalic ..... 1

Macerated ..... 3

A.P.H. .... 2

Hydrocephalus and Spina Bifida ..... 2

Neonatal Deaths ..... 22

## Causes—

Spina Bifida ..... 5

Hydrocephalus and Spina Bifida ..... 2

Cerebral Hæmorrhage ..... 1

Prematurity associated with Maternal Eclampsia 1

Prematurity associated with Maternal Pyelitis ... 1

Prematurity associated with Maternal A.P.H. .... 2

Prematurity associated with Congenital Heart .... 3

Prematurity under 2½ lbs. .... 3

Prematurity non-viable (but lived) .... 2

Prematurity and anæmia .... 1

Prematurity and marasmus ..... 1

Premature babies which lived..... 24

Prematurity associated with Maternal Eclampsia .... 1

„ „ „ „ Pre- „ .... 9

„ „ „ „ A.P.H. .... 1

„ „ „ „ Twins ..... 5

„ „ „ „ Maternal Hydramnios ..... 1

„ „ no apparent cause ..... 7

Two of these babies were under 3½ lbs.

Six of these babies were under 4½ lbs.

Number of babies discharged entirely breast fed ..... 364

Number of babies discharged entirely bottle fed ..... 96

Number of babies discharged part bottle and part breast fed ..... 53

Premature babies admitted from district ..... 5

All under 4 lbs.

2 lived—(1) 3 lbs.

(2) 3 lbs. 8 ozs. .

3 died —shortly after admission.

## (b) MUNICIPAL MIDWIVES AND DOMICILIARY MIDWIFERY SERVICE.

The scheme for the domiciliary midwifery service has been maintained with eight Municipal Midwives. Each Midwife has received instruction in Minnitt's Gas/Air Analgesia, and the requisite number of machines have been ordered, but delivery is slow. The question of providing motor transport for each Midwife has been under consideration by the Council as it has been found that it is impossible to carry a heavy midwifery bag and a Minnitt's apparatus on a bicycle. The Town Ambulance Service is available at night for conveying midwives to their cases until the transport question is settled.

The Municipal Midwives attend the Ante-Natal Clinic at Risedale Maternity Hospital at special sessions which are conducted by the Maternity and Child Welfare Officer and any abnormal case is referred to the Obstetric Consultant.

The following is a summary of the work undertaken by the Midwives during the year :—

Municipal Midwives —8—Domiciliary cases.			
	As Midwives....	.....	390
	As Maternity Nurses	....	107
Private Midwives —7—As Midwives....			
	As Maternity Nurses		112
		.....	43

The figures for Municipal Midwives represent 76% of the total domiciliary births in the Borough.

## (c) WELFARE CENTRE.

The Welfare Centre continues to function energetically and the average attendances keep well up to expectations. The average attendance for 1945 was 142.5, compared with 138.5 for 1944. The number of children who first attended during the year and who, on the date of their first attendance, were under one year of age was 1,128, and those over one year of age was 75, whilst the total number of children who were under one year of age at the end of the year was 990, and over one year of age, 4,599. Two Assistant Medical Officers and five Health Visitors attend the Clinic. Babies are weighed weekly until they are three months old when, if their condition is satisfactory, monthly weighing is regarded as sufficient. The Medical Officers see all new babies referred by the Health Visitors for advice on feeding and general management of the child. Full use has been made of the facilities available for mothers to purchase dried milk, foods, vitamin preparations and other medicaments, and also to collect their allocation of Fruit Juice and Cod Liver Oil under the Ministry of Food Scheme. In order to reduce the average attendance to reasonable proportions, it will be necessary to decentralise the Clinics by new buildings in different areas of the town.



## (d) WAR-TIME NURSERY.

This useful institution continued its activities during the year. The accommodation remained the same, viz—45 for day and 15 children at night. The number of children in attendance dropped steadily in the last quarter of the year since many of the mothers returned to their homes owing to the closing down of certain of the war-time industries. The training and care of the children was demonstrated in their improved physical condition and the instruction they received in personal hygiene and conduct laid a sound foundation for their future well-being.

## (e) CARE OF PREMATURE BABIES.

Special attention was paid to the care of premature babies, and the arrangements for the admission of such babies to Risedale Maternity Hospital instituted last year was continued and achieved some success. Special visits to premature babies are paid by the Health Visitors.

## (f) INFANTILE MORTALITY.

Infantile Mortality rate is expressed as the number of deaths of infants under one year per 1,000 live births. The death rate amongst infants has steadily declined, due in a great measure to the work being carried out by the Maternity and Child Welfare Authorities in their Maternity Hospitals, ante-natal clinics and child welfare clinics and also the grand work carried out by the Health Visitors and Domiciliary Midwives.

It is appreciated, however, that the constant improvement in health education of the general public, the teaching of mothercraft and parentcraft in schools, youth clubs and welfare centres has also helped in the reduction in the number of deaths of infants. There is no doubt, however, that such factors as economic distress, due to unemployment or low wages, bad and overcrowded houses, the employment of married women in industry, and the social class of the parents, namely unskilled or semi-skilled workers, has the effect of raising the infantile mortality rate. One hopes in the future post-war world that we shall see freedom from want, economic security for the family by full employment and adequate wages which will not require the mothers to work in industry, and better housing so that each family can have a decent home of their own in order to bring up their children.

When one analyses the causes of deaths of infants, one finds that they can be roughly divided into certain groups, namely, avoidable and unavoidable deaths. Under **avoidable deaths**, one can place the bacterial infections, such as gastroenteritis, pneumonia, bronchitis, and infectious diseases, such as measles and whooping cough. Deaths from these causes can be avoided by education of the mothers in general hygiene, clean milk supply, encouragement of breast feeding, pointing out the danger to young children if they contract measles and whooping cough, avoiding crowds when epidemics of colds are



about, and teaching the mothers not to neglect a cold in a child. It will be appreciated that the work carried out at our welfare centres and in the homes by the Health Visitors is primarily concerned with the reduction in the number of avoidable deaths.

