## Contributors

Eccles (Greater Manchester, England). Borough Council.

## **Publication/Creation**

1947

## **Persistent URL**

https://wellcomecollection.org/works/x6bw86t6

### License and attribution

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

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

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



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



# BOROUGH OF ECCLES



# REPORT

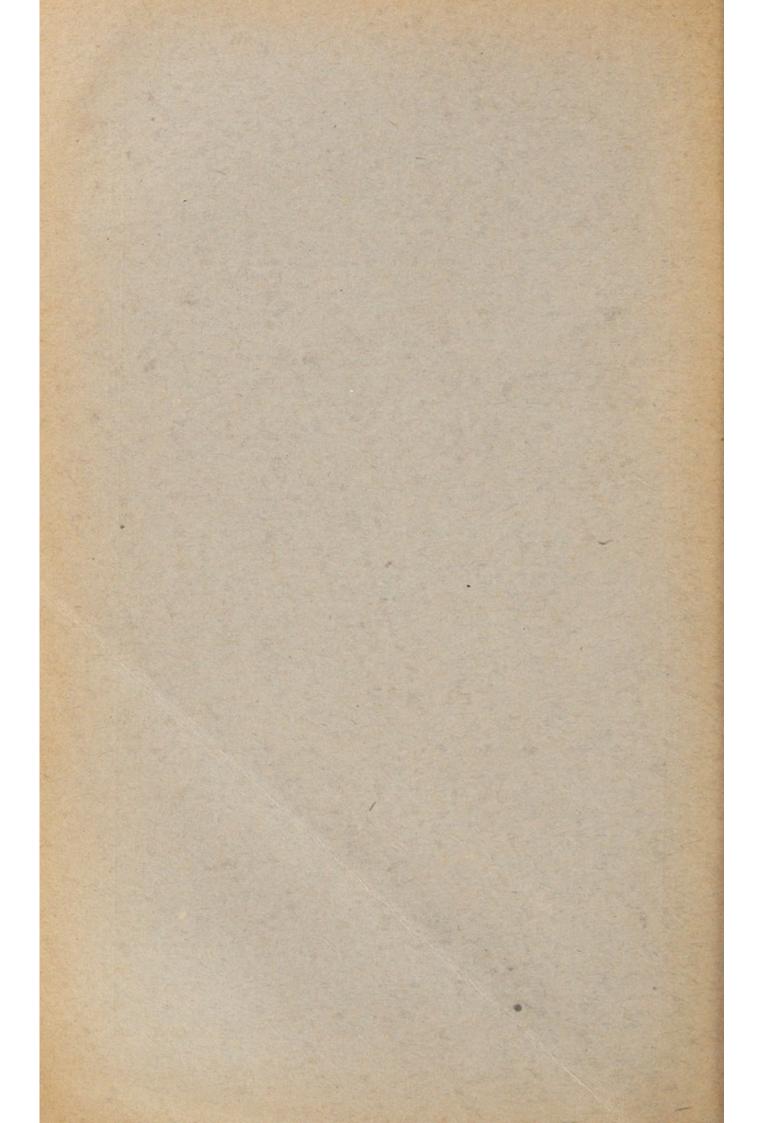
of the

# MEDICAL OFFICER OF HEALTH

For the Year ended 31st December, 1947

J. E. SPENCE, M.B., D.P.H. Medical Officer of Health

Issued by Order of the Health Committee



# BOROUGH OF ECCLES



# REPORT

of the

# MEDICAL OFFICER OF HEALTH

For the Year ended 31st December, 1947

J. E. SPENCE, M.B., D.P.H. Medical Officer of Health

Issued by Order of the Health Committee

# CONTENTS

								 GE
GENERAL STATISTIC	os	•••	•••	•••	•••		 	 6
MORTALITY STATIST	rics						 	 8
BIRTH STATISTICS							 	 11
GENERAL PROVISIO	N OF	HEAD	СТН	SERV	ICES		 	 15
INFANT MORTALITY	• ••						 	 20
INFECTIOUS DISEAS	ES	·					 	 22
TUBERCULOSIS							 	 30
POLIOMYELITIS							 	 31
MATERNITY AND CI	HILD	WELI	ARE				 	 45
THE CARE OF THE	Aged						 	 62
SUPERVISION OF TH	е Мн	k Su	PPLY	<i></i>			 	 64
FOOD AND DRUGS							 	 65
REPORT OF THE SE	NIOR	SANE	FARY	Ins	PECT	OR	 	 70

#### ANNUAL REPORT

of the

# Medical Officer of Health

for the year 1947.

#### TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE BOROUGH OF ECCLES.

#### Ladies and Gentlemen,

I have to submit my 27th Annual Report on the work of the Public Health Department for the year 1947.

During recent years there has been a rapid decline in the incidence of diphtheria and last year only four cases of the disease occurred, the lowest number ever recorded. 52 per cent. of the children under 5 years and 82 per cent. of the children aged 5 to 15 years are now immunised against this disease, and the fall in the incidence of the disease can be attributed, at least in part, to the satisfactory response by parents to the advice to have their children immunised.

A severe epidemic of poliomyelitis affected the whole country, but in proportion to its size Eccles was more heavily attacked than any other urban district. A full and careful investigation into the epidemiology of the outbreak of the disease has been made by Dr. Sweetnam, to whom I am indebted for his able report on the epidemic.

When the National Health Service Act comes into operation in July, some of the Welfare activities of this Authority will be transferred to the County Council, and I have considered it opportune to give in this Report a brief outline of the development of the maternity and child welfare services in the Borough.

The birth rate during the past year has been high, the number of births being the highest since 1921 and the infant mortality rate of 45.5 is practically the same as in the preceding year.

I am, Ladies and Gentlemen,

Yours obediently,

J. E. SPENCE,

MEDICAL OFFICER OF HEALTH

Public Health Department, Irwell Place, Eccles. May, 1948.

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

https://archive.org/details/b29189470

# Public Health Officers of the Local Authority

#### Medical Officer of Health, School Medical Officer, and Medical Officer Maternity and Child Welfare.

Dr. J. E. SPENCE, M.B., Ch.B. (Honours) Edin., D.P.H., Edinburgh and Glasgow.

#### Deputy Medical Officer of Health, etc.

Dr. W. P. SWEETNAM, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H. (Appointed 22/1/47).

#### Consulting Obstetrician.

Dr. W. R. ADDIS, M.C.

#### Sanitary Inspectors.

Chief Inspector : G. V. HULSE, C.R.S.I. H. R. TAYLOR, C.R.S.I., Certif. Inspr. Meat & Food. J. C. ANKERS, C.S.I.B., Certif. Inspr. Meat & Food (Resigned 31/7/47). A. MENARRY, C.S.I.B., Certif. Meat & Food (Liverpool University). G. WATERWORTH, C.S.I.B., Certif. Inspr. Meat & Food. (Resigned 31/12/47). A. MURRAY, C.S.I.B. (Appointed 8/9/47).

#### Health Visitors and School Nurses.

Miss D. ATKINSON, S.R.N., S.C.M., H.V. Miss M. E. ELLERINGTON, S.R.N., S.C.M., H.V. Miss A. HUGHES, S.R.N., S.C.M., H.V. (Resigned 31/12/47). Miss F. ISHERWOOD, S.R.N., S.C.M., H.V. Miss A. M. MAKIN, S.R.N., S.C.M., H.V. Miss D. E. SMITH, S.R.N., S.C.M., H.V. (Appointed 24/2/47, Resigned 15/7/47).

#### Municipal Midwives.

Mrs. E. REYNOLDS, S.R.N., S.C.M. Mrs. P. LOMAX, S.R.N., S.C.M., H.V. Mrs. R. STUBLEY, S.R.N., S.C.M. (Resigned 30/6/47). Mrs. E. M. BUTLER, S.R.N., S.C.M. Miss M. WILLCOCK, S.R.N., S.C.M. (Appointed 1/5/47).

#### Clerical Staff.

Chief Clerk : { A. ROGERS (Resigned 31/5/47). J. W. EVANS (Appointed 1/6/47). S. MURPHY. R. COLLEY (Appointed 14/7/47). Miss D. BROUGHTON. Miss S. FOGG. Miss C. E. STEGGLES.

# STATISTICS AND SOCIAL CONDITIONS OF THE BOROUGH.

Area (in acres)	 	 	 3,417
Population (Census 1931)	 	 	 44,416
" (Estimated 1947)	 	 	 41,740
Number of houses and flats 1947	 	 	 12,765
Rateable Value (December, 1947)			
Sum represented by a penny rate			

#### PHYSICAL FEATURES OF THE DISTRICT.

The area of the Borough is 3,417 acres. It extends from the Gilda Brook, which separates it from the City of Salford, westward for a distance of four miles to the boundary of Irlam Parish. Its southern boundary is the Manchester Ship Canal, from which it extends northwards for a distance of  $1\frac{3}{4}$  miles to the boundaries of Worsley U.D. and Swinton and Pendlebury M.B.

The area is flat, its maximum height above ordnance datum being 136 feet in Half Edge Lane and its lowest point being below the 50 foot contour line in the neighbourhood of the old bed of the River Irwell at the west end of the Borough.

The substratum is mainly red sandstone to the east of Monton Road which is syntopical with the Swinton Fault. To the west are upper Carboniferous Rocks containing the Slack Lane coal seam, which crops up within 6 feet of the surface at Monton Green. Further west the Carboniferous Rocks are overlaid with Glacial Drift, yellow and white sands and gravel and then by peat at Barton Moss.

Barton Moss, which is about 75 feet above ordnance datum, has been drained and reclaimed by the Manchester Corporation Cleansing Department and now consists of fertile agricultural land, quite unsuitable for development owing to the difficulty in obtaining a solid foundation for buildings, the peat being 16 to 20 feet in thickness.

#### POPULATION.

The population at the 1921 Census was 44,242 persons and at the 1931 Census 44,416, an increase of 173 persons. The estimated population for the year 1947 as computed by the Registrar General was 41,740 a decline of 2,676 since the Census. At the 1931 Census there were 10,699 structurally separate dwellings, giving an occupation density of 4.15 persons per dwelling. At the end of last year the total number of houses in the Borough was 12,765, giving an occupation density of 3.27.

## SOCIAL CONDITIONS AND OCCUPATIONS.

The principal group of occupations in which the population of the Borough is employed comprises commercial, professional and clerical occupations, a large proportion of these persons being employed in Manchester. A large proportion of adult males are engaged in engineering and metal trades or are railway or transport workers, while a smaller number are engaged in textile trades, building, furniture making, etc.

						Contraction of the local division of the	No. of Concession, Name
- Parks	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Population Live Births.	40,910	40,360	40,090	39,430	39,440	41,270	41,740
Males	268	341	333	396	313	431	446
Females	293	318	304	355	315	381	414
Total	561	659	637	751	628	812	860
Legitimate :	501	035	0.57	1.51	020	014	000
Males	252	326	318	377	279	406	422
Females	282	298	290	342	288	362	396
Total	534	624	608	719	567	768	818
Illegitimate :							
Males	16	15	15	19	34	25	24
Females	11	20	14	13	27	19	18
Total	27	35	29	32	61	44	42
Birth Rate	13.7	16.3	15.8	19.0	15.9	19.6	20.6
Stillbirths.				1			
Males	11	10	7	14	15	15	13
Females	11	8	12	12	11	10	17
Total	22	18	19	26	26	25	30
Stillbirth Rate	37.7	26.6	28.9	33.4	39.0	29.0	33.0
Deaths.		-0.0	20.0	00.1	00.0		00.0
Males	323	297	248	272	295	271	299
Females	291	250	243	246	273	264	242
Total	614	547				535	541
			491	518	568		
Death Rate	15.0	13.5	12.2	13.1	14.4	12.9	12.9
Maternal			200				
Deaths :				P. 1. 19 1.			
Puerperal	-		0.0				
Sepsis	0	0	0	0	1	0	1
Other causes	0	0	0	2	1	0	3
Infant Deaths	49	43	35	43	42	37	40
Infant Mor-				1. (1.)	1		
tality Rates :							
All Infants	90.0	63.7	54.0	57.2	66.0	45.0	46.0
Legitimate	85.0	60.9	54.0	55.6	70.0	40.0	45.0
Illegitimate	185.0	114.0	68.0	125.0	32.0	136.0	71.0
Deaths from :							
Cancer	88	88	67	79	95	79	61
Measles	2	0	0	0	1	0	0
Whooping	-	U.	V	0		1.	v
	6	1	1	2	0	0	1
Cough Diarrhoea	0	1	1	4	0	0	1
	0		1			e	0
(under 2)	3	$\frac{2}{2}$	$\frac{1}{2}$	4	3	6	8
Diphtheria	9	2	2	3	2	0	0
				10 A	1	1	

#### VITAL STATISTICS.

CAUSES OF DEATH during the Years 1941-1947.

11	1	1	6	20	0															
					-	1	1			21		24	10	12	9		31	58		17
	1	1	13		61	1	ł	2	1	9		10	1	29	~		25	52		18
	1	1	6	1	1	9	I	1	2	110		10	8	33	1		41	58		9
- 1	1	1	14	61	1	1	1	۱	1	63		11	1	20	\$		25	54		9
11	1	-	9	1	61	-	1	١	1	8		13	6	22	01		26	73		61
11	1	-	11	1	1	1	-	-	1	9		13	1	24	51		34	59	-	4
- 1	1	-	9	4	-	1	1	1	67			8	-	18	9		35	99		4
11	1	e)	14		-	1	1	1	1	Ŧ		6	1	30	4		31	65		61
11	1	1	4	~	1	-		1	61	1-		2	12	18	1		26	67		00
	1	c1	Ш	~	c1	20	1	1	1	1		9	1	18	00		36	62		1
11	1	67	9	1	1	1	1		1	8		-	12	19	4		29	65		1
		1	21		c3	63	1	1	67	4		-	!	31	-		23	74		~
11	3	61	5	67	1	4	¢1	1	1	2		12	8	26	1		41	99		~
-	0	-	16	~	1	-	1	1		9		11		20			31	51	-	9
			-						0				-	-	1	-	Lesions	He	20. Other Diseases,	Circulatory System
	Cerebro Spinal Fever 1	Cerebro Spinal Fever 1 Scarlet Fever 3 3 3	Cerebro Spinal Fever       1       -       -       -         Scarlet Fever       -       3       3       -       -         Whooping Cough       -       3       3       -       1       -         Diphtheria       7       2       -       2       1       -	Cerebro Spinal Fever       1       -       -       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       -       1       -       -       -       -       1       1       1       1       1       1       1       1       1       -       -       -       -       1       -       -       1       1       1       1       1       -	Cerebro Spinal Fever       1	Cerebro Spinal Fever $1$ $   -$	Cerebro Spinal Fever       1       -       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       -       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       -       -       -       1	Cerebro Spinal Fever       1       -       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       -       1       -       -       -       -       1       -       -       -       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       -	Cerebro Spinal Fever       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       1       -       -       -       -       1       1       -       -       1       1       -       -       -       -       -       1       1       1       1       1       1       1       1       1       1       1       -	Cerebro Spinal Fever       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       -       1       -       -       -       1       1       1       1       1       1       1       1       -	Cerebro Spinal Fever       1       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       -       1       -       -       1       -       -       -       -       1       1       -       -       -       -       -       -       -       -       1       1       -	Cérebro Spinal Fevér1 $   -$ <t< td=""><td><math display="block"> \begin{array}{ccccc} \hline \text{Cerebro Spinal Fever} &amp; &amp; 1 &amp; - &amp;</math></td><td>Cérebro Spinal Fevér       1       -       -       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -</td><td><math display="block"> \begin{array}{ccccc} \hline Cerebro Spinal Fever &amp; . &amp; 1 &amp; - &amp; 1 &amp; - &amp; -</math></td><td><math display="block"> \begin{array}{cccc} \hline Cerebro Spinal Fever \\ \hline Cerebro Spinal Fever \\ \hline \\ Scarlet Fever \\ \hline \\ Whooping Cough \\ \hline \\ \\ Whooping Cough \\ \hline \\ \\ Whooping Cough \\ \hline \\ \\ \\ Whooping Cough \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </math></td><td><math display="block"> \begin{array}{cccccccccccccccccccccccccccccccccccc</math></td><td><math display="block"> \begin{array}{cccccccccccccccccccccccccccccccccccc</math></td><td><math display="block"> \begin{array}{ccccc} \hline Cerebro Spinal Fever \\ Wonoprig Cough \\ \hline \\ Wonoprig Cough \\ \hline \\ Wonoprig Cough \\ \hline \\ T \\ T</math></td><td><math display="block"> \begin{array}{cccc} \hline Cerebro Spinal Fever &amp; &amp; 1 &amp; - &amp;</math></td></t<>	$ \begin{array}{ccccc} \hline \text{Cerebro Spinal Fever} & & 1 & - & - & - & - & - & - & - & - &$	Cérebro Spinal Fevér       1       -       -       -       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -       -       1       -	$ \begin{array}{ccccc} \hline Cerebro Spinal Fever & . & 1 & - & - & - & - & - & - & - & 1 & - & -$	$ \begin{array}{cccc} \hline Cerebro Spinal Fever \\ \hline Cerebro Spinal Fever \\ \hline \\ Scarlet Fever \\ \hline \\ Whooping Cough \\ \hline \\ \\ Whooping Cough \\ \hline \\ \\ Whooping Cough \\ \hline \\ \\ \\ Whooping Cough \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ccccc} \hline Cerebro Spinal Fever \\ Wonoprig Cough \\ \hline \\ Wonoprig Cough \\ \hline \\ Wonoprig Cough \\ \hline \\ T \\ T$	$ \begin{array}{cccc} \hline Cerebro Spinal Fever & & 1 & - & - & - & - & - & - & - & - &$

0.00	9 1	ro o1	01 - 4 <sup>2</sup> <sup>2</sup> <sup>2</sup>	541 12.9
- 9	∞ 0 I	l ∞	$\begin{cases} 282 & 6 \\ 292 & 6 \\ 299 & 6 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	
4 -	0 10	1	264 1 286 286 6	535 12.9
0101	0 10	9	8 6 271 271	
01	6 1		273 273 273	568 14.4
		1	865 33 73 73 78 88 56 33 73 78 78 78 78 78 78 78 78 78 78 78 78 78	14
	1 10-1	c3 c0		518 13.1
1 1 33	6 6	9	9 32 272 272	13
-	00	11	$\begin{bmatrix} 24\\ 243\\ 243\\ 243\\ 243\\ 243\\ 243\\ 243\\ $	491 12.2
0	01 00	01	1221228	45
	юн	0	2210 2210 2200	.5
	4 ∞	4	8 8 119 119 297	547 13.5
	1- 10	∞	2 31 291 291	4.0
4 01 03	1 10 CO	10	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	614 15.0
	Ne	6Pe	tions, etc Suicide Road Traffic Accidents Other Violent Causes All Other Causes All Causes	TOTAL DEATH RATE
	Duodenum       4       1       7       1       1       1       3 $-$ 3       1       2 $-$ 1         Duodenum $\cdots$ 4       1       7       1       1       1       3 $-$ 3       1       2 $-$ 1         Diarrhoea, under 2 years       2       1       1       1       1       1       2       4       5         Appendicitis $\cdots$ $3$ $ 1$ $ 2$ $ 1$ $2$ $4$ $5$ Other Directive $\cdots$ $3$ $ 2$ $ 1$ $3$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$ $ 1$ $ 2$	Duodenum       4       1       1       1       1       1       1       2       1       2       1         Diarrhoea, under 2 years       2       1       1       1       1       1       2       4       5         Diarrhoea, under 2 years       2       1       1       1       1       2       4       5         Appendicitis       3       -       2       -       1       3       -       2       4       5         Appendicitis       3       7       4       3       2       5       7       7       7       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       1       -       1       -       1       -       1       -       1       -       1       -       1       -       1       1       1       1       1       1       1       1       1       1       -	Duodenum4171111241Diarrhoea, under 2 years211111245Appendicitis211111245Appendicitis374321245Appendicitis374325545Appendicitis3743662777Other Digestive37436627777Nephritis2555777728Nephritis2 $-1$ $-1$ $-1$ $2$ $-1$ $1$ $-1$ $-1$ Nephritis2 $5$ $5$ $7$ $7$ $7$ $7$ $7$ $2$ $3$ $8$ Nephritis $-1$ $-1$ $-1$ $-1$ $-1$ $-1$ $-1$ $-1$ $-1$ $-1$ Abortive Sepsis $-1$ <td>Duodenum41711111Diarrhoea, under 2 years211111124Appendicitis3-1-2-13245Appendicitis37435777245Other Digestive374355777245Other Digestive3743557777777Disturbances25873657777777Disturbances25873662777777Abortive Sepsis1</td>	Duodenum41711111Diarrhoea, under 2 years211111124Appendicitis3-1-2-13245Appendicitis37435777245Other Digestive374355777245Other Digestive3743557777777Disturbances25873657777777Disturbances25873662777777Abortive Sepsis1

		A	CHINAU	IN OF		CONTRAC		AUED.						
	1941	1	19	1942	19	1943	19	1944	19	1945	19	1946	1947	11
Age.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	W.	F.
01	22	27	20	23	22	13	27	16	25	11	23	14	29	11
1-2	4	61	1	67	61	1	01	1	1	67	1	-	2	3
2-5	9		4	67	1	~	61	1	.00	67	1	5	4	-
5—15	10	3	4	61	80	61	-	61	1	5	1	-	~	4
15-25	11	4	9	5	10	9	~	4	67	9	5	4	1-	4
25-45	38	22	36	24	18	14	26	27	19	20	30	15	п	56
45-65	77	17	104	64	74	57	68	65	104	63	74	60	98	45
. 65 and over	155	153	122	128	128	147	141	134	141	159	137	167	142	148
Total	323	291	297	250	248	243	270	249	295	273	271	264	299	242

DEATHS AT VARIOUS AGES.

