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1930

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## **County Borough of Blackpool.**



# Annual Report

For the Year 1930,

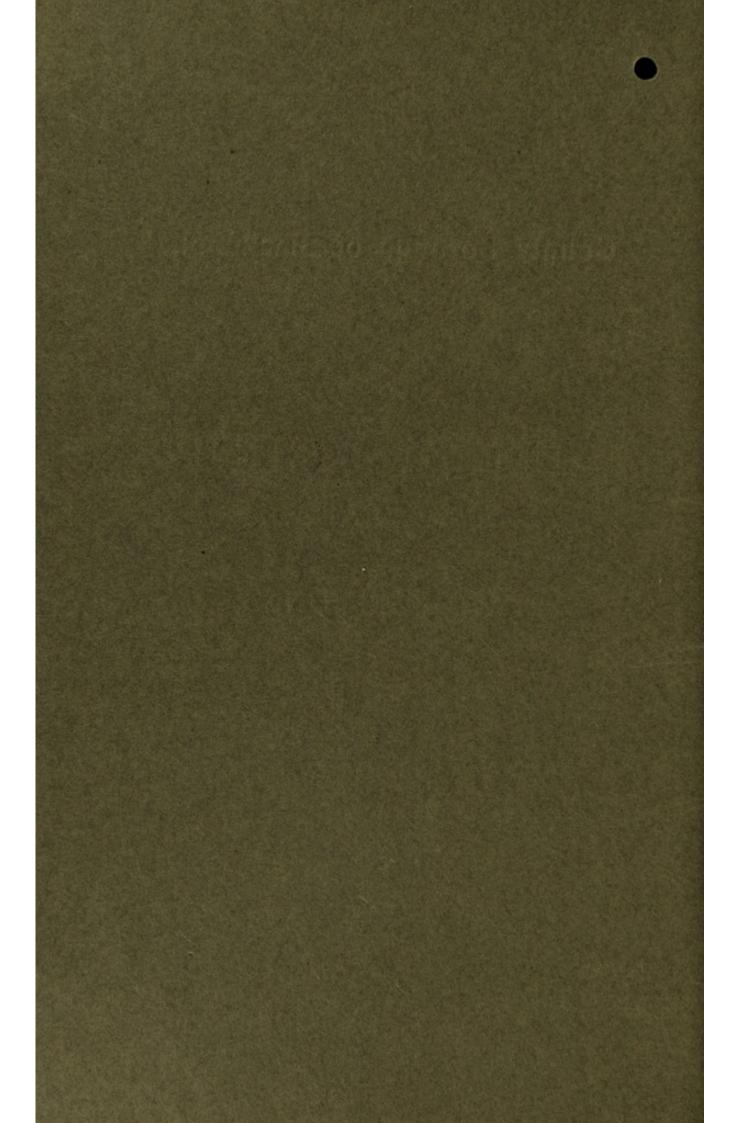
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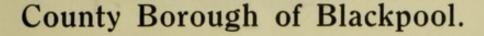
# E. W. REES JONES,

M.D., D.P.H.

Medical Officer of Health and Medical Superintendent of the Infectious Diseases Hospital.









# **Annual Report**

For the Year 1930,

By

# E. W. REES JONES,

M.D., D.P.H.

Medical Officer of Health and Medical Superintendent of the Infectious Diseases Hospital.



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#### HEALTH COMMITTEE.

Mr.	Alderman	P. J. TOMLINSON, J.P. (Mayor from November, 1930).
,,	Councillor	G. W. GATH, J.P. (Mayor to November, 1930).
,,	Alderman	HILL, J.P. (Chairman to November, 1930).
,,	,,	BROWN, J.P.
,,		MATHER, J.P.
,,	Councillor	ANDERSON (From November, 1930).
,,	,,	BAILEY, J.P. (Vice-Chairman from November, 1930).
,,		COOP (To November, 1930).
,,		FURNESS (From November, 1930).
,,		Holt, J.P.
		MASTERSON.
,,	••	MILLINGTON, J.P. (Vice-Chairman to November, 1930); (Chairman from November, 1930).
,,	,,	Pye (From November, 1930).
	,,	QUAYLE.
,,	,,	ROUND (From November, 1930).
,,	,,	ROBINSON (From November, 1930).
	,,	Smith.
,,	,,	STEVENSON.

#### HEALTH GENERAL SUB-COMMITTEE.

Mr. Alderman P. J. TOMLINSON, J.P. (Mayor from November, 1930).

- Mr. Councillor G. W. GATH, J.P. (Mayor to November, 1930).
- Mr. Alderman HILL, J.P. (Chairman to November, 1930).
  - " BROWN, J.P.

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" Councillor BAILEY, J.P. (Vice-Chairman from November, 193	per, 1930).	Novem	from N	hairman i	Vice-(	.P. (	BAILEY,	Councillor	
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- ,, FURNESS (From November, 1930).
- " MILLINGTON, J.P. (Vice-Chairman to November, 1930); (Chairman from November, 1930).

" QUAYLE.

,, STEVENSON (From November, 1930).



#### MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Mr. Alderman P. J. TOMLINSON, J.P. (Mayor from November, 1930).

" Councillor G. W. GATH, J.P. (Mayor to November, 1930).

" Alderman HILL, J.P. (Chairman to November, 1930).

" " BROWN, J.P.

,, Councillor BAILEY, J.P. (Vice-Chairman from November, 1930).

" FURNESS (From November, 1930).

" Holt, J.P.

", MILLINGTON, J.P. (Vice-Chairman to November, 1930); (Chairman from November, 1930).

Mrs. Chew.

...

..

,,

Mrs. A. Oliver. Miss Black.

#### TUBERCULOSIS SUB-COMMITTEE.

Mr. Alderman P. J. TOMLINSON, J.P. (Mayor from November, 1930).

" Councillor G. W. GATH, J.P. (Mayor to November, 1930).

" Alderman HILL, J.P. (Chairman to November, 1930).

,, ,, BROWN, J.P.

" Councillor BAILEY, J.P. (Vice-Chairman from November, 1930).

" " FURNESS (From November, 1930).

" " Holt, J.P.

", ", MILLINGTON, J.P. (Vice-Chairman to November, 1930); (Chairman from November, 1930).

Dr. H. T. BARTON.

Mr. J. H. HURSTFIELD.



#### OFFICERS OF THE HEALTH DEPARTMENT.

- E. W. REES JONES, M.D., D.P.H., Medical Officer of Health.
- B. F. BARTLETT, M.R.C.S., L.R.C.P., Assistant Medical Officer of Health, Tuberculosis Officer, Venereal Diseases and Maternity and Child Welfare Medical Officer.

TOM WALKER, M.R.C.V.S., Veterinary Surgeon (part time).

T. R. HODGSON, M.A., F.I.C., F.C.S., Public Analyst (part time).

†‡ H. PRIESTLEY, Senior Sanitary Inspector.

† J. TOLMAER, Assistant Sanitary Inspector.

† T. COOKSON, Assistant Sanitary Inspector.

† A. E. FITTON, Assistant Sanitary Inspector.

†‡ E. SHUTTLEWORTH, Assistant Sanitary Inspector.

- † E. SMITH, Assistant Sanitary Inspector.
- W. MOISTER, Pupil Sanitary Inspector.
- †‡ H. V. DIXON, Meat Inspector.
- †‡ A. COUPE, Junior Meat Inspector.
- †‡ F. Roworth, Superintendent, Public Abattoirs.

§ Miss E. M. PROCTER, Matron, Infectious Diseases Hospital.

- § " E. B. PENDRED, Tuberculosis Nurse.
- " R. J. SAUVAIN, Health Visitor.
- " G. SYKES, Health Visitor.—Resigned February, 1930.
- o- " C. HILL, Health Visitor.—Appointed 8th December, 1930.
- o- " J. GIBSON, Health Visitor.
  - § " B. MCCORMACK, Infectious Diseases Nurse.
- §- " M. PARKER, District Nurse.
- " A. B. WHITE, District Nurse.
- o " L. ROBINSON, District Nurse.

EDWARD SMITH, Chief Clerk.

† Holds Sanitary Inspector's Certificate, Royal Sanitary Institute.

‡ Holds Meat Inspector's Certificate, Royal Sanitary Institute.
 – Holds Central Midwives' Board Certificate.

Folds Central Midwives Board Certificate § Holds Certificate—General and Fever.

o Holds Certificate—General, Queen's Nursing Certificate.

o- General Trained.

#### PUBLIC VACCINATION :

Dr. H. E. COCKCROFT, Public Vaccinator, Northern Area. Dr. R. THURSZ, Public Vaccinator, Southern Area. J. A. JUMP, Vaccination Officer, Southern Area. G. N. REES, Vaccination Officer, Northern Area.



## General Statistics.

Area (exclu	sive of foreshore)					 5,216 acres
Area of fore	shore and Crown	Lands				 1,966 ,,
Number of	inhabited houses					 27,174
Number of	empty houses					 759
Population	(Census, 1921)					 99,640
Do.	(corrected by Reg	gistrar	Gener	ral for	1921)	 73,800
Do.	( do.		do.		1922)	 74,050
Do.	( do.		do.		1923)	 75,130
Do.	( do.		do.		1924)	 77,410
Do.	do.		do.		1925)	 80,750
Do.	do.		do.		1926)	 88,640
Do.	do.		do.		1927)	 93,160
Do.	do.		do.		1928)	 98,210
Do.	do.		do.		1929)	 99,800

(The estimated population for 1929 has been used in this report in accordance with a Memorandum received from the Ministry of Health.)

Rateable value : Borough Rate	 	 	£1,301,411
Sum represented by a penny rate	 	 	£5,000

Based on the assumption of a 99,800 population, the density of population of the whole town, and of each ward, is as follows :---

Bla	ckpool,	19.13 per acre.	
Bispham			 81.96
Warbreck		Tyldesley	 31.62
Claremont	66.85		 46.84
Talbot	67.77	Victoria	 16.31
Bank Hey	74.03	Waterloo	 8.13
Brunswick	59.77	Layton	 13.26
			18.15

The following Table gives the actual area and population for the town generally, and each of the wards :—  $\!\!\!-\!\!\!$ 

	Area in Acres.	Popu- lation.		Area in Acres.	Popu- lation.
Blackpool	 5,216	99,800	Foxhall	 141	11,557
Bispham		5,016	Tyldesley	 232	7,337
Warbreck	 388	5,046		 168	7,873
Claremont	 139	9,292	Victoria	 354	5,773
Talbot	 135	9,148	Waterloo	 643	5,233
Bank Hey	 98	7,255	Layton	 738 -	9,789
Brunswick	 137	8,189	Marton	 457	8,29

### Extracts from Vital Statistics.

						Total	М		F.
Births : Leg						999	49		506
Ille	gitima	te				86	43	3	43
Birth Rate							10	0.87 p	er 1,000
Deaths									1,359
Death Rate							1:	3.62 p	er 1,000
Number of v					quen	ce of chi	ld birtl	1:	
									1
(b)	From	other	causes						4
Infant Mort	ality p	er 1,00	0 births	s :—					
									64.5
Legitim									61.1
Illegitin	nate								104.6
Deaths from	Measl	es (all	ages)						9
Do.	Who	oping (	ough (a	ll ages)					2
Do.			inder 2						$\overline{5}$

(a) **Births.**—During the year 1,085 births were registered, including 15 in the Kirkham Workhouse. These, divided into sexes for the four quarters of the year are as follows :—

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total.
Males Females	$\begin{array}{c} 127\\ 143 \end{array}$	$\begin{array}{c} 135\\147\end{array}$	$\begin{array}{c}138\\136\end{array}$	$\begin{array}{c}136\\123\end{array}$	$536 \\ 549$
Total	270	282	274	259	1,085

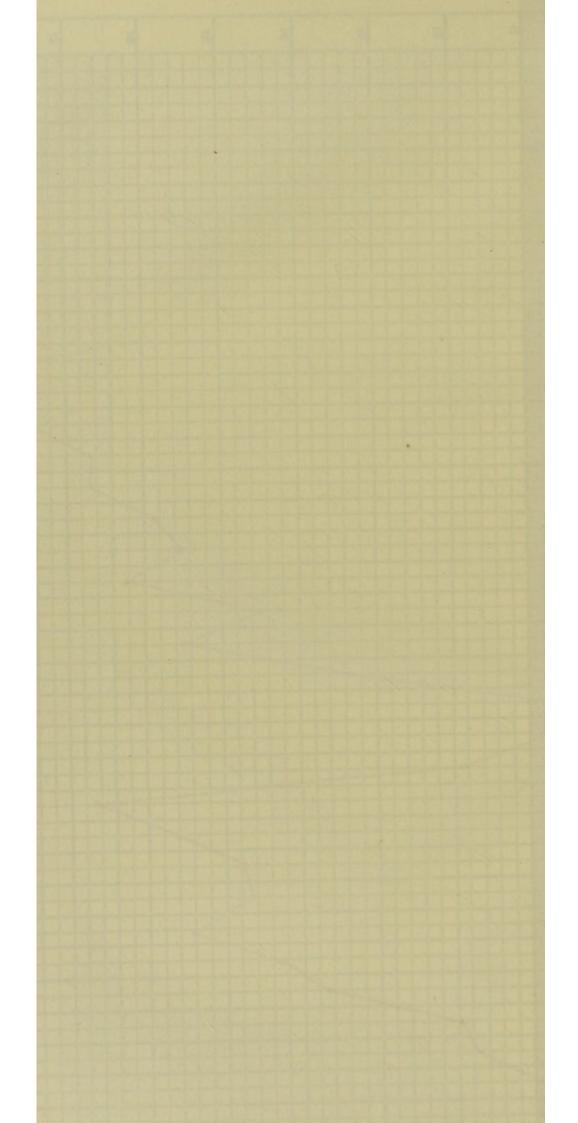
The birth rate for the year on the gross population was 10.87 per 1,000, and with the exception of the years 1917 or 1918, it is the lowest recorded rate in Blackpool. I have, in previous reports, offered some explanation of our low birth-rate by the fact that our proportion of married women of child-bearing age is small as compared with that of industrial towns.

The earliest recorded birth rate which I have of Blackpool is for the year 1878, when with a population of 13,000, there was a rate of 38.8 per 1,000. I have prepared a table based on the same lines as a table in the Annual Report of the Registrar General for the year 1907, in which the rate for 1878 is taken as a standard and is called 100, and the subsequent years are given as comparative percentages.

The chart facing this page will vividly reveal the fluctuations which have taken place in the birth rate, with its gradual downward tendency, with the exception of the years 1918, 1919 and 1920.

# BIRTH-RATES FOR THE YEARS 1897-1930

Birth- Rate.	ō	=	12	13	4	15	16	51	18	19	20	2	22	23	24	25	26	27	Birth
1897.								و و و و و			++++				HI		TH	THI	189
1898.																			189
1899.																			1899
1900.																			1900
1901.																			1901
1902.																			1902
1905.																			1903
1904.																			1904
1905.																			1905
1906.																			1906
1907.																			1907
1908.																			1908
1909.							P												1909
1910.								++++											1910.
1911.																			1911.
1912.																			1912
1913.																			1913.
1914.																			1914.
1915.																			1915
1916.						TH													1916.
1917.																			1917.
1918.							++++												1917.
1919.																			1919.
1920.	ŦŦ					╈╪╪╪╪		<del>     </del>											1919.
19 21.								****											
1922																			1921.
1923.					114			+++++											1922.
1924																			1923.
1925																			1924.
1926.																			1925.
1927.			1 m		+++++														1926.
1928.					1111														1927.
1929.																			1928.
1930.														++++					1929.
Birth- Rate.	5	=	5	ū	4	E	-		L			1111		1111	1111				1930
more.			10	r	4	ζi	6	17	ā	ē	20	2	22	3	24	22	26	27	Birth- Rate.