The group which I term **unavoidable deaths** consists of Malformations and Prematurity, the latter, however, are not strictly unavoidable. One must appreciate that many cases of prematurity are due to toxæmias of pregnancy and, in order to save the mother and procure a live baby, labour is induced, resulting in a premature child with lessened chance of survival. The Ministry of Health have recently advised Welfare Authorities to make special provision for the care of premature infants by means of adequate ambulance services, hospital accommodation and special nursing care and supply of breast milk.

Many of the provisions will have to await building of the necessary hospital accommodation. In Barrow, arrangements have been made for special cots, suitably heated, and clothing which can be provided by the Midwife on the district and an ambulance service to remove cases to the Maternity Hospital where the home circumstances are unsuitable for treatment at home. Another cause of premature births is probably a deficiency in certain hormones in the mother towards the seventh month. There is room for further research in this field of medical science. Our present welfare services, with efficient ante-natal care and an obstetric consultant, can detect the early appearance of toxæmias and the provision of adequate ante-natal beds in hospital for treatment can lower the incidence of toxæmias of pregnancy and the special arrangements for the care of premature babies should lower the infantile death rate from this cause.

The principle group of unavoidable deaths is the **Malformations** and, in my opinion, cannot be reduced by the existing welfare services. Some observers believe that malformations are due to some fault in the chromosomes at the time of fusion, with the resulting imperfect implantation of the fertilised ovum. We do not really know why these malformations occur, and further medical research is required.

The statistics for Barrow for the years 1936—1944 show that the group I term unavoidable deaths, namely, malformations and prematurity, account on an average for 51.5% of all infantile deaths. The percentage due to malformations alone during the same period is 22.5%. The infantile death rate during the war years due to malformations has tended to increase, reaching the highest figure in 1944 (28.5%) which was the same year in which the highest number of women over 21 years of age were in employment. Before the war about 1,500 women and girls were employed in industry, but during the war the number so employed rapidly increased, reaching a peak in 1944, when nearly 6,000 women over 21 years of age, and 1,367 girls between



18 and 20 years were employed. One can assume a large proportion of the over 21 years group were married women, and one may assume that the employment of pregnant women may affect the foetus and cause a malformation with the subsequent increase in the infantile death rate. Up to the end of 1945 there have been 75 infantile deaths, 22 of which were due to malformations and 22 to prematurity, therefore, almost one-third of the total infantile deaths was due to malformation.

Is some factor, such as the employment of women in industry, anxiety of the mother due to war conditions, separation from husband, evacuation of children, dangers from bombing or a general feeling of insecurity responsible, or is it some dietary deficiency? There is definitely some factor present which inhibits the full development of the foetus, and, in my opinion, there is scope for further medical research.

(g) HOME HELPS.

Probably as a result of the return from industry to their own homes, more women applied for registration as Home Helps than for some years. The present panel consists of six Home Helps, which is sufficient to meet all reasonable demands. The indications are that more use will be made of this service, particularly as most of the Home Helps are prepared also to act as Domestic Helps.

(h) CARE OF ILLEGITIMATE CHILDREN.

All services which are available to married mothers are available to unmarried mothers and the supervision of illegitimate children is the same as for legitimate children. There is full co-operation with the Sister in Charge of the Home maintained by the Furness Association for Social and Moral Welfare, where unmarried expectant mothers stay until they can be transferred to the St. Monica Maternity Home, Kendal, which is subsidised by the Local Authority for any Barrow girls admitted.

(i) VENEREAL DISEASES.

There has been no change in the running of the Venereal Diseases Clinic since the last report. The Clinic is situated in the grounds of the Infectious Diseases Hospital at Devonshire Road. The staff consists of two part-time Clinical V.D. Officers, one full-time Male Orderly and two Sisters from Devonshire Road Hospital act as part-time assistants at the female clinics.

The Clinics are held as under :—

Males	—Tuesday and Friday	....	....	....	7-0 p.m.
Females—	Monday	....	....	....	7-0 p.m.
	Wednesday	....	....	....	2-0 p.m.



## VERMINOUS CONDITIONS.

One full-time Cleanser is employed by the Health Committee and two by the Education Committee, and their duty is to treat adult females and children of all ages who require cleansing. Health Visitors and School Nurses ascertain those verminous children who require treatment and make arrangements for them to attend at the Central Clinic. The only remaining First Aid Post closed down during the year, consequently such cases as cannot be treated at the Clinic, e.g. adult males, are treated at Roose Institution. Lethane oil is supplied and nit combs are lent to mothers of children free of charge for the eradication of nits. Scabies cases are treated with Benzyl Benzoate.

The following table shows the number of cases of Scabies dealt with during the year :—

Babies under five years .....	132
School Children .....	433
Adults .....	77
	<hr/>
	642
	<hr/>

## IMMUNISATION AGAINST DIPHTHERIA.

The scheme for immunisation against diphtheria was continued vigorously during the year. School Nurses and Health Visitors take every opportunity of impressing on parents the advisability of having their children immunised. Every effort is made to encourage parents to have their children immunised in infancy and to have a further protective injection prior to the child entering school. During the Summer a publicity campaign, sponsored by the Ministry of Health and carried out by the Ministry of Information, was carried out locally, the main part of the campaign being through the medium of the press.

The following table shows the number of children immunised during 1945 :—

Under five years .....	730
5—15 years .....	83

At the end of the year there were 2,122 children under five, and 6,197 between 5 and 15 who had completed a course of immunisation.

## PARATHYPHOID B. FEVER.

There was an outbreak of Paratyphoid B. Fever in the middle of August, which lasted until the middle of September, with a second outbreak in October and November.



The outbreak was a milk borne infection, due to the milk supply being contaminated by carriers. One of the main difficulties in control of the infection was that many of the clinical cases and the carriers were without symptoms and had not felt ill or been off work. Another contributing factor was the breakdown of the steam steriliser at the farm, which prevented the bottles from being properly sterilised, just at the period when the carriers had contaminated the milk. Investigations also showed that casual labourers helping with haymaking sometimes helped the normal milking team to strip the cows in the evenings, and they had also to be investigated.

