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OXFORD



County Borough of Barrow-in-Furness.

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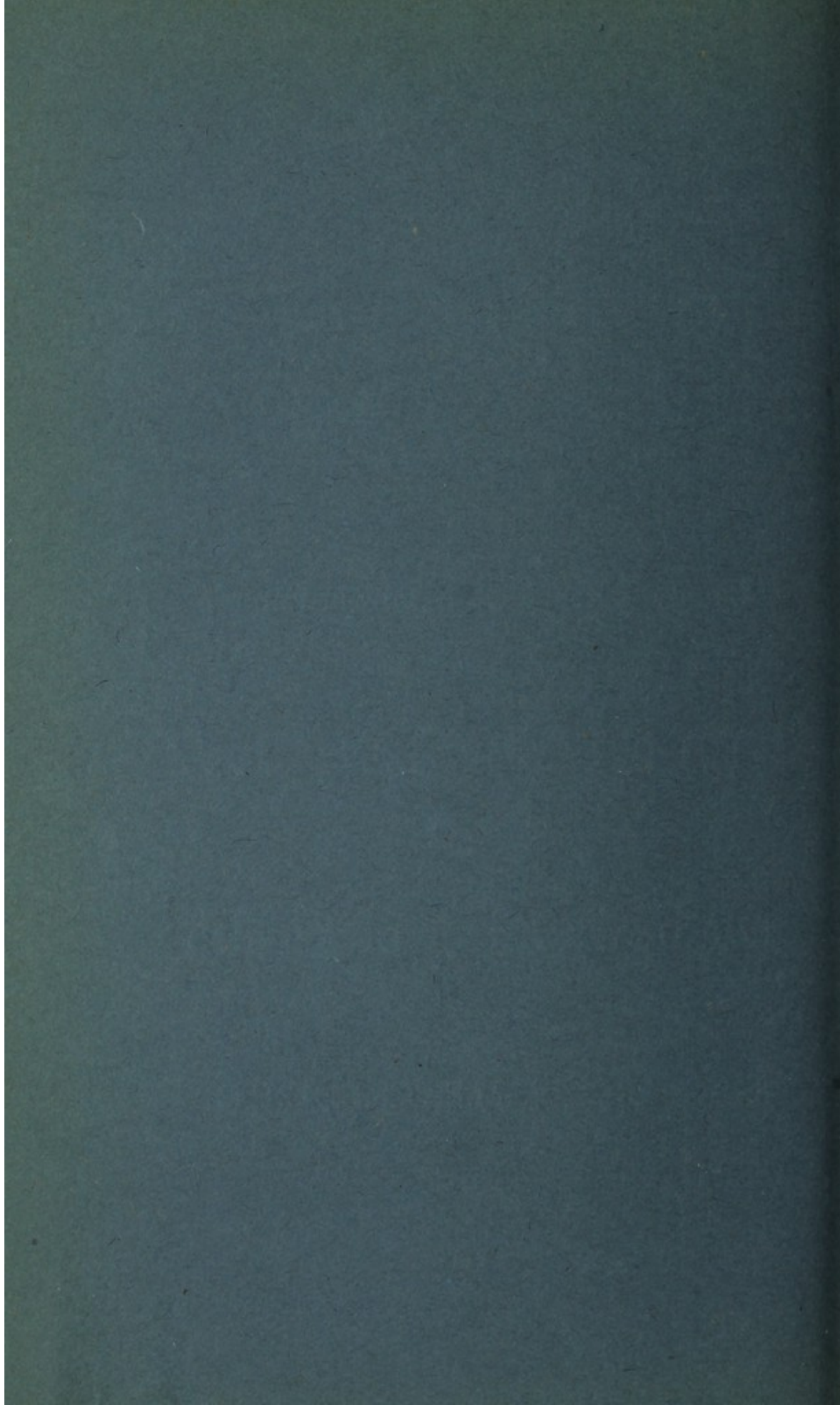
# ANNUAL REPORT

of the

Medical Officer of Health

G. G. DICKIE, M.B., Ch.B., D.P.H.

1950.





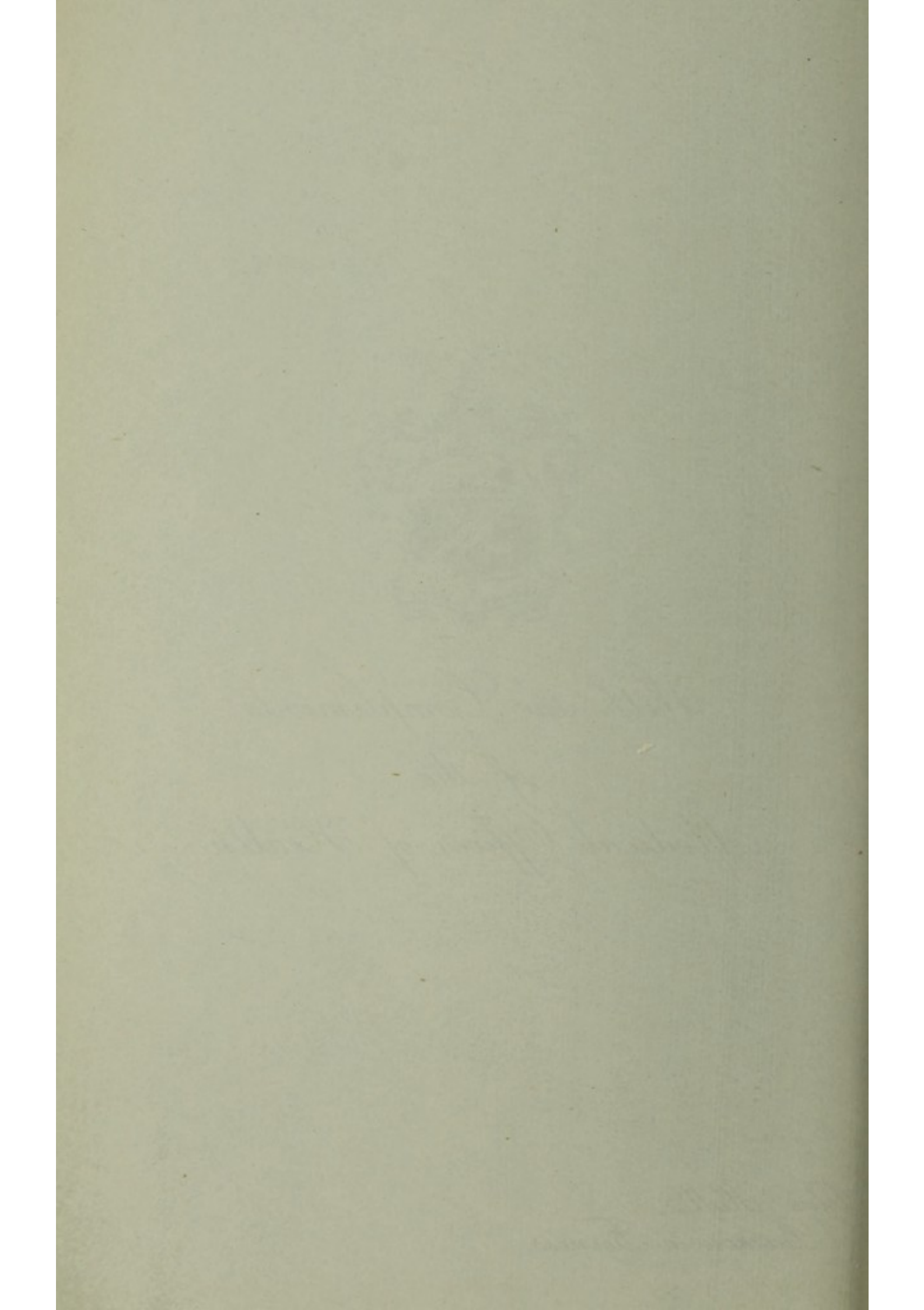


*With the Compliments  
of the  
Medical Officer of Health.*

G. G. DICKIE, M.B., Ch.B., D.P.H.

1950.

*Town Hall,  
Barrow-in-Furness.*





County Borough of Barrow-in-Furness.

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# **ANNUAL REPORT**

of the

Medical Officer of Health

G. G. DICKIE, M.B., Ch.B., D.P.H.

**1950.**



County Borough of Banow-in-Furness.

# ANNUAL REPORT

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Medical Officer of Health

G. G. DICKIE, M.B., Ch.B., D.P.H.

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

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ANNUAL REPORT OF THE  
MEDICAL OFFICER OF HEALTH.  
1950.

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TO THE CHAIRMAN AND MEMBERS OF THE HEALTH  
COMMITTEE.

Ladies and Gentlemen,

It is my pleasure to present my Annual Report for the year ended 31st December, 1950, on the Public Health of the County Borough.

As has been the custom in my two previous Annual Reports, sections have been arranged where applicable in accordance with the Sections of Part III of the National Health Service Act of 1946.

Statistically there has been little significant change and the recorded rates remain much as in previous years. It is gratifying, however, to note that the Infant Mortality Rate of 45.20 is the lowest yet recorded. In this connection it has been possible to begin an investigation of factors likely to influence stillbirth and Infant Mortality generally. As yet it is too soon to assess the value of this survey but it is hoped that, in due course, analysis of the information obtained may lead to a further decrease in the Infant Mortality figures.

In the sphere of Infectious Diseases a greatly increased incidence of Measles and Whooping Cough has been recorded, a combined total of 1,238 cases having been notified.

The incidence of other notifiable Infectious Diseases, with the exception of Scarlet Fever which has dropped, remains fairly constant.

As was anticipated in last year's Annual Report, four Student Health Visitors obtained the Health Visitors Certificate of the Royal Sanitary Institute and their addition to the permanent staff brings the establishment of Health Visitors to full strength.

Unhappily the same cannot be said for the establishment of Medical Officers which, as in previous years, remains only 60% filled. The Award of the Industrial Court is, to say the least of it, disappointing, and the fact must be faced that the salaries now offered will not attract recruits to the Public Health Service.

Whilst Local Authority Health Services may be kept going meantime with the aid of General Practitioners employed on a part time basis, such a policy is shortsighted and does nothing to ensure in the future the continuous availability of experienced and competent Medical Officers of Health.