BIRTH RATE, DEATH RATE and ANALYSIS OF MORTALITY during the Year 1947. Provisional Figures. The rates for England and Wales have been calculated on a population estimated to the middle of 1947, but those for the towns have been calculated on populations estimated to the middle of 1946.

(The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

	RATE PER 1000 Total Populatio	RATE PER 1000 Total Population			ANNUAL I	ANNUAL DEATH-RATE PER 1000 POPULATION	E PER 100	0 POPULAI	HON.		RATE 1000 LIV	RATE PER 1000 LIVE BIRTHS
	Live Births.	Still- Births,	All Causes.	Typhoid & Para- typhoid Fevers,	Small Pox.	Measles	Scarlet Fever.	Wheop. Cough.	Diph- theria.	In- fluen za.	Diarr- hoea & Enter- fits (under' 2 Yrs.)	Total Deaths under One Year.
England and Wales	20.5	0.50	12.0 .	0.00	0.00	10.0	0.00	0.02	0.01	0.09	5.8	41.0
126 County Boroughs and Great Towns, including London	23.3	0.62	13.0	0.00	0.00	0.02	0.00	0.03	0.01	0.09	8.0	47.0
148 Smaller Towns (estimated resident popula- tions 25,000 to 50,000 at Consus, 1931	22.2	0.54	11.9	0.00	00.0	0.02	00.0	0.02	10.0	0.08	3.7	36.0
ECCLES	20.6	0.07	10.5	0.00	0.00	0.00	0.00	0.02	0.00	0.00	9.3	46.0
THE MATEDNAL MODTALITY DAMES & F. L. L	A CL TUTT	a paul	-									

Puerperal Infections. THE MATERNAL MORTALITY RATES for England and Wales are as follows :-without Sepsis. Abortion with Sepsis. Abortion

Others. 0.85

0.16

0.06

Per 1,000 Total Births .

VITAL STATISTICS OF THE WHOLE DISTRICT during the Year 1947 and Previous Years.

		NETT BIRTHS	SIRTHS		NETT	NETT DEATHS			MATERNAL DEATHS	. DEATHS
Year.	Popu- lation.	Number.	Rate.	Under Number.	l year. Rate.	At All Number.	At All Ages. nber. Rate.	Stillbirth Rate.	Sepsis.	Other Causes.
1927	45,390	709	15.6	43	60.6	577	12.7	1	-	-
1928	45,200	743	16.4	49	65.9	499	11.0		67	6
1929	45,040	682	15.1	47	68.9	597	13.2	1		
1930	45,040	639	14.2	41	64.1	539	9.11	. 44.5	0	5
1931	44,770	606	13.5	51	84.1	524	11.7	32.5	6	
1932	44,434	577	13.0	. 42	72.8	507	11.4	47.0		
1933	44,942	536	11.9	28	52.2	486	10.8	59.5	-	6
1934	43,370	514	11.8	28	54.5	487	11.2	48.0	67	1 61
1935	42,900	553	12.8	23	41.6	498	11.6	48.0	0	
1936	42,770	602	14.0	33	54.0	525	12.2	55.5	6	4
1937	42,560	626	14.7	41	65.0	573	13.4	29.5	1 01	1
1938	42,550	593	13.9	36	60.0	521	13.1	45.5	0	• 1
1939	42,630	586	13.7	22	37.5	541	12.7	65.4	0	6
1940	41,440	602	14.5	47	0.77	1112	17.1	42.9	0	0
1941	40,910	561	13.7	51	90.0	614	15.0	37.7	0	0
1942	40,360	659	16.3	42	63.7	547	13.5	26.6	0	0
1943	40,090	637	15.8	35	54.0	491	12.2	28.9	0	0
1944	39,430	751	19.0	43	57.2	519	13.1	33.4	0	6
1945	39,440	628	15.9	42	66.0	568	14.4	39.0	1	
1946	41,270	812	19.6	37	45.0	535	12.9	29.0	0	
1947	41.740	860	20.6	40	46.0	541	19.9	33.0	1	

#### Births.

The number of children born during 1947 was 860, an increase of 236 over the average of the preceding ten years. After the 1914-1918 war there was a sharp rise in the number of births commencing in the last quarter of 1919 and continuing in the year 1920, after which the number of births declined steadily. During the decade 1930-1940 the annual number of births in the Borough was less than 600 and in 1934 reached the lowest level of 514. During the present decade the annual number of births has increased. In 1944 the number of births was 751 ; in 1945, 628 ; in 1946, 812 ; while in 1947 the number of births was 860, equivalent to a birth rate of 20.6.

A serious consequence of the low birth rate in the interval between the two wars is that there has been a considerable change in the constitution of the population, the number of young people has declined markedly and a corresponding increase in the number of old people has taken place. At the last Census there were 1,725 over the age of 70 years and 1,280 over the age of 65 years, a total of 3,000 persons over 65 years of age. It is now estimated that the total number of persons over the age of 70 years is 3,000, an increase of approximately 74%, while the number of persons aged 65-70 is 2,200. In order to maintain a static population the birth rate should not fall below its present level of 19 to 20 per 1,000 of the population, which is approximately the rate necessary for the replacement of the population.

#### Deaths.

541 deaths occurred during the year, the number of deaths of each sex being approximately equal. 40 deaths occurred in the first year of life, while 31 deaths occurred between the ages of 1 and 25 years. Although little change in the trend of infant mortality has taken place during the past 20 years there has been a steady decline in the mortality among children and adolescents up to 25 years. 53.5% of the deaths were of people over the age of 65 years.

Cancer continues to be a major cause of death, being responsible for 9.4% of the total deaths, heart and circulatory diseases for 27%, and respiratory disease for 17%.

#### Maternal Deaths.

There were three maternal deaths during the year, one from obstetric shock, one from post partum haemorrhage, while the third was due to septicaemia following abortion due to a fall.

Nine women suffering from septic abortion were admitted to Ladywell Sanatorium, all of whom recovered. There has been a marked increase in the incidence of this condition. It is never possible to obtain much information about persons suffering from abortion, but it is safe to presume that at least a proportion of the cases are due to criminal interference with pregnancy, which appears to be more prevalent at the present time.

#### Stillbirths.

The stillbirth rate has shown a considerable reduction during the past 15 years. For the last three quinquennial periods the average rate has been 46.3, 48.8 and 33.1 per 1,000 births respectively, and for 1947 it was 33.0 per 1,000 births.

station and second states and shall be a second state and

# GENERAL

# PROVISION OF HEALTH SERVICES IN THE AREA.

## Laboratory Facilities.

All pathological specimens, as well as samples of milk for bacteriological examination, are sent for examination to the University of Manchester Department of Bacteriology and Preventive Medicine Laboratories, York Place, Manchester. During the year a total of 265 examinations were made at the laboratories.

	Dipht	heria.		Ice	Crean	n.		Tub	c for ercle cilli.
Month.	Total	+	Total	Grade	Grad > 2	Grade 3	Grade 4	Total	+
January	14	-				_		1	
February	3							1	
March	12	-						1	
April	12	1							
May	6		-						
June	38	3		-				1	
July	35	6	10			4	6		
August	13	3							
September	21	2	4		2	1	1		
October	6						-	1	
November	9								
December	8		-				-		
Totals	177	15	14		2	5	7	5	

## Various Investigations.

Milk, Me	thyle	ne	Blue	Test		 	27
Milk, Bad	eteria	1 0	count.	and	Coli	 	35
Haemoly	tie S	tre	ptoco	eei		 	3
Staphylo	eocci					 	1
Faeces							
Urine						 	
Ringworn	n					 	-
Wasserma	in					 	1
Vincents	Angi	na				 	1

#### PUBLIC BATHS.

There are two swimming pools, the male pool containing approximately 63,000 gallons and the female pool 48,000 gallons. The water from both pools is driven by an electrically-operated pump to three 8-foot Bell's Pressure Filters, being automatically dosed with alum and soda en route. After filtration, ammonia and chlorine gas are added to the water, which is then aerated and warmed and returned to the pools. The filters are capable of dealing with 28,000 gallons per hour, and the whole of the water in the two baths can be passed through in four hours. The treatment of the water is controlled by regular estimations of the pH value and amount of available chlorine.

In addition to the two bathing pools there are 20 slipper baths for males and 16 for females, which are well patronised.

The result of the bacteriological examination of the water from the swimming baths during the year was quite satisfactory.

Result of Examination of Water from the Swimming Baths.

Date.	Origin of Sample.	Coliform (	Organisms.
Date.	origin of Sample.	found in	not found
2/1/47	Female Bath	,	100 ml.
2/6/47	Male Bath		100 ml.
22/10/47	Male Bath		100 ml.
22/10/47	Female Bath		100 ml.

# Result of Chemical Analysis from Swimming Baths.

FEM	IALE BATH	MALE	Ватн
<i>pH</i> Value 7.3 Free Chlorine	7.0	5.4	7.0
parts per million 0.8	0.2	Nil.	0.1
Appearance Clear.	Clear.	Clear.	Clear.
Ammonia Nil.	Nil.	Present.	Nil.
Nitrites Faint Trac	e. Nil.	Nil.	Present.
Remarks Free Chlori excessive		pH value outside range	Free chlorine deficient.

#### Ambulance Facilities.

Two motor ambulances and one car are maintained at the Fire Station for conveying sick and accident cases. During the year 6,275 calls were made for the conveyance of persons to hospital, of which 4,335 calls were for Eccles residents and 1,940 calls for Swinton residents. No charge is made to residents in the Borough for the use of the ambulance.

Cases of infectious diseases are removed to Ladywell Sanatorium by means of an ambulance belonging to the City of Salford, a sum of half a guinea being paid for each case removed.

#### Nursing in the Home.

(a) GENERAL. Two district nurses are employed by the Eccles District Nursing Association for the nursing of cases of non-infectious illness at home.

(b) INFECTIOUS DISEASES. With the exception of scarlet fever, diphtheria and enteric fever, such advice and assistance in the nursing of cases of infectious diseases and puerperal fever as may be necessary is given by the Health Visitors. During the year 552 visits were paid by them to cases of infectious disease for the purpose of giving assistance in the supervision and nursing of the following conditions :—

Bronchitis and P	neu	noni	a	 	4
Measles				 	449
Chicken Pox				 	13
Whooping Cough	,			 	86

Visits are paid twice daily, if necessary, including Sundays, in cases in which the patients were seriously ill, and assistance was given to the mother in various ways.

#### CLINICS AND TREATMENT CENTRES.

Eccles Corporation.

- Maternity and Child Welfare Centre, Green Lane, Patricroft.
- Infant Consultations. Monday, Tuesday, Wednesday and Thursday, 2-0, to 4-30 p.m.; Tuesday and Wednesday, 9-30 to 12 noon.
- (2) Ante Natal Clinic.
   Every Friday, 9-30 a.m. to 12 noon and 2-0
   p.m. to 4-30 p.m.

Lancashire County Council.

- School Clinic, Irwell Place, Eccles.
- (1) Minor Ailments Clinic. Daily, 9 a.m. to 12-30 p.m.
- (2) Dental Clinic. Monday to Thursday, 9-0 a.m. to 12 noon. Monday, Tuesday, Wednesday and Thursday, 2-0 p.m.

- (3) Inspection Clinic. Friday, 9-0 a.m.
- (4) Ophthalmic Clinic. By appointment.
- (5) Orthopaedic Clinic, Longfield Lodge, Cadishead. Third Thursday in each month, 2-30 p.m.

Infant Welfare Centre, Green Lane, Patricroft.

- (6) Speech Therapy Clinic. Monday, 9-0 a.m. to 12 noon and 2-0 p.m. to 4-0 p.m.
- (7) Dermatological Clinic. Alternate Wednesdays, 10-30 a.m.

Lancashire County Council.

#### Tuberculosis Dispensary.

Gilda Brook Road, Eccles.

(1) Tuesday, 2-0 p.m. to 4-0 p.m. Friday, 10-0 a.m. to 12 noon.

Salford Corporation.

Salford Municipal Clinic for Venereal Diseases.

Sundays, 9-30 a.m. to 12-30 p.m. and 3-30 p.m. to 6-30 p.m.

Mondays to Fridays, 8-30 a.m. to 8-30 p.m. Saturdays, 8-30 a.m. to 12-30 p.m. and 7-0 p.m. to 8-30 p.m.

#### HOSPITALS.

No change in the hospital accommodation for the area has taken place during the year; general cases are admitted to Park Hospital and the Eccles and Patricroft Hospital, while chronic cases are admitted to Green Lane Institution. A large number of cases from the district are also received by the various hospitals in Manchester and Salford.

Beds for Orthopaedic cases are reserved for Eccles children at the Biddulph Orthopaedic Hospital by arrangement with the Lancashire County Council.

Cases of infectious diseases and puerperal pyrexia are admitted to the Ladywell Sanatorium by arrangement with the Salford City Council, while cases of Small Pox are sent to the Small Pox Hospital, Clayton Vale, Manchester.

#### Public Health Legislation in Force.

Public Health Acts Amendment Act, 1890 (Parts 2, 3 and 4). Eccles Corporation Act, 1901. Eccles (Housing of the Working Classes) Order, 1902. Rats and Mice (Destruction) Act, 1919. Borough of Eccles (Offensive Trades) Confirmation Order, 1924. Public Health Acts Amendment Act, 1907.

Part 7. Sections 85 and 86.

Public Health Act, 1925 (Part 2).

Eccles (Supervision of Midwives) Order, 1930.

Eccles (Supervision of Midwives) Amendment Order, 1938.

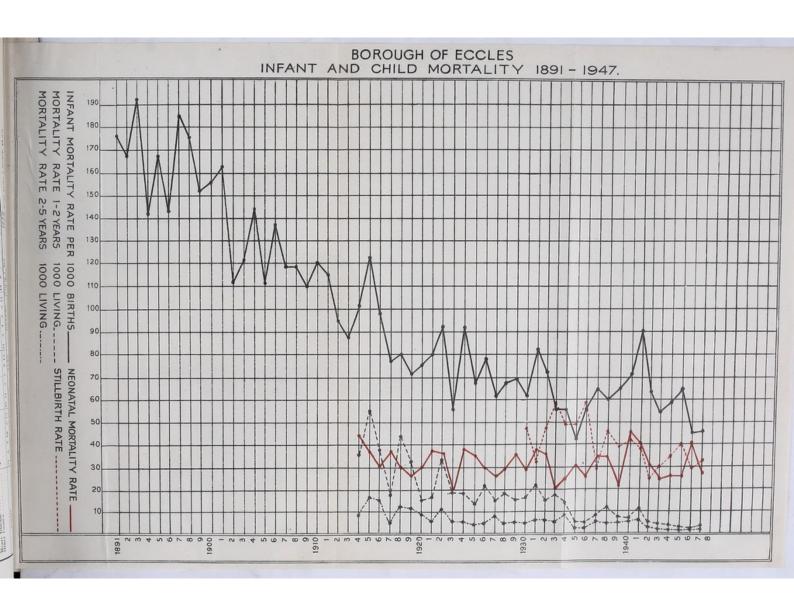
- Eccles (Midwifery-Prohibition of Unqualified Persons) Order, 1938.
- Lancashire County Council (Rivers Board and General Powers) Act, 1938-Sections 115 and 116.

## Bye-Laws, Regulations, etc.

Houses let in Lodgings.	Offensive Trades.
Good Rule and Government.	New Streets and Buildings.
Closing Order	Barbers and Hairdressers.
(Butchers' Shops).	Weekly Half-Holiday Order, 1927.
Closing Order	Employment of Children.
(Boot and Shoe Shops).	Nursing Homes.
Smoke Abatement.	Improvement of Housing
Nuisances.	Conditions.
Slaughter Houses.	Eccles Fish & Chip Friers' Weekly
Common Lodging Houses.	Half-Holiday Order, 1939.

				-	-
		sdinom 21-6		13	
		1-3 months		0	
	1947	1-3 weeks		10	
	18	1-7 days		13	1
		Under 1 day		00	
		IntoT	1-   0   01+0000101   01	40	1
		3-12 months		13	1
		i-3 months		1-	8
	9			01	16.3
	1946	1-3 weeks			i i
				10	Total under 1 month, 46.3%
		Under 1 day		10	B
under 1 year.	-	Total		37	1
ye		siftnom 21-6		16	pu
-		sdfmom &I		10	n n
H	1945	13 weeks		10	Fota
de	-	sysb 7-1		9	20.0
II		Under 1 day		10	13.4
1		Total		21	
Ages		sdinom 21-6		12	111
A		1-2 months		6	
S		I-3 weeks		9	
no	1944	sysb 7-1		1-	ks. da
Various		Праег 1 алу		9	in 1 d days weeks
VS		Total		43	ithin -7 da
at		sdinom 218			118
2.5				8 11	vi.
Causes a		1-3 months		00	DEATHS
m	1943	I		4	EA
		syab 7-1		00	A
tated		Under 1 day			
Stated		IstoT		34	1
Sta		sdinom 218		13	24.3% 9.5% 49.4%
		admon 8-1		80	224. 49.5
on	1942	* 13 weeks		-	
H	-	17 days	·	00	a
S		Under 1 day		H	oni
Nett Deaths from	-	IntoT		<u>\$1</u>	Bronchitis and Pneumonia Gastro Enteritis Pre-Natal or Natal Causes
)es		sdimont 21-8	01       -	15	Pne stal
H		summer and the		00	Bronchitis and F Gastro Enteritis Pre-Natal or Nat
E	41	1-2 weeks		10	s au ntc
N	1941	1-7 days		-1	hiti ata
		Under 1 day	1111111111111111111	10	stro
		IntoT	8       -       -         -       -       -       -       -       -       -       -       -       -       -         -         -         -         -         -         -         -         -         -           -           -           -           -           -           -           -           -           -           -           -           -           -             -             -             -             -             -               -               -	45	Brd
			Measles		SUMMARY, 1941-1947.
			far.	-	ī
		ATH	v, 3		941
		DE	Cough Tuberculos Tuberculos anot Tubere Sirth Birth Sirth Sise ebility, Mar		., 1
		AO	Bin	TOTALS	RY
		B	S S S S S S S S S S S S S S S S S S S	TO	MA
		CAUSE OF DEATH	Measles		MU
		0	Measles		02
Į,	-			_	

INFANT MORTALITY.