Year.	Birth Rate Blackpool.	Birth Rate Blackpool compared with rate for 1878 taken as 100.	Birth Rate England and Wales .	Birth Rate England and Wale compared with rate for 1878, taken as 100.
1878	38.8	100	35.6	100
1879	36.6	94.3	34.7	97.5
1880	34.0	87.6	34.2	96.1
1881	30.6	78.9	33.9	95.2
1882	30.0	77.3	33.8	94.9
1883	30.0	77.3	33.5	94.1
1884	29.8	76.8	33.6	94.3
1885	27.4	70.6	32.9	92.4
1886	25.9	66.8	32.8	92.1
1887	25.3	65.2	31.9	89.6
	24.5	63.1	31.2	87.6
1888				87.4
1889	26.5	68.3	31.1	
1890	23.7	61.1	30.2	84.8
1891	22.3	57.5	31.4	88.2
1892	24.0	61.9	30.4	85.4
1893	22.4	57.7	30.7	86.2
1894	23.9	61.6	29.6	83.1
1895	26.7	68.8	30.3	85.1
1896	25.7	66.2	29.6	83.1
1897	26.25	67.7	29.6	83.1
1898	27.74	71.5	29.3	82.3
1899	27.34	70.5	29.1	81.7
1900	25.27	65.1	28.7	80.6
1901	22.90	. 59.0	28.5	80.1
1902	23.96	61.8	28.5	80.1
1903	22.97	59.2	28.4	79.8
1904	21.53	55.5	27.9	78.4
1905	20.30	52.3	27.2	76.6
1906	17.91	46.2	27.1	76.1
1907	18.09	46.6	26.3	73.9
1908	17.54	45.2	26.2	73.6
1909	16.70	43.0	25.6	71.9
1910	16.74	43.1	24.8	69.7
1911	15.97	41.2	24.6	68.5
1912	15.50	39.9	23.8	66.9
1913	16.25	41.9	23.9	67.1
1913	16.25	37.3	23.9	66.9
1914	15.54			
1915		40.0	21.8	61.2
	13.40	34.5	21.6	60.7
1917	10.64	27.4	17.8	50.0
1918	10.63	27.4	17.7	49.7
1919	11.84	30.5	18.5	52.0
1920	16.71	43.1	25.4	71.3
1921	15.61	40.2	22.4	62.9
1922	14.80	38.1	20.6	57.8
1923	14.76	38.0	19.7	55.3
1924	15.43	39.7	18.8	52.8
1925	14.36	37.0	18.3	51.4
1926	13.65	35.2	17.8	50.0
1927	11.85	30.5	16.7	46.9
1928	11.53	29.7	16.7	46.9
1929 1930	10.94	27.1	16.3	45.7
	10.87	27.9	16.3	45.7

There were 86 illegitimate children born during the year, including 12 at Kirkham Workhouse. This figure gives the following rates :---

- (1) 0.86 per 1,000 of the inhabitants.
- (2) 3.60 per 1,000 females of conceptive age.\*
- (3) 7.92 per cent. of the total births.

#### \*Calculated on there being 23,869 females at child-bearing age—20 to 45.

These figures for the past few years have been as follows :----

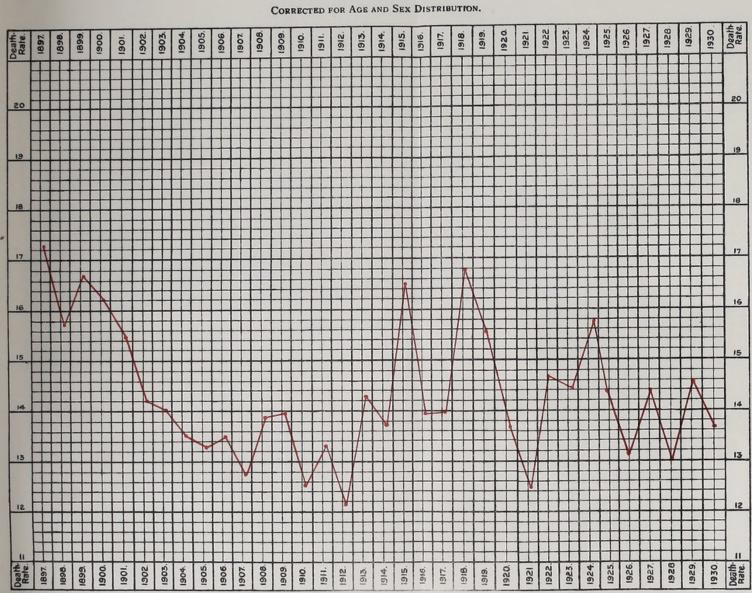
1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919
0.94	0.98	0.76	1.13	1.05	1.46	1.18	1.17	1.44	1.39	1.78
3.93	4.13	3.18	4.76	4.40	6.10	4.96	4.92	6.02	5.82	7.47
8.61	8.41	6.43	8.35	7.32	9.45	8.02	7.93	9.20	8.31	14.98
1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907
1.23	1.18	1.18	1.03	1.31	1.45	1.29	1.13	1.35	1.14	1.08
5.14	4.95	4.96	4.17	5.48	6.07	5.27	4.61	5.50	4.64	4.39
11.52	8.81	7.62	6.87	8.05	9.35	8.10	6.76	8.09	6.49	5.96
	0.94 3.93 8.61 1917 1.23 5.14	$\begin{array}{cccccc} 0.94 & 0.98 \\ 3.93 & 4.13 \\ 8.61 & 8.41 \\ \\ 1917 & 1916 \\ 1.23 & 1.18 \\ 5.14 & 4.95 \\ \end{array}$	$\begin{array}{ccccccc} 0.94 & 0.98 & 0.76 \\ 3.93 & 4.13 & 3.18 \\ 8.61 & 8.41 & 6.43 \\ \end{array}$ $\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$						

The second figure, *i.e.*, the proportion of illegitimate births to women at conceptive ages, is the one which represents best the progress of illegitimacy in the country, and it shows a considerable improvement on most of the previous years.

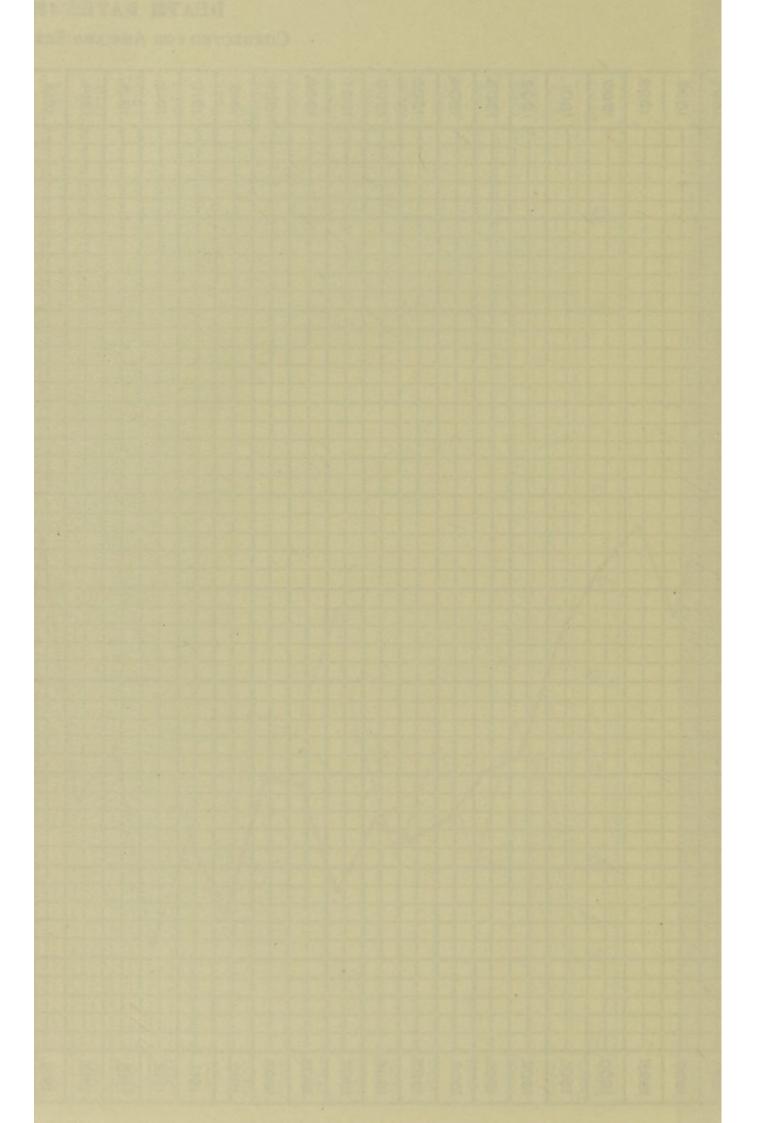
(b) **Deaths.**—The number of deaths of Blackpool residents which occurred during the year was 1,359. This figure includes the deaths of 81 persons in the Kirkham Workhouse, and of 75 persons in areas outside Blackpool.

The deaths, divided into sexes for the four quarters of the year, were as follows :---

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total.
Males Females	$\begin{array}{c} 173\\223\end{array}$	180 171	$\frac{130}{133}$	170 179	653 706
Total	396	351	263	349	1,359



DEATS RATES 1897-1930.



The death rate for the year was 13.62 per 1,000 of the population and the progress of the rate year by year will be seen on reference to the chart facing this page. The comparison of this rate with other portions of the country is as follows :—

England and Wales	 		11.4 per 1,000	
107 Great Towns	 		11.5 ,,	
159 Smaller Towns	 	·	10.5 ,,	
London	 		11.4 ,,	
Blackpool	 		13.6 ,,	

The rate of 13.62 is, however, based on a supposed population of 99,800. At the census of 1921 the average number of persons per house was 4.5. There is no reason to believe that this average is any lower than it was. Assuming, however, that it has remained the same, then, as the number of inhabited houses is 26,585, the population is at least 122,283, and a death-rate calculated on this figure would be 11.1 per 1,000.

The percentage of the deaths in the various age groups, with similar figures for a series of previous years are as follows :---

Age Period.	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917
Under 12 months 1 and under	5.2	4.2	6.2	5.5	7.6	9.0	7.0	7.1	6.9	8.4	8.5	7.72	7.89	6.9
5 years 5, and under	1.6	2.2	2.3	3.2	1.7	3.2	3.9	1.7	2.6	2.9	2.6	2.86	5.29	3.0
65 years 65 years and		45.2	45.8	46.9	47.8	47.5	47.0	48.1	48.6	45.1	48.9	52.43	55.37	50.3
over	48.3	48.4	45.7	44.4	42.9	40.3	42.1	43.1	41.9	43.5	39.9	37.00	31.45	39.7

It will be noted from the above table that the percentage of deaths under five years is slightly higher than the previous year, but compares favourably with a series of preceding years. The percentage of deaths over 65 years is increasing, and it may be said that nearly one-half our population lives to be 65 years or over. The various activities of the Sanitary Authority as detailed in this report are producing a marked effect in prolonging life. The observations which I made in my last report are equally applicable this year and they were as follows :—" In other words, people are living longer, and the average age at death is higher." It may reasonably be anticipated that the supervision of children in their pre-school days, which is now an integral part of the work of the Health Department, will produce a still more marked effect in improving the health of these children and in reducing still further their adverse vital statistics. I have received from the Registrar General's office a list of the causes of deaths divided into sexes and age periods. These numbers differ somewhat from the compilation kept in my office, owing to the fact that the Registrar General's figures cover the period of a calendar year, whereas it is found more convenient locally to deal with 52 weekly returns, and the mode of classification differs greatly with the different persons allocating the causes and specifying which of the certified causes should be taken as the main one.

The list which I have received from the Registrar General is as follows :---

CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M F	$648 \\ 695$	$\frac{45}{25}$	6 5	47	6 10	24 16	67 65		195 189	89 167
1 Enteric fever	M F		Ξ		-		-	=	-	-	
2 Small pox	M F	-		-	_	-	-	-	-		-
3 Measles	M F	5 4	- 2	2 1	-2	1		-		-	
4 Scarlet fever	M F	-	_	-	11	-		=	-	-	-
5 Whooping cough	M F	2 1	2 1	-	-	_	-		11		
6 Diphtheria	M F	3 4		-		2 3	_1	11	-		-
7 Influenza	M F	2 6	1	-		-	-	1	1 2	-1	-2
8 Encephalitis lethargica	M F	2 1	=	-	-	-	_1	-1	_1	-	-
9 Meninogococcal meningitis	M F	-1	-	-	-1	-		-	-	=	Ξ
10 Tuberculosis of respiratory system.	M F	37 18	-1	-	-	-	1 5	21 9	12 2	3 1	
11 Other tuberculous diseases.	M F	4 6		-2	=	-	3		1	-3	-
12 Cancer, malignant disease.	M F	81 111	_				2	$\frac{2}{13}$	41 63	$\frac{30}{25}$	8 8
13 Rheumatic fever	M F	1	_	_	-	-1	-	I	_1	-	

#### CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE COUNTY BOROUGH OF BLACKPOOL, 1930.



CAUSES OF DEATH.	Sex	All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—
14 Diabetes	M F	12 14	11	11		11		-1	4	5 6	3 3
15 Cerebral hæmorrhage, &c.	M F	$\frac{40}{52}$	-		11	_	=	-	11 13	20 20	9 19
16 Heart disease	M F	121     166	-	-	-	_1	_2	7 6	39 54	49 59	23 47
17 Arterio-sclerosis	M F	39 32			-		-	-	73	21 9	$\frac{11}{20}$
18 Bronchitis	M F	22 31	_2	N	1	_	-1	1	777	6 9	$6 \\ 12$
12 Pneumonia (all forms)	M F	48 24	_2	3	1	-1	3 1	9 3		10 4	3 4
20 Other respiratory diseases.	M F	8 2	_2	-	_	-	_1	-	3 1	2	-1
21 Ulcer of stomach or duodenum.	M F	7 2		-	14		-	4	2	1	
22 Diarrhœa , &c.	M F	6 6		1	-1	_	_	-1	_1	-1	-
23 Appendicitis and typhlitis.	M F	11 11	_	_	_		4	2 3		2 1	-4
24 Cirrhosis of liver.	M F	6 2		-	-	-	-	-1	3 1	3	
25 Acute and chronic nephritis.	M F	25 34	_		-	-		4			-3
26 Puerperal sepsis	M F	-1	K	-	-	_	-	-1	-	=	-
27 Other accidents and dis- eases of pregnancy and parturition.	M F	-3					-2	-1			-
28 Congenital debility and malformation premature birth.	M F	24 16			-	-	-	-	-		1 1
29 Suicide	M F	13 12	-	-	-		-1	34		34	
30 Other deaths from violence.	M F	28 13			_1	1	5	5 1			
31 Other defined diseases	M F	$     \begin{array}{c}       100 \\       121     \end{array} $		-2	2 1	1 3	32				
32 Causes ill-defined or unknown	M F	_1	-	-	-	11	-	-	1		

Tuberculosis was stated to be the cause of death in 66 instances viz.: 55 cases of Tuberculosis of the respiratory organs and 11 of Tuberculosis of other parts of the body. This figure is nine less than that for the previous year, but when the increase in population is borne in mind the actual death-rate from the disease is found to be definitely on the decline.

Cancer has again made its large toll upon our resident population, 199 deaths having been caused by this disease and its allied condition —Sarcoma. It is disappointing that we are still in the dark as to the causation of cancer, and until some light is thrown upon it, little can be done in the way of prevention. It will probably be found to be microbial in origin and we shall have to revise our opinions as to its infectivity. We may definitely dismiss the idea of any article of diet having an influence upon its cause or course.

On the instructions of the Health Committee the following advertisement appears quarterly in our local press, and pamphlets similarly worded are freely issued :—

#### COUNTY BOROUGH OF BLACKPOOL.

#### PUBLIC HEALTH DEPARTMENT.

#### CANCER.

Little is known of the "Cause of Cancer," but there is no indication that it is hereditary or infectious. There are no special "Cancer Houses," "Cancer Areas," or "Cancer Families."