It must not be forgotten that the general raising of the standards of health in this country over the past 50 years has been largely at the instance of the Health Services of the Local Authority.

The catastrophe which has befallen the School Dental Service was foreseen and is now evident to all. The Local Authority must decide whether the hard gains of the Pioneers of Preventive Medicine are to suffer a similar fate. And it must decide now.

In conclusion, I wish to express my thanks to the Mayor, Members of Council and Officials of the Corporation for the support and assistance given me and to my Staff for their loyal and willing service throughout the year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient Servant,

G. G. DICKIE,

Medical Officer of Health.



## STAFF.

The following assistants were employed on the work of Public Health in the Borough at the end of the year under review :

## MEDICAL AND DENTAL.

Deputy Medical Officer of Health in  
charge of Maternity and Child  
Welfare Work and Inspector of  
Midwives ....

Assistant Medical Officer ....

Assistant Dental Officer ....

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

J. H. C. Corr, L.R.C.P. & S., L.R.F.P.  
& S.

Winifred G. Sivewright, L.D.S.

## SANITARY.

Chief Sanitary Inspector ....

J. Shanks, Cert.R.S.I. & Joint Board  
Cert. R.S.I. (Meat and Food Inspec-  
tion), Cert. R.S.I. (Smoke Inspec-  
tion).

Assistant Chief Sanitary Inspector ....

T. E. Pollock, Cert.R.S.I., Cert.R.S.I.  
(Meat & Food Inspection).

Sanitary Inspector for Meat  
Inspection ....

Vacant

District Sanitary Inspectors ....

H. C. Perkins, Cert.R.S.I. & Joint  
Board.

F. Wilson, Cert.R.S.I. & Joint Board,  
Cert.R.S.I. (Meat & Food Inspection),  
Cert.R.S.I. (Sanitary Science).

E. Philbin, B.A., Cert.R.S.I. & Joint  
Board.

E. N. Whitehead, Cert.R.S.I. & Joint  
Board, Cert.R.S.I. (Meat & Food  
Inspection).

H. L. Field, Cert.R.S.I. & Joint Board,  
Cert.R.S.I. (Meat and Food Inspec-  
tion), Diploma in General Hygiene  
R.I.P.P.H.

Rodent Officer ....

H. Williams.

Trainee Sanitary Inspectors ....

J. W. McGarry.  
A. Rogers.

## HEALTH VISITING AND MIDWIFERY.

Superintendent Nursing Officer ....

Miss J. Pottinger, S.R.N., S.C.M.

Health Visitors ....

Miss E. Cunliffe, S.R.N., S.C.M.

Miss M. K. Burns, S.R.N., S.C.M.

Mrs. E. M. Tilburn, S.R.N., S.C.M.

Mrs. D. Cockin, S.R.N., S.C.M.

Miss M. Scott, S.R.N., S.C.M.

Miss M. P. Antcliffe, S.R.N., S.C.M.

Miss A. W. Cant, S.R.N., S.C.M.

Miss D. Latham, S.R.N., S.C.M.

Miss M. Morris, S.R.N., S.C.M.

Tuberculosis Health Visitor ....

Miss C. Roberts, S.R.N.



Municipal Midwives .... Mrs. B. Austin, S.R.N., S.C.M.  
 Miss A. Bagshaw, S.C.M.  
 Miss G. M. Fytche, S.C.M.  
 Mrs. F. Garstang, S.C.M.  
 Miss T. Potts, S.R.N., S.C.M.  
 Mrs. M. Railton, S.C.M.  
 Miss V. Stewart, S.R.N., S.C.M.  
 Mrs. G. Timms, S.R.N., S.C.M.  
 Mrs. A. Wallace, S.C.M.  
 Mrs. E. G. Watson, S.C.M.

#### HOME NURSING SERVICE.

Superintendent .... Miss M. Stockley, S.R.N., S.C.M.,  
 R.F.N., Q.N.  
 District Nursing Sisters .... Miss D. Moscrop, S.R.N., S.C.M.,  
 R.F.N., Q.N.  
 Mrs. M. A. Morello, S.R.N., R.F.N.  
 Mrs. B. Steel, S.R.N., S.C.M., Q.N.  
 Miss I. Wemyss, S.R.N., Q.N.  
 Miss S. A. Whitehead, Trained Nurse.  
 Mrs. M. Shaw, S.R.N.  
 Miss J. Lindop, S.R.N.  
 Mrs. J. Cringle, S.R.N.  
 Mrs. L. Hollis, S.R.N.  
 (Commenced 30/1/50).  
 Miss K. Aldred, S.R.N., S.C.M.  
 (Commenced 12/6/50).  
 Mrs. M. Newsham, S.R.N., R.F.N.  
 (Commenced 28/8/50).

#### PHYSIOTHERAPY.

Physiotherapist .... Miss M. Johnson, C.S.P., M.E., L.E.T.

#### AMBULANCE SERVICE.

Ambulance Officer .... J. H. Smethurst.

#### MENTAL HEALTH SERVICE.

Duly Authorised Officer .... H. Kitchin.  
 Assistant Duly Authorised Officer H. Hughes.

#### ADMINISTRATION.

Chief Clerk .... A. Gawthrop.

#### CLERICAL.

Senior Clerk .... H. Smith.

#### ADDRESSES.

Public Health Department .... Town Hall.  
 Sanitary Inspector's Office .... Town Hall.  
 Ante-Natal, Post-Natal and  
 Gynaecological Clinics .... Risedale, Abbey Road.  
 M. & C.W. Clinic .... }  
 Dental Clinic .... } Central Clinic, Abbey Road.  
 U.V.R. & Remedial Exercises Clinic }  
 Minor Ailments Clinic .... "Arndene," Abbey Road.  
 Ambulance Station .... Fire Station, Abbey Road.  
 District Nurses' Homes .... 2 Fairfield Lane.  
 27 Mikasa Street.

Population, Mid-1949	67,950
No. of Deaths	918
Death Rate	13.51
No. of Live Births Registered—Legitimate	1,215
Illegitimate	46
	<hr/> 1,261
No. of Stillbirths Registered	28
Birth Rate	18.56
Illegitimate Births per 1,000 Births	35.69
Infant Mortality per 1,000 Live Births	45.20
No. of Live Births Notified	1,250
No. of Maternal Deaths	2
Rate per 1,000 Births	1.59
Percentage of Live Births notified	99.13
DEATH RATES.	
Diphtheria	Nil
Enteritis	0.103
Measles	0,059
Scarlet Fever	Nil
Whooping Cough	0.015
Enteric	Nil
Tuberculosis (Respiratory)	0.413
Tuberculosis (Other Forms)	0.015
Cancer	2.031
Bronchitis	0.413
Pneumonia	0.427
Influenza	0.103
Diseases of Circulatory System	5.063

NATIONAL HEALTH SERVICE ACT, 1946.

## HEALTH CENTRES.

No proposals for the provision of Health Centres have been made and in Barrow, as yet, there has been no demand for the comprehensive centre envisaged by the Act. Discussions between the various bodies as to the ideal design of centre are in progress.

CARE OF MOTHERS AND YOUNG CHILDREN.

WELFARE CENTRE.

The Central Clinic is staffed by three Health Visitors on each of the four afternoon sessions held every week. Whenever possible, two of the medical staff attend, but on some occasions only one is available. Clerical assistance is provided.



There has been a slight fall in the Birth Rate but it is still high, and the cumulative effect of the increased Birth Rate during the post war years is still shown in the figures for children on the register of the Welfare Centre.

880 babies (under 12 months) and 62 older children were admitted to the register; whilst of the cases on the register 8,754 attendances were made by the babies, and 2,744 attendances were made by children between the ages of 1 and 5 years. 2,806 examinations of children and 113 of mothers were conducted by the medical staff.

The figures given include attendances by toddlers at a special clinic held monthly.

The mother who previously brought her child to the clinic because the Doctor's advice was free now takes him to her family doctor and obtains not only advice but extra nourishment and vitamin preparations free.

The continued movement of population to new housing estates on the outskirts of the town is also having an adverse effect on clinic attendances. Neither the staff nor the premises necessary to provide branch clinics are yet available although the growing need is fully realised.

#### FOOD DEPOT.

Experience has shown the wisdom of the decision to move the Food Depot to separate premises in Cavendish Square. Congestion at the Clinic has been relieved, and sales are now more evenly distributed over the week.

The "shop" is available to any mother whose baby, as shown by its weight card, regularly attends the Welfare Centre and has been weighed within the last four weeks.

#### PREMATURE BABIES.

Premature babies requiring hospital treatment are dealt with at Risedale Maternity Hospital. A special heated basket for transporting the baby is loaned by the hospital and the Authority's ambulance service provides a conveyance.

The Maternity and Child Welfare Officer is available in a consultant capacity. The Municipal Midwives have all had instruction in the care of premature babies, and any special appliances required can be borrowed from Risedale Maternity Hospital.

All Midwives are required to send notification of premature babies to the Medical Officer of Health and arrangements are made for an early follow up by the Health Visitors.

During the year 80 premature babies were born alive, including 75 whose mothers usually reside within the area. 27 were born at home and of the 21 who were retained at home 3 died in the first 24 hours, 3 more died before the month end and the remaining 15 survived. 6 were transferred to hospital and one of these died between the first day and the month end. Of the 53 born in hospital 5 died in the first 24 hours, 14 more died before the month end and the remaining 34 survived.



## PREMATURE BIRTHS.

	Died in 24 hours.	Died 1 day 1 month.	Survived 1 month.	Total.
Born at home and retained at home ....	3	3	15	21
Born at home and transferred to Hospital ....	....	1	5	6
Born in Hospital ....	5	14	34	53
Total ....	8	18	54	80
No. whose mothers usually reside in area ....				75

## INFANT MORTALITY.

The Infant Mortality Rate of 45.20 per 1,000 births is the lowest yet recorded. The figures for the last 10 years are :

1941	....	....	....	55.4
1942	....	....	....	62.8
1943	....	....	....	53.6
1944	....	....	....	60.51
1945	....	....	....	58.4
1946	....	....	....	52.91
1947	....	....	....	51.45
1948	....	....	....	49.52
1949	....	....	....	49.33
1950	....	....	....	45.20

49 deaths from developmental defects include 12 premature births, 17 malformation, 6 birth injury and 14 from other diseases peculiar to the first year of life. The remaining 8 deaths arose from respiratory, infective, digestive and general conditions and accidents.