#### INFANT MORTALITY.

During 1947 there were 40 deaths of infants under one year of age, equivalent to an infant mortality rate of 46 per 1,000 pirths. There is still much room for further improvement in the nfant mortality rate as too many deaths occur from causes which might be prevented. During the past seven years 24.6% of the infant deaths which have occurred in the Borough have been certified as due to bronchitis or pneumonia. These conditions may in some instances have been sequelae of other infections, but in a large proportion of cases the children have been infected by persons suffering from acute catarrhal conditions. Few mothers realise how easily babies may be infected by coming into contact with those suffering from catarrh. Mothers suffering from colds should always wear a mask over the nose and mouth when Children and well-meaning neighbours and nursing babies. relations should not fondle and kiss them, and mothers should avoid taking infants into crowded and badly ventilated places such as crowded buses and even the waiting halls of hospital out-patient departments.

Six deaths were due to gastro-intestinal disorders, a rather higher proportion than usual. Lack of adequate care in the preparation of feeds and the bottles may be responsible for some of these deaths, but overfeeding or unsuitable feeding no doubt has been the primary cause of the disorder in a number of cases. There are still too many mothers who will not persevere with breast feeding. They are too anxious that their babies should thrive and be as big as any others they may see, and there is a natural tendency to overfeed. It is difficult to persuade mothers that the big fat babies are not always the healthiest and the baby who wins a prize in a baby show is not always the best baby.

There is no doubt that breast feeding is the best for the baby and ultimately the least trouble for the mother, but the institution of breast feeding is not always a simple straightforward matter. There are little difficulties to overcome at the commencement before the baby can become adjusted to the supply and some patience and trouble is necessary. Unfortunately the young mother is over-anxious and worried and is willing to accept any advice offered, while there are too many relatives and busy-bodies ready to give advice which is bad. The mother is told that her breast milk is too weak or not agreeing with her child and is advised to adopt some other method of feeding. In a large proportion of these cases if the mother would seek competent advice before discontinuing breast feeding the difficulties could be adjusted and breast feeding continued. Causes operating before or during birth were responsible for 40% of the infant deaths. The importance of careful ante-natal supervision combined with good midwifery cannot be stressed too strongly as a means for the reduction of neo-natal mortality.

In addition to the decline in infant mortality there has also been a steady fall in the mortality of children under school age. During the year there were eight deaths of children aged 1–2 years and five of children aged 2–5 years, equivalent to a mortality rate of 6.6 per 1,000 children aged 1–2 years and 1.4 per 1,000 children aged 2–5 years.

#### INFECTIOUS DISEASES.

#### Measles.

During the early months of the year the usual biennial epidemic of Measles was experienced. There was an increased incidence of the disease in August, 1946; during September to November the number of cases was small, and then during December of last year the number of notified cases rose to 96. The close association of young children at Christmas parties increased the possibility of the infection spreading, and in January the number of notifications rose to 189 and in February to 293. During the succeeding months the number of cases declined rapidly and the epidemic had run its course by June. 201 of the children were under the age of 3 years, 284 were between 3 and 5 years, and 234 aged 5 to 10 years. Ten of the children were removed to hospital. There were no deaths from the disease.

During the past 30 years measles has continued to appear fairly regularly in biennial epidemics, but the number of cases occurring during the epidemics has shown a tendency to decline, probably due to some extent to a smaller number of children at risk owing to the declining birth rate. The maximum number of cases in a single epidemic occurred in 1925 when there were over 1,500 cases. During the preceding five years the average annual number of births was 840. In recent years the number of cases in an epidemic year has been less than half the number of cases in 1925, while the average number of births has been about 85 per cent. of the births after the first world war. Other factors which may be responsible for the reduced incidence of the disease are a change in the infectivity of the virus or an increase in herd immunity. During the 10-year period 1917 to 1926 the average annual deaths from the disease was 5.2, while during the ten years 1938 to 1947 it has been 0.6.

RECORD OF CASES OF INFECTIOUS DISEASES, 1937-1947.

11	Desths		1
1947	Sase5 Votified	29 29 29 29 29 29 29 29 29 29	1234
1946	Deaths		45
19	Cases Votified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	578
1945	Deaths	1     1     1     23     1     2	56
Ii	Cases Votified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	879
1944	Deaths	<sup>2</sup>    <sup>2</sup>     <sup>2</sup>    <sup>3</sup>	9 52
15	Cases Votified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1039
1943	Desths		70
16	Cases Dofified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	737
1942	Deaths	1     2     2     1     2	55
19	Cases Votified	111         169         6	1012
1941	Desths	@  <sup>5</sup> 0 <sup>6</sup> <sup>3</sup> 3     <mark> </mark>   3 <sup>8</sup>    <sup>8</sup>	85
19	Cases Votified	144         1         8         3         3         4         1	100 1115
1940	Deaths	61 62 1 1 1 1 1 1 1 1 1 1 1 1 1	100
19	Sases Votified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2209
939	Desths		45
19	Cases Votified	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	558
1938	Deaths	23 23 23 21	
19	Cases Dottfod	1027         1027         11         123 <th133< th=""> <th133< th=""></th133<></th133<>	1514 63
37	Deaths	1         1	80
1937	Cases Votified	1 1 2 2 3 2 2 1 2 1 3 2 3 2 2 2 1 2 1 2	550
		ver ver Pyrexia Pyrexia rimary rimary rimary rimary rimary rimary rimary rimary rimary rimary rimary rimary rimary omyelitis rimary rim	
	SES.	ittacosis arlet Fever phtheria iteric Fever derperal Pyrexia neumonia Acute Primary Acute Primary ysipelas rebro Spinal Fev ute Poliomyeliti alaria ysentery ysentery hthalmia phthalmia phthalmia reprosis asles phoping Cough blo Encephalitis abies	tal .
	DISEASES.	Eno Spinger and Manual Science Free Free Science Free Free Free Free Free Free Free Fr	Total
	ц.	Psittacosis	

Number of cases of Infectious Disease notified, number of deaths from these diseases, number of cases removed to hospital, and deaths in hospital during the year 1947.

NOTIFIABLE DISEASES.

 			0	-
		Total Deaths		484
ital.	Deaths in	of persons belonging to district.	∞           −	4
Hospital.	Total	removed to Hospital.	01 44       1 1 2   00	56
		65 and over.	∞   ∞       →           ∞	12
		45 to 65		42
		35 to 45		22
		20 20 35	30   -   5 5 5     3   - 3   - 12	63
		15 to 20	<b>=</b>	24
FIED.	s.	10 15 15	∞ 01     −   01 00     00   0] +     0	54
CASES NOTIFIED.	YEARS.	10 to	28   1   1   1   1   1   1   1   1   1	352
SES		5 to	1	
G		e 5 4	3 3 3 2 5 1 4 4 4 7 5 7	164 195
		01 2 00	<sup>1</sup> <sup>1</sup> <sup>2</sup> <sup>2</sup> <sup>3</sup> <sup>3</sup> <sup>1</sup> <sup>1</sup> <sup>1</sup> <sup>1</sup> <sup>2</sup> <sup>1</sup> <sup>3</sup> <sup>1</sup>	1000
		10 t -	+         16         3         1         1         8         1         1         1         4	107
		Under 1		59 107 135
		Total Cases at all Ages	29 54 54 54 55 55 55 55 55 55 55 55 55 55	1229
		Disease.	Smallpox Scarlet Fever Diphtheria Enteric Fever Puerperal Pyrexia Preumonia, Primary Influenzal Erysipelas Acute Poliomyelitis Acute Poliomyelitis Acute Poliomyelitis Pulmonary Pulmonary Non-Pulmonary Non-Pulmonary Measles Whooping Cough Cerebro Spinal Fever Polio-encephalitis Scabies	TOTALS 1229

### WHOOPING COUGH.

Whooping Cough, the other serious infectious disease of early childhood, has shown a similar change. This disease was first made notifiable in Eccles in 1924. Epidemics of the disease recur less regularly than of measles, but it tends to become epidemic every two or three years. In the epidemics of 1925 and 1926, 413 and 555 cases were notified, but since that time only two large epidemics have occurred, in 1936 and 1941, when there were 373 and 370 cases respectively. The number of deaths from whooping cough, as from measles, has declined. In the decennium 1917-1926 the average annual number of deaths was 7.4, while during the last ten years the average annual number has been 1.5. Since 1942 immunisation against whooping cough has been carried out at the Infant Welfare Centre, where a total of 1,649 children have been immunised. about 40 per cent. of the children born. It cannot be claimed that immunisation is entirely responsible for the decline in the incidence of the disease, but there is no doubt that it has reduced the severity of attack and assisted in reducing the mortality.

WHOOPING	COUGH IMMUNIS	SATION.
Persons	Inoculated each ve	ear.

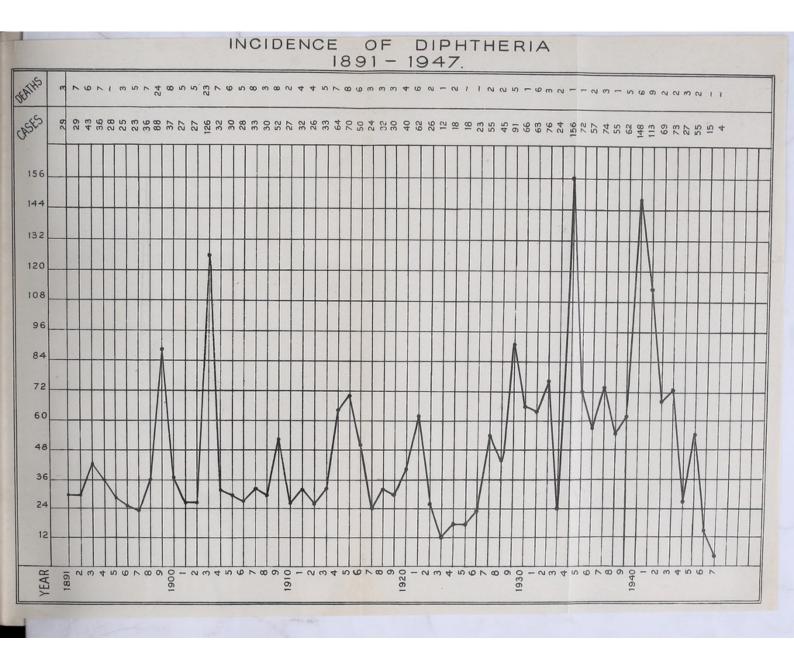
Verse			Year	r Inocu	lated.		1-11	
Year of Birth.	1947	1946	1945	1944	1943	1942	Total	
1947	9				_	_	9	Total inoculated
1946	193	11	-				204	aged under five
1945	31	152	5				188	years on 31/12/47
1944	4	54	233	10			301	956
1943	3	6	39	189	17		254	(30.25%)
1942		1	8	57	194	11	271	Total inoculated
1941	1		2	6	35	139	183	aged 5 to 14 yrs.
1940	-	1	2	4	5	89	101	on 31/12/47
1939		1	1	5	11	57	75	692
1938		1	1	3	4	25	34	(12.42%)
1937	-			-	1	11	12	( /0)
1936				1	4	2	7	
1935	- (			1	5	3	9	
1934		-		_	-		-	
1933	-	-		-	-	-	-	
Prior to 1933	_	-	1	-	-	_	1	Total aged 15 and over.
Totals	241	227	292	276	276	337	1649	Grand Total
Nett Births	-	812	628	751	637	659	-	

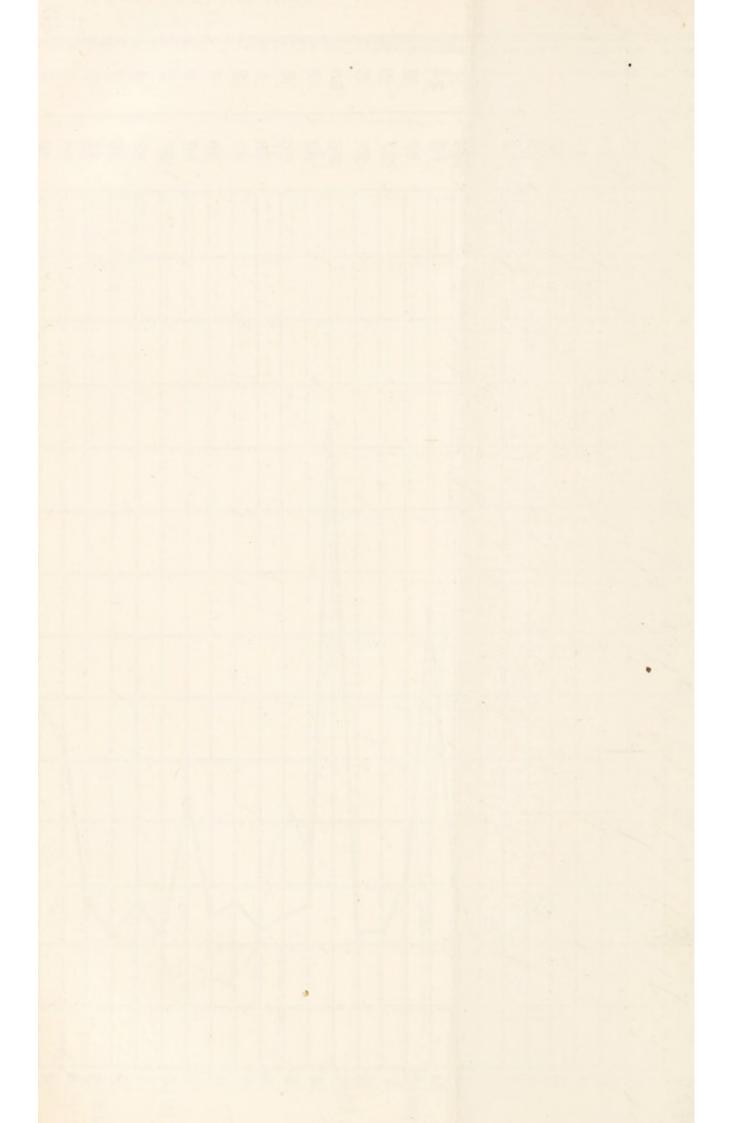
		ME	ASLI	cs.		WH	toop	ING (	COUG	н.
Year.	Under 1 yr.	1-2 yrs.	2–5 yrs.	5–15 yrs.	Total	Under 1 yr.	1-2 yrs.	2–5 yrs.	5-15 yrs.	Total
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		yrs. 1 3 1 5 2 3 1 1 2 1 3 1 1 2 1 1 1 2 1 1 1 1 1 1	yrs. 2 1 7 3 3 3 1 1 4 1 4 1 1 - - - - - - - - - - - - -	yrs.	$\begin{array}{c} 4\\ 5\\ 2\\ 1\\ 18\\ 2\\ 10\\ 3\\ 2\\ 5\\ 6\\ 1\\ 9\\ 4\\ 1\\ 10\\ 2\\ 2\\ -\\ 3\\ -\\ 2\\ -\\ -\\ 2\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\$	$ \begin{array}{c} 1 \text{ yr.} \\ 2 \\ 1 \\ 4 \\ 7 \\ 4 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 1 \\ 1 \\ 5 \\ 1 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 4 \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2$	yrs.       5       2       1       4       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1	yrs. 3 6 1 1 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	yrs.	$ \begin{array}{c} 10\\ 10\\ 6\\ 1\\ 17\\ 1\\ 11\\ 6\\ 2\\ 2\\ 4\\ 4\\ 5\\ 3\\ 2\\ 2\\ -\\ -\\ 1\\ 3\\ 1\\ 6\\ 1\\ 2 \end{array} $
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_			1				-	

# Deaths from Measles and Whooping Cough, 1918 - 1947

#### DIPHTHERIA.

The reduction in the incidence of diphtheria during recent years is equally noteworthy. The incidence of diphtheria over a period of years has shown a considerable change, as is clearly shown by the graph of the incidence of this disease in the Borough since 1891. In the period 1899 to 1902 there was a marked increase in the annual number of cases of diphtheria ; then, for a period of 22 years up to 1926, the number of cases remained low, averaging 35 per year. The prevalence of the disease afterwards increased, culminating in a heavy incidence of the disease between 1934 and 1940, since when it has declined rapidly, and during 1947 only four cases of the disease were notified.





DIPHTHERIA IMMUNISATION.

Persons Inoculated each year. New Cases.

	Total	$ \begin{array}{c} 30\\ 367\\ 376\\ 475\\ 475\\ 406 \end{array} \begin{array}{c} {\rm Total \ under \ 5 \ on} \\ 31/12/47, \ 1654\\ (52.34\%) \end{array} $	$\begin{array}{c} 467\\ 455\\ 455\\ 558\\ 558\\ 558\\ 474\\ 524\\ 419\\ 426\\ 392\\ 392\\ 349\\ 349\\ \end{array} \\ \begin{array}{c} \text{Total aged } 5-14\\ 4576\\ 524\\ 525\\ 524\\ $	2003Total aged 158233Grand Total
		11111		97 107
	1936 1935 1934	11111		80 89
	1936	1111	1	32 50
	1937	11111	48 13 15 4 + + + + + - + -	766
	1938	11111	111 111 111 111 111 111 111 111 111 11	255 405
	1939	11111	49 50 81 50 82 88 85 86 86 86 86 86 86 86 86 86 86 86 86 86	45 261
ated	1940	11111	33 33 33 30 37 37 37 37 37 37 37 37 37 37 37 37 37	246 515
Inocul	1941	11111	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 3 \\ 9 \\ 2 \\ 4 \\ 5 \\ 1 \\ 3 \\ 9 \\ 2 \\ 4 \\ 5 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 2 \\ 1 \\ 2 \\ 2$	211 1020
Year Inoculated	1943 1942 1941 1940 1939		$\begin{array}{c} 15\\ 209\\ 209\\ 165\\ 136\\ 161\\ 161\\ 134\\ 74\\ 60\\ 60\\ \end{array}$	191 211 1455 1020
	1943	-	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} 222\\ 85\\ 85\\ 93\\ 80\\ 80\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16$	58 831
	1944	5 246	87 87 83 83 85 63 85 63 85 83 9 9 4 4	11 681
	1945	304 304 94	14 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 602
	1947 1946 1945 1944	277 277 136 43	64 64 64 67 67 67 68 67 67 67 67 67 67 67 67 67 67 67 67 67	3 692
	1947	12 8 8 3 8	62 56 56 56 56 56 56 56 56	1 678
Year	of Birth	1947 1946 1945 1945 1943	1942 1941 1941 1939 1938 1938 1935 1935 1933	1926 to 1932

Immunisation against diphtheria was commenced in 1935 but the numbers immunised were small at first and it was not until 1942 that a large proportion of the children under 15 years had been immunised.