One of the contributing causes of Cancer is prolonged irritation as for instance by broken teeth, short pipes, etc., causing Cancer of the tongue or lip. All sources of irritation of this or similar nature should, therefore, be avoided.

Cancer is usually painless in the early stages, and is sometimes painless throughout its course.

With regard to the treatment of Cancer, it cannot be too strongly emphasised that the success depends upon early recognition of the disease.

If diagnosed in its early stage and before the symptom of pain appears, complete cure can frequently be effected.

The following are some of the early signs of Cancer—and any person noting any of them should promptly place himself under medical treatment :—

- 1. A lump or swelling in a woman's breast after the age of 40 years.
- 2. Loss of blood other than at normal periods or after the change of life.
- 3. A wart, sore, or ulcer on the lower lip, tongue or inside of the mouth in a man over 45 years of age.

Persistent hoarseness.

5. Bleeding from the bowels after 45 years of age.

E. W. REES JONES, M.D.

Medical Officer of Health,

December, 1930.

BLACKPOOL.

The following table reveals the steady and continuous inroads made by the disease of  $\tt CANCER:-$ 

YEAR.	Number of Deaths.	Death Rate.	England and Wales.
1895	16	0.486	0.753
1896	17	0.464	0.762
1897	30	0.746	0.785
1898	22	0.484	0.799
1899	34	0.705	0.826
1900	47	0.937	0.820
1901	54	1.064	0.842
1902	47	0.901	0.844
1903	52	0.981	0.872
1904	41	0.755	0.877
1905	54	0.969	0.885
1906	54	0.946	0.917
1907	52	0.890	0.909
1908	51	0.854	0.923
1909	59	0.960	0.952
1910	46	0.765	0.967 .
1911	72	1.179	0.993
1912	69	1.111	.1.019
1913	92	1.433	1.064
1914	94	1.416	1.069
1915	85	1.323	1.121
1916	93	1.475	1.166
1917	103	1.655	1.210
1918	102	1.580	1.218
1919	108	1.591	1.145
1920	112	1.588	1.161
1921	128	1.734	1.215
1922	123	1.661	1.229
1923	133	1.770	1.267
1924	133	1.718	1.297
1925	144	1.783	1.336
1926	156	1.759	1.362
1927	156	1.578	1.376
1928	167	1.690	1.425
1929	182	1.824	1.437
1930	199	1.994	1.454

The number of deaths from Heart Disease, viz. : 229, was high, but the Pneumonia and Bronchitis figures were much on a par with previous years. The number of deaths from Accidental Cases, viz., 40, was high.

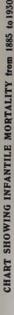
Authority	Estimated Civil Popula- tion.	Rate	Crude Death Rate 1,000 ation.	Infant Mortal- ity. per 1 birt		Tuberculosis Death Rate (all forms) per million population.
Blackpool Barrow-in-Furness Bolton Bootle Burnley Bury Liverpool Manchester Oldham Preston Rochdale Southport Warrington Wigan	$\begin{array}{c} 64,850\\ 181,500\\ 84,970\\ 100,200\\ 56,830\\ 879,657\\ 773,792\\ 142,500\\ 126,100\\ 90,900\\ 80,700\\ 79,400\\ 79,400\end{array}$	$\begin{array}{c} 10.9\\ 16.2\\ 13.3\\ 21.1\\ 13.4\\ 12.9\\ 21.5\\ 16.6\\ 14.5\\ 15.7\\ 13.7\\ 11.0\\ 19.5\\ 18.0 \end{array}$	$\begin{array}{c} 13.6 \\ 12.1 \\ 12.4 \\ 11.1 \\ 12.7 \\ 13.4 \\ 12.8 \\ 12.7 \\ 13.6 \\ 11.4 \\ 13.8 \\ 11.6 \\ 11.8 \\ 12.9 \end{array}$	$\begin{array}{c} 64.5\\ 72.1\\ 69.0\\ 79.0\\ 75.5\\ 69.0\\ 82.0\\ 78.7\\ 62.0\\ 73.0\\ 66.0\\ 74.2\\ 65.0\\ 108.0 \end{array}$	$\begin{array}{c} 4.6\\ 3.8\\ 5.17\\ 3.35\\ 4.5\\ 5.4\\ 3.97\\ 4.90\\ 5.2\\ 6.6\\ 9.6\\ 14.6\\ 3.2\\ 7.6\end{array}$	$\begin{array}{c} 661.3\\ 1017.7\\ 826\\ 1271\\ 900\\ 827\\ 1398\\ 1370\\ 975\\ 991\\ 690\\ 740\\ 1300\\\end{array}$

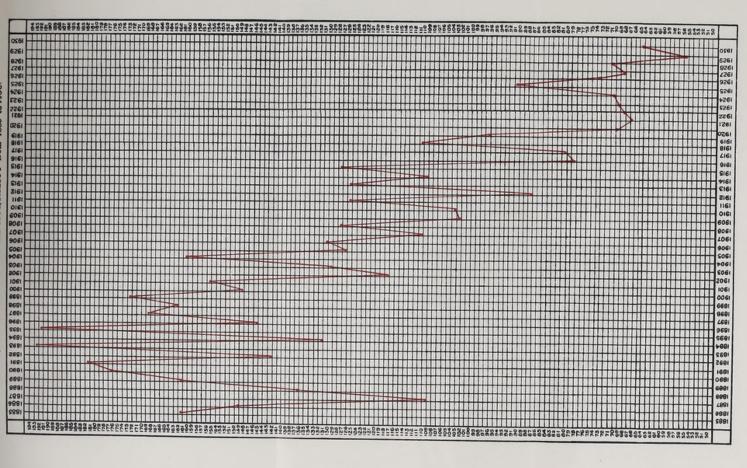
#### SUMMARY OF VITAL STATISTICS OF THE COUNTY BOROUGHS IN LANCASHIRE FOR 1930.

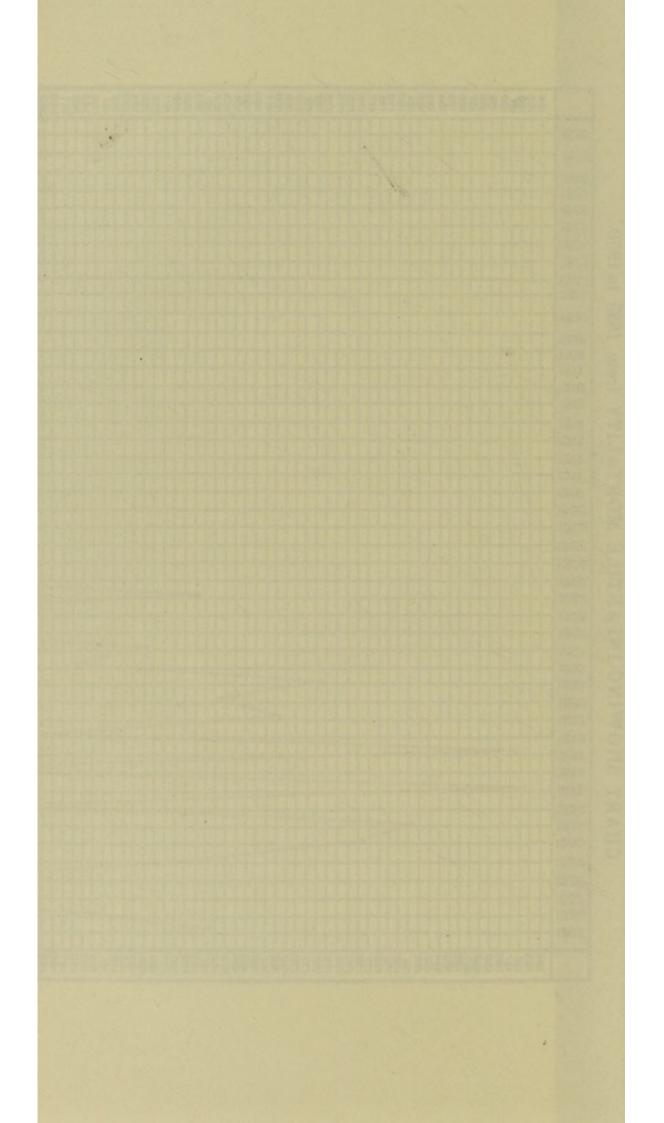
Of the 1,359 resident deaths in 1930 the causes of 1,208 or 88.9 per cent. were certified by medical practitioners. Inquests were held respecting 98 or 7.2 per cent., whilst the remaining 53 or 3.9 per cent., were uncertified.

The Ward statistics with regard to death rates are as follows :---

Wards	5.	Death Rate, 1930
Bispham		 16.3
Warbreck		 6.7
Claremont		 14.2
Talbot		 16.6
Bank Hey		 6.6
Brunswick		 11.7
Foxhall		 5.5
Tyldesley		 10.8
Alexandra		 12.9
Victoria		 20.1
Waterloo		 18.5
Layton		 9.7
Marton		 31.6







The observations upon the total number of deaths, which I made in my previous Annual Report, are applicable this year, and are as follows :—

The gross number of deaths, viz: 1,359 is lower than 1929. The constitution of the population of a health resort such as ours must of necessity differ from that of an industrial centre. We must expect a smaller proportion of young manhood and womanhood, a higher proportion of elderly persons and of persons seeking health, and must, therefore, be prepared for a larger number of deaths. It should also be borne in mind that the seasonal occupation, which entails strenuous work for a short period of the year, and a lenghty period of relative inactivity and unemployment, does not present the ideal condition of healthy life, and again contributes to a higher death rate.

**Infantile Deaths.**—Seventy children under the age of twelve months died during 1930 and the Infant Mortality was at the rate of 64.5 per 1,000 births. With the exception of the year 1929, when the rate was 55.8, this is the lowest figure which we have reached and we seem to be at a measureable distance from the figure at which we aim, viz : 50. The chart facing this page will reveal the fluctuations of the Infant Mortality figure for each of the years since 1885, and it will be seen that our present position is remarkably healthy as compared with some of the early years ; but we are still far from being satisfied. The frequent cause of Infantile Deaths in past years, viz : Diarrhœa, has largely ceased to operate, and our attention is drawn more to respiratory diseases as a cause of death, and to the necessity for preaching the doctrine of "Sunlight and Fresh Air." Our present housing conditions render adequate air space difficult to secure in many cases ; but much can be done to counteract overcrowding by freedom of ventilation.

Premature Birth, Congenital Malformations, Debility, &c., accounted for the large number of 39 deaths. It is not possible to suggest any common or general causation for this class of cases, and, therefore, it is not possible to suggest any general precautionary measures. These cases require more personal and individual supervision; and it is in this respect I anticipate that our pre-natal clinic will prove of advantage. This clinic has been in operation for four years, and further details are given of it in a later portion of this report.

# INFANTILE MORTALITY, 1880 to 1930 .- Rate per 1,000 Births.

Year.	Blackpool.	England and Wales.
1880	206	153 -
1881	126	130
1882	221	141
1883	123	137
1884	140	147
1885	162	138
1886	150	149
1887	110	145
1888	137	137
1889	162	144
1890	177	151
1891	182	149
1892	143	145
1892		159
	193	
1894	132	137
1895	192	161
1896	146	148
1897	169	156
1898	163	160
1899	173	163
1900	149	154
1901	156	151
1902	118	133
1903	130	132
1904	161	145
1905	127	128
1906	131	133
1907	111	118
1908	128	121
1909	103	109
1910	104	106
1911	126	130
1912	88	95
1913	126	109
1914	110	105
1915	128	110
	79	86
1916	81	81
1917	111	97
1918	97	89
1919		80
1920	70 67	83
1921	67 63	77
1922	68 70	69
1923	70	
1924	71	75
1925	90	75
1926	73	70
1927	67	69
1928	70	65
1929	56	
Mean of 51 years	123	119
1930	64	60

		.91	emitig9III		-	-	20	1		6
		Mother em-	ployed away from home	1	I	1	5	1	-	6
	-		smroinI oN		1		N.		- 01	6
	.e.	Hand	Fed partly or en- tirely	1	x	1	14		∞   − ∞	31
	FEEDING.		Not Breast Fed Fed	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1	1	9	1	-   - 0	15
			Not Fed	ľ		-	11		000	15
		th	Total.		61		6		-	12
ت		Fourth	Under 3 mths.	1	. 61	1	6	1	1111	Ξ
LAI		rd	Total.	°	61	Г	5		01   01	15
-TOTAL.	QUARTERS.	Third	Under 3 mths.	61	1	-	5		-     01	12
	UAR	pue	Total.		01	1	10		-	20
ONE	õ	Second	Under 3 mths.	1	-	1	6	1	- ~ ~	14
SR		st	Total.	I	ŝ	-	12	1	1   4	23
UNDER		First	Under 3 mths.	1	-	-	12	1	-     4	20
	×		Total.	4	6	3	36	1	4   6 0	70
THS	YEAR	's	Under 3 mth	ଟା	20	¢1	35	-	9 6	57
DEATHS			CAUSES.	Common Infectious Diseases (Measles, Diphtheria and Whooping Cough)	Diarrhoeal Diseases : Diarrhoea, Enteritis and Gastritis	ormations	4-Premature Birth, Debility, Icterus, etc.	tsés	Convulsions Bronchitis Pneumonia Other causes	
			CA	1-Common Infection Diphtheria and	2—Diarrhœal Diseases :— Diarrhœa, Enteritis a	3-Congenital Malformations	4-Premature Birth,	5-Tubercular Diseases	6 —Other Conv Causes. Pneu	TOTALS

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES.

Cases of Infectious Diseases notified during the years 1897-1930 (inclusive).

	1897	1898	1899	0061	1061	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910	903 1	1 106	905 1	906	1 206	81 800	31 60		61 116	912 1913	13 1914	161	5 1916	8 1917	8161 2	8 1919	1920	1920 1921	1922	1923	8 1924	1925	1926	1927	1928	1929	1930
Smallpox	1	1	I	1	7	01	13	x	œ	6			1							1	1	1	-		1	Г	1	1		10	-	17	-
Diphtheria & Membranous Croup	-	10	13	54	134	15	07	46	65	54	54	61	96	7		35	13	22 29	9 42	2 67	77 77	74	178	52	28	25	52	107	30	88	38	30	65
Erysipelas	1	I	1	14	13	13	19	26	17	18	13	18	38	20	26	23	24 2	22 29	61 6	9 12	2 20	22										27	40
Scarlet Fever	177	11	1+1	187	271	197	257	179	200	183	177 2	238 3	348 1	181	84	83 1(	102 145	5 316	8 144	1 88	8 60	95	229	220	179	154	108	211	110	168	202	245	183
Typhus Fever	-	1	1	1	1	1	1	1	1	1	I	-	-	1	1	1	-	I	- 1	1		1	1	1	1			1		1	1		1
Enteric Fever	- 30	67	59	. 68	58	20	<u>\$</u>	28	51	39	Ŧ	65	8 <del>1</del>	12	39	17	13 3	32 35		6	7 10	9 6	-	6	1	9	6	-	9	Ξ	01	1	3
Puerperal Fever	51	10	ic	3	¢1	61	80	ic	8	¢1	01	00	+	18	10	9	01	8			61	+	6	+	I	6	=	+	3	-	10	3	ic
Puerperal Pyrexia	1	1	1	1	1	1	1	1	1	1	I	1		1	1	1	1	1	1	1	1	I	1	1	1	1	ſ	1	01	x	10	10	œ
Measles	794	259	370	302	532	863	127 1386		871	389	309 1268		834 6	660 11	1181 7:	720 1232	32 690	0 680	6+01 0	116	1168 1409		369 1415	43	1125	624	1197	1255	1027	1027 1311 1190	1190	198	198 1748
Rotheln		1	-	c1	ic.	ic.	ic.	13	27	9	-	1	-	1	1	-		1	1		1	1	1	32	21	23	51	73	544	36	24	18	22
Tuberculosis : (a) Pulmonary	1	1	1	1	1	1	1	1	1	1	1	1	1	+	1 ++	133 13	131 120	00 169	9 143	3 188	\$ 202	151	119	127	121	107	129	115	107	88	5	81	84
monary .	1	1	1	1	1	1	1	1	1	1	1	-	1	-	1	1	46 3	37 25	5 35	5 53	3 63	8 67	++	33	27	22	38	38	Ŧ	27	13	17	14
Cerebro spinal meningitis		1	1	1	1	1	1	1	1	1	1	1	1			1	1			3 10		3 1	1	-	I	T	01	01	1	1	1	-	3
Poliomyelitis	1	1	1	I	I	1	1	1	1	1	1	1	1	-	-	~		1			1	-	-	61	1	1	F	01	-	¢1	-		1
- Ophthalmia Neonatorum	1	l	1	1	1	1	1	1	1	1	I	1		1		1	- 17	Ξ	18	ŧ	21	28	37	18	37	48	28	53	20	17	14	1	3
Encephalitis Lethargica	1	1	1	I	1	1	1	1	1	1	1	1						I	1	1	1		-	3	1	1	29	80	+	+	61	61	-
TOTALS	1031	418	589		600 1019 1227	1227	515	515 1691 1221		200	627 1	627 1653 1368		921 14	1419 13	1040 1594	94 1088	8 1303	3 1467	1610	1870	818	2073	554	1568		1669	1864	1040 1669 1864 1919 1795	1795	0	663	2178