## HEALTH VISITING.

The Health Visiting Service was strengthened during the year by the appointment of four nurses for assisted training. All of these qualified as Health Visitors.

A birth visit, and subsequently one visit per month for 6 months is paid. Visits thereafter are of necessity less frequent, but all children are kept under supervision until they reach the age of 5 years. Special visits are paid as necessary.

The following table shows the work done in connection with mothers and children :—

(i) To expectant mothers	....	....	....	....	....	First visits	193
						Total visits	193
(ii) To children under 1 year of age	....	....	....	....		First visits	1127
						Total visits	6944
(iii) To children between 1 and 5 years of age	....	....	....	....	....	First visits	10
						Total visits	10173

### CARE OF ILLEGITIMATE CHILDREN.

No discrimination is made against the unmarried mother, to whom are open all the facilities provided by the Authority.

In addition, arrangements are made in suitable cases for the confinement to take place at the Maternity Home, St. Monica, Kendal, or the Hope Hospital, Leeds. Both of these, in addition to providing for the mother's bodily needs, give rehabilitative training.

Close co-operation is maintained with the Local Social Worker of the Furness Association for Moral Welfare, and with other workers.

During the year 5 cases were admitted to St. Monica.

### ADOPTION.

Close co-operation is maintained with the Children's Department and all registered Adoption Societies which deal with local cases, although no Society is located in Barrow.

These organisations notify to the Medical Officer of Health the names and addresses of potential adopters, so that visits by a Health Visitor can be arranged and the suitability of conditions assessed.

In conjunction with the Guardian ad litem close supervision is maintained during the trial period before confirmation of the Adoption Order.

### CHILD LIFE PROTECTION.

This is now the responsibility of the Children's Committee but foster children will continue to be supervised by the Health Visitors in the normal course of their duties.

### OPHTHALMIC TREATMENT.

By arrangement with the Barrow Executive Council, Dr. H. C. Kodilinye still conducts the Ophthalmic Clinics, which were previously a direct charge on the Authority.

95 children made 171 attendances and spectacles were prescribed in 49 cases.

The following is a classification of the conditions for which children attended the clinic.

#### Refractions—

Hypermetropic Astigmatism	....	....	....	6
Myopic Astigmatism	....	....	....	1
Hypermetropia	....	....	....	9
Other Conditions	....	....	....	1

#### Squints—

Convergent	....	....	....	....	39
Alternating	....	....	....	....	3

#### Treatments—

Dacryocystitis	....	....	....	....	19
Ptosis	....	....	....	....	1
Conjunctivitis	....	....	....	....	3
Blepharitis	....	....	....	....	2
Other Conditions	....	....	....	....	12



## DENTAL TREATMENT.

During the year 59 sessions were devoted to the treatment of Expectant and Nursing Mothers and children under 5. 452 attendances were made by Expectant and Nursing Mothers and 450 by children under 5.

The number of Expectant Mothers attending for treatment increased slightly, but there was a definite improvement in the state of their teeth, and very few needed multiple extractions. Only 7 complete and 22 partial dentures had to be supplied.

It was not necessary to refer any patients for X-ray.

In the treatment of the children under 5 it was necessary to extract 146 teeth. 238 teeth were treated with Silver Nitrate and 36 were filled, in an attempt to save the temporary teeth as long as possible.

The following tables show the work done :—

	Examined	Needing Treatment	Treated	Made Dentally Fit
Expectant and Nursing Mothers	173	161	161	151
Children under 5	305	274	274	260

	Ex-trac-tions	Anaesthetics		Fill-ings	Scal-ing & gum treat-ment	Silver Nit-rate treat-ment	Other Oper-ations	X Rays	Dentures Provided	
		Local	Gen-eral						Comp-lete	Part-ial
Expectant and Nursing mothers ....	196	145	1	179	53	....	134	....	7	22
Children under 5	146	49	64	36	....	238	42	....	....	....

## ORTHOPÆDIC CLINIC.

The consultant clinic conducted by the Medical Superintendent of the Ethel Hedley Hospital, Windermere, has, by arrangement with the Manchester Regional Hospital Board been continued at the Board's expense. Cases are referred by the medical staff and in cases of urgency arising between clinics, are sent to the out-patient clinics at Ethel Hedley or North Lonsdale Hospital.

76 children made 130 attendances on the 6 occasions on which the clinic was held.

97 children visited the Physiotherapist on 145 occasions for fitting of splints, plasters, etc.



### MASSAGE AND REMEDIAL EXERCISES CLINICS.

In conjunction with the specialist orthopaedic clinic a Physiotherapist devotes three sessions each week to children under 5. At these sessions cases referred by the medical staff or from the Orthopaedic Clinic are given massage or remedial exercises. The adaptation of rooms at the Welfare Centre was completed at the end of 1949 and the clinic opened in this new location at the beginning of the year.

32 patients attended for massage and made 559 attendances.

16 patients had remedial exercises in 781 attendances.

### SUN-RAY.

The Ultra Violet Ray Therapy Clinic in charge of a Physiotherapist is available for two sessions weekly to children referred by the medical staff. The clinics are held in the same premises as the Massage and Remedial Exercises Clinics already referred to. During the year 161 children under 5 made 1362 attendances.

### ANTE-NATAL.

Every pregnant woman can have ante-natal care free of charge from a doctor of her choice. This service is provided under arrangements made by the Executive Council.

The Authority maintains an ante-natal clinic, to which any midwife can bring her cases. The clinic, which is situated in the grounds of Risedale Maternity Hospital, is conducted by the Assistant Medical Officer for Maternity and Child Welfare, and is staffed by the Municipal Midwives. The Obstetric Consultant from Risedale Maternity Hospital is available to see abnormal cases. Each week there are three sessions, one of which is set aside for new cases. It is hoped to provide ante-natal clinics at other centres when circumstances permit.

383 patients made 1711 attendances in the year.

### POST-NATAL.

By arrangement, the Post-Natal and Gynaecological Clinic previously provided by the Authority and which has now vested in the Minister of Health, is still available for midwives' cases.

### MISCELLANEOUS.

Close co-operation exists between the Public Health Department and the various other workers in the field of Children's Welfare—in particular the Local Inspector, N.S.P.C.C., the Probation Officers, the Area Children's Officer and the Diocesan Social Worker.

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## MIDWIFERY.

### MUNICIPAL MIDWIVES.

It was not considered necessary to fill a vacancy which occurred in the early part of last year and the needs of the service are now adequately met by the employment of 10 full time midwives, one of whom is designated Relief Midwife and therefore does not herself book any cases.

The Housing Committee has accepted the principle of providing accommodation for a midwife on each new estate. This may facilitate both recruitment (when needed) and redeployment of staff to suit population movements.



A Minnitt's Gas-Air Analgesia Apparatus is available for each midwife. Any patient can, if she is medically suitable, have this aid. Unfortunately, the apparatus is not easily carried, and arrangements for conveyance have to be made in each case. It is hoped that each midwife will ultimately have her own car. A sterilized accouchement set is provided free for each patient.

The arrangements for Ante-Natal Clinic care have already been detailed and in addition patients receive ante-natal supervision in their own homes.

Where the patient is unsuitable on medical grounds or because of unsuitable home conditions, for a domiciliary confinement, it is usually possible to arrange hospitalization.

The midwives are also available to act as Maternity Nurses where a patient wishes to be confined by her own doctor.

#### PRIVATE MIDWIVES.

5 private nurses notified their intention to practice as Midwives or Maternity Nurses but only 2 of them undertook any confinements.

The following table of domiciliary confinements shows that the Municipal Midwives attended in 95% of the cases.

Municipal—	Midwives cases	....	....	....	....	372	} 502
	Maternity Nurse cases	....	....	....	....	130	
	Gas-Air administered	....	....	....	....	440	
Private—	Midwives cases	....	....	....	....	16	} 26
	Maternity nurse cases	....	....	....	....	10	

#### SUPERVISION OF MIDWIVES.

The Local Health Authority remains the Local Supervising Authority under the Midwives Acts. The Medical Officer deputed to act as Supervisor of Midwives paid 79 visits in this connection. There were no irregularities necessitating proceedings.

Medical Aid was summoned in accordance with the rules of the Central Midwives Board in 85 cases. 4 of these were cases who had booked a General Practitioner Obstetrician under arrangements of the Barrow Executive Council.

#### HEALTH VISITING.

As already indicated, the Health Visiting Service has been seriously handicapped by shortage of staff. Even with the additional staff the available personnel are barely adequate for visits to Mothers and Young Children.

Within these limitations, visits were paid to notified cases of Pneumonia, Measles and Whooping Cough, and one nurse devoted her whole visiting time to care and after care of the tuberculous population and their households.



### HOME NURSING.

It has become increasingly evident that the staff required to run a chargeable service was insufficient to meet the growing needs of a free service. It has not been possible to secure additional staff; in fact the existing establishment has only been maintained by the employment of part time staff.

The Superintendent has her headquarters at the home at 2, Fairfield Lane where most of the resident staff are located. There is also a 2-nurse home at 27, Mikasa Street, Walney, but only one sister is accommodated there at present. 7 cars are in use and staff for whom no car is available walk or cycle.

The services of a Nursing Sister are provided on medical recommendation only. The nurse makes a morning visit as often as the condition of the case demands. In severe cases evening visits are also paid. There is no night nurse.

31,515 visits were paid to 1,421 patients.

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### VACCINATION AND IMMUNISATION.

The facilities provided by the Local Authority for immunisation against Diphtheria remain substantially unaltered.

Vaccination, now on a voluntary basis is available as a Local Health Authority Clinic service.

In addition, General Practitioners who have signified their intention of participating in the arrangements undertake vaccination and immunisation in their surgeries or in the home.