The first indication of the outbreak was when a member of the Public Health Staff was admitted to Hospital with a pyrexia of unknown origin and routine blood examination revealed a positive Widal Test for Paratyphoid B. Investigation was immediately made at the household and at the farm supplying the milk. All the regular milking team were tested for their Widal reaction and the results were negative. A further visit was made to the farm, and it was discovered that the horseman and tractor driver assisted with the stripping of the cows in the mornings only and relieved the regular milkers at certain weekends, although they were not members of the milking team. Both these men had positive Widal Tests for Paratyphoid B. and they were removed to Hospital three days after the report of the first case. Neither man admitted having been ill at any time or had had symptoms suggestive of Paratyphoid. They were found to be intermittent carriers and were allowed out of hospital after repeated tests, and returned to their respective duties of horseman and tractor driver, and forbidden to enter the dairy premises or interfere with the milking in any way.

A complete check up of the milking methods, bacteriological examinations of bottles, milk kits, sterilising chamber, bottle washing machine, cooler and bottle caps was made without finding any further source of infection. The drainage system of the farm was tested, the main water supply and a water beck where the cows splashed through on their way to and from the cowshed, without finding evidence of paratyphoid. The farmer was instructed regarding strict precautions in his milking methods and cleanliness of the milkers, and no-one except the recognised milkers were to handle the milk supply.

Investigation of the homes of the first clinical cases revealed that there had been several cases who had been ill in the same neighbourhood and had been treated for diarrhoea and pyrexia without being diagnosed by their private doctors, and consequently had never been notified to the Medical Officer of Health. These patients were visited, and specimens of blood, faeces and urine collected, and the results confirmed that they also had been infected with Paratyphoid B.



The investigation revealed that there were 23 cases of Paratyphoid B. Resulting from the contamination of the milk by the carriers, 12 cases had been ill and undiagnosed and treated by their doctors prior to the first notified case and 10 subsequent cases. Many of the patients denied they had been ill, but Widal Tests were positive in all.

There was a lull until October, when another case was diagnosed, and the milkers at the farm were re-inspected, but there had not been any illness since their previous examinations.

Blood tests were again performed and it was found that the dairy maid had now a positive Widal, whereas it was negative at the previous examinations. She had not been ill and had not had any symptoms. The inference was that she had been infected in the interval between the two outbreaks and had herself contaminated the milk supply on this occasion. She was immediately taken off milking, a complete bacteriological investigation of blood, fæces and urine carried out, and not allowed to return until the fæces examinations were repeatedly negative.

The householders were immediately notified to boil all milk and the General Practitioners informed to be on the look out for more cases. There were seven further cases, all connected with this outbreak, occurring within the incubation period when the dairymaid was handling the milk. The last clinical case was on 16th November. Householders continued boiling their milk until 6th December, when they were informed that their milk supply was now pasteurised.

Great difficulty was experienced in obtaining facilities for pasteurising the milk, as there was only one plant in the town, and that was being operated by the Co-operative Society and being worked to capacity to supply their own customers, whilst the dairy-man in question was a producer retailer of accredited milk and a member of another Association.

The powers of the Medical Officer of Health under the Milk and Dairies Order are limited when dealing with an outbreak like this. There are no powers of compulsion to have the milk heat treated, only powers of stopping the supply for 24 hours.

On the 6th December the milk producer eventually agreed to have the milk supply pasteurised and bottled at the Co-operative Society Pasteurising Plant, and there have been no further cases.

The following table is a theoretical reconstruction of the origin of the outbreak and the dates when the actual patients first became ill. The 18th of August was the date of the first notification, and the 22nd August was the date when the carriers were confirmed by Widal Test and removed to Hospital.



# THEORETICAL DATES WHEN OUTBREAK BEGAN AND ONSET OF CLINICAL SYMPTOMS.

\* Onset of clinical symptoms.

□ First notified case.

X Removal of carriers from milking.

## JUNE.

17th Theoretical date.

23rd When carriers contracted the disease.

24th Temporary labourers as haymakers helped the milkers in the evenings.

30th

## JULY.

1st Sterilising boiler broke down and out of commission and bottles not properly sterilised.

23rd

## AUGUST.

4th \* \*

6th \* \*

7th \*

9th \* \* \*

10th \* \* \*

12th \*

18th □

20th \*

21st \*

22nd X \* \*

27th \*

## SEPTEMBER.

1st \* \*

3rd \*

10th \*

17th \* \* Contacts of earlier case.

22nd \* 2ND OUTBREAK.

## OCTOBER.

12th \*

20th \*

29th \*

31st \*

## NOVEMBER.

10th X

11th \* \*

16th \* \*

### AMBULANCE SERVICE.

With the closing down of Civil Defence the problem of staffing the Town Ambulances became more acute. After prolonged negotiation, the running of the service was taken over by the Transport Committee on behalf of the Health Committee, on 1st July.

The number of cases transported during the year was as follows :—

Accidents .....	602
Removals (illness) .....	1,463
Out of town journeys .....	87
<hr/>	
Total .....	2,152
<hr/>	

There are three town ambulances and one ambulance stationed at Devonshire Road Hospital for the purpose of removing cases of infectious disease to the Isolation Hospital.

### GOVERNMENT EVACUATION SCHEME.

With the cessation of hostilities the Government Evacuation Scheme ceased to operate during the year, and the evacuees who had been received here returned to their homes in London. Prior to their return they were all medically examined.

### BLOOD TRANSFUSION SERVICE.

The Blood Bank at the North Lonsdale Hospital continued during the year, and the Volunteer Car Pool continued its useful work of transporting patients to and from outlying districts and also conveying the blood to the E.M.S. Laboratory at High Carley.

### E.M.S. PATHOLOGICAL SERVICE.

All of the Public Health laboratory work is carried out at the E.M.S. Laboratory at High Carley. Specimens are despatched daily by 'bus, resulting in a quick and efficient service. I wish to acknowledge my indebtedness to Dr. J. Carr Brundret (who left the Laboratory during the year) and to Dr. Eric H. Bailey, his successor, for their assistance in carrying out investigations for the Department.

### ULTRA-VIOLET CLINIC.

392 individual children made 3,986 attendances at the Ultra-Violet Ray Clinic for Non-tuberculous children during the year.

### MASSAGE AND REMEDIAL EXERCISES CLINIC.

This Clinic remained in abeyance during the year, as it was not possible to obtain a Physiotherapist. It is gratifying to report that the position has now been remedied and the clinics were re-started early in 1946.