During recent years the proportion of children under 15 years who have been immunised has gradually increased and at the present time 82.15 per cent. of the children between 5 and 15 years have been immunised. The rapid decline in the incidence of the disease since 1940 can, in the main, be attributed to immunisation, but it must be admitted that part of the decline may be due to a change in the virulence of the organism.

The result of modern treatment of the disease by adequate doses of effective antitoxin is even more striking. During the epidemics of 1899 and 1903 the deaths from the disease were 27 and 20 per 100 cases respectively, while during the epidemic years 1934 and 1940 the deaths were 0.6 and 4 per cent. of notified cases respectively.

During 1947, 678 children were immunised, and at the end of the year 52.34 per cent. of children under the age of 5 years and 82.15 per cent. of children aged 5 to 15 years were immunised. When children are immunised in infancy the parents are advised to arrange for them to have a boosting dose of prophylactic to maintain a safe level of immunity at the age of 4 to 5 years, when they are admitted to school, and again about the eighth birthday. During the year 251 children received boosting doses.

#### SCARLET FEVER.

It is now 20 years since there was a large epidemic of scarlet fever in the Borough when 391 cases occurred. There was a slight increase in the number of cases of the disease in 1933, 1938 and 1943, but since 1943 the number of cases each year has declined and in 1947 only 29 cases were notified, the smallest number ever recorded in the Borough. The cases have all been very mild and only two were removed to hospital. There were no deaths from the disease. This disease, which, in the latter half of the last century, was a dreaded scourge responsible for a high mortality, is now extremely mild and no death has occurred in the Borough from this disease since 1933.

|--|

		Year of Boosting Dose.								Year
	Total	1940	1941	1942	1943	1944	1945	1946	1947	of Birth
Total rec	-		-	-	_					1945
boosting dose ageo under 5 o 31/12/47, <b>23</b> (.73%	6 17	11			=		1	5	6 11	1944 1943
Total rec	120						1	39	80	1942
boosting	199					4	36	76	83	1941
dose ageo	245					37	91	76	41	1940
5-14 yr	348				32	65	96	131	24	1939
on 31/12/4	253	_	2	11	54	58	77 57	51	-	1938
1864	$210 \\ 116$	_	7	$\frac{25}{23}$	70 56	54 27	01	$\frac{4}{2}$	1	1937 1936
(33.46%)	90		25	47	8	21	5	5	1	1935
	137	1	48	78	5	3	2		1	1934
	146	-	63	80	3					1933
Total rece boosting dose ageo 15 and	526	3	259	236	12	10	1	1	4	1926 to 1932
over on 31/12/47, <b>526</b>										
GRAND TOTAL.	2413	4	404	500	240	260	367	387	251	Total

#### SCABIES.

During the year 119 cases of Scabies were notified. Scabies is a family disease which spreads readily from one person in a household to the remaining members, and the treatment of individual cases will do little to reduce the spread of infection. Whenever a case of scabies is notified an effort is made to persuade the whole of the members of the household to have treatment on the same day and arrangements are made for those who are employed to attend for treatment in the evening when they have finished their day's work. In most instances it has been possible to persuade the whole of the household to accept treatment and the condition has been cleared up, but in a few cases some members have refused treatment and infection has recurred among those who have been treated. During the year 278 cases and contacts were treated at the baths and kept under observation until the condition has cleared up. Some of the persons who have been notified have received treatment privately, but in these cases, so far as I can ascertain, treatment has not been given to other members of the household, some of whom may not have complained of itching but who may have recently been infected and at the time do not show any symptoms of the disease. There are also a number of persons suffering from scabies who do not obtain any medical advice.

Scabies is a disease which becomes prevalent under the overcrowding conditions and close personal contact associated with war. During and after the first world war there was a marked increase in the incidence of scabies, which gradually diminished during the following three or four years. We can anticipate that a similar decline in the incidence of the disease will occur in the next two or three years, but the decline may be delayed by gross over-crowding conditions consequent on inadequate housing and a lower standard of cleanliness due to the rationing of soap.

### TUBERCULOSIS.

		New	Cases.		Deaths.			
Years.	Pulmonary		No Pulmo				Non- ulmonary	
rears.	М.	F.	М.	F.	М.	F.	М.	F.
0-1	_		_	1	_		-	1
1-5	1		2		1	-	2	
5-10		4	1		-			
10-15	2	1	-	-		1		
15-20	1	1		1				1
20-25	1	6	1		1	1		
25-35	4	5	-	1	2	4		
35-45	4	2	-	1	1	2		2
45-55	10	2			4	2	-	-
55-65	6	)		1	6			1
65 and over	3	1	-	-		1	1	
Totals	32	23	4	5	15	11	3	5

#### New Cases and Mortality, 1947.

Wards.		Pulmonary.	Non- Pulmonary.	All Cases			
Barton					10	2	12
Eccles					7		7
Irwell					8	1	9
Monton					3	. 1	4
Patricroft					4		4
Trafford					9	1	10
Westwood	Par	k			9	1	10
Winton	•••	••	•••		5	3	8
Borough					55	9	64

# Distribution of Notifications in Wards.

### POLIOMYELITIS.

## Introduction.

During the months of June to October, 1947, Eccles suffered, as part of a country-wide epidemic, a severe outbreak of Poliomyelitis.

An intensive investigation of the disease in all its aspects was undertaken in the Borough.

#### Method of Field Survey.

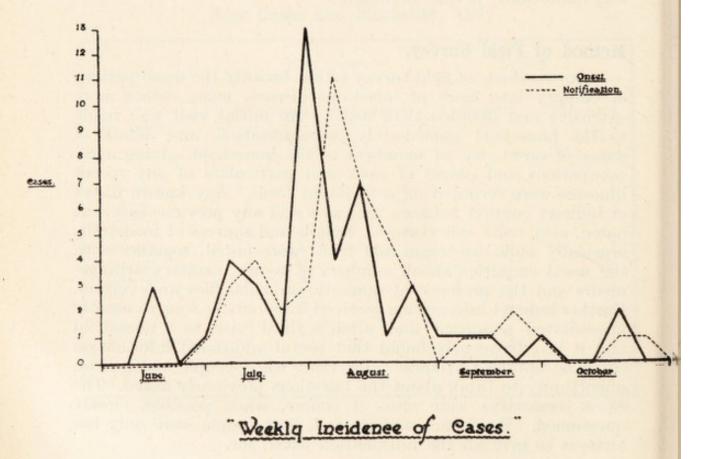
Our methods of field survey follow broadly the usual pattern of enquiry into cases of infectious disease, being rather more extensive and detailed than usual. An initial visit was made to the household immediately on notification, and details of dates of onset, list of members of the household, giving ages, occupations and places of work and particulars of any recent illnesses were recorded on a standard form. Any known direct or indirect contact between the cases and any previous case was noted, also visits and visitors. Details and sources of foodstuffs, especially milk, ice-cream and fruit, were noted, together with the usual enquiries about numbers of rooms, sanitary arrangements and the presence of domestic animals, flies and vermin. Further indirect information received from outside sources usually necessitated a second and often a third visit to a household and it was frequently found that useful additional information could be obtained at these later visits when people had had an opportunity to think about the questions previously asked. The cases themselves were also, of course, when possible, closely questioned. We found, without fail, that people were only too anxious to give all the information asked for.

### General Epidemiological Findings.

Between July 4th and November 1st, 46 notifications were received. It was soon realised how very misleading dates of notification were when it was seen that the interval between the onset and notification varied between seven weeks and one day.

The first case occurred on June 18th and the date of onset of the last was October 25th, the outbreak being spread over a period of about four months.

The graph of the weekly incidence of cases shows the usual salient features. It is irregular, probably due to the overall number of cases being small. A large number would possibly smooth the curve out. It does demonstrate a slow rise in the third week of June, a more pronounced rise in the middle weeks of July, a peak, almost explosive in type, in the week of July 27th to August 2nd, followed by an initial rapid decline and later on a slower tapering off. The explosive type of curve does suggest a disease of short incubation period and high infectivity in a susceptible population. The black dotted line represents cases according to weeks of notifications and gives a very rough idea of how notifications lagged behind the dates of onset.



Attack Rate and Age Distribution.—Cases, cases per cent. and attack rate per 1,000 in age groups are shown in Table I.

#### TABLE I.

	AGE GROUPS IN YEARS				
	0 to 4	5 to 9	10 to 14	15 and above	Total
A. Cases B. Cases per cent C. Attack rate per 1,000	28 61 8.07	$     \begin{array}{c}       11 \\       25 \\       3.85     \end{array} $	$     \begin{array}{c}       3 \\       7 \\       1 \cdot 14     \end{array}   $		46 100 1.09

A. Cases. B. Cases per cent. C. Attack rate per 1,000. (In age groups)

As is usual during epidemics in urban areas, the brunt of the infection fell upon pre-school children (61 per cent. of the total). A further analysis of the figures shows that 70 per cent. of cases were in children under six. This proportion of younger children appears larger than in the country as a whole. There was only one case in a child under one (aged 11 months). The eldest patient in the series was a man aged 26.

The attack rate (1.09) is a very high rate for an urban community in this country. The attack rate among children under five is 8.09 per 1,000.

Mortality Rate.—There were three fatal cases, giving a case mortality of 7 per cent.

Sex Incidence.—63 per cent. of cases were males and 37 per cent. females. This preponderance of males is a constant feature of poliomyelitis epidemics, for which no one appears to have offered an explanation. In considering these figures it must be remembered that the overall number of cases is small.

Incubation Period.—It was found surprisingly difficult to estimate an incubation period. To do this with any degree of accuracy it was thought necessary to establish a single exposure of limited duration. In only one instance was there evidence of direct case to case contact; again, there was only one instance of two cases in one household, these two cases occurring within two days of each other and both probably infected from a common source. These limitations, combined with the fact that the outbreak occurred in an open populous community, largely accounts for this difficulty. However, in five instances among early cases our criteria of a single exposure of limited duration were satisfied.

1. In this instance it has been established that the first patient in Eccles had been visited by a cousin from Irlam. The visiting child lived in a part of Irlam where a small group of cases had occurred. The visiting child herself developed a sore throat, general malaise and a temperature for 24 hours, and the following day visited the Eccles child. These two children were on affectionate terms, their manifestations of affection including kissing. Nine days after this visit the Eccles child developed poliomyelitis.

2. The second instance is that of a child of four living in an area of the Borough up to then free from infection. The only time this child had been away from the immediate neighbourhood of its home for over a month previously was when it was taken in a perambulator to visit a grandmother in an area where three cases had already occurred. During this visit the child was handled and nursed by the sister of a previous case who herself developed an abortive attack on the following day. The child developed poliomyelitis nine days after the visit.

3. The third instance is the only example of a case to case contact. A girl and a boy, aged 11 and 12, both stamp collectors, exchanged stamps, during which the usual licking of stamp hinges took place. The boy became ill the same evening and the girl 13 days later. For most of these 13 days the girl had been away in Anglesey on holiday and no other direct or indirect contact could be established.

4. In this case the patient, an adult male, played cards with the father of two children who had previously contracted poliomyelitis within two days of one another. The man became ill exactly a week later. An interesting feature of this case is that the man had a short febrile illness, headache, general malaise for the 48 hours following the card game, apparently recovered completely and returned to his work as a manual labourer. He became ill again with typical symptoms of onset five days later, that is, seven days after contact.

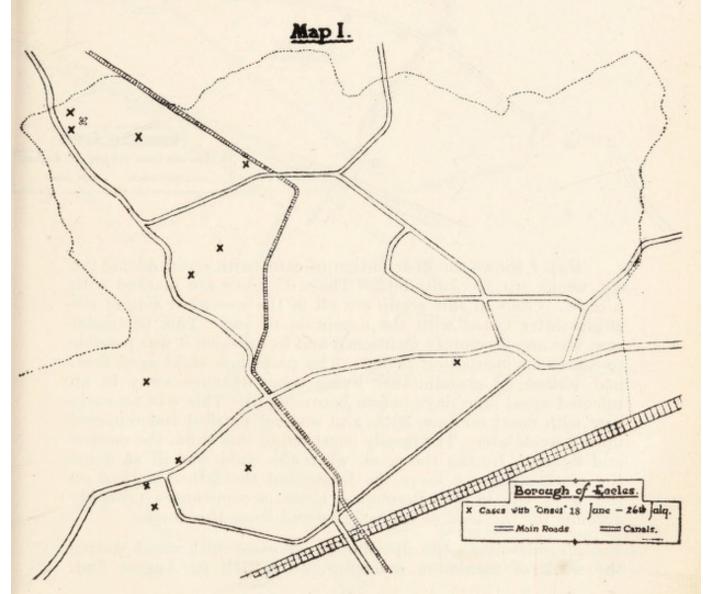
5. In the fifth instance, the patient, a child of 15 months, the second case to occur on the eastern side of the Borough, had been away on holiday at a farm in North Wales for three weeks and returned on July 18th. The child became ill on July 27th and, almost certainly, must have become infected during these nine days. The family consisted of the child and mother only, the father being in the Army and away from home. On the day following the return from holiday, July 19th, the child was taken to the other side of the Borough to visit relatives living within a few doors of a previous case and contacts of that case. The child, apparently, did not come into contact with anyone other than its mother until it became ill eight days later.

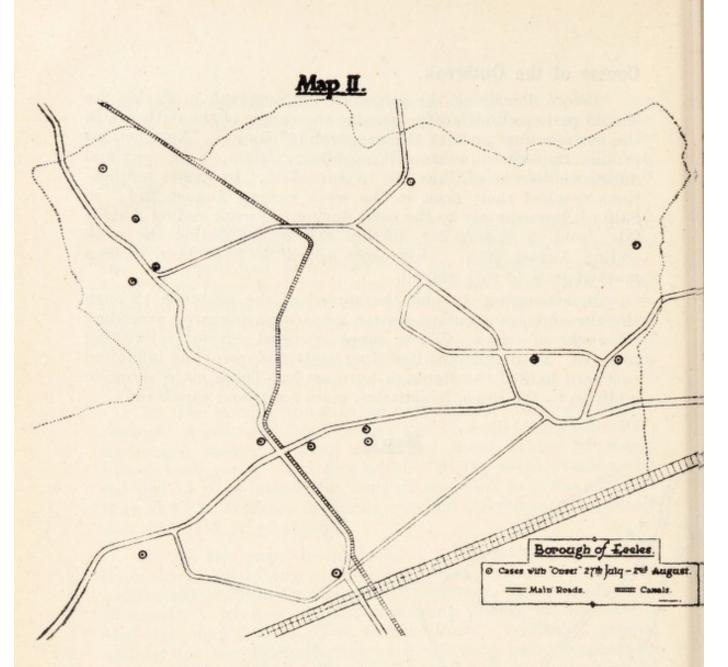
These five instances give incubation periods of seven days, eight days, two of nine days, and thirteen days.

## Course of the Outbreak.

Before describing the spread of the outbreak in Eccles, we should perhaps first briefly examine the course of the outbreak in the surrounding parts of the geographical county. Notifications in our immediate westward neighbour, Irlam, were maximal during the weeks of June 7th to June 21st. In Eccles notifications reached their peak in the week ending August 2nd; in Salford, immediately to the east, during the week ending August 9th; and in Manchester, further east again, during the week ending August 30th. There does appear to have been quite a marked west-to-east spread.

In attempting to plot the spread of the outbreak through the Borough, consecutive scatter maps were prepared according to weeks of onset. These maps revealed several interesting features. To simplify matters four scatter maps of the inhabited eastward half of the Borough were made. These maps show, in addition to the cases, boundaries, main roads and canals only.





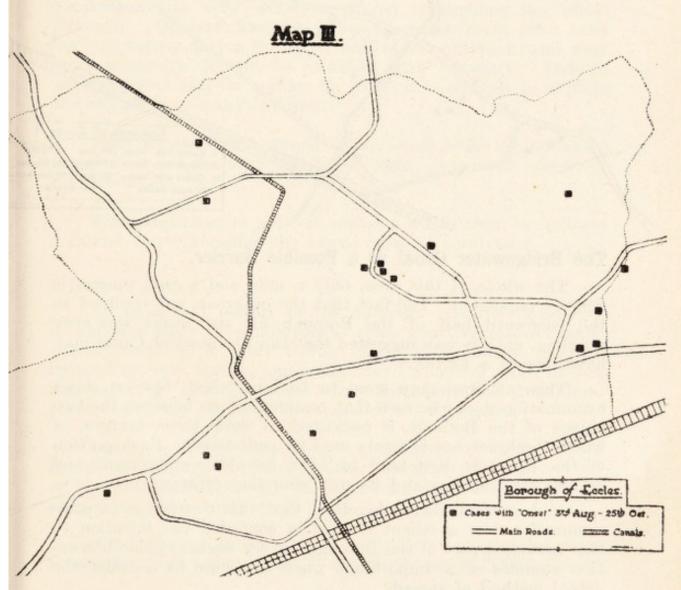
 $Map \ I$  shows the distribution of cases with onset during the six weeks up to July 26th. These 13 cases are marked with a cross. Cases in this group are all in the westward side of the Bridgewater Canal with the exception of one. This particular case was one previously mentioned and from which it was possible to assess an incubation period. The patient, a child aged four, had visited its grandmother living some distance away in an infected area, nine days before becoming ill. This was an early case with onset on June 30th, and was not notified and removed until a week later. The family consisted of this child, the mother and father. During the week when the child was ill at home the mother did not leave the house and the father worked on the west side of the Borough; these circumstances probably account for the lack of an early spread from this focus.

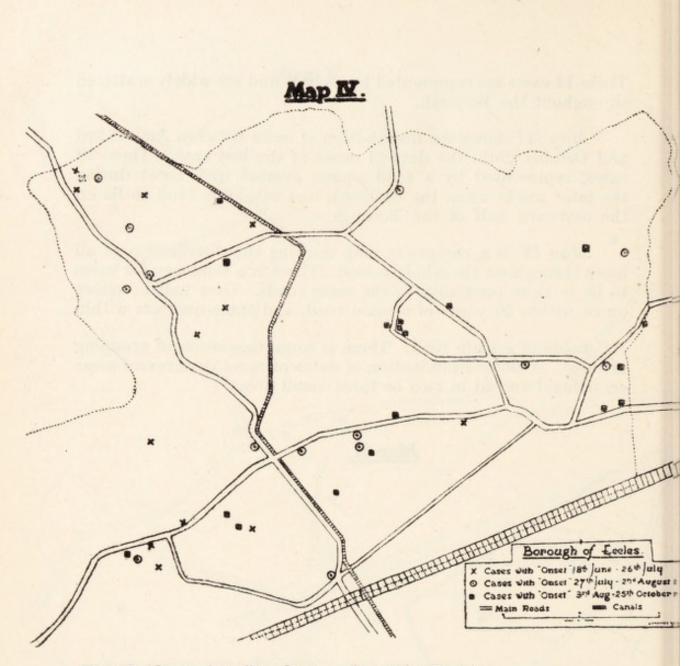
Map II shows the distribution of cases with onset during the week of maximum incidence, July 27th to August 2nd. These 14 cases are represented by a circle and are widely scattered throughout the Borough.

