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#### **Contributors**

Nelson (England). Borough Council.

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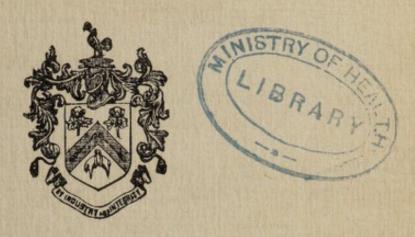
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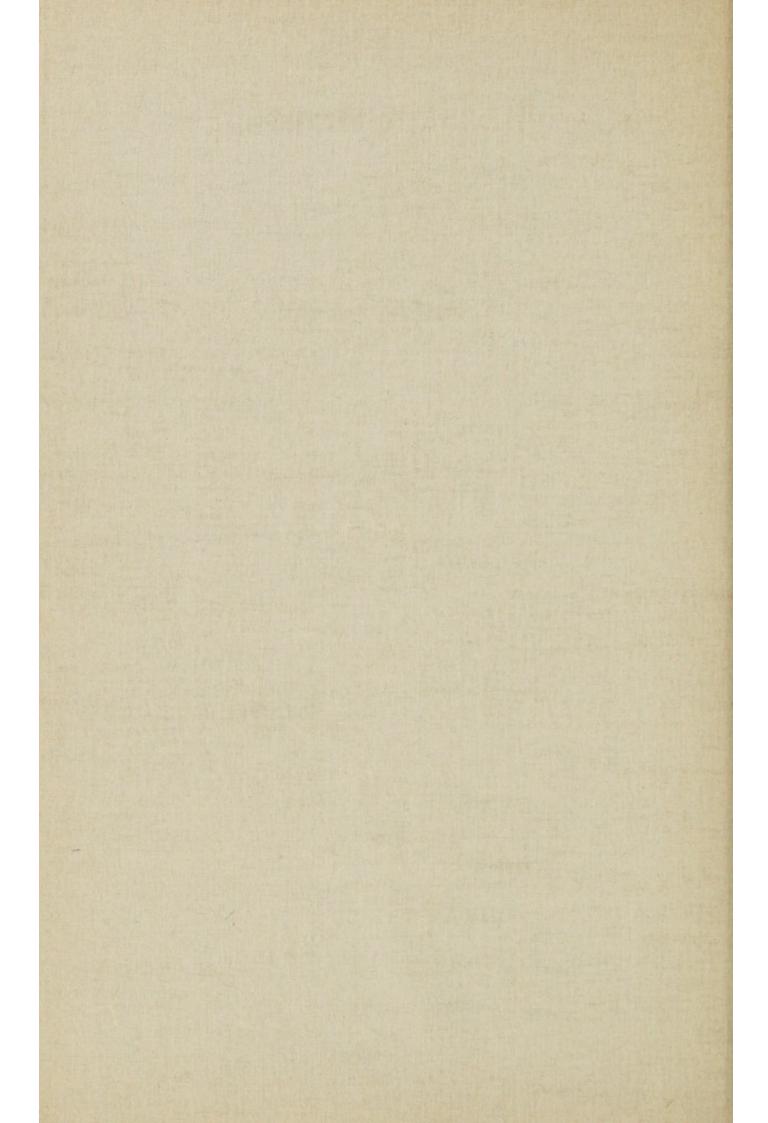
## BOROUGH OF NELSON

# REPORT

OF THE

Medical Officer of Health 1950

> R. E. ROBINSON, Medical Officer of Health





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## BOROUGH OF NELSON

#### HEALTH COMMITTEE.

ALDERMAN R. BLAND (Chairman).

COUNCILLOR G. H. DUXBURY (Vice-Chairman).

THE MAYOR (COUNCILLOR T. WALKER).

ALDERMAN W. BANNISTER.

- ,, F. CORK.
- ,, R. Winterbottom.

Councillor Mrs. A. Burrows.

- ,, J. W. Butterfield.
- " P. S. Cox.
- ,, A. Dent.
- ,, J. Hayhurst.
- ,, H. Ingham.
- , MRS. E. KAY.
- ,, S. Shaw.
- ", D. J. SPEAK.

## STAFF OF PUBLIC HEALTH DEPARTMENT.

Med	ical Officer of Health
Chie	f Sanitary Inspector
	Retired 1st Feburary, 1950. Retained in an advisory capacity until 31st May, 1950.
	W. L. KAY, F.S.I.A., M.R. San. I. (a, b, c, d, e, f, g) Commenced duty 1st June, 1950.
Assi	stant Sanitary Inspector S. HAYDOCK, C.R.S.I. Died 8th March, 1950.
Add	itional Sanitary Inspector
	Commenced duty 5th June, 1950.
Chie	f Clerk
Cler	k G. Walton.
(a)	Certificate R.S.I. and S.I.E.J.B.
(b)	Certificate R.S.I. for Inspectors of Meat and Other Foods.
(c)	R.S.I. Certificate for Smoke Inspectors.
(d)	R.S.I. Certificate in Sanitary Science applied to Buildings and Public Works.
(e)	Liverpool University Meat Inspectors Diploma.
(f)	Liverpool School of Hygiene Smoke Inspectors Certificate.
(g)	City and Guilds Certificate in Boilerhouse Practice.
(h)	Diploma in General Hygiene (Hons.) Royal Institute of Public Health and Hygiene.

# LIST OF LOCAL AND ADOPTED SANITARY ACTS ADMINISTERED BY THE COUNCIL.

Nelson Water and Gas Act, 1866.

Nelson Local Board Act, 1879.

Nelson Improvement Act, 1886.

Nelson Local Board Act, 1888.

Nelson Corporation Act, 1903.

Nelson Provisional Orders, 1871, 1873, 1876, 1890, 1895, 1897, 1899, 1904.

Borough of Nelson (Extension) Order, 1897.

The Public Health Acts Amendment Act, 1890, adopted 1891.

The Infectious Disease (Prevention) Act, 1890, adopted 1896.

The Public Health Acts Amendment Act, 1907, parts adopted 1912.

The Nelson Corporation Act, 1921.

The Public Health Act, 1925, except Sections 15, 35, and 41

# LIST OF BYE-LAWS RELATING TO SANITARY MATTERS IN FORCE IN THE BOROUGH.

Dates of Adoption.

1890 Common Lodging Houses.

Offensive trades: Blood Boiler, Blood Drier, Bone Boiler, Fellmonger, Tanner, Leather Dresser, Soap Boiler, Tallow Melter, Fat Melter, Tripe Boiler, Glue Maker, Size Maker, Gut Scraper.

1897 Nuisances.

1897 and 1907 Slaughterhouses.

1911 Dairies, Cowsheds and Milkshops Regulations.

1931 Sanitary Conveniences.

1939 Buildings,

PUBLIC HEALTH DEPARTMENT, 21 CARR ROAD,

NELSON.

December, 1951.