	Total	Deaths	-	1	1	-	1	16	I		4	1	1	6 .	1	00
		65 1 and over			1	1	1	33	1	1	1			1	I	
		5 to 2		1			1	32	1	1	-	1		1	1	1
		35 45	1		1	1	1	10	1	1	01		1	1	1	1
		20 35 to		-	1	-	1	1-	1	1	1		1	1	1	1
	only	15 20 20	-	-	1	Į.	- 1	-	1		-		1	1	1	
	dents	15 to 1	01	1	1	1	1	1	1	1	1	1	1	1	1	1
	(Resi	10 50 10	00	1	1	1	1	-	1	1	1	1	1	61	1	1
	DEATHS (Residents only).	5 to 4	-	1	1		I	1	1	1	1		1	1	ŀ	
	DE	÷ ۲ م	1	1	1		1	L	A	1	1	1	1	-	1	1
		01 S 00		1	1	1	1	-		1		1	1	-	1	1
		- 2 01	1	1	I	1		4	1	1		1	I	60		1
PERIODS.		Under 1	1		1	1	1	61	1	1	1	1	1	01	1	
PER	-	65 and over	-	1	1	F	1	-	1	1	1	4		1		
AGE		45 to 65	1	-	1	1	1	x	1	1	1	14	1	1	1	1
Y		35 to 45	01	e0	1	1	-	10	1	1	1	10	~	4	1	
		20 35 to 2	4	6	¢1	4	10	10	1	1		9	-	œ	1	
	FIED	15 20	¢1	15	1	-	1	-	1	1	1	4		13	1	
	Noti	10 15	14	35	1	1	1	01	1	1	1	10	26	42	4	6
	CASES NOTIFIED	5 to 10	32	93	-	- 1	1	5	1	1	1	<b>01</b>	243	1014	x	220
	C	4 0 10	4	14	1		1	1	1	1	1		37	187	~	31
		€ 5 æ	+	10	1	1.	1	01		1	1	1	25	156	-	24
		01 Q 00	-	10		1	1	<b>01</b>	-	1	1	1	19	151	61	20
		- 5 01	-	~	1	1	1	-			1	T	22	114	01	15
		Under		1	I	1		1	1	1	1	l	6	58	-	10
A.d.	mitted	to Hos- pital	53	147	01	5	4	61	01	1	. 1	18	1	147	. 1	1
	-	fied.	65	183		10	9	45	60	1	I	40	388	1,748	55	329
		Disease,	Diphtheria	Scarlet Fever	Enteric Fever	Puerperal Fever	Pyrexia	Pneumonia	Spinal Fever	Poliomyelitis	Encephalitis Lethargica	Erysipelas	Chickenpox .		German Measles	Whotoping Cough

#### INFECTIOUS DISEASES

The incidence of Infectious diseases in the town during 1930, has been on the whole satisfactory and the details as applied to each disease will be found in the table on page 22, and in the remarks which follow this paragraph. It has only been possible to keep these diseases within their present confines by a very large amount of work of visiting and supervision of contacts.

Scarlet Fever.—183 cases, one death. 147 of the cases or 80 per cent. were isolated at the Sanatorium.

**Diphtheria.**—65 cases, seven deaths. 53 of the cases or 81.5 per cent. were isolated at the Sanatorium. The administrative measures taken to deal with the disease have remained as in previous years, and include immunisation by inoculation of your staff who come into contact with cases. In some towns clinics have been established where children can be brought to be immunised, but having regard to the low incidence I do not propose to embark upon the scheme at present but to reserve the procedure for those who are liable to come into contact with infection.

Small Pox.—One mild case occurred in the town and recovered after suitable isolation and treatment. In addition there have been amongst our visitors several contacts with cases in other towns, of whose proposed visit to Blackpool I had been previouly notified. The work entailed in the visitation and supervision of these contacts had been enormous and the assistance of Inspector Priestly and the District Inspectors has been invaluable. It is only because the Department has been provided with adequate and prompt means of locomotion in the visiting of cases that we have been able at some times of the year to keep pace with the work. In addition to the supervision of contacts and examination of suspected cases Dr. Bartlett and I have during the year vaccinated 40 persons. All the anxiety, worry, work, and expense associated with Smallpox is attributable to the neglect of vaccination. As I stated in my last report, Small Pox is the one disease above all others which could within a short period, be wiped out of existence viz., by vaccination or re-vaccination.

**Measles.**—1,748 cases. Nine deaths. In spite of the fact that measles is a notifiable disease in this town little if any impression in made upon its incidence by administrative measures, and we are one of the few towns, if not the only one, where the disease is a notifiable one. Measles in so far as it is controllable, must be dealt with by domestic rather than general administrative action, and parents should be impressed with the possible gravity of the disease and with the great desirability of protecting their children from known infection—especially the younger children. Combined with this there could continue the existing amicable working arrangements with the Education Department



and its staff of head teachers, the provision of nursing for necessitous cases or hospital treatment. Of the 1748 cases, 26 only were in persons over school age. It cannot be too often repeated that Measles is especially dangerous to young children. The younger the child, the greater is the danger, and for every year in a child's life that an attack of Measles can be postponed, the chances of complete recovery are enhanced.

**Puerperal Fever and Puerperal Pyrexia.**—Five cases of the former and six of the latter were notified to me and one death from the former disease occurred. It is hoped that the pre-natal work carried out by us will have beneficial effect in anticipating and avoiding the dangers of parturition and that this will be revealed in the statistics of these diseases.

**Ophthalmia Neonatorum.**—Three cases were notified and one of these was treated at the Sanatorium. All the cases recovered with unimpaired vision.

388 cases of **Chicken Pox** and 329 of **Whooping Cough** were reported to me mainly by the School Attendance Officers.

#### TUBERCULOSIS.

The incidence of this disease as evidenced by notifications and deaths during 1930 was as follows :—

Notifications—Pulmonary, 84; Non-Pulmonary, 14. Deaths—66.

The following table gives the cases and deaths divided into sexes and age groups :---

ths. Females	· · · · · · · · · · · · · · · · · · ·	. 6
Dea Males	01	õ
ations. Females		9
Notific Males		õ
ths. Females	-     - 4 6 9 6   -	18
Dea Males	0.01-10.00	37
tations. Females	-   -   41001-01	32
Notific Males	0 <u>1</u> 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	52
		:
Seriors age	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TOTALS
	Males Females Fema	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Year.	No. of Deaths.	Death Rate.	Year.	No. of Deaths.	Death Rate.
1901	37	0.73	1916	67	1.06
1902	45	0.86	1917	64	1.03
1903	35	0.74	1918	87	1.34
1904	47	0.86	1919	47	0.69
1905	51	0.92	1920	61	0.86
1906	39	0.68	1921	56	0.76
1907	50	0.86	1922	65	0.87
1908	47	0.86	1923	46	0.61
1909	45	0.73	1924	71	0.92
1910	38	0.63	1925	80	0.99
1911	51	0.83	1926	69	0.78
1912	49	0.79	1927	73	0.78
1913	49	0.76	1928	73	0.74
1914	71	1.07	1929	75	0.75
1915	70	1.09	1930	66	0.66

The number of deaths and death-rate from Phthisis in the past thirty years have been as follows :---

It was not found necessary during the year to take any action under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or the Public Health Act, 1925, Section 62, which deal with the compulsory isolation of cases of Tuberculosis.

Except in cases where a desire to the contrary has been expressed, all notified cases have been visited by the Tuberculosis Medical Officer or the Tuberculosis Nurse. The following visits have been paid :—

Pulmonary.	No	on-Pulmor	nary.	Total.
 99		25		124
 3,916		559		4,475
		TOTAL	÷	4,599
	99	99	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3,916 559

On the occasions of these visits opportunities are taken to enquire into and advise upon the precautions which should be adopted for reducing the risk of infection of other members of the household, to enquire into social conditions and the ability to obtain sufficient nourishment and medical attendance, to enquire into the health of other members of the household and to arrange for the medical examination of contacts by the Tuberculosis Officer. The wards at the Sanatorium previously approved for the treatment of Tuberculosis have continued in use throughout the year, and the following is a list of the institutions where patients have been sent for residential treatment :—

Blackpool Sanatorium				 36 cases.
Dorset Red Cross, Swar				1 case.
	hage			 - cube.
Meathop				 3 cases.
Crossley				 10 "
Heatherwood				 1 case.
Shropshire Orthopædic	Hospi	tal		 4 cases.
Delamere Sanatorium				 10 ,,
Cheyne Hospital				 2 "
King Edward VII Sana	toriun	n		 1 case.
Preston Hall				 1 "
Heswall				 7 cases.
Royal National, Bourne	emoutl	n		 1 case.
Crippled Children's Hos	spital,	Marple		 1 ,,
David Lewis Northern	Hospit	al, Live	erpool	 1 "
Liverpool Open-Air Hos	spital,	Leasow	ve	 1 ,,
Lostock Hall, Lostock				 1 ,,
Southport Corporation				 1 ,,

The Tuberculosis Dispensary at the Public Health Office has been in operation throughout the year and the Tuberculosis Officer and Nurse are in attendance. The Dispensary continues to carry out the following functions: (1) Examinations of suspected cases for Medical Practitioners; (2) Examination of contacts; (3) Sorting of cases or recommendations for treatment, and (4) Treatment of patients. The total number of patients who attended the dispensary was 201, and 1,202 attendances were made by them. In addition, 32 contacts were examined by the Tuberculosis Officer.

Specimens of sputum are examined at intervals in our own Laboratory to assist the diagnosis and cases are also sent for X-ray examination and report. Extra nourishment in the form of eggs and milk supplied daily is provided for suitable cases receiving domiciliary treatment, and the cost of surgical apparatus in non-pulmonary cases is met in whole or in part by the Health Committee, according to the financial circumstances of the patient.

The general scheme of dealing with Tuberculosis has remained as in former years, and the disappointing feature persists in that we do not get hold of the cases until the disease is advanced and when the prospect of cure is remote. The services of the Tuberculosis Officer might with much advantage be sought to a greater degree by medical practitioners and by the patients themselves,

#### VENEREAL DISEASES SCHEME.

Clinics are held each day of the week—four Clinics for Males and two Clinics for Females—at special Wards at the Blackpool Victoria Hospital. Dr. Bartlett is in attendance at each Clinic.

To bring the facilities to the notice of the public generally, small posters are placed in all the Public Lavatories in the town, informing the public that treatment is provided for them with the utmost privacy, free of cost, and appealing to them to take advantage of the Scheme. The situation of the Clinic and the hours of attendance are specified on these posters.

Patients may attend at the Clinic at any hour for irrigation, a member of the staff of the Hospital being in attendance to supervise such irrigations. The existing arrangements in this respect would appear to meet the needs of the patients.

The Local Medical Practitioners are fully aware of the facilities available at the Clinic, and of the fact that the services of the Medical Officer of the Treatment Centre are available at any time for the purpose of consultation free of charge.

There are **31** Medical Practitioners in the area who are qualified to receive free supplies of Arsenobenzol compounds, all of whom have been supplied.

During the year advantage was taken of the facilities for pathological examinations by Medical Practitioners in 183 cases.

The hours of the Clinics are as follows :---

MALES :

FE

Mondays Wednesdays Thursdays Saturdays	···· ····	4-45 p.m. to 6-30 p.m. 11-0 a.m. to 12-30 p.m. 4-45 p.m. to 6-30 p.m. 11-0 a.m. to 12-30 p.m.
EMALES :		
Tuesdays Fridays		5-0 p.m. to 6-30 p.m. 11-0 a.m. to 12-30 p.m.

The following Salvarsan substitutes are kept at the Health Offices for distribution to Medical Practitioners who are qualified to receive them : Neo-Kharsivan, Neo-Salvarsan and Silber-Salvarsan.

A full statistical report upon the work carried out during the year has been prepared and forwarded to the Ministry of Health. A summary of the work for each of the fourteen years during which the scheme has been in operation is given in the following table :—

		and the second second		and the second s		
Totals, 1917			37	326	37	19
Totals, 1918		16	141	1,574	219	95
Fotals, 1919		35	333	3,092	520	136
Fotals, 1920		181	519	6,839	273	77
Fotals, 1921		315	499	8,180	38	16
Fotals, 1922		227	486	7,404	117	143
Fotals, 1923		280	493	6,440	140	172
Totals, 1927Totals, 1926Totals, 1928Totals, 1929Totals, 1919Totals, 1918		182	515	7,190	62	175
Fotals, 1925		194	569	11,735	161	207
Totals, 1926		279	498	15,521 13,521 11,735	67	280
Totals, 1927		257	551	15,521	100	353
		226	169	21,321	75	412
Totals, 1929		252	903	20,965 22,494 21,321	90	252
Totals, Totals, Totals, 1930 1930 1929 1928		225	896	20,965	Nil.	259
1930	Males. Females	58	189	3,265	Nil.	259
16	Males.	167	707	17,700	Nil.	
		<ol> <li>Number of patients under treatment 1st January, 1930</li> </ol>	2. New out-patients	<ol> <li>Total attendances of out- patients (including at tendances for irrigation) 17,700 3,265</li> </ol>	4. Aggregate number of in- patient days	<ol> <li>Specimens examined for Wassermann reaction</li> </ol>

School Closure — It was necessary during the year to close one of the schools in order to prevent the spread of Infectious Disease.

**School Exclusions.**—The following are the lines upon which we work with regard to the exclusion of infected children from school :—

#### SCARLET FEVER.

1.—PATIENTS :	(a) Hospital Cases. (b) Home Cases.	Two weeks after discharge. Two weeks after disinfection.
2.—Contacts :	(a) Hospital Cases	One week after removal to Hospital.
	(b) Home Cases.	One week after disinfection.

#### DIPHTHERIA.

1.—PATIENTS :

2.—Contacts :

<ul><li>(a) Hospital Cases.</li><li>(b) Home Cases.</li></ul>	Three weeks after discharge. Three weeks after disinfection.
(a) Hospital Cases.	Two weeks after removal to Hospital.
(b) Home Cases.	Two weeks after disinfection.

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ENTERIC FEVER AND ERYSIPELAS. CONTACTS need not be excluded from School.

#### MEASLES.

1.—PATIENTS : 2.—Contacts :

- Three weeks from appearance of rash. (a) Infant Scholars. Three weeks from onset of last case.
- (b) Other Scholars :---

I.—If had Measles. Not to be excluded.

II.—If not had Measles Three weeks after onset of last'case.

#### WHOOPING COUGH.

PATIENTS : Contacts : Six weeks, or as long as cough continues. Infant Scholars. Same period as patient.

#### MUMPS.

PATIENTS : Contacts : One week after subsidence of swelling. Not to be excluded.