At the Central Clinic one session each week is devoted to Vaccination and Immunisation. An Assistant Medical Officer and a Health Visitor are on duty and clerical assistance is provided. Cases receive attention with or without appointment.

During the year 260 persons have been vaccinated and 202 have been re-vaccinated under clinic arrangements. A further 193 vaccinations and 78 re-vaccinations have been reported by General Practitioners.

No case of smallpox has been reported.

514 courses of immunisation and 179 re-inforcing doses were administered at the clinic and 127 courses of immunisation and 1 re-inforcing dose were reported by General Practitioners.

No case of diphtheria was confirmed.

49.6% of the population under 5 and 65.4% of those between 5 and 15 are estimated to have been immunised.

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### AMBULANCE.

The Chief Fire Officer acts as Ambulance Officer. Ultimately complete interchangeability of Fire and Ambulance Personnel will be sought, but this is not at present possible. For the time being the ambulance used for infectious cases is staffed by personnel from the Infectious Diseases Hospital and is garaged at that hospital.



The ambulance can be summoned for removals by Doctors, Nurses and Midwives, but a medical certificate is required before an out of town journey is authorised. The change to a free service has resulted in an increased user, and there is a tendency to abuse the service on long distance calls. A strict interpretation of the words "where necessary" has reduced such abuse.

Cars required for the mental health service are hired from local taxi proprietors.

The ambulances made 8,013 journeys, totalling 68,159 miles and carried 7,936 patients during the year. Cars made 84 journeys with 85 patients over a distance of 6336 miles.

The main hospital centre is 100 miles from Barrow, and it is often necessary to send ambulances to places at an even greater distance. Consequently it was felt that one purpose vehicles were of limited utility, and the proposal to obtain a sitting case car was shelved, one of the new ambulances being obtained in its place.

The Ambulance fleet comprises a Daimler (1949), 2 Austins (1948), a Humber (1942), a Bedford (1941) and a Ford (1941).

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## PREVENTION OF ILLNESS, CARE AND AFTER-CARE.

### TUBERCULOSIS.

Provision of advice and assistance, nursing requisites, home visiting and co-operation with industrial Medical Officers, Disablement Rehabilitation Officers and National Assistance Boards has continued throughout the year. As the Tuberculosis Health Visitor acts as clinic nurse there has been no difficulty in maintaining adequate liaison. Preliminary surveys of accommodation were made along with officials of a Mass Miniature Radiography Unit with a view to the Unit visiting Barrow in 1951.

### MENTAL HEALTH.

Duly Authorised Officers give advice and assistance and visit the homes of the patients at intervals suited to their condition. The cases are also kept under medical supervision and visited as opportunity offers. When it is possible to secure the services of a Psychiatric Social Worker the time which can be devoted to each case will be greater.

### OTHER ILLNESS.

The Health Visitors advise and assist in cases referred by hospitals and general practitioners.

Residential accommodation is provided by arrangement with the Governors of Infield Convalescent Home.

### LOAN CUPBOARDS.

Previously these were maintained by the Nursing Association for patients attended by the District Nurses and by the Tuberculosis Dispensary for Tuberculous patients.

This service has now been extended to all bed patients nursed at home and sick room equipment such as bed pans, bed rests, fracture cages, rubber sheeting, air rings, is now available on loan in any case where need exists.

Applications are received at either Nurses' Home (2 Fairfield Lane or 27 Mikasa Street).



**GENERAL.**

The services of Domestic Helps and District Nurses are provided in suitable cases.

**PROPAGANDA AND HEALTH EDUCATION.**

In addition to verbal instruction and advice given by the staff suitable posters are displayed in places frequented by the Public. Campaigns are conducted in schools and at clinics.

Good relations exist with the local Press which has always shown itself willing to co-operate in publishing any item to which it is considered the Public attention should be drawn.

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**DOMESTIC HELP.**

For many years the Authority has maintained a service of home and domestic helps and the staffing difficulties encountered during the war years have been overcome. The Superintendent Nursing Officer undertakes most of the field work in connection with the service.

Helps are provided mainly in cases of confinement, illness of housewife or to infirm old people, but applications are occasionally received from other categories of person whose cases, on investigation, are found to come within the scope of the scheme. This is not a free service, and charges are recovered according to the means of the applicant.

The names of persons suitable for this kind of work are registered and listed. Helps are allocated to cases as applications are received. This system works satisfactorily and it has not been found necessary to pay a retaining fee, as cases can usually be arranged so that helps have very little idle time.

100 cases were dealt with and 24 helps were in employment at the year end.

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**MENTAL HEALTH.****ADMINISTRATION.**

**COMMITTEE.** The Health Committee, which comprises Council Members and co-opted representatives of the local medical profession, meets at monthly intervals to deal with matters affecting Mental Health.

**STAFF.** This section of the Department is at present staffed by two male Duly Authorised Officers. The vacancy for a female Psychiatric Social Worker remains unfilled. Administration and clerical duties are undertaken by the general office staff. The Assistant Medical Officers provide the medical assistance needed, and it is also possible to have assistance in certification from local practitioners. The Medical Officer of Health and the Deputy Medical Officer of Health have both received the approval of the Minister of Health for the purpose of making recommendations under the Mental Treatment Acts. The visiting specialists from Lancaster Moor Mental Hospital conduct a weekly out-patient clinic and in addition are available for consultation as required.

**CO-ORDINATION.** The Authority's Officers undertake the supervision of and reporting on cases on trial for licence or on licence and in addition prepare any other reports of home conditions, etc., required by Hospitals and Institutions.



**VOLUNTARY ORGANISATIONS.** There are no voluntary organisations dealing with Mental Health in the area.

**TRAINING OF STAFF.** The Assistant Duly Authorised Officer attended a short training course in Sheffield.

#### WORK DONE.

**PREVENTION, CARE AND AFTER-CARE.** Cases coming to the notice of the Authority's staff are immediately referred for specialist advice so that the condition may be dealt with in its early stages. The Authority's Medical, Nursing and Lay Visiting Officers maintain supervision over cases under domiciliary care or on licence. Appropriate advice and assistance is given and arrangements are made for financial assistance to be granted by the National Assistance Board where applicable.

**LUNACY AND MENTAL TREATMENT.** During the year the Manchester Regional Hospital Board prohibited the admission of cases direct to Roose Hospital, which is now considered as an annexe to Lancaster Moor Hospital. In consequence all cases have to be removed to Lancaster in the first instance and this imposes a heavy additional burden both on the Duly Authorised Officers and on the Ambulance Service.

The following summary indicates work done by the Duly Authorised Officers.

**SECTION 20, LUNACY ACT, 1890.** 45 patients (25 male and 20 female) were removed to Roose Hospital on "three-day" orders. Summary Reception Orders were prepared for these patients in respect of 11 males and 11 females who were transferred to Lancaster Moor Hospital and 2 males who were retained in Roose.

10 male patients were released. One died in Roose Hospital. One other was released to go to Lancaster Moor Hospital as a voluntary patient.

5 female patients were released. 2 others were released to go to Lancaster Moor Hospital as voluntary patients, one remained in Roose Hospital voluntarily and one was transferred to Lancaster Moor Hospital in the private class.

15 patients (3 male and 12 female) were removed to Lancaster Moor Hospital on "three-day" orders. Summary Reception Orders were issued by magistrates for that area in respect of 1 male and 8 females included in that number. The remainder became voluntary patients.

**OTHER REMOVALS.** In addition to the cases listed above, 51 cases who had not been the subject of a Section 20 Order were admitted to hospital. They comprised 2 males and 3 females who would previously have been admitted to Roose Hospital for certification but who were dealt with in their own homes and removed to Lancaster Moor Hospital on Summary Reception Orders and 16 voluntary males and 30 voluntary females also admitted to Lancaster Moor Hospital. Officers of the Authority escorted all the cases admitted under Orders and 16 of the 49 voluntary patients. Additionally 3 cases being transferred from Roose Hospital to Lancaster Moor Hospital by order of the Hospital Management Committee were escorted. In all 62 journeys to Lancaster were made.

**OTHER WORK.** Case histories were prepared in respect of 74 cases.

Home conditions reports were submitted in respect of 21 proposed discharges.



**MENTAL DEFICIENCY.** 2 females were reported by the Local Education Authority under Section 57 (3) Education Act, 1944, and 6 males and one female under Section 57 (5). In addition 9 males and 6 females were ascertained to be defectives. The new cases have been placed under statutory or voluntary supervision or in institutions.

4 males including 2 from the waiting list have been admitted to institutional care. The following table shows the waiting list at the year end.

	Male	Female	Total
Under 5	1	1	2
5—14+	1	—	1
Over 14	—	3	3
	2	4	6

**AMBULANCE SERVICE.** The general ambulance service is available for mental cases. Where necessary, one of the Authority's Duly Authorised Officers travels with the ambulance or car, and arrangements exist whereby mental nurses can be borrowed from Roose Hospital to accompany female or difficult patients.

### NATIONAL ASSISTANCE ACT, 1948.

No action under Section 47 of this Act was taken during the year.

### GENERAL PUBLIC HEALTH.

#### INFECTIOUS DISEASES.

#### CORRECTED NOTIFICATIONS FOR 1950.

Disease	Male	Female	Total
Scarlet Fever	28	33	61
Whooping Cough	37	65	102
Measles	580	556	1136
Pneumonia	20	23	43
Cerebro-spinal Fever	—	1	1
Dysentery	5	2	7
Ophthalmia Neonatorum	1	—	1
Puerperal Pyrexia	—	1	1
Erysipelas	5	10	15
Food Poisoning	1	—	1
Malaria (Relapse)	—	1	1
Poliomyelitis (Paralytic)	1	1	2
Tuberculosis	62	31	93

During the year a Group Pathological Laboratory has been established in Barrow and material from suspected infectious cases is now dealt with locally instead of at High Carley. I should like to record my appreciation of the services rendered by both Pathologists and their staffs.



## VERMINOUS CONDITIONS.

The facilities provided for the School Health Service are extended to children of pre-school age, a proportion of the cost being borne by the Health Committee.