#### To the Chairman and Members of the Health Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report for the year 1950.

During the year there were two quite large epidemics of Whooping Cough and Measles, the number of cases being 244 and 579 respectively. This was 235 and 500 more than 1949, but fortunately, these epidemics, though wide-spread, were mild in character.

Scarlet Fever, too, claimed its usual quota, and there were in all 51 cases, none of which were of a serious nature.

The infantile mortality rate was the lowest on record, being 12 per 1,000, and is one to be proud of. Where the figures under review are small, an average of five years is of more value for assessing the efficiency of an authority's health services.

The Department lost the valuable and capable work of Mr. Ingham during the year through retirement; 40 years is a long time to serve any authority and it is to be hoped that he will be spared to enjoy many years of a well earned rest.

I am grateful to the Committee for its enthusiasm and support, and to the staff for their co-operation at all times.

I have the honour to be,

Ladies and Gentlemen,

Your obedient Servant,

R. E. ROBINSON,

Medical Officer of Health,

#### STATISTICAL SUMMARY.

Area in acres
Ordnance level, lowest point
Ordnance level, highest point
Ordnance level, centre of town
Drainage of surface water — Natural, chiefly to Walverden
Stream or Pendle Water.
Subsoil - Clay, with understratum of standstone and out-
croppings of coal.
Population — Census, 1931
Registrar-General's estimate of civilian population,
mid-year 1950 34,670
Number of inhabited houses —
(a) Census, 1931
(b) End of 1950 according to rate books 12,399
Rate
Rateable Value
Sum represented by a penny rate£950
The estimated cost of the Local Health Services for the

The estimated cost of the Local Health Services for the financial year 1950/51 was estimated at £3,599, which is equivalent to a rate of 3.79d. in the £.

Cotton and silk weaving and allied trades form the chief industries of the area. Employment was maintained at a very high level during the year, in fact there were more posts than personnel to fill them. Many of the factories have improved their canteen facilities in an endeavour to make working conditions as comfortable as possible.

#### VITAL STATISTICS.

Live Births:	Males	Fe	emale	s T	otal
Legitimate	 240		229		469
Illegitimate	 10		11		21
Total	 250		240		490
Still Births:					
Legitimate	 2		3		5
Illegitimate	 -	• • •	-		
Total	 2		- 3		5

Deaths 261 303	. 564
Deaths of Infants under 1 year of age:         5         1           Legitimate         —         —	
Total 5 1	6
Deaths of Infants under 4 weeks of age :           Legitimate         4 1           Illegitimate	. 5
Total 4 1	5
Maternal Deaths: From pregnancy, childbirth and abortion	. 2
Excess of deaths over births	. 74
VARIOUS RATES.	
Live Birth Rate per 1,000 estimated home population 1950):  Crude Rate  Adjusted Rate  Comparability Factor  Still Birth Rate per 1,000 total (Live and Still) Births	
Live Birth Rate per 1,000 estimated home population 1950):  Crude Rate Adjusted Rate Comparability Factor  Still Birth Rate per 1,000 total (Live and Still) Births Rate per 1,000 estimated home population (mid 1950): Crude Rate Adjusted Rate Comparability Factor	14.1 15.1 1.07
Live Birth Rate per 1,000 estimated home population 1950):  Crude Rate  Adjusted Rate  Comparability Factor  Still Birth Rate per 1,000 total (Live and Still) Births  Rate per 1,000 estimated home population (mid 1950):  Crude Rate  Adjusted Rate	14.1 15.1 1.07 10 16.3 14.5
Live Birth Rate per 1,000 estimated home population 1950):  Crude Rate Adjusted Rate Comparability Factor  Still Birth Rate per 1,000 total (Live and Still) Births Rate per 1,000 estimated home population (mid 1950): Crude Rate Adjusted Rate Comparability Factor  Infantile Mortality Rate: All Infants per 1,000 Live Births Legitimate Infants per 1,000 Illegitimate Live	14.1 15.1 1.07 10 16.3 14.5 0.89

#### BIRTHS.

The actual number of births registered in Nelson during the year was 445, of which 444 were live births and 1 still birth. Included in this number were 26 live births relative to non-residents of the Borough, but the corrected total of live and still births for the year was 490 and 5 respectively, which shows that 45 live births and 4 still births pertaining to Nelson residents occurred outside the district.

The 490 live births represents an annual live birth rate of 14.1 per 1,000 of estimated home population, which is an increase of 0.3 per 1,000 on the live birth rate for 1949, but a decrease of 1.9 on the average live birth rate for the past 5 years, 1944-49.

Compared with the birth rate for England and Wales for 1950, the Nelson rate is less by 1.7 per 1,000 of population, and compared with the average birth rate of 148 towns with a 1931 census population of 25,000-50,000, Nelson's rate is 2.6 per 1,000 less.

The 5 still births registered give a still birth rate of 10 per 1,000 total births (live and still) and 0.14 per 1,000 of estimated population, and represent 1.0% of the total live and still births,

Included in the total of 490 live births are 21 illegitimate births which represent 4.2% of the total live births, and give an illegitimate live birth rate of 0.60 per 1,000 of population.

#### DEATHS.

During the year 564 deaths occurred in Nelson, but 30 of these were of non-residents. In addition, 143 residents died outside the area, so that the total deaths assignable to Nelson for the period is 564 (261 males and 303 females); this gives an annual death rate of 16.3 per 1,000 of population. The figure is an increase of 0.4 on the previous year, and 1.0 per 1,000 on the average figure for the 5 years 1945-49. Compared with other figures supplied by the Registrar General, the Nelson adjusted death rate is 2.9 higher than the rate for England and Wales, and 2.9 above the rate for a group of 148 towns with a 1931 census population of 25,000-50,000.

The five principal causes of death are as follows:-

		M.	F.	Dea	ath Rate
(1)	Other Heart Diseases	56	 67		3.54
(2)	Vascular lesions of the				
	Nervous System	32	 61		2.68
(3)	Coronary Diseases	37	 27		1.84
(4)	Cancer	26	 21		1.35
(5)	Bronchitis	20	 17		1.06

For more detailed list of deaths see page 13.

#### INFANT DEATHS.

There were 6 deaths (5 males and 1 female) of infants under the age of one year, and this gives an annual infantile mortality rate of 12 per 1,000 live births. This is 24 per 1,000 live births, and 11 deaths less than the previous year.

The average rate for the previous five years 1945-49 is 37 per 1,000 live births, so that the 1950 rate is 25 per 1,000 live births less than that figure.

Compared with the infantile mortality rate for England and Wales for 1950, i.e., 29.8 per 1,000 live births, the Nelson rate is less by 17.8 and it is less by 17.8 than the average infantile mortality rate for the group of 148 towns with a 1931 census population of 25,000-50,000, which rate is 29.4 per 1,000 live births. The figure for England and Wales is calculated per 1,000 related live births.