#### CHICKEN POX.

PATIENTS :	Three weeks, or until all Scabs have disappeared.
Contacts :	<ul><li>(a) Infant Scholars. Same period as patient.</li><li>(b) Other Scholars. Not to be excluded.</li></ul>

The above periods are liable to alteration in individual cases on instructions from the Medical Officer of Health. **Bacteriological Laboratory.**—The following specimens were examined at the Public Health Office :—

Swabs for Diphtheria Bacilli		 	771
Sputum for Tubercle Bacilli		 	431
Smears, etc., for Gonococci		 	12
Т	OTAL	 	1,214

**The Sanatorium.**—The number of cases of various diseases treated at the Sanatorium during the year will be seen in the following table :—

		Remaining in at end of 1929.	Admitted during 1930.	Discharged during 1930.	Died during 1930.	Average stay of non-fatal cases.	Average stay of fatal cases.	Remaining in at end of 1930.
Scarlet Fever	 M. F.	4 5	67 80	67 81	_	$\begin{array}{c} 33\\34 \end{array}$	-	4 4
Diphtheria	 M. F.	3	$\frac{18}{35}$	$\frac{18}{29}$		$\frac{32}{31}$	7	$\frac{3}{4}$
Enteric Fever	 M. F.	-	1 1	1 1	_	39 41	_	_
Measles	 M. F.	-	71 76	70 74	$\frac{1}{2}$	17 <sup>1</sup> 16	3 9	=
Puerperal Fever	 F.	-	5	3	1	28	1	1
Erysipelas	 M. F.	-	11 7	8 7	1	$\frac{12}{16}$	2	2
Phthisis	 M. F.	11 5	$\begin{array}{c} 25\\ 12 \end{array}$	14 9	14 4	166 183	$\begin{array}{c} 75\\162 \end{array}$	8 4
Other Diseases	 M. F.	-	$\begin{array}{c} 13\\19\end{array}$	$\frac{12}{17}$	_	$\frac{14}{16}$	_	$\frac{1}{2}$
TOTALS	 	29	441	411	26	_	_	33

The total number of cases compares with previous years as follows :--

1930 445	1921 365	1912 217
1929 354	$1920 \dots 532$	1911 213
1928 349	1919 411	1910 303
1927 444	1918 537	1909 477
1926 257	1917 544	1908 402
1925 486	1916 596	1907 312
1924 456	1915 663	1906 306
1923 389	1914 297	. 1905 270
1922 461	1913 263	

The maintenance costs at the Sanatorium for feeding only (groceries. greengroceries, milk, fish, bread and meat), is at the rate of 10s. 5d, per head per week.

The Hospitals provided or subsidised by the Corporation are as follows :---

- 1.—One Hospital for general Infectious Diseases, Tuberculosis Cases and Maternity Cases, with an accommodation of 82 beds.
- One Hospital for Small Pox Cases, situtated at Elswick, and used jointly by the Corporations of Blackpool, Preston, Lytham St. Annes, and the Councils of the Fylde District.

The Ambulance facilities of the District are as follows :---

- For Infectious Cases. One Motor Ambulance kept at the Infectious Diseases Hospital.
- For Non-Infectious Cases. Two Motor Ambulances kept at the Fire Station.

One whole-time General and Fever-trained Nurse is employed by the Health Department, who carries out nursing of cases of Infectious Disease under the direct supervision of the Medical Officer of Health.

#### DISINFECTING DEPARTMENT.

Articles removed fr	om	619 Hou	ses t	o Sana	torium	for	Disinfec	tion:—
Sheets, quilts, 1		ets, etc.						3,134
Articles of cloth								1,999
Pillows and bol	sters							2,185
Beds								652
Mattresses								732
Carpets								266
Rugs and mats								72
Curtains								383
Cushions								248
Table cloths								53

		TOTAL		 13,345
Articles from Sanatorium	····	 		 2,102
Miscellaneous articles		 ;		 794
Books	Harry	 	1	 725

## Infectious Diseases.

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Inquiries into cases of infectious disease (see Visits and Inspections)	_
Houses disinfected after cases of infectious diseases	340
Houses disinfected after cases of consumption	52
Other premises disinfected	201
Isolation notices served upon householders	2,529
Isolation notices served upon School Managers	3,454
Isolation notices served upon School Attendance Officers	3,454
Other notices to School Managers with regard to infectious diseases	1,866
Other notices to householders with regard to infectious	
diseases	1,866
Other notices to School Attendance Officers	1,866
Notices to Free Library with regard to infectious diseases .	2,218

**General Hospital Provision.**—There is one Voluntary Hospital named The Victoria Hospital within the Borough, the number of beds available being 132. A nominal allocation of these beds is as follows :—

Nature.	Males.	Females.	Total.
General Medical	10	10	20
" Surgical	40	40	80
Children	10	10	20
Venereal	1	1	2
Ear, Nose & Throat	3	2	5
Ophthalmic	3	2	5
Totals	67	65	132

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ie or andirali . Alternationali .	Medical.	Surgical.	Totals.
In-patients	 489	2,309	2,798
Out-patients	 748	2,147	2,895
TOTALS	 1,237	4,456	5,693

There is also an Out-patient Department in connection with the Institution, and the following Table indicates the use made of the Hospital during 1930 :—

The Blackpool Corporation makes an annual grant of £500 to the Victoria Hospital and, in addition, shoulders all the cost of the treatment of venereal diseases.

**Medical Relief by Public Assistance Committee.**—Under the provisions of the Local Government Act, 1929, this work was taken over by the Corporation, and for the purposes of brief description it may be referred to under the categories of outdoor and indoor medical relief. The Borough is divided into two districts, the Northern and Southern, the populations being 45,946 and 53,854 respectively. Drs. Cockcroft and Thursz, who were previously employed as District Medical Officers under the Guardians continued their services under the Corporation, and the following table shows the number and classification of the cases dealt with by them from 1st April, 1930, to the end of the year :—

Dise	ase.	Lenter	Number of Cases.
Influenza Tuberculosis Cancer Rheumatism Diabetes Anæmia Bronchitis Old Age Other diseases	···· ··· ··· ··· ··· ··· ··· ··· ··· ·		$12 \\ 11 \\ 4 \\ 16 \\ 3 \\ 4 \\ 23 \\ 24 \\ 120$
Тот	ALS		217

For the purposes of indoor medical relief under the provisions of the Local Government Act, the Corporation entered into a five years' agreement with the Lancashire County Council for the Infirmary at Kirkham to continue to be used for the treatment of Blackpool cases. The Institution is under the management and control of the County Council and the area served by it comprises Blackpool, Lytham St. Annes, Kirkham, Poulton, Thornton, Fleetwood and the Fylde Rural District, with a combined area of 67,509 acres and a population of 170,625 (1921 census). The available accommodation in this Infirmary is as follows :—For Men, 66 beds; Women, 73 beds; Children, 3 beds; Total, 142; and the following beds were occupied during the year :—Men, 58; Women, 54; Children, 4, and Maternity, 1.

The statistics of the admission of Blackpool cases from 1st April to the end of the year was as follows :—Total admissions, 227; Maternity cases, 17; Total deaths, 89; Total of discharges, 262.

**Out-Relief** (Non-Medical).—The following is a brief summary of persons who have received out-relief in the Borough during 1930 :—

	North.	South.	Total.
Males, in health and temporarily disabled	94	160	254
Males, not able-bodied	77	105	182
Females, in health (widows, etc.) with children	5 142	185	327
Females, not able-bodied	108	202	310
Children under 16 years of age	275	487	762
	696	1,139	1,835

FON	TON D	ISPENSAI	RY, 1930	).	
	Surgical.		Med	Total.	
	Males.	Females.	Males.	Females.	Total
Out-Patients	37	44	447	653	1,181

**District Nurses.**—Three district nurses are employed by the Health Department of the Corporation and their whole time is occupied in district nursing amongst the sick poor of the town. As far as possible they act under the instructions of the medical practitioners in attendance upon the cases, but in many instances, such as those of chronic bedridden cases, doctors are not in attendance, under which circumstances the nurses have to receive their instructions from me or to act according to their own judgment. Their services have been much utilised, and in carrying out their valuable work the large total of 10,601 visits were paid by them.

Ladies' Sick Poor Association.—About 1,539 cases were visited and relieved by the ladies of this Association during the year. The help takes the form of meat, eggs, groceries, clothes, boots, loan of bath chairs, etc., £838. 13s. 2d. being expended for this purpose during the year.

#### PUBLIC VACCINATION.

In accordance with Clause (b) of Section 2 of The Local Government Act, 1929, the functions relating to Vaccination were transferred to the Town Council to be discharged by the Public Health Department.

Your Medical Officer of Health is the Chief Public Vaccination Officer. The services of Drs. Cockcroft and Thursz, who carried out the duties of Public Vaccinators under the Poor Law Authority prior to the Act of 1929 becoming operative, were retained, as also were the services of the two Vaccination Officers—Messrs. Jump and Rees. On the instructions of the Health Committee the duties continue to be carried out by these Officers for a period of twelve months, at the close of which the whole question of Public Vaccination will be again considered by the Committee. In the meantime, I have made arrangements with the Vaccination Officers to report to me quarterly upon the work being carried out by them in this new and important activity of the Department.

The following are details extracted from the Annual Return which I have forwarded to the Registrar-General, and relate to the year 1st January to 31st December, 1929 :--

Number of live births returned in Birth List Sheets registered from 1st January to 31st December, 1929		1,090
Number successfully vaccinated		158
Number insusceptible of Vaccination		3
Number in respect of whom Statutory Declaration Conscientious Objectors have been received	of 	570
Number who died unvaccinated		42
Number postponed by Medical Certificate		12

Removals to other Districts the						
which have been apprised				1340	77	
Removal to places unknown					142	
Number of these births remaining	on 31	st Ian	uary.	1931.	ion faith	

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That the set of the

## neither duly entered in Vaccination Register nor temporarily accounted for in Report Book ...

From the above figures it will be observed that only 14.5 per cent. of the total number of live births returned during the year 1929 were successfully vaccinated, whilst no less than 52.3 per cent. made statutory declaration of conscientious objection.

#### NURSED-OUT CHILDREN.

**Children Act, 1908.** Infant Life Protection.—On the 1st April, 1930, the Health Committee took over the responsibility for the administration of Part I of the above Act.

The provisions of this part of the Act are briefly as follows :--

- (1) When a person undertakes for reward the nursing and maintenance of one or more children under the age of seven years, notice must be given to Local Authority within forty-eight hours of reception of child. The notice shall state name, sex, date and place of birth of the child or children, name and address of personreceiving child and name and address of person from whom child has been received.
- (2) Notification of change of address to be given within fortyeight hours.
- (3) Notification of death of child to be given within forty-eight hours.
- (4) Notification of removal or of transfer of child to another home to be given within forty-eight hours.
- (5) Failure to give notice as specified is an offence.
- (6) Local Authorities to appoint Infant Life Protection Visitor.
- (7) Refusal to permit admittance or examination of child is an offence.
- (8) Local Authority may fix number of children which may be retained in a dwelling house.

- (9) If any child is kept in any premises which are overcrowded, dangerous, or insanitary, or by a person who by reason of negligence, ignorance, inebriety, immorality, or criminal conduct, Local Authority may make an order directing removal of such child.
- (10) Notice of death to be given to Coroner.
- (11) Nursed-out children not to be insured by persons in charge.

Nurse Gibson was appointed by the Committee as the authorised Officer to keep under supervision and periodical visitation the homes where children are nursed-out.

40 children were already being nursed-out when the Health Committee took over the duties specified in the Act. The homes were visited and the previous authorizations granted were renewed. 30 further applications were received during the year, 28 of which were granted, and two refused owing to unsuitability of the premises. During the year 5 of the nursed-out children were adopted legally, one attained the age of seven years, and thirteen were returned to their parents.

The Homes where these children are nursed-out are visited and reported upon once in each quarter of the year. Up to the end of the year 193 visits were paid.

#### BOARDED-OUT CHILDREN.

The Public Assistance Committee is responsible for the care of boarded-out children, but at their request my Nurse visits such children periodically, and I furnish reports to the Public Assistance Committee at regular intervals of the conditions generally of such children and their home surroundings.

#### MATERNITY AND CHILD WELFARE.

The work under this scheme of the activities of the Health Department has proceeded throughout the year without interruption and it is mainly due to the supervision exercised and instruction given that the present position as reflected by the Infant Mortality rate is so satisfactory. The Maternity and Child Welfare work may for the purposes of report be classified according to the following Sub-divisions :—

1.—Inspection of Registered Midwives.—There are on the Register 33 midwives, and 145 visits have been paid to them during the year by the Medical Officers or Health Visitors, and their bags, appliances, books, etc., supervised. They have all been kept posted up in any new requirements of the Central Midwives Board and their local Association has been active in arranging lectures by Medical Practitioners and for this purpose I have granted them the use of a room in the Public Health Offices. 2.—Ante-Natal Supervision of Expectant Mothers.—For this purpose a special Clinic is held on Friday afternoons and it is very gratifying to be able to report a satisfactory attendance, viz. : 241, during the year. At this clinic enquiries are made as to the histories of past pregnancies and examinations made as to progress of the existing one and the prospects of a favourable termination. Advice is given on such items as diet. clothing, exercise, attention to bowels, etc., and arrangements made for admission to the Maternity Home or for attendance by Doctors or practising Midwives. In addition to attendance at the Clinics the Health Visitor detailed for this specialised work visits the expectant mothers in their own homes, and in this respect 275 first visits and 1,855 subsequent visits were paid.

**3.**—**Provision of Medical assistance or attendance of Midwife at Confinement.** Financial help is given by the Health Committee in appropriate cases and during 1930, in 6 cases the Midwife's fee has been paid in full and in 25 cases in part. Where medical assistance is requisitioned by a midwife, the Doctor's account is sent to the Corporation in accordance with a scale of fees issued by the Ministry of Health, and the Corporation have powers to reclaim the amount from the patient. In 16 cases the doctor's fees have been paid in full.

4.—Provision of Residential Accommodation for Maternity Cases The wards at the Sanatorium approved by the Ministry of Health for this purpose, have been utilised during the year, and the house in Whitegate Drive previously used as a Maternity Home is now used as residential quarters for the Maternity Nurses and pupil midwives. During the year 273 patients were admitted to the Maternity Wards and it is interesting to note that since the commencement of this special work in 1920, 2,160 cases have been dealt with to the end of 1930. There is no definite allocation of beds for special cases, but those mainly dealt with are (1) those without suitable accommodation at their homes and (2) those where complications are experienced or anticipated. There is no differentiation made between legitimate and illegitimate cases. The charges for admission vary up to £4 per week in accordance with the financial circumstances of the patients, and arrangements exist with the Lancashire County Council to admit cases for them from their administrative area if accommodation is available. It will of course be realised that out of 273 cases a certain number of abnormalities and complications are met with, and a few mothers and babies do not have the desired favourable termination of the pregnancies. Full details of the work at the Maternity Wards and of the complications are supplied to the Ministry of Health and no useful purpose would be served by reproducing the table in this report.

5.—Infant Welfare Clinic.—This has been in operation on Monday, Wednesday and Thursday afternoons throughout the year and Dr. Bartlett has been in attendance. Medical and nursing advice has been given to the mothers, milk has been provided in suitable cases free or at cost price, the babies have been weighed, examined and records kept as to their progress. It will be noted in the table on page 43 that 16,658 packets of dried milk have been dispensed at the Clinics, and owing to social conditions it was necessary that 9,425 should be supplied free and 5,602 at less than cost price. The total attendances at the Clinic have been 17,432, and it has been found necessary to continue the Wednesday afternoon Clinics to relieve the pressure on the normal Clinic days. Of the total attendances 726 were "first visits."

In addition to the supervision of the children at the Clinics, home visiting by the Health visitors has been carried out and work performed similar in nature to that at the Clinic. Home visiting has one definite advantage over Clinic attendance in that it gives the visitor an opportunity of observing home conditions and advising upon such items as ventilation and sleeping accommodation. During 1930, 1,109 first visits and 4,499 subsequent visits were paid by the Nursing Staff.