Map III shows the distribution of cases between August 3rd and October 25th, the date of onset of the last case. These 18 cases, represented by a solid square symbol with onset during the later weeks when the outbreak was subsiding tend to lie on the eastward half of the Borough.

 $Map \ IV$  is a composite map showing the distribution of all cases throughout the whole period. There is a tendency for cases to lie in close proximity to the main roads. Over half lie either on or within 50 yards of a main road, and three-quarters within

100 yards of a main road. There is some suggestion of grouping of cases. A closer examination of dates of onset does reveal some centrifugal spread in two or three small areas.





## The Bridgewater Canal as a Possible Barrier.

The whole of this area, only a mile and a half square, is densely populated. The fact that the outbreak was confined to the westward half of the Borough for six weeks was very puzzling, until it was suggested that the Bridgewater Canal may have formed a barrier.

This, at first, may seem to be far-fetched, but on closer examination it can be seen that communication between the two halves of the Borough is restricted to these three bridges, of which the lower one is rarely used by pedestrians. Each portion of the Borough does tend to have its own employment and amusement facilities and its own shopping centres.

It does seem likely, therefore, that this restriction of communication was a salient feature in confining the infection to this westward part of the Borough for six weeks. This observation assumes some importance when we come to consider the actual method of spread.

# Mode of Spread.

#### CONTACTS.

A history of direct or indirect contact with a previous case within a fortnight of onset was obtained in 20 per cent. of cases. If one adds visits of the patient or a member of the household from an area previously free from infection to the immediate locality where cases had already occurred and visitors from such a locality the proportion is raised to 33 per cent. The addition of probable cases where contact had almost certainly occurred, although not admitted, raises this proportion to 46 per cent.

It was very striking how often during the first half of the outbreak indirect contact between cases could be established, and, in contrast, how very rarely during the latter half.

During the same periods direct contacts alone had increased from about 50 to over 200, and indirect contacts by a far bigger proportion and very widely scattered throughout the whole Borough. Opportunities for indirect contact must have been very numerous during the latter half of the outbreak, and were correspondingly difficult to establish with certainty. Indeed, with opportunities for contact so great, it is difficult to explain the escape of so many children.

The contacts can be likened to a snowball gathering increasing momentum and size until, finally, becoming, it must be admitted, uncontrollable.

This proportion of indirect contacts would seem to indicate a carrier wave preceding the actual cases of paralysis.

#### ABORTIVE CASES.

An important feature of the outbreak was the prevalence of abortive cases of poliomyelitis, these abortive attacks being characterised by a short febrile illness with general malaise, irritability, sore throat, and sometimes abdominal pain, nausea and vomiting. The symptoms were indistinguishable from those occurring in the preparalytic stages of a frank case.

Data concerning these cases are incomplete, being largely based on a history of illness in other members of the household or in immediate contacts. In all, during routine enquiries, 15 such cases were discovered.

In an attempt to estimate the prevalence of abortive cases a survey of two areas of the Borough was made (Table II).

Area.	No. of Houses		lation. over 15		Cases. over 15		ve Cases. over 15
AB	50 50	51 41	110 93	1	0	15	1 2

TABLE II. PREVALENCE OF ABORTIVE CASES IN THE IMMEDIATE NEIGHBOURHOOD OF A FRANK CASE.

In these two areas the housing conditions and social status of the inhabitants are comparable. Each area contained a small communal children's playground. In area "A" a frank case of poliomyelitis had occurred. In area "B" no cases had been notified. A house-to-house census of 50 houses in each area was undertaken and careful enquiries made of any illnesses during the months of July, August, September and October. Area "A" (in which the frank case occurred) contained 110 adults and 51 children under 16. In this area one adult and 15 children gave histories of illness compatible with a diagnosis of abortive poliomyelitis. Area "B" contained 93 adults and 41 children under 16. In this area two adults and three children gave histories of suggestive abortive illnesses.

This high proportion of abortive cases is borne out by information received by general practitioners in the Borough, several of whom have estimated that, in their private practices, they have seen between 10 and 20 abortive cases to one frank case.

This survey helped to confirm the impression that the virus was widespread throughout the Borough and especially in the neighbourhood of cases. Several further points of epidemiological interest were :—

- (1) The rarity of case-to-case contact. In this connection it is interesting that one case occurred in a day nursery school. None of the other 42 children in the nursery at the time, all in the age group showing the highest attack rate, were affected.
- (2) There was a further case in a baby in a home for unmarried mothers. None of the other twelve children of ages between a few weeks and two years appear to have been affected. Four of the children did have short febrile illnesses at about the same time. The matron, however, was quite certain that they were "teething troubles." It seems likely that this child was infected by one of the mothers working in the neighbouring fever hospital. All the babies' milk and drinking water in this home is boiled before use.
- (3) A further solitary case occurred in an army camp.

Water.—As the virus has been found frequently in faeces and sewage (Melnick, 1946; Paul and Trask, 1941) it is, of course, possible for it to gain access to water supplies. In this outbreak we feel justified in ruling out the question of a waterborne infection. The water supply to Eccles is provided by the Manchester Corporation. Neighbouring authorities, some of whom have had sporadic cases only and none on a comparable scale, have an exactly similar source of supply. Again, there is no association with the other evidence of the pollution one would expect if the water supply was contaminated with sewage.

Milk.—A number of outbreaks have been definitely traced to milk (International Committee, 1932). Practically all the milk in the Borough is adequately heat treated—many sources and suppliers are represented in the outbreak. Cases have occurred in children where the only supply of milk has been in the form of reconstituted dried milks.

Fruit.—Again, it has been suggested that fruit may harbour the virus (Toomey and August, 1933). The outbreak did reach its peak during a period when fruit was in plentiful supply. In nine of the cases among young children, the mothers have been emphatic that the children either did not have any fruit at all or only after being carefully washed or peeled.

Flies.—Flies have been incriminated in the past on the grounds that the virus has been recovered from pools of flies trapped in urban areas during outbreaks of the disease (Melnick and Ward, 1945). Some workers have been inclined to attribute a definite part to the fly in the spread of infection (Deeny and MacCormick, 1946).

It is generally agreed that, probably due to a more plentifu<sup>1</sup> supply of improved insecticides, there have been fewer house flies in the Borough this year than usual, in spite of the hot summer. There were possibly more blow flies than usual, especially in the vicinity of kitchen waste bins. These bins were, however, removed early in the outbreak. It seems unlikely that, if flies did play an important part in the spread of infection, cases would have been restricted for six weeks to the westward side of the Bridgewater Canal.

No evidence was obtained of any undue prevalence or significant diseases in rats or mice in connection with cases; neither could ice-cream be in any way incriminated.

Summing up these observations in connection with the mode of spread of infection we find :—

(1) Evidence of carrier-to-case contact and contact between abortive and frank cases.

- (2) Evidence of numerous abortive cases, especially in close proximity to frank cases.
- (3) A marked tendency for cases to be on or in the immediate neighbourhood of main roads.
- (4) Some suggestion of grouping of cases and centrifugal spread.
- (5) An initial marked restriction of the spread of infection by the Bridgewater Canal, where communications between the two halves of the Borough are restricted.
- (6) A rapid spread once that barrier was crossed.
- (7) The exclusion of other important means of spread.

These findings all lead us to the conclusion that human contact played the major rôle in the spread of infection.

### Source of Infection.

In attempting to assess the actual source of infection we enter on to more controversial grounds.

The virus has been recovered from the pharynx of patients (Howe, Wenner, Bodian and Maxey, 1944) and contacts (Flexner, Clarke and Fraser, 1913), from the faeces of cases (Pearson and Rendtorff, 1945) and contacts (Pearson, Brown, Rendtorff, Redenow and Francis, 1945). Most American workers appear to stress the importance of faecal spread, while the consensus of opinion in this country seems to favour a pharyngeal spread. There are several factors in the Eccles outbreak which would seem to favour the theory of pharyngeal spread :—

- In very few of our cases was there evidence of the prolonged or intimate personal contact, usually associated with faecal spread.
- (2) The distribution of cases over the Borough is of the type one usually associates with droplet infection.
- (3) All social groups are represented in the outbreak.
- (4) We do not believe that, in Eccles, sanitary conditions and habits are such as to afford many opportunities for spread of intestinal infections; certainly not on such a wide scale.
- (5) If such conditions do exist, why, we may reasonably ask, have we not had a comparable outbreak of other commoner intestinal diseases? No undue prevalence of gastro-intestinal infections was noted during the period of the outbreak.

- (6) In this connection it is noteworthy that poliomyelitis seems to be affecting more and more the countries in which sanitation and hygiene are presumably making the greatest advances.
- (7) Again, catarrhal symptoms were very common in the preparalytic phases. The seasonal incidence is, we must admit, unlike that of other droplet infections. But,
  bearing in mind the increasing recognition being given to the part played by evaporated particles of infected material in droplet spread, the hot dry summer may well have facilitated a nasopharyngeal spread.

## Origin of the Outbreak.

The outbreak in the Borough appears to have started with four separate cases all occurring within ten days of each other. None had any direct contact with each other, and no indirect contact could be established. However, all can be linked with Irlam. The first case, already described in connection with the incubation period, was visited by a cousin who lived in a poliomyelitis focus in Irlam. This child had herself developed an abortive attack the day before the visit. The fathers of the second and third cases work in a factory in Irlam. This factory also employs contacts of the Irlam cases. A lodger in the household of the third case also works in an Irlam factory. The fourth case was probably infected by his brother who was a frequent visitor to a grandmother living in an outlying part of Irlam but also a poliomyelitis focus.

When it is borne in mind that not one of the other 42 cases can be linked directly or indirectly with the Irlam outbreak, it seems reasonable to assume that the infection was introduced from that quarter.

### Treatment of Cases.

All cases diagnosed or suspected as suffering from poliomyelitis were admitted immediately to Ladywell Sanatorium during the acute phase of the disease. Children were later transferred to Biddulph Orthopaedic Hospital, and adults to Park Hospital, Davyhulme, for specialist orthopaedic treatment. While in the orthopaedic hospital, the children receive, as far as possible, normal education. Biddulph Hospital, which is situated in ideal country surroundings in Staffordshire, is unfortunately difficult of access from Eccles. Arrangements were therefore made for special buses to take parents and visitors to Biddulph on visiting days. This arrangement has proved very popular and has been extended to include parents from neighbouring authorities. On discharge from hospital, children attend the orthopaedic clinic at Green Lane, where they receive physiotherapy and remedial exercises under the supervision of an orthopaedic specialist, and arrangements will be made for a number of the crippled children to be admitted to the Open Air School, as some may not be sufficiently active to associate with more vigorous children.

#### Preventive Measures.

The usual preventive measures were instituted very early in the outbreak. Publicity given by the local press, and the excellent pamphlets on infantile paralysis issued by the Central Council for Health Education freely distributed, ensured that the public was kept well informed of preventive measures and with the early signs and symptoms of the disease.

Two-thirds of the total cases and a half of the cases among school children occurred during the time the schools were closed for the summer holidays. During the period the schools were closed, cinemas and swimming baths were barred to children in the hope of restricting the spread of infection. The experience was that children tended to visit cinemas in neighbouring districts and to swim in the filthy canals instead of the baths. The police co-operated well in attempting to dissuade children from using the canals, but their zeal was often thwarted by being on the wrong side of the canal.

Other methods of prevention, such as vaccination and the use of serum, have been tried extensively in other countries, and found to be either dangerous or ineffective. Furthermore, the low attack rate of the disease (1 per 1,000), considerably less than the incidence of other commoner infectious diseases, makes it doubtful whether, even if of proved efficacy, these additional personal preventive measures would be a practical public health measure.

General preventive measures remain, for the present, our most effective weapon for limiting the ravages of this cruel disease. It must be realised, however, that although these measures are not likely to stop an epidemic they will certainly slow down its spread and thereby reduce the total number of cases over the whole period. Since epidemics nearly always terminate with the onset of cold weather, this slowing down of infection will result in some children remaining untouched who may otherwise become permanent cripples.

This country has had little previous experience of poliomyelitis. From 1913, when the disease became notifiable, up to 1946, an average of 700 cases were reported yearly in England and Wales. During the whole of that period only 30 cases were notified in Eccles. In 1947, 8,972 cases were notified in England and Wales, and 46 in Eccles. It is hoped that Eccles, in view of this year's outbreak, may be spared further epidemics. Judging, however, from the epidemics of other countries, especially America, Scandinavia and Australisia, countries which have suffered extensive and repeated epidemics, this is by no means certain, and a warning is necessary that further outbreaks of the disease may be expected.

### MATERNITY AND CHILD WELFARE.

The high death rate which prevailed among infants in the closing year of the last century roused a lively interest in the welfare of babies and, in many areas, voluntary associations were formed to do what was possible to reduce the wastage of infant life by supervision of the infants in their homes, by the education of parents in mothercraft, and by effecting improvements in the general hygienic conditions of urban areas.

In Eccles the infant mortality rate during the last decade of the nineteenth century varied between 145 and 192 per thousand births. It was not uniform throughout the Borough, however, but varied from ward to ward; in the more densely populated wards of Irwell and Barton in 1903 the mortality rate was 226 and 170 per thousand respectively, while in the more sparsely populated Monton Ward, the rate was only 42 per thousand.

Dr. Sergeant, in commenting on infant mortality in Lancashire in that year, stated that "the causes of a high infant mortality are to a large extent remediable, and it ought to be considered disgraceful to any authority to tolerate a rate exceeding 100 deaths under one year per thousand births, while a very much lower rate might reasonably be expected. Filthy environment, and the widespread ignorance of mothers of the elementary principles which ought to guide them in the feeding, clothing and management of their young children are productive of an immense loss of life, which goes on year after year unheeded by the public."

The Council of this Borough felt that something should be done to make knowledge of infant feeding and nurture more generally understood, and, with this object in view, endeavoured to form a Ladies Health Society. In 1904 a Ladies Health Society was formed, and a visitor was appointed at a salary of 16s. 0d. per week to devote her whole time to visiting newly born babies, the instruction of mothers in the nursing, feeding and clothing of infants, as well as in cleanliness and sanitation. During 1905, 535 new babies were visited. The visits were paid once a month, or, in bad cases, twice a month up to the first birthday, and then the children were struck off the list. A pint of milk daily was supplied free in cases of extreme poverty, and, to encourage cleanliness, the visitor was allowed to sell carbolic soap, purchased in bulk by the Society; boat-shaped feeding bottles were also sold to discourage the use of the long-tube feeding bottle. In this year a weekly mothers' meeting was instituted, at which readings and recitations and lectures on babies, cookery and sick nursing were given. Tea was provided at the meetings, a thrift section was organised, and materials for making clothing were sold to the mothers at a cheap rate. The average attendance at the meetings was 18. In 1908 a second visitor was appointed, and during the subsequent years the number of mothers attending the weekly meetings increased steadily.

In 1914 the nature of the meetings was changed. Up to this time the weekly meetings for mothers had been of a social and educational nature, but in that year it was decided to invite only expectant mothers and mothers with infants. A commencement was made with the weighing of babies, which was carried out at alternate meetings, and the M.O.H. agreed to attend the meetings periodically to examine infants. Arrangements were also made for a trained nurse to attend the weekly meetings, but she left the district during the year. In 1915 the meetings for mothers were held in the welfare department of Messrs. Ermen & Roby, Ltd., in Cawdor Street.

Dr. Isobel Cameron of the Local Government Board visited Eccles in the following year and, on her suggestion, a special Sub-Committee consisting of members of the Health Committee and the Ladies Health Society was appointed to deal with Maternity and Child Welfare matters. In 1917 it was decided to appoint a whole-time trained nurse, and Miss I. Wright was appointed as matron of the School for Mothers. Under her guidance the School for Mothers developed steadily and, on the amalgamation of the Child Welfare and School Medical Services in 1923, when four fully-trained health visitors were appointed, Miss Wright was appointed as Superintendent Health Visitor. Miss Wright gave 20 years of devoted and unstinted service in the interest of infants and young children in the Borough until her retirement on account of ill-health in 1937. In her work she never spared herself and was ready at all times to visit ailing children in their homes and give practical help with their nursing. Much of the success of the child welfare work in the Borough since 1917 was due to her energy and interest in children's welfare; her help and assistance is still remembered by many of the older mothers.

The attendance at the Mothers and Babies Welcome Club increased to such an extent that the meetings in Cawdor Street became too congested, and two additional sessions each week were instituted. Of the three sessions, two were for the weighing of babies and the instruction of mothers, while the third was reserved for expectant mothers who were instructed in the cutting out and making of garments for the expected baby, materials being purchased in bulk and sold to the mothers at cost price. Arrangements were also made for the reservation of a bed for Eccles infants at the Babies Hospital (now the Duchess of York's Hospital), Slade Lane, Manchester.

In 1918 a scheme was introduced for the supply of milk to parents whose income was below scale, and in the following year the Mothers and Babies Welcome Club was transferred to the Central Hall, Gladstone Road, where it remained until the present premises were opened on December 8th, 1921, by Mrs. Nanson, in the presence of members of the Council, the Ladies Health Society, and others interested in Infant Welfare. The opening of the new Welfare Centre was a milestone in the history of the child welfare movement in the Borough. Up to this time the movement had been entirely a voluntary one, but with the provision of premises by the local authority the Council accepted responsibility for the service. It is fitting at this point to pay tribute to the band of devoted ladies in the Borough who, since 1904, had successfully fostered the movement and laid a sound foundation for the future development of the work, and to those who have since then continued to give valuable assistance at the Centre.

Difficulty is usually experienced in the adaptation of old premises for purposes for which they were not built but, in this instance, the premises have been ample, although not palatial, and it has been possible to accommodate in them a steadily developing service. In 1922, 9,154 attendances were made by mothers, while 8,557 attendances were made by infants and 1,106 by children aged 1 to 5 years. Last year the number of attendances made by mothers was 14,452, while 11,430 attendances were made by infants and 3,688 by children aged 1 to 5 years. At the new premises four sessions each week were held for mothers and infants, a medical officer being present at two sessions at first and later at three sessions each week. On Wednesday afternnon, Miss Wright continued the meeting for expectant mothers, at which she gave addresses on the preparations for confinement and instruction in the cutting out and making of garments.

The Daily News in 1923 offered a prize of £25 to the district with a population of not less than 25,000 showing the greatest reduction in boy baby death rate during the year ending midsummer, 1923, when compared with the rate for the previous year. The prize was awarded to Eccles with a reduction equivalent to 73.38 per thousand. The male infant mortality rate in the year ending June 30th, 1922, was 120.64 and for the following year 47.26. The Maternity and Child Welfare Committee added a sum of £25 to the *Daily News* prize, and it was decided that the money should be applied in assisting both expectant and nursing mothers in need of a rest to go to a suitable convalescent home for a period not exceeding 14 days.

In 1924 the meeting for expectant mothers was changed to Friday afternoon, when talks on health during pregnancy and practical demonstrations on the cutting out and making of infant garments were given. In addition to general talks on health in pregnancy, individual advice was also given to the mothers.

In October, 1924, the Maternity and Child Welfare Committee inaugurated a scheme for the provision of home helps. In the following year the co-ordination of the Maternity and Child Welfare Service with the School Medical Service was completed and the work of health visitor and school nurse was combined, enabling supervision from birth to school-leaving age to be continuous and home visiting to be closely linked up with attendance at the Welfare Centre.