A study of the infant deaths reveals the following information:

# INFANTILE MORTALITY. ANALYSIS OF INFANT DEATHS AT VARIOUS AGES.

Age Group	No. of Deaths	% of Infant Deaths	Mortality Rate per 1,000 births
Under 1 day	2	33.3	4.0
Over 1 day and under 2 days	_	_	_
,, 2 days ,, ,, 3 days	_	-	_
,, 3 days ,, ,, 4 days	_	_	_
,, 4 days ,, ,, 5 days	1	16.6	2.0
,, 5 days ,, ,, 6 days	_	-	
,, 6 days ,, ,, 7 days	_	-	-
Total under 1 week	3	50.0	6.1
Over 1 week and under 2 weeks	1	16.6	2.0
,, 2 weeks ,, ,, 3 weeks	1	16.6	2.0
,, 3 weeks ,, ,, 4 weeks	_	_	_
Total under 1 month	5	83.3	10.2
Over 1 month and under 3 months			
,, 3 months ,, ,, 6 months	1	16 6	2.0
,, 6 months ,, ,, 9 months	_	100	
,, 9 months , ,, 12 months	-	_	
Total Deaths	6	100.0	12.2

# Infantile Mortality Rate According to the Various Causes of Death.

Cause of Death	Numbe	er of De	aths	Rate per 1,000 Live Births.
Congenital Malformations .		1		2.0
Prematurity		4		8.1
Pneumonia		- 1		2.0

#### MATERNAL MORTALITY.

There were 2 maternal deaths during the year, which give a Maternal Mortality Rate of 4.04 per 1,000 total (live and still) births.

#### MONTHLY ANALYSIS OF DEATHS SHOWING RATES.

Month	Actual Deaths	Outward	Inward	Net Deaths	for Nelson
	in Nelson	transfers	transfers	Number	Rate
January	38	1	14	51	17.6
February	36	2	9	43	14.8
March	55	2 2 3 2	18	71	24.5
April	40	3	14	51	17.6
May	33	2	16	47	16.2
June	35	1	11	45	15.5
July	21	2	9	28	9.6
August	28	2 2 3 3	13	39	13.4
September		3	7	45	15.5
October		3	10	40	13.8
November		1	10	59	20.4
December	41	8	12	45	15.5
Totals	451	30	143	564	16.3

SUMMARY OF AGES AT DEATH.

% of each group to Total	Deaths	0.1 0.1 0.1 0.1 0.1 0.1 0.1 10.2 10.2 11.1 11.8 11.8 0.8	1
to	Total	66 112 123 138 138 141 110 127 127 127 127	564
Total Deaths Allocated Nelson	E4	1   1   1   20   20   20   20   20   20	303
- I	M	20 20 31 31 32 37 37 37 37 37 37 37 37 37 37 37 37 37	261
Inward	H	-               - 88 - 94 / 2 - 54	89
Inw	M	8             -8288735448	75
vard	F	-	16
Outward	M		14
Deaths in Nelson	F	1	251
Dea	M	27	200
Age Groups		Under 1 year  Over 1 and under 2 years  2	Totals

Causes of Death with Corresponding Rates.

	Cause of Death	Males	Females	Total	Crude Death Rate
1.	Tuberculosis, respiratory	5	8	13	00.37
2.	Tuberculosis, other forms	_	1911	_	00.00
3.	Syphilitic disease		2	2	00.05
4.	Diphtheria				00.00
5.	Whooping Cough				00.00
6.	Meningococcal infections	707.00		_	00.00
7.	Acute poliomyelitis		_		00.00
8.	Measles	1	-	1	00.02
9.	Other infective and parasitic	3			
	diseases	1	1	2	00.05
0.	Malignant neeplasm, stomach	7	10	17	00.49
1.	do lung, bronchus	8	1	9	00.25
2.	do breast	_	7	7	00.20
3.	do uterus		7	7	00.20
4.	Other malignant and lymphatic				00120
	neoplasms	26	21	47	01.35
5.	Leukaemia, Aleukaemia				00.00
6.	Diabetes	3	4	7	00.20
7.	Vacular lesions of nervous	0	- 1		00.20
	system	32	61	93	02.68
8.	Coronory disease, angina	37	27	64	01.84
9.	Hypertension with heart disease	2	6	8	00.23
0.	Other heart disease	56	67	123	03.54
1.		10	13	23	00.66
2.	Other circulatory diseases	9	6	8	00.00
3.	Influenza	-	5	11	00.23
J.	Pneumonia	6	17		01.06
4.	Bronchitis	20	17	37	01.00
5.	Other diseases of respiratory			~	00.14
	system	2	3	5	00.14
6.	Ulcers of stomach and			_	00.14
_	duodenum	4	1	5	00.14
7.	Gastritis, enteritis and diarrhoea	1		1	00.02
28.	Nephritis and nephrosis	4	4	8	00.23
9.	Hyperplasia of prostate	2	-	2	00.05
0.	Pregnancy, childbirth and				00.05
-	abortion		2	2	00.05
1.	Congenital malformations	1	-	1	00.02
2.	Other defined and ill-defined	2.2	The same of the sa		01.70
-	diseases	22	17	39	01.12
3.	Motor vehicle accidents	1	-	. 1	00.02
4.	All other accidents	6	6 7	12	00.34
5.	Suicide	2	7	9	00.25
36.	Homicide and operations of war	*****	_	-	00.00
	All Causes	261	303	564	16.3

BIRTH RATES, DEATH RATES, ANALYSIS OF MORTALITY, MATERNAL MORTALITY IN THE YEAR 1950.

(Provisional Figures based on the Quarterly Returns).

England and Boroughs and Great Towns (Resident Population Vales (including London) 1931 Census)  England and Great Towns (Resident Population Administrative County London)		Nelson
Boroughs and Great Towns (including London)		London Administrative County
_	148 Smaller	10wns (Kestdent Population 25,000-50,000 at 1931 Census)
England and Wales	126 County	Great Towns (including London)
		England and Wales

# RATES PER 1,000 HOME POPULATION

ave Diruis	15.8	17.6	16.7	17.8	14.1
Still Births	0.37	0.45	0.38	0.36	0.14
All Causes	11.6	12.3	11.6	11.8	14.5
Typhoid and Paratyphoid	0.00	0.00	0.00	0.00	1
Whooping Cough	0.01	0.01	0.01	0.01	00.00
iphtheria	0.00	0.00	0.00	0.00	0.00
Luberculosis	0.36	0.42	0.33	0.39	0.32
Influenza	0.10	0.09	0.10	0.07	0.20
Smallpox	1	ı	ı	1	1
Polioencephalitis)	0.05	0.05	0.02	0.01	0.00
Pneumonia	0.46	0.49	0.45	0.48	0.27

29	1.6	
34	2.2	
30*	1.9	

All Causes under 1 year of age ...... Enteritis and Diarrhœa under 2 years of age ..... \* Per 1,000 related Live Births.