6.—Registration of Nursing Homes.—On the 1st July, 1928, the Nursing Homes Registration Act came into operation, which required Nursing and Maternity Homes to be registered by the Corporation. Your Medical Officer was appointed the official to carry out the inspection of these institutions both prior and subsequent to registration. Twentytwo Institutions have been registered up to the end of 1930, consisting of eleven Homes for Maternity Nursing, and eleven Homes for General Nursing. No orders were made refusing registration. One application for exemption was received, and a Certificate of Exemption granted.

7.—Orthopædic Scheme. The Health Committee became participants in the Orthopædic Scheme of the Lancashire County Council towards the latter end of 1928.

The organization is briefly as follows: Non-tuberculous crippled children under the age of five years who are suffering from Rickets, Anterior Poliomyelitis, Spina Bifida, Talipes, Flat foot, etc., are, on the recommendation of the Maternity and Child Welfare Medical Officer, sent to the Orthopædic Clinic at Fleetwood when Specialist Surgeons and Nurses of the staff of the Lancashire County Council are in attendance and where facilities for massage, etc., are available.

If, on the advice of the Medical Officer in charge of the Clinic a patient requires residential institutional treatment, arrangements are made for admission into the Heswall Country Hospital at a charge of Two Guineas per week where the requisite treatment is administered by specialists in this branch of Public Health work. X-ray examinations and treatment are also obtainable at the Myrtle Street Hospital, Liverpool, for cases requiring such treatment.

Where requisite and recommended at the Clinic or Hospital, Bandages, Splints, Surgical Boots, etc., are provided for the patients, Reports regarding the progress of the patients are received on discharge from Hospital or Clinic, or periodically if required.

With regard to the cost of treatment under the scheme, the parents are expected to contribute the full amount, but in many cases the financial circumstances of the parents prevent their being able to contribute anything towards the cost of treatment, whilst in other cases small contributions are made. Each case is determined on its merits, full enquiries being made into the financial circumstances in every case.

During 1930 the following cases have been under treatment :--

Rickets	Child taught to walk after treat- ment; kept under observation.
Knock-knees	Laced shoes, crooked, provided.
Wasting of leg and inversion of foot	Club foot shoe provided.
Right Congenital Talipes, e.g., Varus	Admitted to Heswall Hospital for moulding foot into correct position.
Rickets	Advised as to special diet; im- proved.
Congenital Dislocation of Hip	X-ray ; admitted to Heswall Hos- pital.
Severe Rickets	Admitted to Heswall Hospital.
Flat Foot	Wedged insoles provided.
Right Knee Deformity	Right Walking Caliper Splint pro- vided.
Infantile Paralysis Left Lower Leg	Outside Iron, Inside Cross Straps and Inverted Right Splint pro- vided.

During the year several children who have been receiving treatment under the Scheme, having attained the age of five years, have been transferred to the Education Authorities for continued treatment.

In addition to the various items mentioned above, children between the ages of 1 and 5 are kept under supervision by the Health Visitors, and thus there is a continuous supervision by us from the time of birth to the commencement of school attendance, where supervision by the School Medical Department is exercised. In this respect 2,057 visits were paid. During the year a child, who had come to reside in Blackpool from an outside area, was found to be suffering from deafness, dumbness, and slight mental deficiency, and arrangements were made immediately for the child's admission to the Royal Cross School for Deaf and Dumb Children, Preston.

With regard to the disease **Ophthalmia Neonatorum** or inflammation of the eyes in newly-born children which is so frequently a cause of blindness, 3 cases were notified to me during the year, and in the treatment of these cases 58 visits were paid by the Health Visitors and all the cases recovered with unimpaired eyesight.

The following statistical table indicates the amount of work carried out in a series of past years :—

## (a) Visits by Health Visitors :

Births:	1924	1925	1926	1927	1928	1929	1930
First visits	. 1,184	1,074	1,183	1,049	1,113	1,147	1,109
Subsequent visits	. 3,323	4,473	4,519	4,671	4,308	4,319	4,499
Expectant Mothers :							
First visits	215	226	299	256	335	317	275
Subsequent Visits	. 118	1,017	1,790	1,509	1,939	2,175	1,855
Still Births	. 48	39	36	48	35	57	48
Deaths	. 71	66	58	55	55	48	49
Puerperal Fever	. 9	4	1	1	1	6	5
Ophthalmia Neonatorun	1 329	90	165	140	129	72	58
Midwives	. 139	160	209	186	162	179	145
Female Outworkers	. 6	8	2	1		10 1 1 <u></u>	4
Children other than newl born		2,230	994	1,395	931	1,796	2,057
Totals	. 5,984	9,387	9,256	9,311	9,008	10,116	10,104

## (b) Attendances at Clinic :

Expectant Mothers : First visits	1924 32	$     \begin{array}{r}       1925 \\       21     \end{array} $	$     1926 \\     19 $			$   \begin{array}{r}     1929 \\     45   \end{array} $	$\frac{1930}{49}$
Subsequent visits		177				216	
Children :							
First visits	 418	455	524	553	558	666	726
Subsequent visits	 6,743	6,694	10,969	13,400	12,834	14,191	16,706
TOTALS	 7,202	7,347	11,652	14,109	13,619	15,118	17,722

### (c) Supply of "Dried Milk" to suitable cases :

C P . 1 C	pkts.	pkts.	pkts.	1927 pkts.	pkts.	pkts.	pkts.
Supplied free At reduced charge	5,324 1,160						
At nett actual cost	4,018						
TOTALS	 10,502	8,950	11,820	13,724	11,919	13,887	16,658

#### (d) Provision of Midwives and Doctors :

1924	4 1925	1926	1927	1928	1929	1930
Full Midwife's fee granted 11	19	41	24	15	13	6
Half Midwife's fee granted 11	26	15	10	31	27	25
Full Doctor's fee granted 6	14	14	8	6	8	16
Half Doctor's fee granted 15	9	6	6	-	_	3

## II.—SANITARY CIRCUMSTANCES OF THE BOROUGH.

**Water Supply.**—This is under the jurisdiction of the Fylde Water Board. The water is an upland surface water of a soft nature. The gathering ground is a good one, and is thoroughly safe-guarded from all risk of animal pollution, and the water is now laid on to every inhabited part of the Borough.

**Sewerage.**—With the exception of certain outlaying portions the whole of the town is sewered. The main portion of the sewage flows by gravitation to the central sewage chamber from which iron and steel outfall pipes, each 3 feet in diameter, carry the sewage out to sea for a distance of 950 yards. The sewage is screened, and is discharged immediately the level of the sea is below the level of the sewage in the storage chambers until 1½ hours before the time of low water. Valves fixed in a pen-stock chamber serve to keep all sea water from the sewage chambers and sewers while the outfall is tide locked. Storm overflow pipes are provided to relieve the sewage chambers during heavy rains with an in-coming tide, and also a pumping chamber for use if required when the sewage system is full at high tide.

From two portions of the town it is necessary to pump the sewage into the sewage chamber, and a small and separate sewage system is in existence at the northern portion, which flows by gravitation to an outfall which carries the sewage seawards to an extent of 600 yards. The outlet is below the level of the water at all states of the tide, and the discharge is continuous. During 1930 further additions have been made to the sewerage system of this Borough in continuation of the large scheme commenced in 1927. A new sewer, constructed for almost its entire length in tunnel, has been laid under Condor Grove connecting Whitegate Drive to the new sewer in Queen Victoria Road, which was laid in 1929. New Pumping Plant has been installed at Bloomfield Road (now Ansdell Road) Pumping Station, and by a new rising main the sewage is now pumped into a main sewer delivering direct to Manchester Square, thus relieving the Bloomfield Road and Central Drive sewers. Further improvements are still in hand in the South Shore district.

A new Main Sewer from Vicarage Lane to Rigby Road has been completed and put into operation, and a new storm overflow sewer is under construction from Harrowside to Hawes Side Lane. Additional pumping plant has been installed at Manchester Square Pumping Station and the whole of the old plant at Rigby Road has been replaced by new, and improved pumps of greatly increased capacity.

There are 41,387 water closets in the town, about 20 cesspools, and about 118 pail closets.

**Scavenging.**—This is carried out by the Cleansing Department of the Corporation. As all the inhabited portions of the town are on the water carriage system the collection and disposal of excreta other than by this system is small in quantity. The cesspools and privies, where they exist, are emptied and cleaned at least once a week.

With regard to household refuse, galvanised iron bins with tightfitting covers are the most satisfactory of all forms of receptacles and under Section 26 of the Blackpool Improvement Act, 1928, the Corporation are empowered to prescribe the size and material of such receptacles required in substitution of any ashpit or other fixed or movable receptacle for refuse. In the exercise of this power, the Corporation, on the recommendation of the Health Committee adopted the following specification : "Body to be of 20 B.W.G. before galvanising, and of a capacity of not less than 3 cubic feet, or not more than 3.5 cubic feet. The materials, workmanship and construction to be of the best quality throughout."

I am informed by the Director of Public Cleansing that during the season a daily collection was carried out at the Hotels, Hydros, Restaurants, and the larger Boarding-houses, whilst from the ordinary Company-houses the refuse is removed from two to three times a week. With a modification requisite for meeting the reduced demand in connection with Company-houses, this system is maintained during the winter months. The refuse collected is dealt with at the Destructor, and during the year 29,433 tons were destroyed and 1,567 tons were tipped, and 2,696 tons of nightsoil were removed.

The Refuse Disposal Works at Bispham have acted efficiently and without nuisance or annoyance. A fairly complete description of these works was given in my last report, and it is not necessary to repeat it here. The Destructor in Rigby Road was discontinued at the end of 1929, and at the time of writing this report these works are in the process of demolition. Extensions to the new works at Bispham are in prospect, and these will be sufficient to deal with the refuse of the whole town until a new second Refuse Works is constructed. The present capacity of the plant is 100 tons per day, but the design is such that the capacity may be increased to 200 tons per day by the erection of additional furnaces.

With regard to the **inspection of ash-receptacles** by my department, the following work has been carried out :—

TOTAL NUMBER OF VISITS MADE					5,197
Satisfactory ash receptacles		nela bi			124
Unsatisfactory ash receptacles		11.0.9			1,192
Re-inspections of houses under notic	ce				3,781
TOTAL NUMBER OF NOTICES SERVED :		Pı	elimina	ry Sta	atutory
(a) To abolish modified ashpits			-	2	271
(b) To repair modified ashpits			-		
(c) To provide galvanised ashbins			967	1	65
Total number of ashpits repaired					- 3 mil
,, ashpits abolished					274
" galvanised ashbins	prov	rided			1,630
" informations laid					605

It will be noted that process of total abolition of ashpits within the town has proceeded during the year under special powers which we possess by our Local Acts. During the year, 274 were abolished and there remain about 176 and these are rapidly being replaced by galvanised bins. This will result in a cleanlier and more satisfactory method of storage of household refuse pending removal, and a speedier and more sanitary removal by the Cleansing Department.

**Sanitary Inspection of the District.**—This is under the supervision of the Chief Sanitary Inspector, who has submitted to me the following statistical statement of the work carried out by him and his assistants :

Complaints Received				 458
VISITS AND INSPECTIONS (TOTAL)				 16,296
Number of houses fully inspected				 865
Number of inspections of works in pr	ogress			 2,940
Visits to houses and other premises				 2,679
Re-inspections in relation to nuisance	es und	ler not	ice	 2,037
				 287
Inspections of manure heaps				 491
				 13
Visits and enquiries in relation to inf	ectiou	s disea	ises	 4,950

Enquiries into deaths	258
Smoke observations (half-hour duration each)	99
Visits to tents, vans and sheds	976
Inspections of back passages	51
Offensive trades	313
Inspections under Rats and Mice Destruction Order	. 337
N	
NOTICES SERVED FOR THE ABATEMENT OF NUISANCES-	
Statutory	72
Preliminary	388
Verbal	211
HOUSE DRAINS TESTED—Total number of tests made	1,153
New Houses Examined—	
1 anti-factores	735
Drains unsatisfactory on first test	17
rendered satisfactory after first test	5
satisfactory	787
W.C.'s ) of defective construction	-
satisfactory	314
Ash receptacles unsatisfactory	438
· · · ·	
Site of house satisfactory	752
Site of house ] unsatisfactory	-
OTHER HOUSES (1st test) satisfactory	12
Draina	109
House drains to tested during to laving	169
House drams re-tested during re-laying	100
HOUSES PASSED OFF AS SATISFACTORY AFTER DRAINAGE	
DEFECTS REPAIRED	106
	100
NUMBER OF HOUSES WHERE SANITARY DEFECTS WERE FOUND	599
NUMBER OF HOUSES WHERE SANITARY DEFECTS WERE REMEDIED	1,062
NUMBER OF SANITARY DEFECTS REMEDIED	1,941
DRAINS-	
Drains laid, re-laid, disconnected, and ventilated	54
Drains repaired and cleaned out	776
New Gullies fixed	23
New w.c.'s fixed in lieu of privies, pail closets, and defective	
w.c.'s	43
Water closets repaired	6
Water closets unblocked	17
Fittings and water provided for w.c.'s	50
W.C. soil pipes repaired and ventilated	
Cesspools abolished	

WASTE PIPES-				
Bath, lavatory, slopstone and rainwater j	pipes dis	connec	ted	
over gullies				-
New slopstone waste pipes fixed				8
New rainwater pipes fixed				13
Rainwater pipes and roof gutters repaired	1			67
Slopstone waste pipes repaired				30
MISCELLANEOUS-				
Houses cleansed and lime-washed				11
Floors re-laid with flags				
Floors re-laid with concrete				9
Back yards repaired				49
Back yards flagged, concreted or asphalte	ed			15
Back passages cleansed				11
Accumulations removed				92
Animals removed from improper situation	ns			8
Roofs repaired				76
Rooms ventilated				14
Yards cleansed				16
Watercourses cleansed				17
Overcrowding ceased				2
Manure Receptacles Abolished				_
Do. Provided				
Sundry minor defects remedied				534
Number of manholes, gullies, etc., report	ed to D	irector	of	
Cleansing				49
Back streets requiring forming reported				5
Erections in yards, etc., reported				10
				vieite
The above statement does not comprise paid in respect of portions of the work of t				
dealt with in this Report under special heading		artmen	it winter	are
deale when in this report under special heading	50.			

**Factory and Workshops Act, 1901.**—There are 429 Factories in the Borough, and through the courtesy of the Inspector of Factories I am able to give the following classification :—

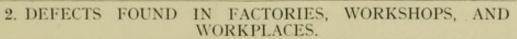
urnish	ning Tr	ades					77
Food	and D	rink					176
f Wear	ing Ap	oparel					45
lookbii	nding						29
							54
							6
Cleani	ing Wo	orks					19
							23
		Тота	LS				429
	Food f Weat ookbin  Cleani	Food and D Wearing Ap ookbinding  Cleaning Wo	Cleaning Works	Food and Drink Wearing Apparel ookbinding  Cleaning Works	Food and Drink             t Wearing Apparel             tookbinding  Cleaning Works	Food and Drink            t Wearing Apparel            tookbinding                        Cleaning Works	Food and Drink             t Wearing Apparel             ookbinding  Cleaning Works

There are 603 workshops in the Borough, and their classification is given in Table 4, on page 49.

During the year 56 workshops were discontinued, and 51 new workshops were added to the register. Of the 51 new workshops, 2 were milliners, 4 dressmakers, 8 tailors, 2 joiners, and 5 boot repairing.

Description	Number of						
Premises.	Inspections	Written Notices.	Prosecutions				
FACTORIES (including Factory Laundries)	63	9	-				
WORKSHOPS (including Workshop Laundries)		12	-				
WORKPLACES (Other than Outworkers' Premises included in Part 3 of this Report).	693	-	-				

## 1.—INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.



...

...