### ORTHOPÆDIC CLINIC.

Bi-monthly clinics attended by the Medical Superintendent of Ethel Hedley Hospital, Windermere, are held at the Central Clinic. Urgent cases requiring immediate examination are sent to Ethel Hedley Hospital by special appointment.



The following table shows the attendances at the Clinics held during the year :—

NON-TUBERCULOUS.

	M. & C.W.	School Children.	Adults (over 16).
No. of individual patients attending	73	91	1
Total attendances	130	152	1

TUBERCULOUS.

No. of individual patients attending	—	—	1
Total attendances	—	—	1

PORT HEALTH.

With the removal of security restrictions it is again possible to give a resume of the work carried out in connection with port health work during the year, particulars of which are appended :—

PORT HEALTH SURVEY.

I—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1945.

TABLE A.

		Number	Tonnage	No. Inspected.		Number reported to be Defective.	Number of vessels on which defects were remedied	Number of vessels reported as having, or having had, during the voyage, infectious disease on board.
				By the Medical Officer of Health.	By the Sanitary Insp'tor			
Foreign	Steamers	57	132678	2	57	10	7	....
	Motor	....	....	....	....	....	....	....
	Sailing	....	....	....	....	....	....	....
	Fishing	....	....	....	....	....	....	....
Total Foreign		57	132678	2	57	10	7	....
Coastwise	Steamers	141	62156	....	32	2	1	....
	Motor	84	41050	....	16	1	1	....
	Sailing	....	....	....	....	....	....	....
	Fishing	....	....	....	....	....	....	....
Total Coastwise		225	103206	....	48	3	2	....
Total Foreign and Coastwise		282	235884	2	105	13	9	....

## II—CHARACTER OF TRADE OF PORT.

### TABLE B.

(a) There was no passenger traffic to and from the Port during the year.

(b) CARGO TRAFFIC. The Chief cargoes brought to the Port consisted of iron ore. The export traffic was mainly Government Stores.

(c) Vessels arrived from the following foreign ports :—Narvik, Oxelosund, Harnosand, Hornillo, Almeria, Bilbao, Melilla, Bougie, Bona, Freetown, Victoria (Brazil), Irish Free State.

## III—SOURCE OF WATER SUPPLY.

The town's water is laid on to the docks, and is utilised for shipping, the water-main adjoining the dock side.

There are no water-boats at the Port.

## IV—PORT HEALTH REGULATIONS, 1933.

### 1. ARRANGEMENTS FOR DEALING WITH DECLARATIONS OF HEALTH.

Blank Declaration of Health forms are sent periodically to the Pilots. One is handed to each Master when the Pilot boards the ship, and, on arrival of the vessel at this Port, the signed Health Declaration is usually filled in and signed, and the Master hands it to the Customs Officer or Sanitary Officer, whichever is first aboard.

### 2. BOARDING OF VESSELS ON ARRIVAL.

Vessels arriving from infected or suspected ports are always boarded by the Customs Officer and Sanitary Officer together. Other vessels are usually boarded by the Customs Officer in the first instance.

### 3. NOTIFICATION TO THE AUTHORITY OF INWARD VESSELS REQUIRING SPECIAL ATTENTION (WIRELESS MESSAGES, LAND SIGNAL STATIONS, ETC.)

No information was received by wireless messages or local signal stations. Any information is usually conveyed by Customs Officers and Pilots.

### 4. MOORING STATIONS DESIGNATED UNDER ARTICLE 10.

A mooring station has been agreed upon. As a suitable and safe anchorage is not available in the vicinity of the Port, it has been arranged, under the circumstances, that the inner mooring station near Buccleuch Bridge within Ramsden Dock be established as a mooring station for all unhealthy ships arriving at Barrow, including "infected" or "suspected" vessels outside the exemptions mentioned in (5) agreed upon.

### 5. PARTICULARS OF ANY STANDING EXEMPTIONS FROM THE PROVISIONS OF ARTICLE 14.



A standing exemption from detention under Article 14 has been agreed upon in respect of ships unhealthy on account of :—

Acute Polio-Encephalitis	German Measles
Cerebro-spinal Meningitis	Measles
(Cerebro-spinal Fever)	Malaria
Chickenpox	Membranous Croup
Continued Fever	Pneumonia (either primary or
Diphtheria	influenzal)
Dysentery	Relapsing Fever
Epidemic Infantile Paralysis	Scarlatina (Scarlet Fever)
(Acute Poliomyelitis)	Trench Fever
Encephalitis Lethargica	Tuberculosis (all forms)
Erysipelas	Typhoid Fever (Enteric Fever)

and of ships otherwise healthy which arrive from areas listed under Article 11.

#### 6. EXPERIENCE OF WORKING OF ARTICLE 16.

Instructions have been given to Harbour Authorities, tradespeople and other persons in the habit of visiting ships at the Port to keep clear until the ship is free from control. No difficulty is now experienced under this Article.

#### 7. CLEANSING AND DISINFECTION OF SHIPS, PERSONS, CLOTHING, ETC.

In cases of necessity the arrangements for disinfecting infected quarters are carried out by the Sanitary Officers, and cases requiring isolation would be found accommodation at the Borough Isolation Hospital, Devonshire Road. Special arrangements have also been made at the Hospital for the reception of cases of infectious disease from overseas and for the observation of contacts. The Corporation motor ambulance is available for the removal of cases to Hospital. All contacts are kept under the supervision of the Port Medical Officer.

8. Bacteriological and Pathological examinations of rats for plague would be carried out at the Central Emergency P.H. Laboratory, Cardiff.

9. Bacteriological and Pathological examinations are carried out at the E.M.S. Laboratory, High Carley, near Ulverston.

10. A local Centre exists at the Devonshire Road Hospital for the diagnosis and treatment of Venereal Disease. The Ministry's circulars to seamen are regularly distributed on vessels arriving at the Port, and every assistance is given to patients in obtaining treatment.

#### TABLE C.

No cases of infectious sickness were landed from vessels during 1945.

#### TABLE D.

No cases of infectious diseases occurring on vessels during the voyage, but disposed of prior to arrival, were reported.