0.00

1.0

12

56

## MATERNAL MORTALITY.

## RATES PER 1,000 TOTAL (LIVE AND STILL) BIRTHS.

England	l and W	Vales.	Nelson.
Abortion with sepsis	0.09		2.02
Other abortion	0.05		0.00
Complication of pregnancy & delivery	0.54		2.02
Sepsis of childbirth & the puerperium	0.03		0.00
Other complications of the puerperium	0.15		0.00

Comparison of various Nelson rates for 1950 with those for 1949 and the mean of the 5 years, 1945-1949.

	Per	1,000 of esti	Per 1,000 of estimated population.	ion.	Maternal m	Maternal mortality rate.	Data of
	Live birth rate.	Crude death rate.	Death rate from tuberculosis of respiratory system.	Death rate from cancer.	Per 1,000 live births.	Per 1,000 total (live and still) births.	deaths under one year per 1,000 live births.
Mean of five years 1945-1949	16.0	15.3	0.41	2.02	0.75	0.73	37
1949	15.8	15.9	0.49	1.80	Nil	Nil	36
1950	14.1+	16.3*	0.37	1	4.08	4.04	12
Increase or decrease in 1950 on 5 years' average 1945-1949	-1.9	+1.0	-0.04	1	+3.33	+3.31	-25
On previous year	+0.3	+0.4	-0.12	1	+4.08	+ 4.04	-24

\* 1950 adjusted death rate (comparability factor, 0.89)=14.5 per 1,000. + 1950 adjusted birth rate (comparability factor, 1.07)=15.1 per 1,000.

# GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Particulars of the Health Department Staff are given on page 4 of this report.

#### LABORATORY FACILITIES.

The small laboratory attached to this department has been closed down and advantage taken of the facilities offered by the Central Pathological Laboratory, Salus Street, Burnley, and in some instances of the Public Analyst, Burnley.

During the year the following specimens were received from local medical practitioners and submitted on their behalf to the Central Pathological Laboratory, Burnley.

Blood films	1
Blood, Wasserman test	10
Faeces	5
Scraping from mucous membrane	1
Semen	2
Sputum	37
Swabs — nasal	1
rectal	2
throat	34
vaginal	5
Urines for general examination	63
Urines for pregnancy test	49
Urethral discharge	4
Total	214

A comprehensive range of services for the area is maintained by the Local Health Authority, Lancashire County Council, including Ambulance Service, Nursing in the Home, Orthopædic, Dental, Ophthalmic, Ante-natal and Minor Ailments Clinics; Day Nurseries, Institutional Provision for Care of the Mental Defective, Ante-natal and Post-natal care and the care of premature infants.

#### THE TUBERCULOSIS DISPENSARY.

The Tuberculosis Dispensary for the area is situated at 64 Carr Road, Nelson, and is conducted by the District Hospital Management Committee.

#### V.D. CLINICS.

These are provided by the District Hospital Management Committee at the Victoria Hospital, Burnley, and the Royal Infirmary, Blackburn.

#### HOSPITALS.

The Hospital Services for the Borough are provided by the Burnley and District Hospital Management Committee of the N.W. Regional Hospital Board.

# PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

During the year 892 cases of infectious disease were notified and this is an increase of 727 cases on the figure for 1949. The main increase is in the number of cases of measles and whooping cough which show increases of 498 and 238 respectively. The outbreak of measles commenced in July, reached a climax in October and then began to fall off towards the end of the year. Whooping Cough commenced in July and ran steadily through to the end of the year.

A detailed comparison with the previous year is as follows:—

10110 112 1						
		C	ases re	moved		
(	Cases 1	notified	to ho	spital	Dea	aths
	1949	1950	1949	1950	1949	1950
Scarlet Fever	47	52	28	31	_	
Diphtheria	_	-	_	_	_	_
Enteric Fever	_			_	_	_
Paratyphoid Fever	_	_		_	_	_
Measles	79	577	-	13	1	1
Whooping Cough	9	247	_	14	_	_
Pneumonia	21	10	-	-	12	11
Puerperal Pyrexia	2	1	1	_		_
Cerebro-spinal Fever .	-	_	_	_	_	-
Acute Polio-myelitis	1	_	1	_	_	
Acute Polio-encephalitis	s —	_	_	_	_	
Dysentery	_	2	_	1		
Ophthalmia Neonatorui	m 1	1	_		_	-
Erysipelas	5	2	1	_	_	-
Totals	165	892	31	59	13	12

The following table gives an analysis of the notified cases of infectious diseases in age groups:-

	Total				AGE	AGE PERIODS	IODS				N	
Disease	Cases	Under 1		3	5 —	10—	15—	25—	45—	65 and over	to hosp'l	Deaths
Scarlet Fever	52	1	5	13	23	8	1	2	1	-	31	1
Measles	577	15	128	243	188	2	1	-	1	1	13.	1
Whooping Cough	247	14	53	109	70	1	1	1	1	1	14	1
Pneumonia	10	1	1	1	1	1	-	4	60	-	1	11
Puerperal Pyrexia	, 1	1	-	1	1	1	1	-	1	1	1	1
Dyscntery	2	1	1	2	1	1	1	1	1	1	1	1
Ophthalmia Neonatorum	1	1	1	1	1	1	1	1	1	1	1	1
Erysipelas	2	1	1	-	1	1	1	1	1	-	1	1
TOTAL	892	30	186	368	282	=	1	8	60	co	59	12

The Registrar General has issued a table showing for England and Wales and sub-divisions of the country, the attack rate per 1,000 of the population, for certain of the infectious diseases and this is submitted along with the attack rate for Nelson, for comparison.

Notifications (Corrected)	England and Wales	126 County boroughs and Great Towns including London	148 Smaller Towns Resident Population 25,000 to 50,000 at 1931 Census	London Adm. County	Nelson
RAT	ES PER 100	00 CIVILIAN	POPULATION	1.	
Typhoid Fever Paratyphoid Fever Meningococcal Infection Scarlet Fever Whooping Cough Diphtheria Erysipelas Smallpox Measles Pneumonia Acute Poliomyelitis (including Polio-	0.00 0.01 0.03 1.50 3.60 0.02 0.17 0.00 8.39 0.70	0.00 0.01 0.03 1.56 3.97 0.03 0.19 0.00 8.76 0.77	0.00 0.01 0.02 1.61 3.15 0.02 0.16  8.36 0.61	0.01 0.01 0.03 1.23 3.21 0.03 0.17  6.57 0.50	0.000 0.000 0.000 1.49 7.12 0.000 0.05 - 16.6 0.28
encephalitis): Paralytic Non-paralytic Food Poisoning	0.13 0.05 0.17	0.12 0.05 0.16	0.11 0.06 0.14	0.08 0.05 0.25	0.00

## DISINFECTION AFTER INFECTIOUS DISEASE.

During the year 44 premises involving 52 rooms have been fumigated, and 31 articles of wearing apparel and 516 articles of bedding, etc., have been disinfected.