In 1926, in compliance with the Puerperal Fever and Pyrexia Regulations, Dr. W. R. Addis was appointed consulting Obstetrician, and in 1930 his services were also made available to medical practitioners in cases of difficult labour. After the Local Government Act, 1929, came into operation application was made by the Council to be constituted a Local Supervising Authority under the Midwives Acts and, with the concurrence of the Lancashire County Council, the application was granted by the Ministry of Health. A scheme for the institution of a fortnightly ante-natal clinic for the supervision of expectant mothers was adopted and put into operation in 1930. The clinic was commenced primarily for mothers who intended to apply for admission for confinement in Park Hospital, Davyhulme, and Dr. Addis, who was consulting obstetrician to the hospital, was in charge of the clinic. Attendance at the clinic, however, was not confined to women seeking admission to hospital and it was hoped that midwives practising in the Borough and medical practitioners would avail themselves of Dr. Addis's services. Arrangements were also made with the County Council for women from the surrounding county districts to attend the clinic.

In the same year arrangements were made with the Lancashire County Council for the treatment of orthopaedic defects in school children and those under school age at the county clinic at Irlam, and two beds in Biddulph Orthopaedic Hospital were reserved for the treatment of children from this area, while, for children requiring massage, X-ray treatment or in-patient treatment of short duration, arrangements were made for this to be provided at Ancoats Hospital, Murchester. By the provisions of the Midwives Act, 1936, local supervising authorities under the Midwives Acts, 1902–1918 were required to establish a municipal midwifery service, and in 1937 the Council appointed four whole-time municipal midwives all of whom had previously been in private practice in the Borough. Midwives who did not enter the municipal service were granted allowances in accordance with the provisions of the Act on surrendering their certificates.

On the appointment of an Assistant Medical Officer in 1938 it was possible to arrange for a medical officer to be present at each session at the Infant Welfare Centre and also to extend the provision for the ante-natal supervision of mothers. Since the inception of the ante-natal clinic in 1930 the attendance had increased considerably, and the premises were uncomfortably overcrowded during the ante-natal clinic sessions. This resulted in mothers having to wait for an excessive time before they could receive attention and it was difficult also to devote adequate time to the examination of abnormal conditions. It was there-fore decided instead to hold two clinics each week on one of the first, third and fifth Fridays in each month. The clinic was attended by the Assistant Medical Officer who carried out the routine examinations, and Dr. Addis, the Consultant Obstetrician, attended on one afternoon each month to examine special cases referred to him. Attendance at the clinics as far as possible was regulated by appointment to avoid undue waiting and delay, but owing to closer supervision of each mother and the increased number of mothers attending, it was found necessary to make still further provision in the following year by arranging an additional clinic each week.

On the outbreak of war in 1939 the distribution of anti-gas helmets for babies was undertaken at the Infant Welfare Centre and arrangements were made for the exchange of helmets for small children's respirators as the children became too big for the helmets. The helmets received in exchange were completely dissembled and thoroughly disinfected before re-issue, an arrangement which was continued throughout the war years.

Park Hospital was no longer available for civilian use after the outbreak of hostilities and arrangements were made for the admission of mothers to Hope Hospital for confinement, if they could not be confined with safety at home. Accommodation in Hope Hospital for cases residing outside the city was very limited and in consequence more women had to be confined at home. The lack of hospital accommodation led to an increase in the demand for the services of municipal midwives and an additional midwife was appointed. In 1942 the pressure on the domiciliary midwives and Hope Hospital was relieved by the

opening of a temporary midwifery unit in the annexe of the Eccles and Patricroft Hospital. As there was no resident obstetrical house surgeon at this hospital and it was not equipped to deal with obstetrical emergencies, arrangements were made with Dr. Addis, Consulting Obstetrician to the hospital, for women booking for confinement in the hospital to attend the ante-natal clinic in Green Lane. At this clinic they were kept under supervision and were seen by Dr. Addis in the later months. of pregnancy with a view to restricting admission to hospital to patients whose labour would probably be straightforward. Patients in whom complications were anticipated were referred to Hope Hospital for confinement. After the termination of the war when Park Hospital was re-opened, a proportion of women from the Borough were admitted there for confinement. In order to avoid frequent journeys to the hospital during the antenatal period, supervision is carried out at the ante-natal clinic in Green Lane and the patient's records are sent on to the hospital prior to their admission. Since the departure of Dr. Buxton on military service the ante-natal clinic has been carried on successfully by Nurse Bradley and Nurse Stubley, both of whom had been recognised by the Central Midwives' Board as district teachers of midwifery and, since their resignation from the municipal midwifery service, the clinic has been carried on by Nurse Bradley who continues to give part-time services for this purpose. Difficult and abnormal cases are referred to Dr. Addis, and cases in which X-ray examination is desirable are referred to the Eccles and Patricroft Hospital.

Arrangements have been made for the municipal midwives to work in pairs, an arrangement which enables them to relieve each other during off-duty periods, sickness, and periods when there is a heavy pressure of work. The facilities of the antenatal clinic have been placed at their disposal for the ante-natal supervision of their own patients, and each pair hold their antenatal meeting at the Welfare Centre on one morning each fortnight, and all mothers attend at least once a month for supervision. This arrangement saves much of the midwives' time and is greatly appreciated by their patients. It has the additional advantage that mothers become accustomed to visiting the Welfare Centre and continue in attendance after the baby has been born.

In March, 1945, an additional session at the Welfare Centre was commenced as the number of mothers in attendance on four sessions was too great for the staff to cope with adequately. It has not been the practice for many years to give addresses to the assembled mothers as it has been found much more satisfactory to talk to each mother individually about her own difficulties and the ailments of her own child, and, in a crowded

clinic, this could not be done. In addition, it is very undesirable to bring infants into a crowded meeting, as catarrhal infections, which constitute by far the most common minor disorders of infants, spread very rapidly in such conditions, and one mother with a cold can readily infect a large number of infants. The attendance of 90 mothers at some sessions was not unusual, and on occasions the number attending reached 100. It was quite impossible to talk to each mother and discuss her problems with her when the attendance was so large. In addition, the number of other clinics attended by the Health Visitors had increased and insufficient time was available for visits to the homes of voung children. An additional health visitor was therefore appointed, and an additional session for mothers and babies was commenced each Tuesday morning. This relieved the congestion at the clines considerably, but the centre was still too crowded at some of the sessions. Even with five clinic sessions each week, the numbers attending was considered too great and an additional clinic was commenced in the early part of last year on Wednesday morning, when a sixth health visitor was appointed and the Borough was divided into six areas. Unfortunately, the last health visitor to be appointed left to go abroad in July last, and Miss Hughes retired on superannuation on December 31st last, leaving only four health visitors to carry on the work. To relieve the remaining health visitors of some of the clinic work, and to allow them more time for home visiting, Nurse Bradley has attended the Welfare Centre for two sessions each week.

A war-time Nursery was not established in the Borough. However great the demand for women to take up industrial employment may be, there is a greater need for children to maintain the population. The urge for production at the cost of fewer babies is a short-term policy which ultimately will lead to a fall in the population and an increase in the proportion of persons beyond the working age. No mother with children under the age of two years should be allowed to return to industryher place is in the home with her children. A woman doing a full day's work should not be asked to take her child to a nursery at some distance from her work-place before she commences work and make a similar journey at night when she is tired, and then undertake her housework. Under such conditions something must be neglected, and it usually is the children who suffer. If it is essential for mothers with young children to return to industry, then provision should be made for the care of the children in nurseries adjacent to the factories. As an alternative to the provision of day nurseries it was considered better for the children to be cared for near their homes. A canvass of the Borough was made and a sufficient number of

suitable women were found each of whom were willing to look after one or two children of women engaged in industry, and the alternative scheme of the Ministry of Labour for the daily minding of children was successfully put into operation. A special visitor was appointed to inspect and approve of the homes in which the children were cared for during the day and to supervise the children while being minded. Women wishing to have their children minded were put into touch by the visitor with a foster-parent living conveniently near their homes. When the scheme was in full operation the average number of children being minded daily was approximately 200.

A special nursery school was provided for children over the age of two years of mothers engaged in industry, and a special nursery class was added to one of the infant schools for this purpose. It is hoped that when conditions permit two more special nursery schools will be provided.

## Maternity and Child Welfare, 1947.

The close co-ordination between the maternity and child welfare service and the school medical service has been fully maintained as in past years, and the two services are closely integrated. All the clinic facilities of the school medical service are available for infants and toddlers, the records of each child are continuous up to the school-leaving age, and the child is supervised by the same personnel throughout the whole of this period.

During 1947, 875 primary visits have been made to infants in their homes and 4.586 re-visits to children under the age of 1 year. 2,555 visits were paid to children aged 1 to 2 years and 4,353 visits to children aged 2 to 5 years, a total of 12,369 visits to the homes of children under 5 years. There is one nursery school accommodating 60 children over the age of 2 years and, so far as accommodation permits, children over the age of 3 years are admitted to the elementary schools where they come under the supervision of the school medical service. Each health visitor attends at the Welfare Centre on one session each week and the mothers from her district are invited to attend the centre on the session at which she is present, if this is convenient for them, so that, in addition to visits to the homes of children, the health visitors are able to see the children from their districts at the Infant Welfare Centre at very frequent intervals. During the year 738 new children under the age of 1 year and 31 children

between the ages of 1 and 5 years attended the centre. 11,430 attendances were made at the centre by children under 1 year and 3,688 attendances by children between the ages of 1 to 5 years. The total number of children in attendance during the year was 1,416, of whom 600 were under 1 year of age at the end of the year.

It is gratifying to report that a high percentage of the babies born in the Borough attend the Welfare Centre. During the year, 853 children were born in the Borough, of whom 738 (86.5 per cent.) attended the Welfare Centre.

No special clinic is held for toddlers but they are encouraged to continue in attendance at the ordinary sessions at the centre. The response has been quite good and approximately one-third of the total attendances at the centre are made by children aged 1 to 5 years and approximately one-third of the children examined by the medical officers are toddlers.

The health visitors spent 293 sessions at the centre and a medical officer was present at 254 sessions. 769 new babies were examined and 2,705 re-examinations of babies under 1 year and 1,646 of toddlers aged 1 to 5 years were made, a total of 5,120 examinations.

A.m.	Ho Vis	me its.	Atten Cen	idance tre.	То	otal.	
Age.	No. of visits.	Average per child.	No. of visits.	Average per child.	No. of visits.	Average per child.	
0-1 (Primary) (Subsequent)	875 4,586	6.24	11,430	13.06	16,891	19.30	
1-2	2,555	2.92	2,526	2.88	5,081	5.80	
2-3	2,400	2.74	773	.88	3,173	3.62	
3-4	1,346	1.53	332	.38	1,678	1.91	
4-5	607	.69	57	.06	664	.75	
Total	12,369	14.12	15,118	17 26	27,487	31 38	

## Special Visits.

Bronchitis and Pne	umo	onia	 	 4
Measles			 	 449
Whooping Cough			 	 86
Chicken Pox			 	 13
Foster Children				
Expectant Mothers			 	 497
Miscellaneous			 	 162
Total			 	 1,211

53

The average number of mothers attending the centre each week during the year was 278, the highest weekly attendance being 392. During the second quarter of the year the average weekly attendance was 312. Formerly only four sessions were held each week, and it was found that the centre was on some occasions, when 90 or more mothers were present, so overcrowded that the health visitor was unable to give adequate attention to those mothers who wished advice or whose babies were not thriving. In 1945 the number of sessions was increased to five when an additional health visitor was appointed. Even with five sessions it was found that the centre was still overcrowded on many occasions. Owing to the increase in the number of babies born and additional clinics, it was found that five health visitors were not able to visit the homes of infants as frequently as was desirable to maintain adequate supervision and, consequently, in January of last year an additional health visitor was appointed and a sixth session instituted at the Welfare Centre in April. Unfortunately this health visitor resigned to go abroad in July, but the additional session at the Welfare Centre has been continued as it has been possible to obtain the part-time services of Nurse Bradley to carry on the session until another health visitor can be appointed. With six sessions per week the average number of mothers attending each session has been about 50; the clinic is not unduly overcrowded, and the health visitor now has more time to see each baby and talk to the mothers.

On December 31st, Miss A. Hughes, who has been a health visitor in the department for 26 years, retired on superannuation and I wish to record my appreciation of the devoted service she gave in the interest of the mothers and children in the eastern portion of the Borough. The supply of health visitors, like most things at the present time, is very short, but I hope it will be possible in the near future to appoint two health visitors to fill the vacancies which now exist.

	Number						
1947.	of Sessions.	0-1	1-2	2-3	3-4	4-5	Mothers
1st Quarter	60	2401	511	164	57	8	3030
2nd Quarter	59	3258	680	216	73	12	4054
3rd Quarter	70	2987	601	201	104	16	3716
4th Quarter	65	2784	734	192	98	21	3652
Tota!	254	11430	2526	773	332	57	14452
Avg. per Session		45.0	9.15	3.04	1.30	0.22	56.9

Summary of Attendances at the Infant Welfare Centre.

Year.	Nett Births.	No. of children under 1 year attending Centre	Percentage.	
1925	793	597	75.3	
1926	778	535	68.8	
1927	709	541	76.3	
1928	743	538	72.4	
1929	682	489	71.7	
1930	639	502	78.6	
1931	606	450	74.3	
1932	577	458	79.4	
1933	536	393	73.3	
1934	514	380	73.9	
1935	553	407	73.6	
1936	602	438	72.7	
1937	626	443	70.8	
1938	593	450	· 75.9	
1939	586	494	84.3	
1940	602	465	77.2	
1941	561	448	79.8	
1942	659	528	80.1	
1943	637	543	85.2	
1944	751	661	88.0	
1945	628	543	86.4	
1946	812	646	79.5	
1947	860	738	85.8	

#### Care of Illegitimate Children.

A large proportion of the unmarried mothers who attend the ante-natal clinic have been seen by myself. Help and advice with regard to confinement have been given to them; their future, together with that of the expected baby, has been discussed, and appropriate advice and assistance has been given. In those instances in which the mother has not been able to keep her baby, assistance has been given in finding a foster home or, alternatively, to make suitable arrangements for the adoption of the child. Adoptions are usually arranged through the Manchester Maternity and Child Welfare Department, as it is not considered desirable, except in exceptional circumstances, for the baby to be adopted by a person residing in the same district as the mother. A number of babies born in Manchester are adopted by persons residing in Eccles, and in these cases the prospective adopters are interviewed and the home inspected by one of the health visitors and a report on the parents and the home submitted to the Manchester M. & C.W. Department, and, when the baby has been received, it is kept under supervision pending adoption. When Adoption Orders are being made by the Eccles Magistrates, a report on the health and suitability of the child for adoption and, if necessary, on the parents, is submitted to the Magistrates' Clerk for the guidance of the Magistrates.

## Child Life Protection.

At the beginning of the year there were on the register four children in the care of foster parents, one of whom was adopted during the year, one was returned to the parents, and two remain under supervision.

As a war-time measure, a few children have been received apart from their mothers into the Ennismore Hostel for Mothers and Babies. During the year three children have been received into the home, two of whom are still there, and one child, whose mother absconded, has been transferred to an orphanage.

## Care of Children of Working Women.

No day nursery has been established in Eccles. A nursery school has been provided for children over the age of 2 years accommodating 60 children, and a special nursery class has been provided in one of the infants school with accommodation for 60 children over the age of 3 years. There is need for further provision for children over 2 years whose mothers must go out to work and it is hoped that two additional nursery schools for such children will be provided in the Borough.

Parents of children under the age of 2 years are not encouraged to go to work as it is felt very strongly that young children require the care and attention of their mothers. If there is a real necessity for the mothers of young children in industry, day nurseries should be established near to the place of work by the industries urgently requiring female labour. It is too much to ask a woman doing a full day's work to dress and wash young children in the early hours of the morning and carry them in winter a mile or more to a nursery and then pick them up in the evening after her day's work before commencing the household duties which have been left until her return home. When a mother must of necessity go to work, arrangements are made for the care of the children by foster parents residing as near as possible to the mother's home. The foster parents are approved by the health visitors and the children are kept under supervision by them while they are in the care of the foster parents.

During the year 48 children were cared for by foster parents of whom 10 were under 1 year of age, 16 aged 1 to 2 years, and 22 aged 2 to 5 years. The number of daily guardians employed during the year was 32.

### Residential Nursery.

There is need of a residential nursery for the occasional accommodation of young children whose mothers may wish them to be cared for, for a day or two, for family reasons. In such a nursery provision could also be made for the residence of young children whose mothers are admitted to hospital on account of illness or confinement, or for the young children of widows who may be compelled to work to supplement their income. At , the present time when children have to be left for these reasons, if there are no relatives willing to take care of them, the only accommodation for them is in the Public Assistance Institution, which is not a desirable place for them and in which it is not possible to provide suitable accommodation.

## Skin Clinic.

By arrangement with the Lancashire School Health Service, Dr. Fessler has held a skin clinic at the Infant Welfare Centre, Green Lane, on alternate Wednesday mornings, to which children under school age, as well as children in attendance at school, are referred for advice and treatment.

During the year 61 children under school age, who made 173 attendances, were seen and advised by Dr. Fessler for the conditions set out in the following table. The condition in 47 of the children was cured during the year, 7 were referred to hospital or ceased to attend before the treatment was completed, while 7 remained under treatment at the end of the year.

Disease or Defect.	Cured.	Incom- plete, left, or referred to hospital	Under treatment at end of year.	Total.
Warts	4			4
Impetigo	1			1
Eczema	19	2	4	25
Alopecia	1			1
Psoriasis	1		1	2
Seborrhoea	4			4
Dermatitis	7	-		7
Ichthyosis			1	1
Cornu Cutaneum		1		1
Lichen Urticatus	1			1
Papilloma		1		1
Pityriasis	1			1
Naevus	1	1	1	3
Angioma		2		2
Scabies	7	-	·	7
TOTAL	47	7	7	61

Results of Treatment of Children under School Age.

### Ante-Natal Care.

Ante-natal clinics have been held as in past years at the Infant Welfare Centre on Friday morning and afternoon, and, owing to the large number of expectant mothers attending the clinic, an extra session has been held on Thursday morning when necessary. The clinic has been carried on by Nurse Bradley and Nurse Stubley, but since the resignation of Nurse Stubley Nurse Bradley has carried on the clinic. The mothers attend the clinic at intervals of three weeks throughout pregnancy and are seen as a routine by Dr. Addis about the 36th week, or if any abnormality is suspected they are referred to him on his next monthly visit or to the Obstetrician at Park Hospital. Cases requiring X-ray examination are referred to the Radiologist at Eccles and Patricroft Hospital. During the year 91 cases were referred to hospital for X-ray examination.

During the year 537 women attended the ante-natal clinic, of whom 534 were resident in the Borough and 3 were from the adjacent county districts. The patients made a total of 2,807 attendances, and of these 110 were confined at home, 259 had arranged for confinement in Eccles and Patricroft Hospital, 157 in Park Hospital, and 9 were confined elsewhere. Two of the women were found to be not pregnant.

The number of women returning for post-natal examination is still very low although all are invited to do so and most of them promise to return. During the year 89 women (16.5 per cent.) returned for post-natal examination.