1,188

21

TOTAL

WORRIERC	1	imbe	r of 1	Defec	ts.	
Particulars.	Not Reme- died 1929.	Found.	Remedied 1930	Not Reme- died 1930	Referred to H.M. Insp'r.	Number of Prosecutions
NUISANCES UNDER THE PUBLIC HEALTH ACTS :		000		10	-	
Want of cleanliness Want of ventilation	7	233	224	16	-	-
Want of ventilation        Overcrowding	1	$2 \\ 2 \\ 1 \\ 3$	3		_	
Want of drainage of floors		ī	1	_	_	_
Defective drains	-	3	3	-	-	-
Other nuisances	2	17	15	4	-	_
Sanitary ( insufficient	-	4	3		-	-
Acom- unsuitable or defective	-	4	2	2	-	-
modation not separate for sexes	-	-	-	-	-	-
OFFENCES UNDER THE FACTORY AND WROKSHOP ACT :						
Illegal occupation of underground						
bakehouse (s. 101)				_	_	_
Breach of special sanitary require-						
ments for bakehouses (ss. 97 to 100)		1	1	-	-	-
Other Offences	_	-	-	-		
(Excluding offences relating to out-						
work, which are included in Part 3 of this Report).						
TOTAL	10	267	254	23	_	_

48

## 3.-HOME WORK.

·	OUTWORKERS' LISTS. SECTION 107.									
Numper Were		Lists received from Employers.								
		Twice in the year. Once in the								
NATURE OF WORK.		Outworkers			Outworkers					
(1)	Lists (2)	Con- trac- tors. (3)	Work- men. (4)	Lists (5)	Con- trac- tors. (6)	Work- men. (7)				
Wearing Apparel : Making, etc	14	18	_	_	_	-				
Umbrellas, etc		_	_	-	-	-				
TOTAL	14	18	_	_	-	-				

Inspections of Outworkers' premises Addresses of Outworkers received from other authorities Do. do. forwarded to other authorities

 $\frac{4}{2}$ 

## 4.—REGISTERED WORKSHOPS.

2 4 k	Making of wearing apparel .	 	 208
shop bak erate	Workshop bakehouses	 	 213
worksl nop t enumer	Preparation of other foods .	 	 6
of be of	Building Trades	 	 48
class wc nay	Furniture making, etc.	 	 32
ant as as, n	Conveyances	 	 22
mportant such as houses, r here.	Other Trades	 	 74
I I I	Laundry Workshops	 	 2-00-2

#### 5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133)	-
Action taken in matters referred Notified by H.M. by H.M. Inspector as remediable Inspector under the Public Health Acts, Reports (of action but not under the Factory and taken) sent to	-
Workshop Act (s. 5). H.M. Inspector.	-
Other	4
Underground bakehouses (s. 101) :	
In use at the end of the year	3

It will be observed from the preceding tables that 1,188 visits were paid by the Inspectors during the year, and the sanitary conditions have been kept under close supervision. This total includes 693 visits to workplaces, but not the visits to slaughter-houses. 267 defects were detected, 10 were still requiring attention at the commencement of the year, and of these 254 were remedied, leaving 23 still requiring attention at the commencement of 1931. Circular letters were sent out at the beginning of February and August, asking for lists of outworkers. The premises of the outworkers were visited during the year, and were found in a satisfactory condition. There are not any premises within the Borough where Rag Flock is manufactured.

Offensive Trades.—The following exist in the Borough :--

Blood Drier at Public Slaug	hter house	 	1
Tripe Boilers "		 	2
Gut Scraper "		 	1
Hide, Skin and Fat Depots	,,	 	2
Eriad Eich Shana		 	127
rned rish Shops		 	127

It is satisfactory to note that all the offensive trades, with the exception of Rag and Bone, and Fried Fish businesses, are at the Abattoirs, where the effluvia emitted by them is not observed by any large body of people. They are also under daily observation by the Superintendent of the Abattoirs and the Meat Inspector.

It will be observed that I am able to give the number of Fried Fish Shops in the town. This business, being a scheduled "offensive trade," may not be established without the consent of the Sanitary Authority, under an Order, which came into operation on the 13th March, 1914. On the 26th April, 1930, a Declaratory Order under Section 112 of the Public Health Act, 1879, as amended by Section 51 of the Public Health Acts Amendment Act, 1907, came into operation and scheduled "Chip Potato Frying" as an Offensive Trade, and this business cannot now be established without the consent of the Sanitary Authority. The number of fish friers' premises on the register during 1930 was 127.

During the year 25 applications to establish a fish frying business were received. Three of these were granted and 22 refused. Of the 127 businesses in the town, 73 were in existence prior to their being scheduled as offensive trades, 23 licences were granted without limit of time, and 31 were granted subject to yearly renewal.

**Common Lodging-Houses.**—Under the Blackpool Improvement Act, 1901, sec. 47, the common lodging-houses, previously existing were re-registered. These houses, with their accommodation, are as follows :—

Eden Street : 160 adults and 1 child. Seed Street : 56 adults and 1 child.

601 visits of inspection were paid, and it was found on the whole that the lodging-houses were kept in a cleanly condition, and managed satisfactorily.

**Sands Inspections.**—I have again to report a very satisfactory condition of the foreshore, and the improvement referred to in my previous reports has been well maintained. The screening apparatus at the north and south outfalls are in full working order, and have proved highly satisfactory in so far as the effects in cleansing the sands have been observed by Inspectors of my department.

**Basement Dwellings.**—These as regards number and unsuitability for habitation as separate tenements remain much as in former years. The housing shortage renders it impossible for us to take any steps to secure the discontinuance of the basement dwellings, but by rigorous supervision by the Inspectorial staff all possible pressure is brought to bear to secure reasonable ventilation and cleanliness and to prevent over-crowding.

**Caravans, Sheds, and similar structures.**—There has been a definite decrease in the number of these dwellings during the past year, but there are still in existence about 300 of them, housing over 700 persons. On the whole, these buildings can only be described as undesirable. A few of them are clean, well kept and weatherproof, but the majority of them are unhealthy, and all reasonable steps to secure their abolition are being taken.

**Legislation in Force.**—The complete list of Byelaws and adopted Acts was given in full in my report for 1926, and it is not necessary to reproduce this list here.

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Milk (Special Designation) Order, 1923.—The following licences were issued during 1930 :

(a) Supplementary Lice	ences	-			
Grade A milk			 	 	4
Certified milk			 	 	1
(b) Dealers' Licences-					
Grade A (Tub. test	ted)		 	 	_
Certified			 	 	1
Grade A milk			 	 	46
Pasteurised milk			 	 	3

**Ice Cream.**—23 samples of Ice Cream were sent to the Clinical Research Association for examination and bacteriological analysis, of which the reports were satisfactory.

**Examination of Cattle.**—The Veterinary Inspector examines at least once quarterly all the live cattle within the Borough; and submits a quarterly report, from which the following details have been compiled :—

		Mi e	lking cows examined.	Total examined.
First quarter	 	 	311	521
Second quarter	 	 	361	698
Third quarter	 	 	320	642
Fourth quarter	 	 	289	498

There was one case of generalised Tuberculosis, which was slaughtered under the Tuberculosis Order. Two animals were found to be suffering from Mastitis, which recovered under treatment. Two cases of Indurated Udder, one Abscesses in the Udder, and one of Gangrene of the Udder, were slaughtered. The health and condition of the cattle inspected was found, on the whole to be good.

The practice of supplying milk in bottles, instead of ladling it out in cans is steadily growing, and consumers of milk are appreciating the advantage of this method of supply. They have only to be more persistent and insistent in their demands for a cleanlier method of milk production and distribution, and the vendors will then be forced to resort to more modern methods. The following is a list of the milk-sellers in the Borough :---

Milkshops selling by retail				25
Provision dealers selling by retail				153
Butchers selling by retail				2
Persons meeting farmers' carts and direct, not taking it home	deliv 	ering 	milk 	81
Selling sterilised and bottled milk				250
Vendors of cream				36
No. of cowsheds in the Borough du occupiers of which sold milk during			the 	28
Ice cream dealers				300

The number of Farmers outside the Borough bringing milk into the Borough was, until recently, 163, but now many of them are sending their milk in by Carriers and Wholesale Dealers, and have ceased to retail it themselves. At present there are 165 sending milk in by Carriers and Retailers.

During 1930, as seen on page 56, 65 visits were paid to cow-sheds within the Borough, 619 to milkshops and dairies, 410 to ice cream stalls and work-places.

74 milk dealers and 49 ice cream dealers, applied for registration during the year.

103 samples of milk which was brought from outside the Borough for sale or consumption within the Borough were submitted for bacteriological examination for the presence of Tubercle Bacilli, all except one of which was found by microscopical and inoculation tests to be free.

**Tuberculosis Order, 1925.**—This Order came into operation on the 1st September, 1925, and Mr. Tom Walker, M.R.C.V.S., and Inspector Dixon were appointed Veterinary Officer and Inspector respectively. During the year the following animals were examined :—

Cows in milk		 	 	76
Other cows or heifers		 	 	19
Other bovine animals		 	 	19

Seven cows in milk and two other cows or heifers were found to be suffering from Tuberculosis—8 with Chronic Cough and definite clinical signs of Tuberculosis, and 1 with Tubercular Emaciation. In each case post-mortem examination confirmed the diagnosis of the Officers, and the animals were destroyed, and the authorised amount of compensation paid to the owners.

**Other Foods.**—The following is a list of shops in the Borough where food is exposed for sale :—

Where Butch	ners' M	leat i	s sold	 	 	254
Meat Stalls				 	 	18
Fish Shops				 	 	86
Grocery and	Provi	sions		 	 	469
Confectioners	s' Sho	ps		 	 	226
Restaurants,	Cafes	and	Tearooms	 	 	117
Fruit Shops				 	 	144
Tripe Shops				 	 	52
Oyster Stalls				 	 	11
Fish and Chi	p Sho	ps		 	 	127

**Slaughter-houses.**—There exist in the Borough the Corporation Abattoirs and one private slaughter-house, though the latter has not been used for the purposes of slaughtering for at least three years.

**Public Slaughter-houses.**— The management of the Public Abattoirs is carried out by a fully qualified Superintendent under the immediate direction and supervision of the Medical Officer of Health.

The premises consist of one Public Slaughter-house used by Butchers in a small way of business, several Private Slaughter-houses, and special premises for the purposes of Triperies, Hide and Skin Depots, Gut Scraping, Offal Disposal, etc. Special premises have been erected and are used by the Jewish Community for their slaughtering require ments.

All animals slaughtered at the Abattoirs are examined, either by the Superintendent or one of the Meat Inspectors, and no meat leaves the premises which has not been examined and passed as fit for human consumption.

Meat condemned is dealt with by a firm occupying premises at the Public Abattoirs, who manufacture such Bye-Products as Meat Meal, Fats, and this firm collects the blood at the abattoirs, which goes through a process of drying, and is then placed on the market as a Manure.

	1924	1925	1926	1927	1928	1929	1930
Cows	190	190	174	148	127	180	181
Heifers	3,679		3,652	3,490	3,399	4,302	5,110
Bullocks			1,965	2,117	2,774	2,459	1,979
Bulls	54		46	33	52	67	49
Calves	1,639	1,596	1,472	1,331	1,514	1,486	1,436
Sheep	56,603	56,576	56,943	61,980	61,653	63,110	63,143
Pigs	1,137	950	946	1,497	2,239	2,137	2,496
	65,226	65,060	65,198	70,596	71,758	73,741	74,394

The following animals were slaughtered at the Abattoirs :---

General Food Supply.—The following visits were paid during the year :--

Milkshops and dairies				 	619
Cowsheds in the Borough				 	65
Cowsheds out of the Bor	ough			 	7
Ice Cream stalls				 	8
Ice Cream workshops				 	402
T				 	147
Other slaughter-houses of	out of	the Bo	orough	 	265
Butchers' shops				 	10,586
Other shops				 	4,882

In all cases where vendors of food have any doubt as to the quality of any article they are invited to send to the Health Office, when the Medical Officer of Health or Food Inspector will at once call and pass an opinion on the article. This arrangement continues to be largely taken advantage of.

It is very desirable that the Corporation should have powers to require the registration of all premises where human food is prepared, stored, or sold. The necessity also of clearing houses for meat brought in from outside districts has already been commented upon.

The Agricultural Produce (Grading and Marking) Act, 1928.—The above Act provides for the Grading and Marking of Agricultural produce produced in England and Wales and for purposes connected with the Order.

EGGS.—Regulations governing Eggs were made during 1928. Three grades were made each for Hen and Duck Eggs. These grades designated the quality of the eggs. This year further regulations have been made whereby there are now four grades of Hen and Duck eggs. These regulations also govern the marking of British eggs which have been "Preserved," "Chilled," and "Cold Stored." Blackpool depends for her fresh egg supply on the local farmers and no grading is carried out, the farmers generally mixing their eggs (all sizes) and selling at a slightly less price. Considerable quantities of Northern and Southern Ireland graded eggs are sold in Blackpool. The regulations governing "Preserved," "Chilled," and "Cold Stored" British eggs are carried out without the slightest trouble,

BEEF.—Regulations governing British Beef and prescribing grades do not apply locally, being confined chiefly to Birmingham and Smithfield.

WHEAT FLOUR, MALT FLOUR, MALT EXTRACT, BROCOLI, APPLES AND PEARS; POTATOES, TOMATOES AND CUCUMBERS—Regulations governing the above British products have been made, but as these orders are not compulsory, very little grading in these products has been carried out locally.

Sale of Food and Drugs Acts, and the Public Health (Preservatives in Food) Regulations, 1925.—Mr. Priestley, the Chief Sanitary Inspector, is the Sampling Officer under these Acts and Regulations and the following is a list of the 298 samples taken by him together with observations upon those adversely reported upon by the Public Analyst :—

	Samples. nber	Nature	Formal Samples. Number					
Taken.	Not Genuine	Nature o	or 5a	mpie.			Taken.	Not Genuine
2		Almonds, Ground						
	and the second	Ammoniated Tinctu		Ouinine				
$\frac{2}{2}$		Baking Powder		100000000000000000000000000000000000000		1.		
5		Barley						1
ĩ		Beef Paste				1.11		
-	Ker States	Beef, Potted					1	1992
1		Beer			****			105
1	_	Black Currant Cordi	al		****			
3	1	Boracic Ointment					1	1
		Brawn					i	-
6		Bread and Butter					-	
6		Butter		****			12	
2		Camphorated Oil						1
ĩ		Candied Peel			****			
		Cheese			****		2	
1		Chicken and Ham P	asta			****		
1		Coffee			****	****	7	
1		Com Elour	****		****			
		Casam			****		12	
3		Comments	****			****	1	
1	-	Daird Emile				****	-	1 miles
2		Delevine			****		200	
1	The state of the s	Flour, Self Raising	****		****			
1	ALCONTRACT Y		****			****		
3	1	Glycerine			****			
1	1	Glycerine and Borax Iodine, Tincture of		****	****	****		a the second
3	_		****		****	****		
2		Jam, Raspberry	****	****				
1		Jam, Strawberry			****			
2		Jam, Black Currant	****	****	****		5	
-		Lard	****		****		2	
2		Lemonade Lemon Cheese	****		****		-	
					****	****		
1	120 100	Mace			****		7	
1		Margarine	;					
0	_	Marmalade	****				3	
2	-	Meat, Potted	****	****	****		0	

Informal Samples. Number			Formal Samples. Number						
Taken.	Not Genuine		Nature	or sar	npie.			Taken.	Not Genuine
	-					~			
-		Milk		****	****		****	113	14
1		Milk, Dried,							-
2	-	Milk, Conder							
2		Milk, Conder	ised Ma	chine:	Skimme	ed Swee	etn d		_
3		Mincemeat		****	****	** **	****		
1		Oatmeal			****		****		
1	1	Ointment, C			à		****	1	1
2	1	Ointment, Io		1			1011	1	
2		Ointment, G			****		****	-	
1		Ointment, Io		****		****			
2	1	Ointment, S		****				1	-
1	1000	Orange Squa			****	****		-	-
1		Peas, Tinnee	1					-	-
-		Pepper				****		1	
1	-	Prunes		****					-
3		Raisins		****				3	
1	_	Rice		****				-	
1		Rum	****	****			****		
		Salmon Past	e	****				1	-
3	3	Sausage			****			2	-
1	-	Seidlitz Pow							
2		Shrimps, Pic		****			****	-	
4		Shrimps, Po						1	
2	1	Suet, Shredd	led		****			1	
4	-	Sugar		****					-
2		Tapioca						-	-
4		Tea						-	
1		Veal, Presse	d	****	****				
1		Vinegar				****		10	2
1	-	Whisky		••••			••••	-	-
109	9							189	18

#### REMARKS.

Boracic Acid. Informal Sample No. 162. — Contained Boracic Acid 8.5 per cent. Wax 91.5 per cent. Deficient of 15 per cent. of its Boric Acid.