Fumigation of rooms is carried out by means of formalin spray and vapour, whilst disinfection of bedding, etc., is done by steam, the apparatus being situated at the Destructor Works, Charles Street. Irrespective of infectious diseases, many requests are received for disinfection to be carried out following other illnesses, or deaths.

#### TUBERCULOSIS.

During the year 28 new cases were notified, 16 respiratory cases (12 males and 4 females) and 12 non-respiratory cases (6 males and 6 females). This is a decrease of 22 cases on the figure for 1949.

Analysis of the new cases and deaths from the disease according to age groups and sex is given in the following table:

			NE	W (	CASI	ES			D	EAT	HS	
Age Periods					No	n-					Non	-
	R	espi	rato	ry R	espin	ratoi	уR	espir	ator	y Re	espir	atory
		M.	F.		M.	F.		M.	F.		M.	F.
Under 1 year		-	_		_	_		-	-		_	_
1 to 5 years		-				_		_	_		-	_
5 to 10 years		-	_		2	3			-		-	
10 to 15 years			_		3	_			-			
15 to 20 years		1	-		_	_		_				
20 to 25 years		1	_		1	_						_
25 to 35 years		2	2			-		-	3		_	
35 to 45 years			1			1		1	1		_	-
45 to 55 years		4			_	1		2	2		_	_
55 to 65 years		2	1		_	1		1	1		_	_
65 and upward	ls.	2	_		_			1	1		_	_
			-		-			-	-		-	
Totals		12	4		6	6		5	8		-	-

At the end of the year there were 204 cases of tuberculosis on the Nelson register as follows:

Pulmonary	Males 85	Females 41	Total 126
Non-pulmonary .	Males 25	Females 53	Total 78

There does not appear to be any evidence of excessive incidence of, or mortality from, tuberculosis in any particular occupation in the district. Notification of this disease is generally efficient and there has been no incidence of wilful neglect or refusal to notify.

# Public Health (Prevention of Tuberculosis) Regulations, 1925.

No action has been necessary under these regulations for dealing with tuberculous employees in the milk trade.

Public Health Act, 1936 — Section 172.

No action has been required under this section during the year.

NATIONAL ASSISTANCE ACT, 1948 — SECTION 47.

No action has been required under this section during the year.

#### CONCLUSION.

In the preparation of this report I am indebted to the following officials who have supplied me with information relative to the work coming under their control, and I desire to express my appreciation of the willing assistance rendered to enable me to present this report for the year 1950.

Dr. S. C. Gawne, County Medical Officer of Health.

Mr. F. V. Alexander, Borough Engineer & Surveyor, Nelson.

Mr. J. Gilchrist Smith, Borough Water Engineer, Nelson.

Mr. W. Knight, Borough Treasurer, Nelson.

Mr. V. Robinson, Director of Public Cleansing, Nelson.

## ENVIRONMENTAL HYGIENE

by W. L. KAY, Esq., f.s.i.a., M.R. san. I, Senior Sanitary Inspector.

#### SANITARY CIRCUMSTANCES OF THE AREA.

#### WATER SUPPLY.

No change has taken place during the year as regards the source, storage or distribution of the water supply for the area. There are two areas of supply, one on the east side of the town and collected in Coldwell reservoirs, and one on the west side collected in the Ogden reservoirs. The source in both cases is upland surface water and springs. Chlorination plant and pressure filters are installed at both groups of reservoirs.

Routine inspection is made of the gathering grounds to ensure freedom from obvious sources of pollution, and samples of both raw water and the water as it goes into supply are taken regularly and submitted for bacteriological and chemical examination.

During the year 51 bacteriological and 4 chemical examinations have been made, both of raw water and the water going into supply, all of which gave satisfactory results, with the exception of one chemical examination.

No plumbo-solvent action is found in the water, but as the result of analysis a slight defect was discovered in the lime dosing apparatus which was remedied.

Water is supplied to other districts adjacent to Nelson and in Nelson 12,282 dwellinghouses are supplied direct from public mains, covering an estimated population of 34,500. No dwellinghouses are supplied by means of stand pipes.

A shortage of water is experienced in a small number of houses, due to groups of these houses being supplied with an inefficient joint service pipe. The corporation has a scheme whereby financial assistance is given to the owners of houses requiring separate service pipes, and 18 rows of property consisting of 197 houses have had joint service pipe replacements during the year.

#### DRAINAGE AND SEWERAGE.

No extension of the sewage plant has taken place during the year, but the re-construction of two bacteria filters and a portion of the main sewer in Walverden valley have been completed during the year.

The treatment is by means of screens, detritus tanks, sedimentation tanks, percolating filter and humus tanks. The final effluent is discharged into Pendle Water. Sludge from the settling tanks is pumped into storage tanks, where it is digested. The digested sludge is spread on adjoining farm land during autumn and winter months.

The estimated dry weather flow of sewage is 1,750,000 gallons per day. The water carriage system is in use throughout the town, and works are situated on the outskirts and in the lowest area of the district. There is a natural fall to the works and delivery is by a high level gravitating sewer. One small low lying area is provided with a low level sewer and the contents of this are emptied into the high level sewer by means of automatic ejections at the works.

There are only a few isolated areas and houses in the borough which are not drained to a sewer, no public sewer being available.

#### RIVERS AND STREAMS.

The Rivers Pollution Acts are administered by the Ribble Joint Committee.

#### CLOSET ACCOMMODATION.

#### Privy middens:

Number of middens	10
Number of closets attached to these middens	10
Number of dry ashpits (excluding middens)	5
Number of movable ashbins	12,709
Number of trough closets	81
Number of waste water closets	
Number of fresh water closets	5,690
Number of houses on water carriage system	

#### Conversions during the year:

Number of privy closets to fresh water closets	 Nil
Number of waste water closets to fresh water	
closets	143
Number of trough closets to fresh water closets	4

#### PUBLIC CLEANSING.

This is carried out by a separate department under the direction of the Director of Public Cleansing (Mr. V. Robinson), who informs me that there has been no change in procedure during the year. The work is carried out by direct labour and on the following lines.

Household refuse is collected weekly from the dustbins and removed in covered vehicles to the Destructor Works, Charles Street. Disposal is by separation, screening and salvage. Screened dust and clinker residue are tipped. Material not worthy of salvage, and organic or vegetable matter not suitable for conversion to a saleable product for animal feeding or as a fertiliser, is incinerated. Street cleansing and street gulley emptying are carried out by motor vehicles specially designed for the purpose and the debris disposed of by controlled tipping.

#### SANITARY INSPECTIONS.

It should be noted that for 4 months of the year due to the retirement of Mr. Ingham, Chief Sanitary Inspector, and the death of Mr. Haydock, Assistant Sanitary Inspector, the department was not working to maximum capacity. Mr. Ingham acted during this period in an advisory capacity. The statistics therefore refer in the main to 8 months only.