	ECO	CLES.	COL	UNTY.	то	TAL.
	Cases	Attend- ances	Cases	Attend- ances	Cases	Attend- ances
ANTE-NATAL. 1946 Cases : For confinement in— Eccles & Patricroft						
Hospital	82	337	1	5	83	342
Park Hospital	24	91			24	91
At Home	20	64			20	64
Elsewhere	1	1		Resist	1	-
Not Pregnant 1947 Cases :	1	1			1	1
For confinement in—						
Eccles & Patricroft						and the second
Hospital	176	1258			176	1258
Park Hospital	133	754	-		133	754
At Home	88	264	2	10	90	274
Elsewhere	9	21			9	21
Not Pregnant	1	2		-	1	2
Total	534	2792	3	15	537	2807
POST-NATAL. Post-Natal Cases :				10.67	10.64	M-asal
(Post-Natal only)	1	1.		-	1	1
Post-Natal following Ante-Natal	88	98	-	_	88	98
Total	89	99			89	99

58

#### Municipal Midwifery Service.

During the year the five municipal midwives have attended 326 cases, 301 of which were delivered by the midwives and 25 by doctors. They were also called in by medical practitioners in 7 cases of abortion.

In 7 cases no fee was charged for the services of the midwives. The fees charged for the midwives' services during the year amounted to  $\pounds 568/15/6$ , of which  $\pounds 524/4/6$  was paid to the midwives or at the Welfare Centre.

The facilities of the ante-natal clinic have been available on two mornings each week for the municipal midwives to carry out ante-natal supervision of their patients as a supplement to, but not in substitution for, ante-natal visits to the homes of their patients. The arrangement has been appreciated by the midwives and the patients. It has enabled the midwives to supervise their patients under more favourable conditions and has brought the mother into closer contact with the Welfare Centre. During the year the patients of the midwives have made 1,074 attendances at the clinics.

Three of the municipal midwives who are qualified to administer analgesics in accordance with the requirements of the Central Midwives Board have been supplied with the necessary apparatus during the year and anaesthesia has been administered by them in 7 cases. An additional charge of 10s. 6d. has been made in cases in which gas and air analgesia has been administered to cover the cost of the anaesthetic and the services of the second midwife. The mothers who have had gas and air analgesia have expressed their appreciation of the relief.

## Midwives Acts.

During the year 13 midwives notified their intention to practice, of whom 6 were employed by the local authority, 4 by the Eccles and Patricroft Hospital, 2 at a private nursing home and 1 in private practice.

During the year the midwives attended 831 cases; 326 were attended by municipal midwives, 44 by midwives in private practice, 138 in a private nursing home, and 323 in the Eccles and Patricroft Hospital. In 756 instances the cases were delivered by the midwife and in 75 a doctor was in attendance at the confinement. Medical aid was summoned in 124 cases. The claims submitted by medical practitioners numbered 78, the total amount being  $\pounds 117/10/6$ . Of this amount  $\pounds 97/18/0$  was debited to the patients and  $\pounds 75/2/0$  was collected during the year.

Reasons for sending for medical aid :---

ANTE-NATAL.								
Condition of	mothe	er					5	
Abortion the	reatene	d					4	
A.P.H							2	
Incomplete :	abortio	n					2	
Disproportio							1	
Persistent p	rolapse						1	
								-15
INTRA-NATAL.								
Ruptured pe		1					47	
Delayed lab							10	
Malpresentat							4	
Retained pla		• •					2	
Uterine iner	tia .					• •	1	
								- 64
POST-NATAL.							1.1	
Post patrum	haemo	orrhage			• •		9	
Pyrexia				• •	• •	• •	6	
Palpitation	•• ••			• •	• •		1	10
0								-16
CHILD.								
Ophthalmia					• •		13	
Asthenia			• •	• •	••		5	
Prematurity				• •		• •	5	
Asphyxia	•• ••		• •	• •	• •	• •	3	
Pemphigus	•• ••			• •		•••	1	
Malnutrition						• •	1	
Discharge fro	om ear		•••	• •	• •	• •	1	20
								-29

During the year 30 still births were notified, equivalent to a still birth rate of 33.0 per 1,000.

## Puerperal Pyrexia.

The services of Dr. W. R. Addis have been retained as consultant under the Puerperal Pyrexia Regulations, but his services were not called for during the year.

During the year 4 cases of puerperal pyrexia and 9 cases of septic abortion were notified. All the cases were removed to hospital.

### Registration of Nursing Homes.

There is one private nursing home in the district registered under the Public Health Act, 1936. This home, which has eight beds, caters for maternity cases only, and during the year 138 cases were delivered in the home. The midwife in charge of the home is qualified to administer gas and air analgesia in accordance with the requirements of the Central Midwives Board, and during the year gas and air analgesia was administered to 105 of the patients. The conduct of the home during the year was satisfactory.

The exemption of the Eccles and Patricroft Hospital from the provisions of the Nursing Home Regulations sections of the Public Health Act, 1936, was renewed by the Council. The temporary annexe continued to be used as a maternity ward, and during the year 323 mothers were admitted for confinement. The ante-natal supervision of the cases referred to the hospital has been continued at the Corporation Ante-Natal Clinic.

There is one home in the Borough for unmarried mothers and their children, provided by the Manchester Diocesan Association for Preventative and Rescue Work, at "Ennismore," Regent Street, Eccles, which has accommodation for 16 mothers with their babies. As a temporary measure, to meet a special need, the home has been permitted to provide accommodation for up to six babies without their mothers.

#### Home Helps.

During the year 7 women have been employed as home helps on 18 cases, the cost of the service being  $\pounds 111/4/8$ , of which  $\pounds 44/5/11$  was recovered in accordance with the Corporation's scale.

#### Domestic Helps.

The scheme for the provision of domestic helps has been continued, and help has been provided in 7 instances at a cost of  $\pounds 33/16/2$ , of which  $\pounds 2/13/0$  was recovered from the applicants.

## CARE OF PREMATURE INFANTS

#### (CIRCULAR 20/44)

(a)	Number of premature babies notified during 1947	 31
(b)	Number born at home	 14
	Number born in Hospital or Nursing Home	
(e)	The number of those born at home :	
	Who were nursed entirely at home	 14
	Who died during the first 24 hours	 2
	Who survived at the end of one month	
(d)	The number of those born in Hospital or Nursing	
	Who died during the first 24 hours	
	Who survived at the end of one month	

### THE CARE OF THE AGED.

As a result of the decline in the birth rate and the prolongation of life by improved hygiene and advances in medical science, the proportion of aged people in the population has steadily increased, and they now constitute approximately oneeighth of the total population. In Eccles there are about 2,700 old people who receive the extra tea ration. The conditions under which many of the old people live are comfortable, as they have children or other relatives who take an interest in their welfare, but there are others who are alone in the world with no one to care for them in their closing years and no one to help them in sickness or when they are too feeble to provide for themselves. At the present time many of the old persons are receiving supplementary pensions and consequently come within the purview of the Assistance Board, but, with increased pensions provided by the National Health Insurance Act, supplementary pensions will no longer be necessary and about 70 per cent. of the supplementary pensioners will cease to be the responsibility of the Assistance Board.

A proportion of the aged live alone either in their own homes or in rooms. To them a friendly visit would be welcome and many would be glad to know someone on whom they could rely for help or advice in debility or sickness. Some, by reason of infirmity, are incapable of coping with their essential housework or are at times unable to do their shopping or draw their pension.

In consequence of a report on the care of the aged submitted to the Maternity and Child Welfare Committee, the Mayor called a meeting of persons interested in the welfare of the aged in November, 1946, with a view to forming an organisation to assist old people. The meeting was addressed by Alderman Mrs. Kemball, who outlined the work of the Old Peoples' Welfare Committee of the Lancashire Community Council, of which she is Chairman. She pointed out that, as old people were inclined to be very independent, it was desirable that housing accommodation should be such that those who were able should live in their own homes as long as they could possibly care for themselves. The housing of the aged was a duty which could best be undertaken by the Local Authority providing bungalows and cottage flats. For those too old to live alone the provision of hostels was the solution, a duty which could be shared by voluntary organisations and local authorities. Lastly, for those needing medical care and attention, there should be institutional accommodation. She stressed the need for an expansion of voluntary service by frequent visiting of old people in their homes or in institutions, the visits being more in the nature of friendly rather than duty visits. By keeping an eye on them the tragedies of lonely old people of which we so frequently hear might be averted.

After the Medical Officer of Health had addressed the meeting it was resolved to form an Old Peoples' Welfare Association for the Borough, and a representative Executive Committee was appointed to carry forward the objects of the Association. During 1947 three "Over 60" Clubs were established, having a total membership of over 300, which held weekly meetings and social events have also been arranged for the members.

The problem of the aged is still a comparatively new one. We know but little of the hardships, difficulties and ailments of old age and, in order to provide a sound basis of fact on which to found schemes for assistance to the aged, a careful investigation and recording of the conditions under which the aged live is an essential preliminary and one which should be put into operation as soon as possible.

When the National Assistance Bill is placed on the Statute Book the responsibility for persons without resources to meet their requirements will be transferred to the National Assistance Board. It will be the duty of every local authority to provide residential accommodation for persons who, by reason of age, infirmity or other circumstances, are in need of care or attention which is not otherwise available to them. Owing to the shortage and control of materials, local authorities will not be in a position for some time to obtain the requisite accommodation, and it will rest with voluntary organisations to make such provision as is possible in the immediate future. Voluntary organisations are also the most suitable bodies to provide hostels for the aged who are not in need of financial assistance but who are either unfit to live alone or prefer the companionship of their fellows

There are, however, many old people, living in houses which have been their home and the home of their family for many years, who are unwilling to leave the familiar surroundings or part with their treasured belongings. Some may be experiencing hardship in one form or another, due to lack of domestic or nursing attention or problems arising out of moderate physical disability, which make them unable to deal with household duties which are beyond their capacity. Domestic helps can be provided by the local authority, but the amount of assistance which can be given in this way is limited by the difficulty in obtaining the services of suitable domestic helps. The housing position at the present time is very acute and there are a large number of young married couples living with their parents in extremely overcrowded and uncomfortable conditions, many of whom are anxious to obtain more suitable accommodation. It might be possible to persuade some of the lonely old persons to accept a suitable young married couple into their home in return for companionship, care and light domestic assistance, and thus secure some measure of assistance and companionship for the lonely aged people.

### SUPERVISION OF THE MILK SUPPLY.

A large proportion of the milk distributed in the Borough of Eccles is graded as Tuberculin Tested or Pasteurised milk. Some of the milk is still delivered in bulk for retail as loose milk, and a small proportion is produced locally.

During the year eight samples of tuberculin tested milk were submitted for bacteriological examination, and on one occasion the milk failed to satisfy the methylene blue test. In six samples bacterium coli were found in 0.1 ml. In only one sample the plate count was higher than 30,000 organisms per ml.; in this instance the plate count showed 2,180,000 organisms per ml. The co-operation of the County Sanitary Inspectors was sought and the farmer visited frequently to advise on precautions for preventing contamination at the source. Tubercle bacilli were not found in any of the samples.

Twenty-four samples of pasteurised milk were submitted for bacteriological examination and all but one satisfied the methylene blue test. In 14 samples bacterium coli were not found in 1.0ml. and in only four samples were bacterium coli found in 0.01 ml. In twelve instances the total number of organisms per ml. by the plate count exceeded 100,000. In all instances the phosphatase test was satisfactory, indicating that the milk had been adequately treated. The organisms found on plate culture were in the main of the harmless thermophyllic type. It is unsatisfactory, however, that adequately pasteurised milk should contain bacterium coli which are most probably introduced after heat treatment during bottling or capping the filled bottles.

Eight samples of sterilised milk were submitted for bacteriological examination. In four instances the plate counts were very high, owing to the presence of B. Subtilis. The spores of organisms of this group are extremely resistant to heat and it would appear that they survived the sterilisation process and afterwards propagated in the milk. Practically all strains of B. Subtilis are non-pathogenic and so far as is known do not cause souring of milk.

Two samples of heat-treated milk were submitted for the Methylene Blue Test and were found to be satisfactory, but one sample submitted for bacteriological examination had a very high plate count and B. coli were present in 0.01 ml. Subsequent inquiry revealed the fact that many complaints had been made about the supply from this wholesale dairy, which is situated outside the Borough.

One sample of raw loose milk had a plate count of 610,000 and B. coli were present in three tubes in 0.01 ml. The appropriate County Authority was informed.

Some bottles of milk on delivery to consumers are occasionally found to have a dirty sediment due to imperfect removal of dried milk residues by the mechanical washer. Very few purchasers of bottled pasteurised milk will not take the trouble to rinse out the bottles after use, and in some instances use them as containers for other liquids; these remarks apply to pint bottles and, to a less extent, to one-third pint bottles. Milk residues left in bottles, particularly in warm weather, sour rapidly due to the growth of organisms, and the milk evaporates leaving a hard deposit on the glass which no mechanical washer can remove. Paint, oil, and similar liquids, often placed in the bottles, cannot be satisfactorily removed, and the bottles have to be destroyed. Bottles with sour and dirty residues which cannot be cleansed by the mechanical washer should be cleansed by hand. The passage of such bottles through the washer and their distribution after filling is due to the carelessness and indifference of the operatives, who appear to take less interest in their work now than formerly. Unless the operatives show a marked improvement in the care and attention paid to their simple duties, the distribution of unclean bottles will continue. The only satisfactory solution to the problem will be the substitution of non-returnable containers for glass bottles, a change which will require an allocation of suitable material for the containers.

### FOOD AND DRUGS.

During the year 150 samples were taken under the Food and Drugs Act, of which 136 were found to be satisfactory. Ninety were samples of milk, of which 58 were formal samples and 32 informal, while 59 were informal samples and one a formal sample of other foods. The foods sampled were as follows :---

oj	Number f Samples		Number satisfactory
Milk	90		10
Butter	2		
Margarine	2		
Sugar	2		
Self-Raising Flour	2		
Soya Flour	2		
Baking Powder	3		
Cooking Fat	2		_
Cooking Oil	1		1
Tea	2		_
Coffee	2		
Coffee with Chicory	1		en la barabi
Gravy Browning	3		the state
Malted Milk	ĩ		
Junket Powder	1		1
Gelatine	1		
Ginger	1		
Arrowroot	1		
Fish Paste	2		
Malt Vinegar			No.
Unfermented Vinegar	2 1		
Mustard	2		
Lemonade Powder	$\overline{2}$		
Sweets (Sugar Confectionery)	ĩ		and and and and
Pepper	î		
Borax	î	•••	
Boracic Ointment	2	•••	
Boracic Powder	• 1		_
Sulphur Ointment	-	•••	
Seidlitz Powders	3		
Castor Oil	$2 \\ 3 \\ 2 \\ 2$	•••	
Epsom Salts	5	•••	
Whisky	ĩ	•••	
Gin	1	•••	
Samples in connection with the	1	•••	
use of a "proprietary fluid"			
in chipped potato preparation	5		2
		•••	-
	150		14

#### Samples Nos. 1019, 1030, 1031-Milk.

Sample 1019 represented a one-pint bottle of T.T. milk purchased from the dairy company who bottled the milk. The milk was delivered at the dairy in ten-gallon cans, and because it was T.T. milk the contents of the cans were not mixed but were bottled separately. On a subsequent day a sample was taken from each can (seven in all) on delivery at the dairy by the same farmer. Of these, five were genuine, one (No. 1030) showed a deficiency of 6.6% in the fat content, and one (No. 1031) contained only 7.47% of solids not fat. In view of the low fat content in sample 1030 taken on delivery no action was taken against the vendors of sample 1019, but they were reminded of their responsibility as vendors if milk sold by them should fall below the minimum limits. The farmer was interviewed, and in regard to sample No. 1030 he was requested to take steps to ensure a more even distribution of the strippings among the cans sent to the dairy. In regard to sample No. 1031 the farmer stated that this supplementary supply was obtained from a neighbouring producer, also outside the area of the Eccles Authority. In view of this explanation it was deemed sufficient to issue a warning to the farmer interviewed and to communicate with the appropriate County Authority for action in their area.

#### Sample No. 1016-Milk.

Sample No. 1016 represented a one-pint bottle of sterilised milk sold in a shop. It was found to contain 2.7% extraneous water. The dairy company supplying the shop was urged by letter to take every precaution to prevent access of water to the milk during processing.

### Sample No. 1017-Cooking Oil.

This informal sample was obtained during investigation of a complaint and represented the oil actually in use in a fish and chipped potato frying apparatus. The analyst reported that, in his opinion, the sample was adulterated with 8% of liquid paraffin. A corresponding formal sample was unobtainable as, in the interval, the fat had been destroyed.

#### Samples Nos. 1053 and 1054.

Sample No. 1053. This informal sample consisted of a bottle of fluid recommended on the label for use by chipped potato friers. The label contained the following statement : "This preservative contains 7% of Sulphur Dioxide." Directions

were given for preparing a diluted solution and for use to preserve raw chipped potatoes. The "chips" were to be drained before cooking and fried as usual, and it was claimed that no preservative would remain in the potatoes after frying. The object of the process was to prevent the darkening of the potatoes which sometimes occurs when they are exposed to air after preparation. On analysis, the fluid was found to contain 8.5% of sulphur dioxide.

Sample 1054. A diluted solution was made according to the directions on the label of sample No. 1053, and the percentage of sulphur dioxide was found to be 0.011 per cent. A sample of treated and drained potatoes (uncooked) was found to contain no sulphur dioxide.

A sample of similarly treated potatoes taken after frying in the usual way was found to contain no sulphur diexide. This preparation was brought to the notice of the Local Authority in whose area the product is manufactured for further consideration.

#### Sample No. 1081—Junket Powder.

This sample was contained in two corked glass tubes each bearing a label. One label had the statement "Containing Rennett" and the other had "Containing Rennet, Salt." Analysis showed the chief constituent by weight to be common salt, present to the extent of 50.9% of the sample.

The packers' attention was drawn to the labelling requirements of the Labelling of Foods Orders 1944 and 1946, asking them to comply with the regulations.

#### Sample No. 1089-Milk.

This informal sample represented milk consigned by a farmer to a dairy, was found on analysis to contain 34% of extraneous water, and accordingly formal samples were obtained.

#### Samples Nos. 1090 and 1091—Milk.

These formal samples, representing two cans of milk consigned by the supplier of sample No. 1089, were taken in course of delivery to a dairy. On analysis they were found to contain extraneous water to the extent of 26.8% and 43.5%.

Corresponding "Appeal to Cow" samples were taken on the earliest practicable occasion. These samples were found to be well above the minimum limits. The farmer was prosecuted and the case was heard by the Eccles Magistrates on 19/9/47. A plea of "guilty" was entered and the defendant was fined £5 in respect of each of two samples and ordered to pay £5 costs; £15 in all.

#### Sample No. 1093-Milk.

This formal sample was taken for the information of the Sampling Officer during his visit to the farm for the purpose of taking "Appeal to Cow" samples in connection with sample No. 1089. It was taken from a can of milk said to be from the previous evening's milking. It was found on analysis to contain 8.0% of extraneous water. No separate legal action was taken in respect of this sample.

#### Sample No. 1146-Milk.

This formal sample represented unprocessed milk sold loose by a retailer. On analysis the sample was found to contain 2.50% of fat. As subsequent investigation (sample No. 1149) partially accounted for the fat deficiency, it was deemed sufficient in this instance to send a letter of warning to the retailer.

#### Sample No. 1149-Milk.

It was ascertained that the milk from which sample No. 1146 was taken was solely from one farmer. Formal samples were accordingly taken very shortly afterwards and from each of the farmer's five cans (representing his whole consignment). The samples were taken in course of delivery to the retailer.