Boracic Acid. Formal Sample No. 187.—Contained Boracic Acid 8.4 per cent., Wax 91.6 per cent. Deficient of 16 per cent. of its Boric Acid. Reported to Health Committee. Legal proceedings authorised. Case withdrawn. Vendor had Warranty from Manufacturers.

Glycerine and Borax. Informal Sample No. 252.—Contained Glycerine 85.2 per cent., Borax 14.8 per cent., 3 per cent. excess Borax. Reported to Health Committee. No further action taken.

Milk. Formal Sample No. 11.—Contained Milk 97 per cent., added water 3 per cent. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 21.—Contained Fat 2.94 per cent., Solids not Fat 8.84 per cent., Water 88.22 per cent. Deficient of 2 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 100.—Contained Fat 2.91 per cent., Solids not Fat, 9.09 per cent., Water 88.00 per cent. Deficient of 3 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 112.—Contained Fat 2.94 per cent., Solids not Fat 8.59 per cent., Water 88.47 per cent. Deficient of 2 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 141.—Contained Fat 2.88 per cent., Solids not Fat 9'05 per cent., Water 88.07 per cent. Deficient of 4 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 144.—Contained Fat 2.91 per cent., Solids not Fat 9.12 per cent., Water 89.97 per cent. Deficient of 3 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk, Formal Sample No. 145.—Contained Fat 2.82 per cent., Solids not Fat 8.95 per cent., Water 88.23 per cent. Deficient of 6 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 177.—Contained Milk 98 per cent., Added Water 2 per cent. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 183.—Contained Fat 2.91 per cent., Solids not Fat 8.93 per cent., Water 88.16 per cent. Deficient of 3 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 184.—Contained Fat 2.91 per cent., Solids not Fat 8.98 per cent., Water 88.11 per cent. Deficient of 3 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 185.—Contained Fat 2.76 per cent. Solids not Fat 8.69 per cent., Water 88.55 per cent. Deficient of 8 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 186.—Contained Fat 2.88 per cent., Solids not Fat 9.00 per cent., Water 88.12 per cent. Deficient of 4 per cent. of its Fat. Reported to Health Committee. Warning letter sent to Vendor.

Milk. Formal Sample No. 291.—Contained Milk 97 per cent., Added Water 3 per cent. Reported to Health Committee. Warning letter sent to Vendor

Milk. Formal Sample No. 294.—Contained Milk 91 per cent., Added Water 9 per cent. Reported to Health Committee. Warning letter sent to Vendor.

**Ointment Creosote.** Informal Sample No. 23.—Contained Creosote 7 per cent., Paraffin Wax 93 per cent. Deficient of 30 per cent. of its Creosote. Reported to Health Committee. No further action taken.

**Ointment Creosote.** Formal Sample No. 44.—Contained Creosote 4 per cent., Paraffin Wax 96 per cent. Deficient of 60 per cent. of its Creosote. Reported to Health Committee. No further action taken.

**Ointment Iodoform.** Informal Sample No. 24.—Contained Iodoform 8 per cent., Fat 92 per cent. Deficient of 20 per cent. of its Iofodorm. Reported to Health Committee. No further action taken.

**Ointment Sulphur. Informal Sample No. 27.**—Contained Sulphur 6 per cent., Fat 94 per cent. Deficient of 40 per cent. of its Sulphur. Reported to Health Committee. No further action taken.

Sausage. Informal Sample No. 127.—Contained Sulphur Dioxide 160 parts per million. Reported to Health Committee.

Sausage. Informal Sample No. 243. Contained Sulphur Dioxide 10 parts per million. Reported to Health Committee. No further action taken.

Sausage. Informal Sample No. 278. Contained Sulphur Dioxide 230 parts per million. Reported to Health Committee. No further action taken.

Suet, Shredded. Informal Sample No. 285.—Contained Suet 82 per cent', Wheat Flour 18 per cent. Reported to Health Committee. No further action taken.

**Vinegar.** Formal Sample No. 137.—Contained Acetic Acid 4.6 per cent. Total solid matter 0.4 per cent. Water 95.0 per cent. Reported to Health Committee. No further action taken.

**Vinegar.** Formal Sample No. 166.—Contained Acetic Acid 4.2 per cent. Total solid matter 0.5 per cent. Water 95.3 per cent. Analyst reported that the sample is not one of Vinegar but a diluted solution of Acetic Acid artificially coloured. Reported to Health Committee. Legal proceedings instituted. Dismissed.

**Merchandise Marks Act, 1926.**—Section 2 of this Act gives power by means of Orders in Council, to require that imported goods on importation, on exposure for sale wholesale and retail, must bear an indication of their origin. In pursuance of that authority Orders in Council have been made with respect to certain foodstuffs :

Cl	ass of 1	Food.			Date of Order operative
Fresh apples					November 13th, 1928.
Honey					January 13th, 1929.
Dried eggs					March 21st, 1929.
Eggs (Hen or D	uck) in	shell		<i></i>	April 21st, 1929.
Currants, Sultar	nas and	Raisir	15	part part	April 21st, 1929. June 21st, 1929.
Oat products, i (not includ Natural Oa	ling Cr	ushed	or B	ruised	June 21st, 1929.
Raw Tomatoes					

Provision is made under Sec. 9 of the Act for the administration by Local Authorities of this Statute and the Orders made thereunder. Power of entry is provided for and an authorised officer is entitled to take samples, and Chief Inspector Priestley has been appointed to carry out the provisions of this Act.

**Housing.**—I am indebted to the Borough Treasurer for supplying me with the number of inhabited and uninhabited houses during the Spring enumeration, and for the sake of comparison I give the corresponding figures for the years since 1903.

The figures for 1930 were obtained by an enumeration held during January, 1931.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	· · · · · · · · · · · · · · · · · · ·	···· ··· ··· ··· ···	$\begin{array}{c} 309\\ 272\\ 188\\ 191\\ 153\\ 171\\ 200\\ 207\\ 298\\ 282\\ 121\\ 130\\ 105\\ 77\\ \end{array}$	$11,181 \\11,494 \\11,789 \\12,053 \\12,334 \\12,607 \\12,994 \\13,361 \\13,714 \\14,209 \\14,784 \\15,096 \\15,682 \\15,062 \\$	$\begin{array}{c} 11,490\\ 11,766\\ 11,977\\ 12,244\\ 12,487\\ 12,778\\ 13,194\\ 13,568\\ 14,012\\ 14,491\\ 14,905\\ 15,226\\ 15,787\end{array}$
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$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$					
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$			77		10.010
1917 1918 1919 1920 1921		1.000		15,963	16,040
1918 1919 1920 1921			27	16,016	16,043
1919 1920 1921			34	16,877	16,911
1920 1921			144	16,848	16,992
1921			403	17,085	17,488
			375	17,708	18,083
1922			270	18,392	18,662
1923			619	19,288	19,907
1924			784	20,844	21,628
1925			895	22,060	22,955
1926			849	23,189	24,038
1927			744	24,386	25,130
1928			809	25,853	26,662
1929			643	26,585	27,228
1930			759	27,174	27,933

## NUMBER OF HOUSES.

The need for houses for the working classes is still acute, and the provision of houses under the Municipal scheme has only partly met the situation. The shortage of houses has necessitated overcrowding and other undesirable conditions of living which are not conducive to the public health or welfare.

NUMBER OF NEW HOUSES ERECTED DURING THE YEAR.

( <i>a</i> )	Total (including numbers given	separ	ately u	nder	<i>b</i> )	
(i)	By the Local Authority					11
(ii)	By other Local Authorities					Nil.
(iii)	By other bodies and persons					740

62	
(b) With State assistance under the Housing Acts :	
(i) By the Local Authority—	
(a) For the purpose of Part II of the Act of 1925	Nil.
(b) For the purpose of Part III of the Act of $1925$	Nil.
(c) For other purposes	Nil.
(ii) By other bodies or persons	Nil.
1.—INSPECTION OF DWELLING-HOUSES DURING THE YEAR—	
(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) and the number of inspections made	873
<ul> <li>(2) Number of dwelling-houses (included under sub-head         <ul> <li>(1) above) which were inspected and recorded             under the Housing Consolidated Regulations, 1925,             and the number of inspections made</li> </ul> </li> </ul>	121
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	54
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	599
2.—Remedy of Defects during the Year without Service of Formal Notices—	
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	990
3.—Action under Statutory Powers during the Year—	
A.—Proceedings under Section 3 of the Housing Act, 1925.	
(1) Number of dwelling-houses in respect of which notices	
were served requiring repairs	8
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	26
<ul><li>(b) By Local Authority in default of owners</li><li>(3) Number of dwelling houses in respect of which Closing</li></ul>	-
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declara- tions by owners of intention to close ,	Nil.

## B.—Proceedings under Public Health Acts.

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices :          380         (a) By owners           380         (b) By Local Authority in default of owners
С.–	-Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—
(1)	Number of representations made with a view to the making of Closing Orders 54
(2)	Number of dwelling-houses in respect of which Closing Orders were made 54
(3)	Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling- houses having been rendered fit Nil.
(4)	Number of dwelling-houses in respect of which Demolition Orders were made 44 (wooden structures).
(5)	Number of dwelling-houses demolished in pursuance of Demolition Orders
	7 Demolished, 19 removed out of area (wooden structures).
d u	IBER OF HOUSES OWNED BY THE LOCAL AUTHORITY, istinguishing those built in the last two years and held nder (1) Part III of the Housing Act, 1925, (2) Part II f the Housing Act, 1925, and (3) other powers—

1919 Act	 666
1923 Act	 505
1924 Act	 11

## BASEMENT TENEMENTS AND TEMPORARY DWELLINGS.

4.-

A special survey and census has been taken of the Basement Tenements and Temporary Dwellings in the town, and the following information has been obtained. (a) BASEMENT TENEMENTS.

There are 221 basement tenements occupied by 553 people.

Of these 221 basements, 142 are single room tenements, 55 are tworoom tenements, and 24 are three-room tenements.

Of the 142 room tenements-

38 are occupied by 1 person each.

65	,,		2 persons	,,
23	,,	,,	3 ,,	,,
10	,,		4 ,,	,,
<b>5</b>		,,	5 ,,	,,
1	,,	,,	8 ,,	,,

The main situation of these tenements is as follows :----

Albert Road .		 	 	93
Charnley Road		 	 	42
Adelaide Street		 	 	24
Tyldesley Road		 	 	18
Lonsdale Road		 	 	23
Withnell Road		 	 	4
Osborne Road	••••	 	 	3

With regard to the rents which are paid for these tenements, it may safely be said that they are greatly in excess of the conveniences and amenities secured. They vary between 8s. 6d. for a middle or back basement to 18s. 0d. (and in some cases 20s.) for a front tenement.

Basement tenements generally do not allow of sufficient ventilation and sunshine, suitable storage for food is inadequate, and the accommodation does not allow for separation of the sexes.

The rents which are paid are in many cases of such an amount as should secure full means for carrying out a healthy existence.

It is desirable that the Sanitary Authority should have considerable increased powers of control of these dwellings and forbidding their use as separate tenements unless and until approved by the Health Committee.

## (b) TEMPORARY STRUCTURES (EXCLUDING WOODEN BUNGALOWS).

There are 300 occupied and 56 unoccupied caravans and similar structures in the town, occupied by 776 persons.

60 of these structures have 1 occupant each.

124	.,,	,,		2 oc	cupants	,,
54	,,	,,		3	,,	,,
30	,,	,,		4	,,	55
15	,,	,,	,,	5	,,	,,
9	,,	,,	.,	6		,,
7	,,	,	,,	7	,,,	,,
1			,,	8	,,	,,

These structures are often dilapidated, draughty and damp and unsuitable for human habitation. A very considerable improvement has been effected in them during the past two years, but they still want drastically weeding out. The powers which we secured in a recent local Act, though they did not grant us all that we desired, yet enable us to deal more or less effectually with this class of dwelling and I trust you will continue to exercise to the full the powers which you possess under the recent Housing Act and our own local Act.

The rents paid for caravans vary between 10s. 0d. and 14s. 0d. per week where the occupiers do not own the structure, but where they do, the ground rent is about 5s. 0d. per week.

## Meteorology.

The Blackpool Observatory is 70 feet above mean sea level, and its geographical position is Lat. 53° 49' N., and Long. 3° 3' W.

The pre-war publication of observations is now resumed, and daily telegrams are issued, which secure insertion in the press.

The equipment of the Observatory is as in former years, and the list of instruments is given in earlier reports.

SUNSHINE.—Bright sunshine amounted to 1336.9 hours, or 175.3 hours below the average for the 25 years 1904-1929. The daily mean value was 3.66 hours, as compared with 4.60 in 1929. Sunshine was recorded on 283 days, and the sunniest days were June 7th and June 8th with 14.8 and 14.7 hours respectively. The brightest months were June, 227.6 hours, and May 180.2 hours.

RAIN.—The rainfall for the year was 39.92 inches, or 5.24 above the average for the 25 years 1904-1929. Rain fell on 216 days, and the months with the heaviest fall were August, 7.88; October, 5.13 and January 5.03 inches. The heaviest fall of rain in one day was 1.57 on the 3rd August.

GALES.—Two gales occurred during the year, viz., on January 2nd and April 4th. In gusts, the highest wind velocity was 63 miles per hour, on the 4th April.

SNOW fell on six days, viz., March 15th, 16th, 18th, 19th, 20th; and December 9th. HAIL fell on 7 days. THUNDERSTORMS occurred on eight occasions, viz., June 18th and 23rd, July 3rd and 14th, August 2nd and 27th, September 4th and November 2nd.

BAROMETRIC PRESSURE.—The highest observed reading was 1,042.4 mb., on the 9th February, and the lowest was 975.5 mb., on the 2nd November. The greatest monthly range of pressure occurred in February, 64.5 mb., and the smallest in April, 25.0 mb.

TEMPERATURE.—The mean shade temperature for the year as 49.4 The highest temperature recorded in the shade was 87°F. on the 27th of August, and the lowest was 24°F. on the 21st February. The highest temperature recorded by the black bulb solar radiation thermometer was 132°F. on the 30th June, and the lowest temperature recorded on the grass was 13°F. on February 21st. MIST occurred on January 1st, 14th, 16th and 28th; April 11th and 25th; August 30th; September 5th, 9th and 16th; November 27th; December 4th, 5th and 7th.

FoG occurred on January 30th ; February 14th ; and December 3rd, 6th, 9th, 10th, 17th and 18th.

HUMIDITY.—The mean relative humidity throughout the year was 82.4% of saturation. The lowest record was 74.2% for the month of June, and the highest was 93.4% for the month of December.

UNDERGROUND TEMPERATURE.—The highest temperature recorded at a depth of one foot was 61.6°F., on the 5th July, and the lowest was 35.0°F. on the 22nd February. At a depth of four feet the highest record was 56.8°F., on the 2nd, 3rd and 4th September, and the lowest was 41.3°F., on the 28th February.

WIND.—From daily observation, made at 9 a.m., the following direction was recorded:—N. 29; N.E. 23; E. 48; S.E. 54; S. 44; S.W. 56; W. 60; N.W. 39; Calm 12.

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