Details of the inspections made are as follows:-	-
Bakehouses	26
Boiler Plants Inspected	26
Butchers Shops	25
Closets — Waste Water	3
Complaints Received	219
Complaints Confirmed	176
Dairies, Milkshops and Milkstores	8
Drains Inspected	46
Drains Smell Test	4
Drains Colour Test	52
Entertainment Houses	3

Farms: Visits	14
Fish Frying Establishments	1
Food (Preserved Food) Manufacturers	53
Food Catering Establishments	23
Food Shops and Warehouses	29
Factories (A) Power	26
Factories (B) Non-Power	3
Houses Defective	88
Houses Detailed Inspections	16
Houses Overcrowding	13
Ice-cream Manufacturers	27
Ice-cream Retailers	71
Infectious Diseases	58
Interviews	180
Markets	18
Meat and Food Inspections	131
Meat and Food Condemnations	46
Meetings with Owners	21
Meetings with Contractors	13
Miscellaneous Visits	56
Notices Served:	
Verbal	36
Informal	231
Statutory Public Health Act	9
Statutory Housing Act	10
Nuisances Visits Re	126
Nuisances Re-inspections	793
Offensive Trades	3
Piggeries	1
Rats and Mice	3
Samples Submitted:	
Ice-cream	65
Milk Biological	37
Milk Methylene Blue	64
Milk Phosphatase	3
Water, etc.	1
Slaughter-Houses	19
Schools	10
Smoke Observations	56
Tents, Vans and Sheds	4
Verminous Premises	12
Workplaces	4

#### Atmospheric Pollution and Smoke Abatement.

Our efforts towards cleaner air were, and continued to be, considerably hampered by the absence of smoke bye-laws. It is to be hoped that their adoption will not be long delayed. 56 observations were made of factory chimneys and of these 11 showed emissions of black smoke in excess of 2 minutes in a continuous period of 30 minutes observation. Advice was given to stokers in these cases on correct methods of firing. Close liaison was maintained with the Regional Fuel Engineer of the Ministry of Fuel and Power. As a result in some cases it was possible to obtain for manufacturers an upgrading in their fuel supply. The Ministry also made available stoker demonstrators who were able to show in practical fashion how to cut out black smoke.

It is interesting to note that there are in Nelson 46 factory chimneys, which gives some indication of the smoke problem.

#### SWIMMING BATHS AND POOLS.

The Corporation own the Public Baths which are situate in Bradley Road, Nelson, and provide swimming baths and slipper baths for males and females.

An Open Air Swimming Pool situate in Marsden Park is also provided and controlled by the Corporation.

Filtration and chlorination plants are in operation at both these premises.

#### DISINFESTATION.

During the year 29 houses involving 106 rooms were disinfested. The figure is almost three times the figure for 1949, and relates to the disinfestation for bugs and fleas. There were in addition 28 houses involving 92 rooms where treatment was given for the eradicating of woodlice and beetles.. Treatment was by the gaseous methods and residual spray, the agents used being D.D.T. and Gammexane, and was carried out by the departmental staff.

#### SCHOOLS.

In midsummer a survey was made of the 24 schools in the district. This revealed that generally speaking there was an absence of adequate washing facilities and modern sanitary accommodation.

The following statistical table gives some indication	n of
the position:—	
(a) No. of schools with unsatisfactory yard surfaces	. 6
(b) Sanitary accommodation. No. of schools with:	
(1) Fresh water closets	. 15
(2) Waste water closets	
(3) Trough closets	. 9
(c) Refuse disposal. No. of schools with:	
(1) Dustbins	. 23
(2) Dry ashpits	. —
(d) Water supply. No. of schools supplied from:	
(1) Public mains	
(2) Private supplies	
(e) No. of schools where washing and drinking facilities	
are considered unsatisfactory	. 22
(f) Drainage. No. of schools with drainage to:	
(1) Public sewers	
(2) Private treatment works	
(g) Facilities for handling meals at the schools. Satisfac	tory.
OFFENCIAL TRADES	

#### OFFENSIVE TRADES.

There is one offensive trade, viz., gut scraping, carried on within the borough. During the year considerable structural work was carried out to bring the premises into conformity with modern practice.

## Factories Act, 1937.

## (1) Inspections for purposes of provisions as to health:

Defects.	Number on Register		Writte Notice:	Legal Action
Factories in which sections 1, 2, 3, 4, and 6 are to be enforced by Local Authorities	47	 8	 1	
in which section 7 is enforced by the Local Authority Other premises in which section 7 is enforced by the Local	316	 37	 21	 _
Authority Total				

(2) Cases in which defects were found:

Defects.	For	ınd	Reme	died	Referr to H.M Inspec	M.	by H	.M.	Legal Action
Want of cleanliness	1	*	-		_		1		-
Sanitary Convenienc	es:								
(a) Insufficient	3		3				3		-
(b) Unsuitable or									
defective	17		14		-		_		
(c) Not separate									
for sexes	1				_		1		_
Total									

(3) Outwork: No notification of outworkers has been received.

#### COMMON LODGING HOUSES.

There is no common lodging house in Nelson, nor are any houses registered as let in lodgings. No action has been necessary either in regard to Tents, Vans,, Sheds, etc., nor to Underground Sleeping Rooms.

#### CANAL BOATS.

Visits have been made from time to time to the Leeds and Liverpool Canal, but on no occasion have canal boats been met with.

## RAG FLOCK ACTS, 1911 and 1928.

Whilst there are no premises in the district in which rag flock is manufactured, it is known that there are several premises whereon rag flock is used. It is hoped in the coming year to make a survey of the district with a view to bringing our records up to date.

#### HOUSING.

Number of houses erected during the year:

			Tra	aditional
	Prefa	bricated	Pe	rmanent
(i)	By Local Authority	Nil		97
(ii)	By other Local Authorities	Nil		Nil
(iii)	By other bodies or persons	Nil		12
	Inspection of dwellinghouses during the	year:		
(i)	(a) Total number of dwellinghouses	inspecte	ed fo	ľ
	housing defects			. 164

(b) Number of inspections made for the purpose	735
(ii) Number of dwellinghouses included above and	
inspected and recorded under Housing Consolidated	
Regulations	Nil
(iii) Number of dwellinghouses found to be in a state so	
dangerous or injurious to health as to be unfit for	
human habitation	2
(iv) Number of dwellinghouses found to be not in all	
respects reasonably fit for human habitation	164
Remedy of defects during the year without service	
formal notice:	. 01
Number of dwellinghouses rendered fit in consequence of	
informal action	63
Action under statutory powers:	
Number of dwellinghouses in respect of which legal	
	8
notices were served under Housing Act, 1936	0
Number of dwellinghouses rendered fit by owners	C
after service of notice	6
By local authority in default of owners	Nil
Number of dwellinghouses in respect of which legal	
notices were served under Public Health Acts	9
Number of dwellinghouses rendered fit by owners	
after service of notice	1
Proceedings under sections 11 and 13, Housing Act,	
1936 (Demolition)	Nil
Proceedings under section 12, Housing Act, (Under-	
ground rooms)	Nil
Overcrowding:	
Number of dwellinghouses overcrowded at end of	
year according to Housing Act, 1936 Not kno	own
Number of new cases of overcrowding reported	
during the year	3
Number of cases of overcrowding relieved during	
the year	
Number of persons concerned in such cases	
Housing Act, 1949.	
Number of schemes submitted:	
(a) by private individuals	1
(b) by Local Authority	
Number of dwellinghouses affected	

\* Number of schemes approved:

(a) of private individuals	1
(b) of the Local Authority	Nil
Number of dwellinghouses affected	1
Number of additional separate buildings provided	1
Any other action taken	Nil

\* Approved by the Local Authority awaiting approval by the Ministry of Local Government and Planning.