## V—MEASURES AGAINST RODENTS.

The Port is not seriously threatened with rat prevalence. As a precautionary measure, however, the officer in charge of vessels is requested, when considered necessary, to have the rat guards fixed on hawsers to prevent the passage of rats between ships and the shore.

TABLES E. AND F.

## (1) ON VESSELS.

Number of Rats.	Jan.	Feb.	Mar.	Apr.	May	June.	Jul.
Black .....	....	....	....	....	....	....	....
Brown .....	....	....	....	2	....	....	....
Species not recorded .....	....	....	....	....	....	....	—
Examined .....	....	....	....	2	....	....	....
Infected with Plague .....	....	....	....	Nil.	....	....	....

Number of Rats. ....	Aug.	Sep.	Oct.	Nov.	Dec.	Total in year.
Black .....	—	....	2	1	1	4
Brown .....	....	....	....	....	....	2
Species not recorded .....	....	....	....	....	....	....
Examined .....	....	....	2	1	1	6
Infected with Plague .....	....	....	Nil.	Nil.	Nil.	Nil.

No Rats were destroyed on Vessels, and none at Docks, Quays, Wharves and Warehouses.

TABLE G.

It was not found necessary to take any measures of Rat Destruction with regard to vessels arriving from Plague "infected" ports.

TABLE H.

As from May, 1930, the Port was included in the list of Ports where the Medical Officer of Health is authorised to issue the Deratisation Certificates and Deratisation Exemption Certificates for which provision is made in Article 28 of the International Sanitary Convention, 1926.

13 Exemption Certificates on Form Port 11 were issued during the year.



DERATISATION CERTIFICATES AND DERATISATION EXEMPTION CERTIFICATES  
ISSUED DURING THE YEAR

Net Tonnage.	No. of Ships.	No. of Deratization Certificates issued.					No. of Deratization Exemption Certificates issued	Total Certificates issued.
		After fumigation with			After Trapping Poisoning, etc.	Total.		
		H.C.N.	Sulphur	H.C.N. and Sulphur				
Ships up to 300 tons ....	....	....	....	....	....	....	....	....
Ships from 301 tons to 1000 tons ....	1	....	....	....	....	....	1	1
Ships from 1001 tons to 3000 tons ....	3	....	....	....	....	....	3	3
Ships from 3001 tons to 10000 tons ....	9	1	....	....	....	1	8	9
Ships over 10000 tons	....	....	....	....	....	....	....	....
Totals ....	13	1	....	....	....	1	12	13

No vessel arrived at the Port either Plague-infected or Plague-suspected.

No Vessels from Plague-infected Ports arrived during the year.

VI—HYGIENE OF CREWS' SPACES.

TABLE J.  
CLASSIFICATION OF NUISANCES.

Nationality of Vessel.	No. inspected during the year.	Defects of original construction.	Structural defects through wear & tear.	Dirt, vermin and other conditions. prejudicial to health.
British .....	244	1	10	26
Other Nations .....	38	—	2	5

7. FOOD INSPECTION.

No foodstuffs arrived at the Port during the year, therefore no action was taken under the Public Health (Imported Food) Regulations, 1937, the Public Health (Preservatives, etc., in Food) Regulations, 1925—1940, and the Food and Drugs Act, 1938 (Section 39), respectively.

SHELLFISH LAYINGS.

SHELLFISH—

It was not found necessary during the year to take any action under the Public Health (Shellfish) Regulations, 1934, no complaints of contamination having been received. Layings are to be found round the coast, chiefly at Piel and Rampside, and at points in the Walney Channel known as Head Scar and Scarth-hole. The latter, however, lies just outside the Borough boundary. The Walney Channel and Rampside public layings are liable to sewage contamination, but, since the issue of prohibition notices in 1918, no complaints have been received.





**SANITARY CIRCUMSTANCES.**

The following is a summary, prepared by the Chief Sanitary Inspector, of the work carried out in his Department during the year :—

**HOUSING.**

No. of dwelling-houses in respect of which formal notices were served requiring execution of repairs, etc. ....	4
No. of dwelling-houses which were rendered fit for human habitation after service of formal notices ....	3
No. of dwelling-houses rendered fit by the Corporation in default of the owners ....	2

At the end of the year action was pending in respect of 1 dwelling-house.

No. of vacant Corporation Houses examined prior to re-letting ....	12
No. of private dwelling-houses examined in respect of applications for re-housing from Tuberculous patients ....	12
No. of occupied Corporation Houses inspected ....	96
No. of visits to private dwelling-houses in connection with overcrowding ....	46

**ABATEMENT OF NUISANCES.**

No. of complaints regarding nuisances and sanitary defects received and investigated ....	1518
No. of inspections and re-inspections made under the provisions of the Public Health Act and Housing Act ....	5092
No. of Intimation Notices served in connection with Nuisances and Sanitary Defects ....	665
No. of Statutory Notices served in connection with Nuisances and Sanitary Defects ....	305

The following is a summary of work carried out during the year as a result of formal action, and in addition to a considerable amount of work effected as a result of informal action :—

**WATER CLOSETS, FLUSHING APPARATUS, ETC.**

No. of W.C. roofs repaired ....	36
No. of W.C. floors repaired or renewed ....	70
No. of W.C. doors repaired or renewed ....	16
No. of W.C. flushing apparatus repaired or renewed ....	244
No. of W.C. flushing apparatus provided with proper supply of water ....	6
No. of broken W.C. basins renewed ....	92

**EAVES GUTTERS, RAINWATER PIPES, GULLEYS, ETC.**

No. of eavesgutters repaired or renewed ....	96
No. of rainwater pipes repaired or renewed ....	68
No. of gratings provided to gulleys ....	13
No. of yard gulleys unstopped ....	37
No. of broken gulleys renewed ....	29
No. of defective lead valley gutters repaired or renewed ....	9



## DRAINAGE AND YARD PAVING, ETC.

No. of stopped W.C. drains cleared and repaired	24
No. of defective W.C. drains repaired or re-laid	11
No. of defective surface water drains repaired or re-laid	13
No. of stopped surface water drains cleared and repaired	22
No. of defective drain vent shafts repaired or renewed	25
No. of leaking yard drains repaired or renewed	12
No. of stopped cellar area drains cleared and repaired	1
No. of defective yard surfaces repaired or renewed	23
No. of broken and defective sink waste pipes renewed	43