The main conditions dealt with are scabies, head lice and ringworm, and these receive treatment at the Central Clinic. Stubborn cases are referred to the Manchester and Salford Hospital for Skin Diseases but it is hoped that in the near future the newly formed Skin Department at North Lonsdale Hospital will be able to help.

Adults are given advice and materials to cleanse themselves and in difficult cases are admitted to hospital.

## WATER.

There has been no change in the source of water supply since last year and the quantity and quality has remained satisfactory.

After discussions with the Ministry of Health, measures to be taken to safeguard the Poaka Beck gathering grounds were agreed upon and are soon to be put into operation.

## PORT HEALTH SURVEY.

## I—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1950.

TABLE A.

	Number	Tonnage	No. Inspected.		Number reported to be Defective.	Number of vessels on which defects were remedied	No. of Vessels on which defects were found and reported to Ministry of Transport Surveyors.	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	97 206185	1	97	23	20	....	....
	Motor	27 22326	....	27	....	....	....	....
	Sailing	....	....	....	....	....	....	....
	Fishing	....	....	....	....	....	....	....
Total Foreign	124	228511	1	124	23	20	....	....
Coastwise	Steamers	174 54111	....	19	3	2	....	....
	Motor	135 113996	....	18	....	....	....	....
	Sailing	....	....	....	....	....	....	....
	Fishing	....	....	....	....	....	....	....
Total Coastwise	309	168107	....	37	3	2	....	....
Total Foreign and Coastwise	433	396618	1	161	26	22	....	....



## 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. Imports :—Iron Ore, Wood Pulp, Pulp Wood, Cork and Scrap Metal. Exports :—Coke, Pig Iron, Fluorspar and Ingot Moulds.

(c) Vessels arrived from the following foreign ports :—Ryika, Bona, Melilla, Algiers, Port Breira, Les Falaises, Almeria, Hornillo Bay, Lisbon, Leixoes, Ymuiden, Helsingborg, Soraker, Oskarshamn, Oxelosund, Kramfors, Narvik, Uleaborg and Eire.

## III—WATER SUPPLY.

The town's water supply is available at the dock side and is used for shipping.

There are no water boats at the Port.

## IV—PORT HEALTH REGULATIONS, 1933—1945

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

A blank Declaration of Health form is handed to the Master of every ship approaching the Port as soon as the Pilot boards.

On arrival at the Port the completed form is inspected by the Customs Officer or Sanitary Officer, whoever is first aboard.

## 2. BOARDING OF VESSELS ON ARRIVAL.

Vessels arriving from infected or suspected ports are always boarded by a Customs Officer and Sanitary Officer together.

Other vessels are usually boarded by a 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.

## 4. MOORING STATIONS DESIGNATED UNDER ARTICLE 10.

(a) Within Docks : An inner mooring station near Buccleuch Bridge within the Ramsden Dock has been established as a mooring station for all unhealthy ships arriving at Barrow, including "infected" or "suspected" vessels outside the agreed exemptions listed under heading 5 below.

## 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  
Cerebro-spinal Meningitis  
(Cerebro-spinal Fever)

Chickenpox

Continued Fever

Diphtheria

Dysentery

Epidemic Infantile Paralysis  
(Acute Poliomyelitis)

Encephalitis Lethargica

Erysipelas

German Measles

Measles

Malaria

Membranous Croup

Pneumonia (either primary or  
influenzal)

Relapsing Fever

Scarlatina (Scarlet Fever)

Trench Fever

Tuberculosis (all forms)

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 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 & 9. BACTERIOLOGICAL AND PATHOLOGICAL EXAMINATIONS.

A sample of rats caught on board ship is subject to a macroscopic examination at frequent intervals. No condition resembling Plague has ever been found. Laboratory facilities for bacteriological investigation are available locally if necessary.

## 10. VENEREAL DISEASE.

A local centre exists at the Devonshire Road Hospital for the diagnosis and treatment of Venereal Disease. Information as to location, days and hours of the available facilities, etc., is supplied by notice to the Master or other responsible officer on a vessel's arrival and every assistance is given to patients to obtain treatment.

## 11. INTERMENTS.

There are no special arrangements for the interment of dead arriving by sea. The body is first examined by a Medical Officer of the Authority.

### TABLE C.

Cases of infectious sickness landed from vessels.

No cases of infectious sickness were landed from vessels during 1950.

### TABLE D.

No cases of infectious disease 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 officers in charge of vessels are requested, when considered necessary, to have the rat guards fixed on hawsers to prevent the passage of rats between ships and the shore.



TABLE E.  
RATS DESTROYED DURING YEAR ON VESSELS.

Rats	Jan.	Feb.	Mar.	Apl.	May	Jne.	Jly.	Aug.	Sep.	Oct.	Nov.	Dec.	Total in Year
Black ....	....	....	....	....	....	1	....	2	....	....	....	....	3
Brown ....	....	....	....	....	....	....	....	....	....	....	....	....	....
Species not recorded ....	....	....	....	....	....	....	....	....	....	....	....	....	....
Examined ....	....	....	....	....	....	1	....	2	....	....	....	....	3
Infected with Plague ....	....	....	....	....	....	Nil	....	Nil	....	....	....	....	Nil

TABLE F.

No rats were destroyed 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 Deratization Certificates and Deratization Exemption Certificates for which provision is made in Article 28 of the International Sanitary Convention, 1926.

34 Deratization Exemption Certificates on Form Port II 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 ....	1	....	....	....	....	....	1	1
Ships from 301 tons to 1000 tons ....	1	....	....	....	....	....	1	1
Ships from 1001 tons to 3000 tons ....	6	....	....	....	....	....	6	6
Ships from 3001 tons to 10000 tons ....	25	....	....	....	....	....	25	25
Ships over 10000 tons	1	....	....	....	....	....	1	1
Totals ....	34	....	....	....	....	....	34	34

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

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

THE PARROTS PROHIBITION OF IMPORT REGULATIONS, 1930.

Two Budgerigars, brought into the Port aboard one vessel, were destroyed under the above regulations.



## 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 .....	88	....	11	26
Other Nations .....	73	....	15	24

## VII—FOOD INSPECTION.

## 1. IMPORTED FOOD.

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.

## 2. SHELL-FISH.

The gathering of Cockles and Mussels from Walney Channel is prohibited by an Order made in 1918, and the gathering of Periwinkles is prohibited by an Order made in 1946.

## SANITARY CIRCUMSTANCES.

The following is a summary, prepared by the Chief Sanitary Inspector, of the work carried out in his Department during the year 1950 :—

## HOUSING.

## HOUSING ACT, 1936.

## Section 11.

## DEMOLITION ORDERS.

No. of Demolition Orders made in respect of Individual Unfit Houses 10

By the end of the year these properties had been demolished or were in course of demolition.

## ABATEMENT OF NUISANCES.

No. of complaints regarding nuisances and sanitary defects received and investigated .....	1336
No. of inspections and re-inspections made under the provisions of the Public Health Act & Housing Act .....	10456
No. of Intimation Notices served in connection with Nuisances and Sanitary Defects .....	1242
No. of Statutory Notices served in connection with Nuisances and Sanitary Defects .....	866
No. of Orders obtained in the Magistrates' Court in respect of Unabated Nuisances .....	41
No. of inspections of Cinemas, Theatres and Music Halls .....	57
No. of miscellaneous inspections (Piggeries, Stables, etc.) .....	428
No. of interviews with owners and agents, etc. ....	955



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	64
No. of W.C. floors repaired or renewed	9
No. of W.C. doors repaired or renewed	36
No. of W.C. cisterns repaired or renewed	131
No. of W.C. flushing apparatus repaired or renewed	27
No. of W.C. flushing apparatus provided with a proper supply of water	13
No. of broken pedestal W.C. basins renewed	32
No. of W.C. conversions	97
No. of W.C. seats repaired or renewed	28
No. of defective W.C. walls repaired or rebuilt	51
No. of defective connections between W.C. basin & flushpipe repaired	22

#### EAVES GUTTERS, RAINWATER PIPES, HOPPER HEADS, ETC.

No. of premises on which eaves gutters were cleared, repaired or renewed	297
No. of premises on which rainwater pipes were repaired or renewed	134
No. of defective lead valley gutters repaired or renewed	8
No. of hopper heads cleared, repaired or renewed	10
No. of yard gulleys unstopped	38
No. of broken gulleys renewed	5
No. of gratings provided to gulleys	22

#### DRAINAGE AND YARD PAVING, ETC.

No. of stopped W.C. drains cleared and repaired	41
No. of defective W.C. drains repaired or relaid	11
No. of defective surface water drains repaired or relaid....	9
No. of stopped surface water drains cleared and repaired	51
No. of defective drain vent shafts repaired or renewed	30
No. of leaking yard drains repaired or renewed	12
No. of defective yard surfaces repaired or renewed	124
No. of broken and defective sink waste pipes repaired or renewed	180
No. of broken and defective bath waste pipes repaired or renewed	14
No. of defective W.C. soil pipes repaired or renewed	32
No. of drainage systems overhauled and relaid	31
No. of cases of cellar flooding remedied	8

#### YARD WALLS, YARD DOORS, ETC.

No. of defective yard doors repaired or renewed	101
No. of defective yard walls repaired or rebuilt	82
No. of disused ash-pits removed	9

#### GENERAL REPAIRS AND RENEWALS TO DWELLING-HOUSES.

No. of roofs repaired	562
No. of floors repaired or renewed	258
No. of cases of dampness in walls remedied	313
No. of cases of defective plasterwork of walls repaired or renewed	803
No. of cases of defective plasterwork of ceilings repaired or renewed	502
No. of defective house walls repaired or rebuilt	214
No. of defective doors repaired or renewed	228
No. of defective kitchen firegrates repaired or renewed	51
No. of defective parlour firegrates repaired or renewed	23
No. of defective bedroom firegrates repaired or renewed	11