#### HOUSING CONDITIONS.

On the whole the general standard of houses is good. The proportion of semi-detached is, of course, increasing. Defects found are in the main due to lack of repairs and maintenance, which to a large extent is due to the difficulty in obtaining materials and labour.

Whilst in many respects Nelson compared with other Northern towns is in a very fortunate position as regards housing standards, it should be remembered that many houses which present a solid exterior have in fact many internal defects such as leaking roofs. There is thus a great need for regular routine housing inspection to ensure that working class properties are properly maintained.

#### HOUSING REPAIRS.

An important change of policy took place towards the end of the year. It had previously been the practice to deal with housing repairs by way of action under Section 9 of the Housing Act, the Corporation carrying out the work in default. With the Works Department fully extended on the erection of new houses, considerable delays were occurring in exercising these default powers. It was, therefore, decided to recommend the Health Committee to deal with housing repairs under the nuisance provisions of the Public Health Act. This has led to a marked speeding up in property repairs to the increased comfort and well-being of the tenants.

A summary of housing defects found during the year is as follows:—

Defective pointing to windows	15
Defective doors	9
Defective fireplaces	3
Defective coal stores	2
Defective rainwater pipes	29

Defective stone staircase	1
Defective eaves gutters	59
Defective handrail to stair case	1
Broken window cords	24
Perished wall and ceiling plaster	88
Flow of sub-soil water	1
Defective sink waste pipes	8
Defective chimney flashings	23
Defective yard surfaces	11
Defective window frames	32
Defective side boilers	1
Defective skirting boards	1
No artificial light	1
General dampness	4
Defective or broken floors	10
Shallow, worn and insanitary stone sinks with un-	
trapped sink waste pipes	9
Defective pointing to external stonework	56
Absence of proper damp proof course	2
Defective W.C.'s or W.W.C.'s	21
Insufficient ventilation to W.C.	1
Defective roof flashings	7
Defective window flashings	1
Defective roofs	28
Yard gate broken	3
Dry rot	9
Woodworm infestation	1

#### SUFFICIENCY OF SUPPLY OF HOUSES.

It is anticipated that 375 three bedroom type houses, 205 two bedroom type and 70 one bedroom type houses are required to meet the housing demand.

Nelson like so many North-East Lancashire industrial towns has an ageing population. The solution of the housing problem might therefore lie in concentrating building resources on the erection of houses for old people at low rentals. In this connection it is interesting to note that there are approximately 800 old people over 65 years of age living alone. The houses thus vacated could be used for the housing of families, thereby making the maximum use of housing accommodation.

At the end of the year there were 36 houses in hand and a

further 48 were contemplated. Whilst sites are available for the present building programme, future development is likely to be impeded by the topographical nature of the land.

#### OVERCROWDING.

It is not possible from the information available to assess the degree of overcrowding in the borough.

Two cases were brought to the notice of the department during the year and these were confirmed and referred to the Housing Department for re-housing as soon as practicable.

#### WATER SUPPLY AND SANITARY ACCOMMODATION.

All the built up area of the town is provided with an internal water supply, but there are a number of houses which have a restricted supply due to the inadequacy of a joint service pipe. Under a Corporation scheme the Water Department undertake replacement of such joint service pipes and during the year 197 houses have had replacements made. At the end of the year there were still a few outstanding.

Only the few older houses, i.e., the back-to-back and single houses, in the town have no separate or adequate sanitary accommodation. There are approximately 107 of these dwellings which are scattered throughout the district.

#### INSPECTION AND SUPERVISION OF FOOD

#### MILK SUPPLY.

The Milk and Dairies Regulations, 1949.

No. of registered distributors operating from: —

- (a) Own dairies in the district ..... 3
- (b) Dairy farms in the district ...... 1
- (c) Premises outside the district ..... 19

The Milk (Special Designation) (Raw Milk) Regulations, 1949.

No. of dealers' licences (including supplementary licences) issued by the local authority during 1950 in respect of:
"Tuberculin Tested" Milk:

- (i) Bottling ... Nil (ii) Distribution ... 19
  "Accredited" Milk:
  - (i) Bottling ... Nil (ii) Distribution ... Nil The Milk (Special Designation) (Pasteurised and Sterilised

Milk) Regulations, 1949.
No. of licences issued in respect of "Heat treated" milk:
Pasteurising plants Nil Sterilising plants Nil
Retail distributors (a) "Pasteurised" 16
(b) "Sterilised" 90
Any refusal or revocation of licences for graded milk, with
reason for the refusal or revocation Nil
Give brief particulars of any structural alterations or
improvements carried out to dairies during the year Nil

#### SAMPLING OF MILK.

#### Bacteriological.

58 samples were submitted during the year for bacteriological examination. 19 of these were unsatisfactory and in these cases the Ministry of Agriculture and Fisheries were advised and requested to investigate conditions at the farm with a view to effecting the necessary improvement.

The policy of the department has been, and continues to be, to sample milk on the streets. By this means a truly representative sample is obtained, i.e., in exactly the same manner as the housewife takes delivery.

#### Biological.

Of 35 samples taken 3 were found to contain tubercle. In these cases immediate action was taken in conjunction with the Divisional Veterinary Officer under the provisions of the Tuberculosis Order and the Milk and Dairies Regulations. It will be noted that approximately 8.5% of the milk sampled was tubercular.

#### Heat Treated Milk.

Of the 3 samples taken and submitted to the Phosphatase Test 1 proved to be unsatisfactory and appropriate action was taken.