## YARD WALLS, YARD DOORS, ETC.

No. of defective yard doors repaired or renewed	48
No. of defective yard walls repaired or rebuilt	40
No. of defective coalhouse walls	3
No. of defective covers to cellar areas	1
No. of disused ashpits removed	10
No. of dangerous lintels to yard doors refixed or renewed	8

## GENERAL REPAIR AND RENEWALS TO DWELLING-HOUSES.

No. of roofs repaired	174
No. of floors repaired or renewed	163
No. of cases of dampness in walls remedied	110
No. of cases of defective plasterwork of walls and ceilings repaired or renewed	423
No. of defective house walls repaired or rebuilt	38
No. of defective doors repaired or renewed	69
No. of defective kitchen firegrates repaired or renewed	64
No. of defective areas repaired or renewed	11
No. of defective chimney flues repaired or reconstructed	4
No. of defective chimney stacks repaired or rebuilt	16
No. of dwelling-houses provided with a sufficient supply of water	112
No. of defective water taps repaired or renewed	10
No. of defective washing boilers repaired or renewed	23
No. of burst water pipes repaired	21
No. of defective window sills repaired or renewed	4
No. of defective cement renderings to external walls repaired or renewed	9
No. of lavatory basins renewed	3
No. of door steps renewed	5
No. of skylights repaired or renewed	4
No. of fasteners to windows renewed	15
No. of sinks renewed	18
No. of vent bricks provided to walls	12
No. of loose handrails to staircases re-fixed	12
No. of defective windows repaired, re-hung or replaced	105
No. of rooms provided with skirting boards	12



No. of defective refuse bins replaced .....	47
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## OTHER NUISANCES.

No. of filthy and verminous premises cleansed and disinfested .....	4
No. of nuisances from the keeping of animals and fowls abated .....	8
No. of nuisances from filthy bedding abated .....	1
Miscellaneous nuisances .....	45

## WATER SUPPLY TO OCCUPIED DWELLING-HOUSES.

No. of Statutory Notices served under the provisions of Sec. 138 of the Public Health Act, 1936, requiring the provision of a sufficient supply of wholesome water to occupied dwelling-houses .....	51
No. of dwelling-houses provided with a sufficient supply of wholesome water by the Corporation in default of the owners .....	4

## DRAINAGE WORK.

The provisions of Section 41 of the Public Health Act, 1936, regarding the notification to be given to the Local Authority of the repair, reconstruction or alteration of the course of any underground drain, are enforced by the Department, and all such work is inspected and approved by the Sanitary Inspectors before being covered in.

## FACTORIES ACT, 1937.

No. of inspections carried out under the provisions of Part I. of the Factories Act, 1937 .....	143
No. of formal notices served under the above provisions .....	4
No. of formal notices complied with under the above provisions .....	4
No. of informal notices served and complied with under the above provisions .....	26

## SHOPS ACT, 1934.

No. of inspections carried out under the provisions of Section 10 of the Shops Act, 1934 .....	96
--	----

## FOOD AND DRUGS ACT, 1938.

No. of inspections of Food premises .....	865
No. of premises registered during the year under Sec. 14 in connection with the preparation or manufacture of sausages or potted, pressed, pickled or preserved food .....	5
Total No. of such premises on the register .....	94
No. of premises registered during the year under Sec. 14 in connection with the manufacture or sale of Ice-cream .....	8
Total No. of such premises on the register .....	33

## PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

No. of inspections of butchers' shops and the Cold Stores .....	784
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### RODENT CONTROL.

The Council employ a Rodent Officer and a Rat-Catcher to deal with rat and mouse infestation. The work is carried out free of charge, with the exception that occupiers of business premises, factories and workplaces are required to pay for the cost of materials and labour. The following is a Summary of the work carried out in this connection during 1945 :—

No. of reports of infestation received and investigated	452
No. of premises found to be infested and treated	224
Amount of poison bait taken	456 ounces
Estimated No. of rats poisoned	1141
No. of dead rats found after poisoning	196
No. of rats trapped	309
No. of rats killed by other means	125
No. of mice trapped	352
Estimated No. of rats poisoned as a result of a sewer-baiting campaign carried out by the Engineer and Surveyor's Department	6625

During the course of the sewer-baiting campaign the Rodent Control staff carried out systematic inspections of properties adjacent to the sewers undergoing treatment and it was found that the sewer work had a very marked beneficial effect upon the infestations discovered in surface properties.

Many surface infestations have been remedied throughout the Borough by means of the repair or reconstruction of defective drainage systems.

### MILK SUPPLY.

No. of registered Dairy Farms	37
No. of visits of inspection paid to dairy farms	212
No. of visits paid to Retail Dairies and Milk Shops	209

Clinical Examinations of dairy cattle were carried out by a Veterinary Officer appointed by the Minister of Agriculture and Fisheries, and the reports received from time to time show that the health of the dairy cattle in the Borough has been very good.

### BIOLOGICAL EXAMINATION OF MILK SAMPLES.

No. of bulk raw and Pasteurised milk samples submitted for animal inoculation test	212
No. of bulk raw milk samples showing the presence of B. Tuberculosis	6
No. of bulk Pasteurised milk samples showing the presence of B. Tuberculosis	1

Details regarding the 6 samples showing positive results were sent to the Divisional Officer of the Ministry of Agriculture and Fisheries, and as a result of the subsequent clinical examinations of the herds concerned, together with the examination of further samples of milk taken from groups of cows in each herd, the affected animals were discovered and immediately removed from the herd for slaughter under the provisions of the Tuberculosis Order, 1938. With regard to the positive sample of Pasteurised milk, further samples submitted all proved to be negative.



## BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES.

## PASTEURISED MILK.

No. of samples taken .....	57
No. satisfactory in all respects .....	34
No. unsatisfactory on Plate Count Test .....	19
No. unsatisfactory on Coliform Test .....	1
No. unsatisfactory on Phosphatase Test .....	7
No. unsatisfactory on Meth. Blue Test .....	Nil.
No. of Licensed Milk Pasteurisers in the Borough .....	1

## ACCREDITED MILK (PRODUCED WITHIN THE BOROUGH).

No. of samples taken .....	48
No. satisfactory on both Meth. Blue and Coliform Tests .....	30
No. unsatisfactory on Meth. Blue Test .....	9
No. unsatisfactory on Coliform Test .....	11
No. of Licensed Accredited Milk Producers in the Borough .....	6

## ACCREDITED MILK (PRODUCED OUTSIDE THE BOROUGH).

No. of samples taken .....	42
No. satisfactory on both Meth. Blue and Coliform Tests .....	26
No. unsatisfactory on Meth. Blue Test .....	13
No. unsatisfactory on Coliform Test .....	7

## TUBERCULIN TESTED MILK (PRODUCED OUTSIDE THE BOROUGH).

No. of samples taken .....	3
No. satisfactory on both Meth. Blue and Coliform Tests .....	2
No. unsatisfactory on Coliform Test .....	1

## ORDINARY MILK (PRODUCED WITHIN THE BOROUGH).

No. of samples taken .....	117
No. satisfactory in all respects .....	52
No. unsatisfactory on Plate Count Test .....	52
No. unsatisfactory on Meth. Blue Test .....	31
No. unsatisfactory on Coliform Test .....	49

## ORDINARY MILK (PRODUCED OUTSIDE THE BOROUGH).

No. of samples taken .....	68
No. satisfactory in all respects .....	18
No. unsatisfactory on Plate Count Test .....	38
No. unsatisfactory on Meth. Blue Test .....	33
No. unsatisfactory on Coliform Test .....	19

There is no prescribed bacteriological standard for Ordinary Milk ; the standard adopted being that for Accredited Milk as regards the Methylene Blue and Coliform Tests, and a Plate Count of 200,000 Colonies for 1 c.c. as regards the Bacterial Count Test.

## MEAT INSPECTION.

## NUMBER OF ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIRS.

Year.	Cattle.	Calves.	Sheep.	Pigs.	Total.
1943 .....	4134	3693	36983	1541	46351
1944 .....	4253	3342	43623	948	52226
1945 .....	4270	5516	28665	347	38798
Increase .....	17	2174	—	—	—
Decrease .....	—	—	14958	601	13428

## NUMBER OF WHOLE CARCASSES WITH OFFALS CONDEMNED.

Year.	Beef.	Veal.	Mutton..	Pork.	Total.
1943 .....	82	55	89	21	247
1944 .....	148	80	157	17	402
1945 .....	144	173	73	8	398
Increase .....	—	93	—	—	—
Decrease .....	4	—	84	9	4

The total weight of meat condemned at the Abattoirs during the year was:—76 tons, 17 cwts., 1 qr., 6 lbs.

## UN SOUND MEAT: CARCASSES AND PART CARCASSES CONDEMNED AT THE ABATTOIRS.

Disease.	Beef.	Veal.	Mutton.	Pork.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
Tuberculosis .....	62828	853	—	1347	65028
Other conditions .....	7994	4630	2620	469	15713
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	70822	5483	2620	1816	80741
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

## UN SOUND VISCERA CONDEMNED AT THE ABATTOIRS.

Disease.	Beef.	Veal.	Mutton.	Pork.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
Tuberculosis .....	48375	162	—	1365	49902
Other conditions .....	32305	1159	7760	93	41317
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	80680	1321	7760	1458	91219
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

## OTHER FOODSTUFFS EXAMINED AND SURRENDERED AT THE ABATTOIRS.

Imported Beef .....	50 lbs.
Imported Mutton and Lamb .....	264 lbs.
Imported Pork .....	188 lbs.
Minced Beef .....	40 lbs.
Cooked Meat (Mutton) .....	10 lbs.
56 x 6 lbs. Tins of Canned Corned Beef .....	336 lbs.
176 x 12 ozs. Tins of Canned Corned Beef .....	132 lbs.



#### CONGENITAL TUBERCULOSIS IN CALVES.

During the year 8 cases of Congenital Tuberculosis in calves have been found on post mortem examinations at the Abattoirs.

Notification was sent in each case to the Ministry of Agriculture and Fisheries, and appropriate action taken, resulting in 5 dams having been dealt with by slaughter under the provisions of the Tuberculosis Order, 1938, and one dam having been slaughtered prior to the visit by the Ministry of Agriculture and Fisheries Veterinary Officer.

#### ICE-CREAM.

During October, 1945, an investigation into the bacteriological standards of Ice-cream manufactured and sold within the Borough was commenced. After unsatisfactory results had been obtained in the first 6 samples, the premises of the manufacturers were re-visited and detailed instructions regarding the hygienic production of ice-cream, together with advice regarding the sterilization of their equipment, was given. On re-sampling, it was found that this follow-up work had had a markedly beneficial effect resulting in satisfactory reports being received in all the 6 repeat samples.

Samples of ice-cream were also submitted for Chemical Analysis, the results of which showed that generally the commodity was of very poor quality.

On the recommendation of the Medical Officer of Health your Committee passed a resolution urging the Ministry of Health and the Ministry of Food to make minimum legal standards for Ice-cream.

#### ADMINISTRATION OF THE FOOD AND DRUGS ACT

##### RELATING TO SAMPLES OF FOOD ANALYSED DURING THE YEAR 1945.

##### NEW MILK.

One formal sample was reported to be slightly watered, the same being sour on receipt by the Analyst.

Two formal samples from the same source were reported to contain 6% and 7% of added water respectively. The Dairy Farmer was prosecuted in each case.

One formal sample was reported to be deprived of 10% of its milk fat. A further sample taken at the place of delivery proved to be milk of abnormal composition.

One formal sample was reported to be deprived of 30% of its milk fat. The bottle containing the retained third portion of sample burst.

One formal sample was reported to be deprived of 16% of its milk fat. "Appeal to Cow" samples were taken, two of which proved to be deficient in milk fat. The Dairy Farmer was interviewed and cautioned.

One formal sample was reported to be deprived of 39% of its milk fat. A further sample taken at the place of delivery proved to be deprived of 11% of its milk fat. The Dairy Farmer was communicated with and an explanation received.