No. of defective chimney stacks repaired or rebuilt	57
No. of defective chimney flues repaired or reconstructed	33
No. of defective flashings repaired or renewed	81
No. of defective washing boilers repaired or renewed	18
No. of defective cement renderings to external walls repaired or renewed	33
No. of defective skylights repaired or renewed	15
No. of defective sinks renewed or refixed	158
No. of vent bricks provided to walls	16
No. of loose handrails to staircases refixed	23
No. of defective fixed cupboards, shelves, etc., repaired or renewed	6
No. of defective firegrate surrounds and hearths repaired or renewed	23
No. of defective window frames repaired or renewed	302
No. of defective window sills repaired or renewed	68
No. of defective window sashes repaired or renewed	145
No. of cases of defective window glazing remedied	52
No. of defective window cords renewed	222
No. of rooms in which skirting boards were provided or repaired	38
No. of defective refuse bins replaced	92
No. of broken and dangerous steps repaired or renewed	33
No. of defective firebacks to kitchen ranges repaired	58
No. of defective mantelpieces repaired or renewed	3
No. of surrounds to sinks repaired	171
No. of defective fireboxes to washing boilers repaired or renewed	11
No. of hot water cisterns repaired or renewed	5
No. of defective staircases reconstructed or repaired	23
No. of water tanks repaired or renewed	3
No. of defective gas pipes and fittings repaired	8
No. of defective electrical fittings, wiring, etc., repaired	1
No. of defective weatherbars & threshwoods provided or repaired	44
No. of broken chimney pots replaced	8
No. of cases of defective pointing remedied	442

#### OTHER NUISANCES.

No. of filthy, unwholesome or verminous premises cleansed or disinfested	12
No. of nuisances from filthy bedding abated	1
No. of accumulations of offensive refuse removed	38
No. of dirty and insanitary areas to buildings cleansed	18
No. of miscellaneous nuisances abated	20

#### WATER SUPPLY TO OCCUPIED DWELLING-HOUSES.

No. of Statutory Notices served under the provisions of Section 138 of the Public Health Act, 1936, requiring the provision of a sufficient supply of wholesome water to dwelling-houses	48
No. of dwelling-houses provided with a sufficient supply of water	83
No. of dwelling-houses provided with a sufficient supply of water by the Corporation, in default of owners	Nil
No. of leaking water pipes repaired	16

#### 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 Sanitary Inspector's Department, and all such work is inspected and approved by the Sanitary Inspectors before being covered in.

No. of inspections and tests carried out in connection with the repair of, alteration to, or addition to, drains	1053
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## SHOPS ACT, 1934.

No. of inspections carried out under the provisions of Section 10 of the Shops Act, 1934 .....	461
The provisions were generally complied with.	
No. of Notices served in respect of defaults under the provisions....	2

## CONTROL OF MOVEABLE DWELLINGS.

During the year considerable time was devoted to the inspection of tents, vans, sheds, etc., used for human habitation.

There is one licensed site within the County Borough area.

One Licence, authorising the use of a caravan as a dwelling house, was re-newed for a period of 12 months.

## 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 work-places 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 1950 :—

No. of reports of infestation received and investigated .....	257
No. of premises found to be infested and treated .....	151
Estimated No. of rats poisoned .....	730
No. of rats trapped .....	178
No. of rats killed by other means .....	8
No. of mice trapped .....	397

Rodent Control work in respect of the sewers is the responsibility of the Borough Engineer and Surveyor.

During the course of the sewer-baiting, 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.

## PREVENTION OF DAMAGE BY PESTS ACT, 1949.

The above-mentioned Act which came into force on the 31st March, 1950, revoked the Rats and Mice (Destruction) Act, 1919. The new Act places the onus on Local Authorities to take such steps as may be necessary to secure as far as practicable that their Districts are kept free from rats and mice, and in particular to carry out inspections from time to time, to destroy rats and mice on land occupied by Local Authorities, and to enforce the duties of owners and occupiers of land regarding rodent infestation. Occupiers of land infested by substantial numbers of rats or mice are legally bound to notify the local authority thereof in writing. The Act places the onus of disinfection of land upon the owner or occupier thereof and provides for the service of notice upon the owner or occupier by the Local Authority, requiring him to take specific action within a specified time for the eradication of rats and mice, and empowers the Local Authority to carry out such work in default, and to recover the cost thereof from the said owner or occupier.



## INFECTIOUS DISEASES.

No. of visits of enquiry and inspection re cases of Infectious Disease	156
Disinfection of premises and effects was carried out where necessary.	

## PHARMACY AND POISONS ACT, 1933.

No. of visits of inspection in relation to applications of persons for the retention of their names in the Authority's List of persons entitled to sell poisons included in Part II of the Poisons List ....	68
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## FERTILISERS AND FEEDING STUFFS ACT, 1926.

Four Informal samples of feeding stuffs were submitted for analysis under the above Act during the year. The protein content in one of the samples was below the guarantee and outside the limits of variations by 1.45%. The seller was interviewed regarding this deficiency. The other three samples were satisfactory.

## MILK SUPPLY.

No. of visits paid to Dairies, Milk Shops and Milk Pasteurising Depots	325
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## THE MILK AND DAIRIES REGULATIONS, 1949

These Regulations came into operation on the 1st October, 1949, and revoked the Milk and Dairies Regulations, 1926 to 1943. The Minister of Agriculture and Fisheries became responsible for the registration of dairy farms and of persons carrying on or proposing to carry on the trade of dairy farmer.

The execution and enforcement of the regulations on dairy farms (except in so far as they relate to diseases Communicable to Man) became from 1st October, 1949, the responsibility of the said Minister, while Local Authorities retain responsibility for those provisions which apply outside dairy farms, for the provisions relating to diseases Communicable to Man, for the registration of dairies other than dairy farms, and for the registration of dairymen and distributors of Milk.

## THE MILK (SPECIAL DESIGNATIONS) (RAW MILK) REGULATIONS, 1949.

## THE MILK (SPECIAL DESIGNATIONS) (PASTEURISED AND STERILISED MILK) REGULATIONS, 1949.

These Regulations re-enact with amendments the provisions of the Milk (Special Designations) Regulations, 1936 to 1948.

The Milk (Special Designations) (Raw Milk) Regulations, 1949, provide that Licences to producers to use any special designation shall be granted by the Minister of Agriculture and Fisheries, while Local Authorities will continue to grant Licences to dealers to use special designations in respect of milk sold by them.

The Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations, 1949, provide for a new special designation "Sterilised Milk." Licences in respect of Pasteurising and Sterilising establishments will be issued by the Food and Drugs Authorities, and Local Authorities will continue to be responsible for all other Licences connected with these designated milks.

All fees for Licences have been dispensed with under the provisions of the above-mentioned Regulations.



## BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES.

## PASTEURISED MILK.

No. of samples taken	83
No. satisfactory in all respects	82
No. unsatisfactory on Coliform Test	1
No. unsatisfactory on Phosphatase Test	Nil
No. unsatisfactory on Methylene Blue Test	Nil
No. of Licensed Milk Pasteurisers in the Borough :—	
H.T.S.T. Process	2

## TUBERCULIN TESTED (PASTEURISED) MILK.

No. of samples taken	16
No. satisfactory in all respects	15
No. unsatisfactory on Coliform Test	1
No. unsatisfactory on Phosphatase Test	Nil
No. unsatisfactory on Methylene Blue Test	Nil
No. of Licensed Pasteurisers of Tuberculin-Tested Milk in the Borough :—	
H.T.S.T. Process	1

## ACCREDITED MILK (PRODUCED WITHIN THE BOROUGH)

No. of samples taken	9
No. satisfactory on both Methylene Blue and Coliform Tests	8
No. unsatisfactory on Methylene Blue Test	Nil
No. unsatisfactory on Coliform Test	1

## ACCREDITED MILK (PRODUCED OUTSIDE THE BOROUGH)

No. of samples taken	5
No. satisfactory on both Methylene Blue and Coliform Tests	4
No. unsatisfactory on Methylene Blue Test	1
No. unsatisfactory on Coliform Test	1

## TUBERCULIN-TESTED MILK (PRODUCED WITHIN THE BOROUGH)

No. of samples taken	21
No. satisfactory on both Methylene Blue and Coliform Tests	19
No. unsatisfactory on Methylene Blue Test	2
No. unsatisfactory on Coliform Test	Nil

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

No. of samples taken	41
No. satisfactory on both Methylene Blue and Coliform Tests	25
No. unsatisfactory on Methylene Blue Test	5
No. unsatisfactory on Coliform Test	14

## ORDINARY MILK (PRODUCED WITHIN THE BOROUGH)

No. of samples taken	37
No. satisfactory in all respects	23
No. unsatisfactory on Plate Count Test	9
No. unsatisfactory on Methylene Blue Test	6
No. unsatisfactory on Coliform Test	11

## ORDINARY MILK (PRODUCED OUTSIDE THE BOROUGH).

No. of samples taken	86
No. satisfactory in all respects	48
No. unsatisfactory on Plate Count Test	17
No. unsatisfactory on Methylene Blue Test	20
No. unsatisfactory on Coliform Test	33



## BIOLOGICAL EXAMINATION OF MILK SAMPLES.

Total No. of bulk samples of Milk submitted for animal inoculation test	74
Total No. of bulk samples of Milk showing the presence of B. Tuberculosis	11
No. of samples of undesignated milk showing the presence of B. Tuberculosis .....	8
No. of samples of Accredited Milk showing the presence of B. Tuberculosis .....	2
No. of samples of Tuberculin-Tested Milk showing the presence of B. Tuberculosis .....	1

Three of the above-mentioned samples of undesignated milk showing positive results, were from milk produced outside the County Borough.

The two samples of Accredited Milk and the one sample of T.T. Milk showing positive results, were from milk produced outside the County Borough.

Details regarding the 11 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 and individual 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.

The sampling of milk for submission to the Animal Inoculation Test for the presence of Tubercle Bacilli had to be considerably curtailed owing to the severe shortage of guinea pigs.

## THE ICE-CREAM (HEAT TREATMENT, ETC.) REGULATIONS 1947 and 1948.

The administration of these Regulations was fully carried out and repeated visits of inspection to premises where ice-cream is manufactured and/or sold showed that, following advice and explanation given by the Inspectors, the provisions were being well complied with.