Four of these samples were found to be genuine, but No. 1149 contained only 2.90% of fat. The deficiency of fat was apparently due to the unequal distribution of the "strippings."

A letter was sent to the appropriate County Medical Officer informing him of the findings and requesting him to communicate suitable with the farmer.

# Report of the Senior Sanitary Inspector

To the Mayor, Aldermen and Councillors of the Borough of Eccles.

Ladies and Gentlemen,

I have the honour to submit my Annual Report of the work done by the Sanitary Inspectors and by the House Refuse Collection Department for the year 1947.

Better progress has been made with housing repairs during the year, but there is still a shortage of labour and materials. The number of defects and nuisances discovered was 6,674 and the number abated 4,726; this is an improvement on the previous year. The number of statutory notices served during the year was 877 as against 727 in 1946.

There has been a continued improvement in the collection of House Refuse during the year and the sales of salvaged materials realised £1,903. 19s. 6d. as against £1,698. 12s. 5d. in 1946.

I again desire to express my thanks and appreciation of the support received from the Chairman and Members of the Public Health Committee, also for the assistance and co-operation received from all members of the Staff of the Department.

> I have the honour to be, Ladies and Gentlemen, Yours obediently,

> > G. V. HULSE, Senior Sanitary Inspector.

PUBLIC HEALTH DEPT.,

IRWELL PLACE, ECCLES. May, 1948.

# Report of the Senior Sanitary Inspector

.

# HOUSING.

# Statistics.

Number of new houses erected during the year :	
(a) Total (inc. numbers given separately under (b) (temp	
(i) By the Local Authority	
(ii) By other Local Authorities	
(b) With State Assistance under the Housing Acts :	
(i) By the Local Authority (temp	
(ii) By other bodies or persons	—
1. Inspection of Dwelling Houses during the year :	
(i) (a) Total number of Dwelling Houses inspected for housing defects (under Public Health of	
Housing Acts)	530
(b) Number of inspections made for the purpo	se 530
(ii) (a) Number of Dwelling Houses (including und	
sub-head (i) above) which were inspected an recorded under the Housing Consolidation	
Regulations, 1925	
(b) Number of inspections made for the purpo	
(iii) Number of Dwelling Houses found to be in a sta	
so dangerous or injurious to health as to be uni	
for human habitation	
(iv) Number of Dwelling Houses (exclusive of the referred to under the preceding sub-head) four	nd
not to be in all respects reasonably fit for huma	
habitation	
2. Number of defective Dwelling Houses rendered fit consequence of informal action by the Local Authorit	
or their Officers	
3. Action under Statutory Powers during the year :	
(A)—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :	ne
(i) Number of Dwelling Houses in respect of which	ch
notices were served requiring repairs	
(ii) Number of Dwelling Houses which were rendered fit after service of formal notices :	ed
(a) By Owners	77
(b) By Local Authority in default of owners	—

(B)—Proceedings under Public Health Act : (1) Number of Dwelling Houses in respect of which notices were served requiring defects to be remedied .. .. .. .. .. 106 .. .. .. .. (2) Number of Dwelling Houses in which defects were remedied after service of formal notices : (a) By Owners .. .. .. .. .. .. .. 46 (b) By Local Authority in default of owners ... (C)--Proceedings under Sections 11 and 13 of the Housing Act, 1936 : (1) Number of Dwelling Houses in respect of which Demolition Orders were made .. .. .. 2 (2) Number of Dwelling Houses demolished in pursuance of Demolition Orders.. .. .. .. 6 The total number of houses and flats in the Borough is

The following table gives the number of houses built and the number demolished for the years 1926 to 1947 inclusive. In addition, there are 13 re-constructed temporary buildings at the Gun Site, Chatsworth Road, used for housing 18 families. Five existing houses were converted into 11 flats, and one large house was converted into 12 flatlets for elderly ladies.

12,765.

Year.	Houses built by Local Authority	Houses built by Private Enterprise	Houses Demolished.
1926	72	36	15
1927	19	37	24
1928	78	46	69
1929	137	16	34
1930	26	3	29
1931	21	68	40
1932		69	14
1933	12	55	20
1934	112	85	68
1935	1	234	46
1936	82	251	76
1937		202	28
1938	2	294	10
1939	158	224	34
1940	100		49
1941			62
1942		and the street	02
1942	_	_	8
1044			10
10.15	and the state of the		5
1010	34	8	4
10.15	97		23
1947	97	. 9	20
TOTAL	851	1637	668

72

# Sanitary Administration.

3,233 inspections were made, 6,674 defects or nuisances discovered, and 4,726 defects or nuisances abated, involving 3,696 re-inspections. In carrying out this work 2,663 informal notices and 877 Statutory Notices were served, and 290 owners were interviewed.

The following is a list of the Statutory Notices served during the year :---

Section 45 of the Public Health Act, 1936 ... 24 Section 93 of the Public Health Act, 1936 ... 326 Section 75 of the Public Health Act, 1936 ... 207 Section 39 of the Public Health Act, 1936 ... 12 Section 9 of the Housing Act, 1936 ... ... 307 Section 103 of the Public Health Act, 1936 ... 1

#### Sanitary Conveniences.

The number and variety of Sanitary Conveniences in use at the end of the year were as follows :---

Fresh-water	flushed	closets	 	15,834
Waste-water	flushed	closets	 	46
Fresh-water	flushed	latrines	 	83
Pail closets			 	43
Dustbins .				13,690
Baths			 	8,439

### Water Supply.

The Manchester Corporation gave a continuous and adequate supply of water during the year. There was no occasion for restriction in its use by house-holders.

352 complaints of waste water due to burst pipes and defective fittings were made to the Waterworks Department.

### Eradication of Bed Bugs.

Number	of	hou	ses fou	ind t	o be	infe	sted	:	
		(a)	Counc	il ho	uses				6
		(b)	Other	hous	es				37

In all cases the Local Authority carried out disinfestation by spraying with Zaldecide.

#### Offensive Trades.

The only premises under this heading in the Borough are four rag and bone dealers and one tripe boiler.

## Theatres and Cinemas.

There are six such places of entertainment in the Borough. These were inspected during the year and seven defects were found and remedied.

## Dairies and Cowsheds.

There are four cowkeepers registered in the Borough.

Two licences were issued under the Milk (Special Designation) Order, one a licence to pasteurise milk and one a dealer's licence to bottle Tuberculin Tested milk.

The number of inspections made in connection with Dairies, Cowsheds and Milkshops was 59.

# Stables and Piggeries.

There are 20 stable premises and 21 premises where pigs are kept.

#### Shops Acts.

There are approximately 893 shops of various kinds in the Borough.

# Mortuary.

The Mortuary was used on 42 occasions for the receiption of bodies.

## Canal Boats.

There were no inspections of Canal Boats during the year. The boats delivering coal to the Wharfs here are day-boats and are not occupied by any person. The other traffic on the Canal consists of those boats passing through the district without stopping.

# FACTORIES ACT, 1937.

# Inspections for purposes of Provisions as to Health

(including Inspections made by Sanitary Inspectors).

		Number	Numb	Occupiers		
Premises (1)	Line No. (2)	on Register (3)	Inspec- tions. (4)	Written Notices. (5)	prose- cuted. (6)	
(1) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	1	56	64	6		
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	2	114	146	15	_	
(3) Other premises in which Section 7 is en- forced by the Local Authority (excluding out- workers' premises)	3	29	20			
TOTAL		199	230	21	-	

# Cases in which Defects were found.

(If Defects are discovered at the premises on two, three or more separate occasions, they should be reckoned as two, three or more cases).

		Numbe	Number of cases in which			
Particulars. (1)	Line No. (2)	Found.	Remed. (4)	Refer To H.M. In- spector (5)	By H.M. In- spector (6)	prose- cutions
Want of cleanliness	4	6	6			-
Overcrowding	5	-			-	-
Unreasonable temperature	6					
Inadequate ventilation	7					- 1
Ineffective drainage of floors Sanitary conveniences :	8	-		-	-	-
(a) insufficient	9	3	2		3	-
(b) unsuitable or def'tive	10	12	12	1 1 1 1 1 1 1		-
(c) not separate for sexes Other offences against the Act (not including offences	11	-	-	-	-	-
relating to out-work)	12	4	3	-	-	-
TOTAL		25	23		3	_

There are 37 out-workers in the Borough.

# FOOD INSPECTION.

# Food Surrendered.

Luncheon Meat, Chopped Ham, etc	26 tins
Ox Tongue (tinned)	14 lbs.
Stewed Steak	53 tins
Soups	79 tins
Peas	255  tins
Beans	245 tins
Meat and Vegetable Ration	9 tins
Tinned Fruits	367 tins
Sardines, Pilchards, Herrings	170 tins
Salmon	40 tins
Lobster and Crayfish	3 tins
Tomato Puree	40 lbs.
Milk (evaporated)	786 tins
	45 tins
Milk (M.S.C.)	8 tins
Jams (tinned)	25 lbs.
Marmalade (tinned)	41 lbs.
Tomatoes	21 tins
Carrots	253 tins
Beetroot	2 tins
Sausage	18 tins
Orange Juice	13 tins
Dates (6 oz. boxes)	56 tins
Prunes	
Barley Flakes (sent for animal feeding)	54 lbs.
Self Raising Flour (sent for animal feeding)	39 lbs.
Household Milk (sent for animal feeding)	64 lbs.
Smoked Haddock	10 lbs.
Livers	24 lbs.

# Registration of Premises for the Manufacture and Sale of Ice Cream and Preserved Foods.

LANCASHIRE COUNTY COUNCIL (RIVERS BOARD & GENERAL POWERS) ACT, 1938.

The following is a list of the types and number of premises for which certificates have been granted under the above Act :

Manufacture of Ice Cream		10
Sale of Ice Cream		34
Manufacture of Sausages		5
Manufacture of Sausages and Prese	rved	
Meat		15
Manufacture of Preserved Meat		
Manufacture of Preserved Fish		34
Hawkers		3

# Inspections.

Bakehouses	119
Food Preparing Establishments	87
Fish Friers	111
Milkshops and Dairies	78
Cowsheds	12
Butchers' Premises	53
Marine Store Dealers	15
Factories	210
Stables and Piggeries	85
Out-Workers' Premises	18
Houses let in lodgings	15
Schools, Sanitary Conveniences	263
Theatres and Cinemas	10
Test applied to Drains	278
District Inspection of Houses	3,493
Re-inspection of Nuisances, etc	3,696
Visits in cases of Infectious Disease	176
Visits re Shops Acts	112
Owners and Contractors seen	354
Visits re suitability of tenants for Corporation	
houses	236
Visits re Rats and Mice	175
Food Enforcement	16
Houses Measured	4
Ice Cream Shops	54
Food Inspections	173
Smoke Observations	29
Offices	4

# Nuisances and Other Work.

House drains, choked and defective	113
Houses re-drained	
Defective ventilating shafts to drains	3
Defective guillies	35
Soil pipes defective	15
Downspouts disconnected from drains	
Water closets defective	42
Various defects in water closets	156
Defective waste-water closets	4
Defective pail closets	
Buildings obstructive to light and air	
Reports to Surveyor	
Defective dustbins and lids	

Want of pointing of house walls	160
Dampness of house walls	54
Defective chimney stacks and pots	71
Defective paving of yards and passages	107
Defective eaves-gutters and spouting	487
Defective bath and lavatory waste pipes	8
Defective roofs	411
Defective house floors	167
Defective slopstone waste pipes	72
Defective slopstones	14
Defective plastering of house and ceiling walls	496
Defective washboilers	22
Defective brickwork of washboilers	14
Defective window frames, etc	200
Defective sashcords to windows	154
DC II C I I	139
Waste of water (reported to the Manchester	100
	352
Corporation)	002
Dirty gullies	8
Dirty yards	0
Dirty closets	8
Dirty houses	1
Dirty bedding	46
Verminous houses	40
Houses overcrowded	
Houses let in lodgings-defects in	-
Van dwellings overcrowded	
Van dwellings without proper sanitary accom-	
modation	
Van dwellings-water supply	
Van dwellings-receptacles for refuse	
Defective manure middens	1
Accumulations of manure or rubbish	32
Want of proper storage for garbage, etc	1
Keeping fowl, etc., so as to be a nuisance	1
Ice-cream shops, defects in	
Workshops, etc., requiring cleansing and lime-	
washing	5
Insufficient W.C. accommodation in factories	
and workshops	3
Defective sanitary accommodation in factories	
and workshops	5
Workshops, defects in remedied	$\frac{3}{7}$
Theatres and cinemas, defects in	7
Milkshops and cowsheds requiring limewashing	-
Milkshops and cowsheds, defects in	9
Bakehouses requiring limewashing	3

Bakehouses, defects in	7
Fried fish shops requiring limewashing, etc	4
Fried fish shops, accumulation of offal	
Piggeries requiring limewashing	
Various defects in piggeries	2
Stables requiring limemething	
Stables requiring limewashing	4
Unregistered houses let in lodgings	
Want of pointing around doors and window	
frames	93
Defective yard walls:	71
Defective brickwork around slop waste pipes	14
Defective brickwork of house walls	81
Defective stone sills to windows	44
Windows not made to open	22
No permitted number in Rent Book	33
Butchers' Shops-defects in	5
Shops Acts-various defects in	5
TT	99
Want of proper lighting and ventilation	7
No proper food store	
No washing accommodation provided	1
Insufficient cooking facilities	
Miscellaneous	352
	00.

# Contagious Diseases of Animals.

No report was received during the year of suspected disease amongst cattle in the Borough.

# **Public Sanitary Conveniences.**

The cleaning and maintenance of the Public Conveniences is vested in the Public Health Committee.

The following is a list of the Conveniences cleansed and maintained by the Department :---

	Accommodation	Accommodation
Situation.	for Females.	for Males.
Bus Station, Lane End	6 W.C.'s	3 W.C.'s and 6 Urinal Stalls
Trafford Road	3 W.C.'s	2 W.C.'s and 3 Urinal Stalls
Peel Green	3 W.C.'s	2 W.C.'s and 2 Urinal Stalls
Winton Library	3 W.C.'s	2 W.C.'s and 3 Urinal Stalls
Cab Stand, Wellington Rd.	Nil	3 Urinal Stalls
Barton Bridge, Barton Lane	Nil	4 Urinal Stalls
Patricroft Bridge	Nil	5 Urinal Stalls
Waggon & Horses, corner		
· of New Lane		4 Urinal Stalls
Monton Green		4 Urinal Stalls

#### House Refuse Collection.

The improvement in the collection of House Refuse was continued during the year. The labour position improved a little, but difficulty was experienced in obtaining casual labour to work during the period of annual holidays. One new S.D. Freighter was delivered at the end of October. The position with regard to the delivery of dustbins has improved.

The number of loads of refuse and salvage removed during the year was 9,763, as compared with 9,457 during 1946, the weight of refuse being 14,976 tons 19 cwts. 3 qrs. as compared with 14,974 tons 3 cwts. for 1946.

There are six S.D. Freighters engaged in the collection of refuse, and one Dodge Waggon which is used for the collection of kitchen waste. The following is a list of the vehicles, the dates purchased, and the cost :—

No.	5.		 1934	 	 £632
No.	1.		 1935	 	 £735
No.	2.		 1936	 	 £552
No.	4.		 1937	 	 £562
No.	6.		 1939	 	 £615
No.	3.		 1947	 	 £888

The types and value of material salvaged during the year are given herewith. The figures have been supplied by the Manager of the Sewage Farm and Salvage Works :—

				£	s.	d.
Waste Paper			1	,302	6	6
Ferrous Metals Non-Ferrous Metals			1	00	19	0
Non-Ferrous Metals				44	10	4
Baled Tins				277	13	9
Textiles						
Bones				26	3	2
Bottles						
Broken Glass	• •	• •		49	5	9
Total			£1	,903	19	6

The Department supplied 937 Dustbins at a cost of £1,174. 11s. 3d. to the owners.

### Kitchen Waste.

The amount of Kitchen Waste collected and sold during the year was 152 tons 12 cwts. 3 qrs. and the income was £246. 1s. 1d. compared with 272 tons 9 cwts. in 1946 and an income of £439. 7s. 2d.

There has been a decline in the collection of Kitchen Waste since 1944, a large portion finding its way into dustbins, and in many cases it is placed at the back of the domestic fire to help out the fuel.

During September and October the kitchen waste bins were withdrawn, on the advice of the Medical Officer of Health, owing to the warm weather and the prevalence of flies.

Below is given the amount of Kitchen Waste collected each year since the work was commenced in December, 1942 :---

		WE	IGH	т.	С	OST.	
		Τ.	c.	q.	£	s.	d.
1942	(1 month)	9	5	1	16	4	2
1943		351	16	3	615	14	3
1944		462	5	1	750	6	2
1945		408	18	2	659	7	7
1946		272	9	0	439	7	2
1947		152	12	3	246	1	1
	1	,657	6	6	£2,727	0	5

The amount collected and sold each month is given below

	Τ.	c.	q.	£	s.	d.
January	19	11	3	31	11	8
February	10	12	0	17	1	10
March	9	13	0	15	11	3
April	11	15	0	18	18	11
May	14	3	0	22	16	4
June	20	2	0	32	8	3
July	19	6	0	31	18	7
August	16	15	0	27	0	2
September	4	0	0	6	0	0
October	. 4	0	0	6	0	0
November	7	14	0	12	8	9
December	15	1	0	24	5	4
	152	12	3	£246	1	1

81

## Rodent Control.

The number of complaints dealt with during the year was 104, of which 25 were complaints of mice. In 15 cases no trace could be found of rats or mice. In 3 cases the infestations were due to defective drains.

NUL AND ALL'S

The estimated number of rats destroyed during the year was 1,241 and of mice 156, at a charge to the occupiers of the premises of £134. 0s. 11d.

The total number of rats destroyed since the work commenced in 1943 was 14,166 and mice 1,020, the amount charged to occupiers of premises for this work being £663, 10s. 1d. Comparative Summary of Work done during Nine Years ended 31st December, 1947.

Year.	Weight o	Weight of ashbin refuse	e removed.	Total Weight of refuse removed.	Average cost per ton.	Cost of Manual Labour.	Cost of Haulage.	Total Cost.
	Carts T. C. Q.	Fords T. C. Q.	S.D. Freights T. C. Q.	т. с. q.	s. d.	£ s. d.	£ 8. d.	£ 8. d.
1939	1	1048 13 0	9877 19 2	10926 12 2	10 0	3011 15 4	2429 4 5	5440 19 9
1940	1	231 5 0	10461 5 0	$10692 \ 10 \ 0$	10 9	3223 0 2	2525 8 10	5748 9 0
1941	1	252 6 0	11570 15 1	11823 1 1	9 2	2982 5 3	2443 5 2	5425 10 5
1942	828 12 3	402 3 3	13051 7 0	14282 3 2	8 5	3406 2 11	2626 1 8	6032 4 7
1943	152 7 1	1	12845 5 0	12997 12 1	9 7	3519 15 7	2709 3 2	6228 18 9
1944	416 10 3	١	10104 9 1	10521 0 0	13 5	3912 17 1	2652 2 1	6564 19 2
1945	790 9 0	379 14 2	10630 7 2	11800 11 0	12 1	4206 14 0	2916 16 5	7123 10 5
1946	826 2 0	1	14148 1 2	14974 3 2	11 7	5476 9 3	3220 9 6	8696 18 9
1947	387 0 3	I	14589 19 0	14976 19 3	12 2	6041 15 2	3042 11 9	9084 6 11
		The second se					the second se	and the second s

83