One formal sample was reported to be deprived of 13% of its milk fat. The vendor was interviewed and cautioned.

One formal sample was reported to be deprived of 6% of its milk fat. A further sample taken at the place of delivery was reported to be deficient in milk fat. The Dairy Farmer was interviewed and cautioned.

One formal sample was reported to be slightly watered and deprived of 5% of its milk fat. The Dairy Farmer was interviewed and cautioned.

Three formal samples were reported to be milks of abnormal composition.

#### BAKING POWDER.

One formal sample was reported to be deficient in available carbon dioxide to the extent of not less than 56%. The Vendor was prosecuted.

One formal sample was reported to be deficient in available carbon dioxide to the extent of not less than 20%. The Vendor was interviewed and cautioned. Stock was withdrawn from sale and returned to manufacturers.

### OFFENCES OTHER THAN ADULTERATION.

#### PASTEURISED MILK.

One formal sample was reported to be insufficiently heat treated to Pasteurise it. The Vendor was interviewed and cautioned.

#### EGG SUBSTITUTE POWDER.

One formal sample was purchased. The sale of this article as sold, is forbidden by The Food Substitutes (Control) Order, 1941. The Vendor was interviewed and cautioned, the stock being immediately withdrawn from sale and returned to the manufacturers.

#### BUN POWDER.

One formal sample was purchased. The Public Analyst reported that the sale of this article, so labelled, was an attempt to evade the provisions of the Food Standards (General Provisions) Order, 1944, as amended.

#### ALMOND SUBSTITUTE.

One formal sample was purchased. The sale of this article as sold, is forbidden under the Food Substitutes (Control) Order, 1941. The Vendors were interviewed and cautioned. The article (small stock) was withdrawn from sale.

### LEGAL PROCEEDINGS.

Summary of samples in connection with which legal proceedings were taken during the year :—

Nature of Sample.	Nature of Offence.	Result of Legal Proceedings.
New Milk	... Contained 6% of added water	} Dairy Farmer fined £2 0s. 0d. and 10/6d. Costs in each case.
New Milk	... Contained 7% of added water	
Baking Powder	Deficient in available carbon dioxide to the extent of not less than 56%.	} Vendor fined £1 0s. 0d. and 10/6d. costs.



## ANALYSIS OF MILK SAMPLES.

Number of Samples analysed .....	132
Number of samples reported genuine .....	114
Number of samples reported to be adulterated or below the Standard of the Board of Agriculture .....	18
Percentage of samples adulterated or below the Standard of the Board of Agriculture .....	13.63
Average % of fatty and non-fatty solids in total samples analysed :—	
Fatty solids .....	3.52
Non-fatty solids .....	8.75
Total solids .....	12.28

## SUMMARY.

Number of samples showing deficiency in milk fat .....	11
Number of samples showing added water .....	3
Number of samples of abnormal composition .....	4

## FERTILISERS AND FEEDING STUFFS ACT, 1926.

4 Informal Samples of feeding stuffs were submitted for analysis under the above Act during the year. All the samples were reported satisfactory.

## UNSOUND FOOD.

The following articles of food dealt with by Authorised Officers under the Food and Drugs Act, have been voluntarily surrendered and destroyed or salvaged during the year.

## DESTROYED.

Tins of Meat .....	177
Tins of Fish .....	432
Tins of Vegetables .....	222
Tins of Fruit .....	6
Tins of Milk .....	429
Tins of Soup .....	78
Jars of Preserves .....	162
Jars of Fish .....	7
Bottles of Sauce .....	21
	T. C. Qrs. Lbs.
Fish .....	2 10 0 25
Vegetables .....	14 16 1 6
Cereals .....	18 1 26
Dried Fruit .....	6 3 16½
Sausage .....	1 1 15½
Meats .....	1 2 9
Shredded Suet .....	1 0 10
Sugar .....	1 1 0
Pickles .....	4 2 5

Condiments .....	4	2	8
Cheese .....		2	8½
Tea .....		1	22
Coffee .....		3	6¾
Confections .....		1	6
Bacon and Ham .....		3	26½
Baking Powder .....		1	0
Meat Extract .....		2	0
Fats .....			16¾
Hops .....			7
Edible Snails .....			2
Fish Cakes .....		116½	dozen.
Assorted Powders .....		187	dozen.
Orange Juice .....		1	gallon.
Meat Pies .....		123	
Rabbits .....		138.	

## SALVAGE.

	T.	C.	Q.	lbs.
Preserves .....	3	4	1	2
Bacon and Ham .....			3	3
Cereals .....			1	0½
Butter .....			2	27½
Margarine .....				25
Sugar .....				9
Pudding Mixture .....				15

## WATER SUPPLIES.

1. The water supply has been improved during the past year and the Council have had a consulting Water Engineer to survey the undertaking and make a report on improvements in the chemical treatment and filtrations of the supply. The quantity of water supplied to the town is quite adequate.

2. The whole of the Borough has a piped water supply. Regular chemical and bacteriological examinations are carried out by the Water Engineer's Department and the Public Health Department, the former samples from the intake, after filtration and treatment, and from the reservoir, whilst the latter samples from various piped supplies throughout the Borough. A regular interchange of information between the two departments is maintained. The following are the number of analyses made during the year :—



## GAS AND WATER DEPARTMENT, 1945.

Bacteriological Examination of Water	Satisfactory	7
	Unsatisfactory	29
	Total	36
Chemical Analysis of Water	Satisfactory	13
	Unsatisfactory	—
	Total	13

## PUBLIC HEALTH DEPARTMENT, 1945.

## BACTERIOLOGICAL EXAMINATION OF WATER.

Corporation Supply	Satisfactory	5
	Unsatisfactory	2
		7
Well Water	Unsatisfactory	1
Swimming Bath Water	Satisfactory	1

3. Lead pipes for domestic supply are not permissible owing to the nature of the water, which would cause plumbo solvent action in them.

4. The entire water supply is chlorinated to prohibit the growth of B. Coli which is present in the untreated water and cannot otherwise be dealt with until the new scheme of chemical treatment is installed.

5. There are 18,139 dwelling houses in the Borough, and the population is 66,690. All houses are supplied direct from the water main, none from standpipes.