No. of inspections of premises where Ice-Cream is manufactured and/or sold .....	487
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## BACTERIOLOGICAL EXAMINATION OF ICE-CREAM

During the year, samples of Ice-Cream were obtained from the various premises registered for its manufacture and/or sale, and were submitted to the Plate Count Test and Coliform Test in addition to the Methylene Blue Test recommended by the Ministry of Health. Details of the samples and the results of the tests are as follows :—

No. of samples of Ice-Cream submitted .....	25
No. of samples satisfactory on Methylene Blue, Plate Count and Coliform Tests .....	13
No. of samples unsatisfactory on Plate Count Test .....	4
No. of samples unsatisfactory on Coliform Test .....	8

All the above-mentioned samples of Ice-Cream satisfied the Methylene Blue Test.

## CHEMICAL ANALYSIS OF ICE-CREAM

No. of samples of Ice-Cream submitted for Analysis....	18
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The results showed a variation of fat content of between 1.6% and 12.6%, the average percentage of fat content being 7.86.



## FOOD PREMISES.

During the year, routine visits of inspection were carried out regularly of all types of food premises including shops, food factories and warehouses, restaurant and hotel kitchens, canteens, ice-cream manufacturers' and dealers' premises, butchers' shops, market stalls and the Cold Stores. Inspections were also carried out of vehicles used for the transport of meat and other foodstuffs.

The following is a summary of the inspections carried out and action taken in connection with food premises.

## THE FOOD AND DRUGS ACT, 1938.

No. of premises registered during the year under Section 14 in connection with the preparation or manufacture of sausages, or potted, pressed, pickled or preserved food	3
Total No. of such premises on the register	108
No. of premises registered during the year in connection with the manufacture or sale of Ice-Cream	24
Total No. of such premises on the register	137
No. of inspections of food premises	1,398
No. of written Notices served under the provisions of Section 13 of the Act	44

The above-mentioned Notices, which relate mainly to the repair and cleansing of walls, ceilings, floors, windows, and doors, the provision and maintenance of suitable and sufficient means of ventilation, the provision of washing basins and supply of hot water for the use of persons employed in food premises, were all complied with.

Special attention was paid to personal hygiene in respect of persons engaged in food handling and preparation, and in this connection a high standard has been maintained.

## BYELAWS.

During the year, Byelaws under Section 15 of the Food and Drugs Act, 1938, were made and confirmed, for securing the observance of sanitary and cleanly conditions and practices in connection with the handling, wrapping and delivery of food sold or intended for sale for human consumption, and in connection with the sale or exposure for sale in the open air of food intended for human consumption.

## PUBLIC HEALTH (MEAT) REGULATIONS, 1924

No. of inspections of butchers' shops, meat stalls and the Cold Stores	314
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The Regulations continue to be well complied with generally, and only informal action was necessary where any default was found.

The provisions of the Regulations in regard to the transport of Meat have been carried out fairly satisfactorily, regard being paid to the difficulty of the provision of suitable covered vehicles for meat transport.



## MEAT INSPECTION.

## NUMBERS OF ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIRS.

Year.	Cattle.	Calves.	Sheep.	Pigs.	Total.
1948 ....	2966	3191	13703	874	20734
1949 ....	3140	3069	13501	1199	20909
1950 ....	3985	2935	14369	1870	23159
Increase ....	845	—	868	671	2250
Decrease ....	—	134	—	—	—

## NUMBER OF WHOLE CARCASSES WITH OFFALS CONDEMNED.

Year.	Beef.	Veal.	Mutton.	Pork.	Total.
1948 ....	142	98	49	5	294
1949 ....	109	64	21	12	206
1950 ....	157	86	56	12	311
Increase ....	48	22	35	—	105

The total weight of meat condemned at the Abattoirs during the year was :—87 tons, 2 qrs. 1 lb.

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

Disease.	Beef.	Veal.	Mutton.	Pork.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
Tuberculosis ....	63230	496	—	890	64616
Other conditions ....	18455	2348	2309	892	24004
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	81685	2844	2309	1782	88620
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

## UN SOUND VISCERA CONDEMNED AT THE ABATTOIRS.

Disease.	Beef.	Veal.	Mutton.	Pork.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
Tuberculosis ....	43976	115	—	2136	46227
Other conditions ....	46848	762	11253	464	59327
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	90824	877	11253	2600	105554
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

	Cattle	Calves	Sheep & Lambs	Pigs
Number killed ....	3985	2935	14369	1870
Number Inspected ....	3985	2935	14369	1870
All diseases except Tuberculosis, Whole carcasses condemned ....	38	75	55	8
Carcasses of which some organ or part was condemned ....	3151	14	4669	260
Percentage of the No. inspected affected with disease other than Tuberculosis ....	80.025%	3.03%	32.87%	14.33%
Tuberculosis only. Whole carcasses condemned ....	119	11	....	3
Carcasses of which some organ or part was condemned ....	1401	....	....	150
Percentage of the number inspected affected with Tuberculosis ....	38.14%	0.37%	....	8.18%

**MEAT INSPECTED AFTER DELIVERY TO THE ABATTOIRS FROM OTHER MINISTRY OF FOOD DEPOTS OUTSIDE THE COUNTY BOROUGH AREA.**

154 Sides of Beef, 326 Sheep Carcasses, 27 sets of Beast Offals.

**IMPORTED MEAT CONDEMNED.**

637 lbs. of Imported Beef, 145 lbs. of Imported Mutton.

**OTHER FOODSTUFFS CONDEMNED AT THE ABATTOIRS.**

53 x 6 lbs. tins of Corned Beef.

17 x 12 ozs. tins of Corned Beef.

**CONGENITAL TUBERCULOSIS IN CALVES.**

During the year, 11 cases of Congenital Tuberculosis in calves have been found on post-mortem examination at the Abattoirs.

Notification was sent in each case to the Ministry of Agriculture and Fisheries and appropriate action taken, resulting in the dams of 8 of the calves being dealt with by slaughter under the provisions of the Tuberculosis Order 1938. The dam of one calf was found not to be amenable to the provisions of the Tuberculosis Order 1938, and the dams of the remaining two calves were not traced.



ADMINISTRATION OF THE FOOD AND DRUGS ACT.  
RELATING TO SAMPLES OF FOOD ANALYSED DURING THE YEAR 1950.

NEW MILK.

Two informal samples taken from the same source were each reported to be deprived of 13% of their original milk fat. Referred to the Lancashire County Council, in whose area the supply was produced. Two informal samples taken from the same source of supply in the County area were certified by the County Analyst to be deficient of 3.3% and 6.6% of fat respectively. The vendors were notified of the deficiencies by the County Medical Officer of Health.

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

TABLE JELLIES.

One formal sample was reported to be slightly deficient of Sugar (total sugar, 46%). The manufacturers were communicated with.

LEGAL PROCEEDINGS.

No legal proceedings were instituted during the year.

ANALYSIS OF MILK SAMPLES.

No. of samples analysed	91
Number of samples reported genuine	86
Number of samples reported to be adulterated or below the standard of the Board of Agriculture	5
Percentage of samples adulterated or below the standard of the Board of Agriculture	5.05
Average percentage of fatty and non-fatty solids in total samples analysed —	
Fatty solids	3.69
Non-fatty solids	8.84
Total solids	12.53

SUMMARY.

No. of samples showing deficiency in milk fat	2
No. of samples showing added water	0
No. of samples of abnormal composition	3

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 otherwise suitably disposed of according to the recommendation of the Ministry of Food in connection with the salvage of Unfit Food.

DESTROYED

Tins of Meat	262
Tins of Fish	52
Tins of Vegetable	606
Tins of Fruit	321
Tins of Milk	1,101
Tins of Soup	133
Tins of Patent Foods	156
Tins of Curry Powder	7
Tins of Salad Dressing Powder	372
Tins and Jars of Preserves	79
Bottles and Jars of Fruit	32
Bottles and Jars of Mayonnaise	33
Bottles and Jars of Salad Cream	363

Bottles and Jars of Sandwich Spread	....	....	330
Bottles and Jars of Pickles	....	....	53
Bottles and Jars of Ketchup	....	....	113
Jars of Cheese Powders	....	....	6
Jars of Meat and Fish Paste	....	....	31
Jars of Ginger	....	....	1
Jars of Olives....	....	....	1
Bottles of Celery Salt	....	....	5
Cartons of Cream of Tartar	....	....	3

	Cwts.	Qrs.	Lbs.
Fish	2	0	12½
Bacon	1	3	12¾
Cheese	1	0	13½
Cereals	10	1	1¾
Confections	1	3	21
Gelatine	1	0	0
Cake and Pudding Mixtures	2	2	17
Sausages		2	10½
Black Puddings		1	9
Pig Maws		1	24
Synthetic Cream		1	1
Frozen Liquid Egg		1	12
Brawn			3
Fat			2½
Milk Whipping Compound			11½
Genoa Cake			6
Dried Fruits			9½
Prawns			24
Fish Cakes			19
Pepper			1
Bisto			6
Eggs			24 Dozen.
Rabbits			20
Soup Powders			10

FOOD FOUND TO BE UNFIT FOR HUMAN CONSUMPTION BUT SALVAGED AND  
DISPOSED OF IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MINISTRY  
OF FOOD.

	Cwts.	Qrs.	Lbs.
Butter	1	0	0
Oatmeal		3	0
Currants		2	4
Bacon and Ham		3	4
Poultry		2	2½
Black Puddings			12
Chitterlings		1	12
Luncheon Meat		1	19
Suet			24½



FOOD AND DRUGS ACT, 1938.  
TOTAL NUMBER OF SAMPLES ANALYSED DURING THE YEAR ENDING 31st DECEMBER, 1950.