#### FOOD AND DRUGS ACT.

The administration of the Food and Drugs Act is undertaken by the Lancashire County Council, and the County Medical Officer of Health has kindly supplied me with the following particulars of samples taken in Nelson by his officers. A total of 175 samples was obtained, of these 111 were of milk, and the 64 others comprised:—

9	ice cream.	3	soup canned.
1	golden raising powder.	3	sponge cake and sponge
3	California syrup of figs.		pudding mixture.
4	fish canned.	1	compound syrup of figs
3	cocoa.	2	sugar.
3	sauce.	2	tea
1	strawberry jam.	2	mineral water.
2	custard powder.	1	blackcurrant jam.
1	boracic acid powder.	1	arrowroot.
1	flaked beef suet.	2	meat pies.
1	British sherry.	1	ruby wine.
1	tawny wine (S. African	1	mincemeat.
	port type).	1	ground mixed spice.
2	camphorated oil.	1	synthetic cream.
1	ground ginger.	1	barley.
1	butter	1	margarine.
1	cooking fat.	1	cheese.
1	dried peas.	1	sultanas
1	aspirin tablets.	1	Barluze.
1	Lucozade.		

All the above samples were certified by the County Analyst to be genuine, with the exception of the following:—

Sample	Result of Analysis.	Action taken.
1 mincemeat	Soluble solids 62.8 per cent Deficient 2.2 per cent. soluble solids	Packers communicated with.
1 informal milk	Deficient 8.2 per cent. solids- not-fat. The freezing point indicated the presence of 7.4 per cent. of extraneous water	Formal sample taken.
1 formal milk	Deficient 4.7 per cent. solids- not-fat. The freezing point indicated the presence of 3.3 per cent. of extraneous water	Same vendor.
1 formal milk	Deficient 2.9 per cent. solids- not fat. The freezing point indicated the presence of 2.5 per cent. of extraneous water	further samples obtained.
1 Lucozade	Tonic properties claimed. Con. travention of Article 7 of the Labelling of Food Order	Vendor written and age and amount of stock queried. Stock re-labelled.

#### MEAT AND FOOD INSPECTION.

The slaughter of animals, as in previous years, was carried on at the Colne Abattoirs. One slaughterhouse in Nelson is licensed to provide facilities for the slaughter of cottagers' pigs. In this latter connection a very close liaison is maintained with the Ministry of Food to the advantage of both departments.

It is, I think, regrettable in view of the size and the population of the town, that Nelson butchers are compelled to look to a smaller town for slaughtering facilities with the consequent loss of time to them in travelling.

The following table shows the number of carcases inspected and condemned during the year:—
Number of pigs killed
Number of pigs inspected 87
All diseases except tuberculosis:
(a) Whole carcases condemned
(b) Carcases of which some part or organ was condemned
(c) Percentage of the number inspected affected with disease other than tuberculosis 1.1%
Tuberculosis only:
(a) Whole carcase 1
(b) Carcases of which some part or organ was condemned
(c) Percentage of number inspected affected with Tuberculosis
Whilst it has not been necessary to seize formally any

Whilst it has not been necessary to seize formally any unsound food, an appreciable quantity of food, after examination, has been found to be unfit for human consumption and voluntarily surrendered.

The food thus found to be unfit was destroyed under supervision.

The following list shows the amount of food dealt with in this manner:—

	N	o. of			weight.
Product.	cont	ainers.			ozs.
Baked beans	90	tins	***	 96	0
Beet	14	tins		 14	4
Carrots	6	tins		 5	7½
Eggs	1	tin		 28	0
Fish: Salmon	6	tins		 1	0
Sardines	2337	tins		 467	61
Pilchards	2	tins		 2	0
Fruit	100	tins		 126	14
Fruit juices	28	tins		 34	12
Ham, cooked boneless	2	tins	***	 35	4
Jam	21	tins		 31	12
Milk	235	tins		 260	12
Meat and meat products	118	tins		 145	14
Peas	190	tins		 193	12
Soup	13	tins		 13	8
Miscellaneous :					
Chicken	1	carcase	***	 4	0
New potatoes	1	bag		 56	0
Shredded wheat		packets		 30	0

By reference to the 1949 Report it will be seen that there has been an increase in the amount of food examined and found to be unfit for human consumption.

#### FOOD HYGIENE.

With the increase in the incidence of food poisoning cases nationally, it was considered advisable to make a detailed survey of all the food trades within the borough.

It was decided, therefore, to make a start with ice cream and a detailed examination was made of all the premises of manufacturers and retailers of ice cream within the borough. This revealed that many people were unaware of the legal provisions appertaining to the manufacture of ice cream and as a result they had not sought registration.

Some idea of the position can be gained from the fact that whereas at the beginning of the year 61 premises were registered for the manufacture or sale of ice cream, the number of premises so registered at the end of the year was 85.

It will thus be seen that a quarter of the people engaged in the ice cream trade in the town were not registered.

During the year 65 samples of ice cream were submitted to bacteriological examination. These were placed in:

Grade	1	 27	Grade 3 10	3
Grade	2	 16	Grade 4 6	3

In those cases where samples fell into categories 3 and 4 the premises of the vendors and manufacturers were visited and suitable advice given. This resulted in a marked improvement in standards.

#### Manufacture of Preserved Foods.

Preserved foods, being as they are, a very suitable culture medium for food poisoning organisms, it was decided to concentrate attention on these premises and the survey was still proceeding at the end of the year.

The picture presented was very much the same as for ice cream. At the beginning of the year 2 premises were registered, whilst at the end of the year the position was 24.

Considerable upgrading of the premises necessitating structural alterations was found to be needed, and it was most encouraging to find how very readily the trade as a whole co-operated with the department.

During the coming year it is intended to concentrate attention on such food preparation premises as bakehouses, fried fish shops, school and factory canteens, cafes and restaurants.

Once the preparation side of the food trade has been dealt with, we shall then be able to turn our attention to the distribution of food by means of a thorough inspection of all food shops within the borough.

#### HEALTH EDUCATION.

From June onwards talks were given to various organisations on environmental and food hygiene. These talks were supplemented by suitable films obtained from the Central Office of Information.

There can be no doubt that although such activities take up a lot of time outside normal office hours, the results obtained fully justify the extra work put in.

#### METEOROLOGICAL OBSERVATIONS.

The Meteorological Station is situated in the grounds of the Cemetery, Walton Lane. Daily readings have been taken throughout the year and the following figures are of interest:—

Barometer at M.S.L	Highest reading	1036.1 mb. on 19th Jan. 979.8 m.b. on 11th Feb.
	Mean for the year	1011.6 mb.
Maximum in the shade	Highest reading	83.0° on 6th June.
	Lowest reading	30.0° on 29th Jan.
	Mean for the year	54.0°
Minimum in the shade	Highest reading	58.0° on 19th July.
	Lowest reading	11.0° on 4th Dec.
	Mean for the year	
Bright sunshine	No. of days recording sunshi	
and the second	Total amount for the year	
	Average per day throughout	
Rainfall	No. of days on which rain of	
Timinin	Total rainfall for the year .	
	Greatest fall in one day	
	Greatest fan in one day	
	No of down with poinfull of	on 22nd July
	No. of days with rainfall of	41
	0.01 to 0.03 inches	41
	No. of days with rainfall of	101
	0.04 inches or more	181