No. of Samples taken.			Description of Sample.	No. of Samples genuine.			No. of Samples adulterated or not up to standard.	
Formal.	Informal	Total.		Formal.	Informal	Total.	Formal.	Total.
3	88	91	New Milk ...	3	83	86	...	5
1	...	1	Margarine ...	1	...	1	...	...
1	...	1	White Pepper ...	1	...	1	...	...
1	...	1	Mincemeat ...	1	...	1	...	...
1	...	1	Jam ...	1	...	1	...	...
1	...	1	Custard Powder ...	1	...	1	...	...
1	...	1	Baking Powder ...	1	...	1	...	...
1	...	1	Table Jellies...	...	...	...	1	1
1	...	1	Glaze Cherries	1	...	1	...	...
1	...	1	Mixed Spice...	1	...	1	...	...
1	...	1	Gelatine ...	1	...	1	...	...
9	...	9	Sausages ...	9	...	9	...	...
...	7	7	Meat Paste ...	...	7	7	...	...
...	3	3	Shredded Suet ...	...	3	3	...	...
...	1	1	National Flour ...	...	1	1	...	...
...	5	5	Self Raising Flour	...	5	5	...	...
...	6	6	Confectionery ...	...	6	6	...	...
...	1	1	Ground Almonds...	...	1	1	...	...
...	18	18	Ice Cream ...	...	18	18	...	...
...	8	8	Salad Cream	...	8	8	...	...
...	1	1	Mayonnaise ...	...	1	1	...	...
...	6	6	Coffee & Chicory Essence ...	...	6	6	...	...
22	144	166		21	139	160	1	6

# FACTORIES ACT, 1937 AND 1948.

1.—INSPECTIONS for purposes of provisions as to health (including inspections made by Sanitary Inspectors)

Premises	Number on Register	Number of		
		Inspections	Written notices	Occupiers prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities .... ..	35	38	10	Nil.
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .... ..	217	163	5	Nil.
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ....	23	27	2	Nil..
TOTAL .... ..	275	228	17	Nil.



## 2.—CASES IN WHICH DEFECTS WERE FOUND.

Particulars	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
	Found	Remedied	To H.M. Inspector	Referred By H.M. Inspector	
Want of cleanliness (S.1.)	....	....	....	....	....
Overcrowding (S.2.)	....	....	....	....	....
Unreasonable temperatures (S.3)	....	....	....	....	....
Inadequate ventilation (S.4)	....	....	....	....	....
Ineffective drainage of floors (S.6)	....	....	....	....	....
Sanitary Conveniences (S.7)					
(a) Insufficient	4	4	....	4	....
(b) Unsuitable or defective	11	11	....	2	....
(c) Not separate for sexes	....	....	....	....	....
Other offences against the Act (not including offences relating to Outwork)	4	4	....	....	....
TOTAL	19	19	....	6	Nil.

## OUTWORK (Sections 110 and 111).

Nature of Work	Section 110				Section 111		
	No. of out-workers in August list required by Sect. 110 (1) (c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions	
Wearing Apparel.... .... (making, etc.)	2	—	—	—	—	—	
TOTAL .....	2	—	—	—	—	—	



Table of the results of the analysis of the samples of the soil from the site of the accident.

No. of sample	Results of analysis of the soil from the site of the accident					No. of sample
	Lead	Cadmium	Copper	Chromium	Mercury	
1	0.0001	0.0001	0.0001	0.0001	0.0001	1
2	0.0001	0.0001	0.0001	0.0001	0.0001	2
3	0.0001	0.0001	0.0001	0.0001	0.0001	3
4	0.0001	0.0001	0.0001	0.0001	0.0001	4
5	0.0001	0.0001	0.0001	0.0001	0.0001	5
6	0.0001	0.0001	0.0001	0.0001	0.0001	6
7	0.0001	0.0001	0.0001	0.0001	0.0001	7
8	0.0001	0.0001	0.0001	0.0001	0.0001	8
9	0.0001	0.0001	0.0001	0.0001	0.0001	9
10	0.0001	0.0001	0.0001	0.0001	0.0001	10
11	0.0001	0.0001	0.0001	0.0001	0.0001	11
12	0.0001	0.0001	0.0001	0.0001	0.0001	12
13	0.0001	0.0001	0.0001	0.0001	0.0001	13
14	0.0001	0.0001	0.0001	0.0001	0.0001	14
15	0.0001	0.0001	0.0001	0.0001	0.0001	15
16	0.0001	0.0001	0.0001	0.0001	0.0001	16
17	0.0001	0.0001	0.0001	0.0001	0.0001	17
18	0.0001	0.0001	0.0001	0.0001	0.0001	18
19	0.0001	0.0001	0.0001	0.0001	0.0001	19
20	0.0001	0.0001	0.0001	0.0001	0.0001	20
21	0.0001	0.0001	0.0001	0.0001	0.0001	21
22	0.0001	0.0001	0.0001	0.0001	0.0001	22
23	0.0001	0.0001	0.0001	0.0001	0.0001	23
24	0.0001	0.0001	0.0001	0.0001	0.0001	24
25	0.0001	0.0001	0.0001	0.0001	0.0001	25
26	0.0001	0.0001	0.0001	0.0001	0.0001	26
27	0.0001	0.0001	0.0001	0.0001	0.0001	27
28	0.0001	0.0001	0.0001	0.0001	0.0001	28
29	0.0001	0.0001	0.0001	0.0001	0.0001	29
30	0.0001	0.0001	0.0001	0.0001	0.0001	30
31	0.0001	0.0001	0.0001	0.0001	0.0001	31
32	0.0001	0.0001	0.0001	0.0001	0.0001	32
33	0.0001	0.0001	0.0001	0.0001	0.0001	33
34	0.0001	0.0001	0.0001	0.0001	0.0001	34
35	0.0001	0.0001	0.0001	0.0001	0.0001	35
36	0.0001	0.0001	0.0001	0.0001	0.0001	36
37	0.0001	0.0001	0.0001	0.0001	0.0001	37
38	0.0001	0.0001	0.0001	0.0001	0.0001	38
39	0.0001	0.0001	0.0001	0.0001	0.0001	39
40	0.0001	0.0001	0.0001	0.0001	0.0001	40
41	0.0001	0.0001	0.0001	0.0001	0.0001	41
42	0.0001	0.0001	0.0001	0.0001	0.0001	42
43	0.0001	0.0001	0.0001	0.0001	0.0001	43
44	0.0001	0.0001	0.0001	0.0001	0.0001	44
45	0.0001	0.0001	0.0001	0.0001	0.0001	45
46	0.0001	0.0001	0.0001	0.0001	0.0001	46
47	0.0001	0.0001	0.0001	0.0001	0.0001	47
48	0.0001	0.0001	0.0001	0.0001	0.0001	48
49	0.0001	0.0001	0.0001	0.0001	0.0001	49
50	0.0001	0.0001	0.0001	0.0001	0.0001	50
51	0.0001	0.0001	0.0001	0.0001	0.0001	51
52	0.0001	0.0001	0.0001	0.0001	0.0001	52
53	0.0001	0.0001	0.0001	0.0001	0.0001	53
54	0.0001	0.0001	0.0001	0.0001	0.0001	54
55	0.0001	0.0001	0.0001	0.0001	0.0001	55
56	0.0001	0.0001	0.0001	0.0001	0.0001	56
57	0.0001	0.0001	0.0001	0.0001	0.0001	57
58	0.0001	0.0001	0.0001	0.0001	0.0001	58
59	0.0001	0.0001	0.0001	0.0001	0.0001	59
60	0.0001	0.0001	0.0001	0.0001	0.0001	60
61	0.0001	0.0001	0.0001	0.0001	0.0001	61
62	0.0001	0.0001	0.0001	0.0001	0.0001	62
63	0.0001	0.0001	0.0001	0.0001	0.0001	63
64	0.0001	0.0001	0.0001	0.0001	0.0001	64
65	0.0001	0.0001	0.0001	0.0001	0.0001	65
66	0.0001	0.0001	0.0001	0.0001	0.0001	66
67	0.0001	0.0001	0.0001	0.0001	0.0001	67
68	0.0001	0.0001	0.0001	0.0001	0.0001	68
69	0.0001	0.0001	0.0001	0.0001	0.0001	69
70	0.0001	0.0001	0.0001	0.0001	0.0001	70
71	0.0001	0.0001	0.0001	0.0001	0.0001	71
72	0.0001	0.0001	0.0001	0.0001	0.0001	72
73	0.0001	0.0001	0.0001	0.0001	0.0001	73
74	0.0001	0.0001	0.0001	0.0001	0.0001	74
75	0.0001	0.0001	0.0001	0.0001	0.0001	75
76	0.0001	0.0001	0.0001	0.0001	0.0001	76
77	0.0001	0.0001	0.0001	0.0001	0.0001	77
78	0.0001	0.0001	0.0001	0.0001	0.0001	78
79	0.0001	0.0001	0.0001	0.0001	0.0001	79
80	0.0001	0.0001	0.0001	0.0001	0.0001	80
81	0.0001	0.0001	0.0001	0.0001	0.0001	81
82	0.0001	0.0001	0.0001	0.0001	0.0001	82
83	0.0001	0.0001	0.0001	0.0001	0.0001	83
84	0.0001	0.0001	0.0001	0.0001	0.0001	84
85	0.0001	0.0001	0.0001	0.0001	0.0001	85
86	0.0001	0.0001	0.0001	0.0001	0.0001	86
87	0.0001	0.0001	0.0001	0.0001	0.0001	87
88	0.0001	0.0001	0.0001	0.0001	0.0001	88
89	0.0001	0.0001	0.0001	0.0001	0.0001	89
90	0.0001	0.0001	0.0001	0.0001	0.0001	90
91	0.0001	0.0001	0.0001	0.0001	0.0001	91
92	0.0001	0.0001	0.0001	0.0001	0.0001	92
93	0.0001	0.0001	0.0001	0.0001	0.0001	93
94	0.0001	0.0001	0.0001	0.0001	0.0001	94
95	0.0001	0.0001	0.0001	0.0001	0.0001	95
96	0.0001	0.0001	0.0001	0.0001	0.0001	96
97	0.0001	0.0001	0.0001	0.0001	0.0001	97
98	0.0001	0.0001	0.0001	0.0001	0.0001	98
99	0.0001	0.0001	0.0001	0.0001	0.0001	99
100	0.0001	0.0001	0.0001	0.0001	0.0001	100