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#### COUNTY PALATINE OF LANCASTER



OFR

260CT 1933

OF THE

# **MEDICAL OFFICER OF HEALTH**

# FOR THE YEAR 1932,

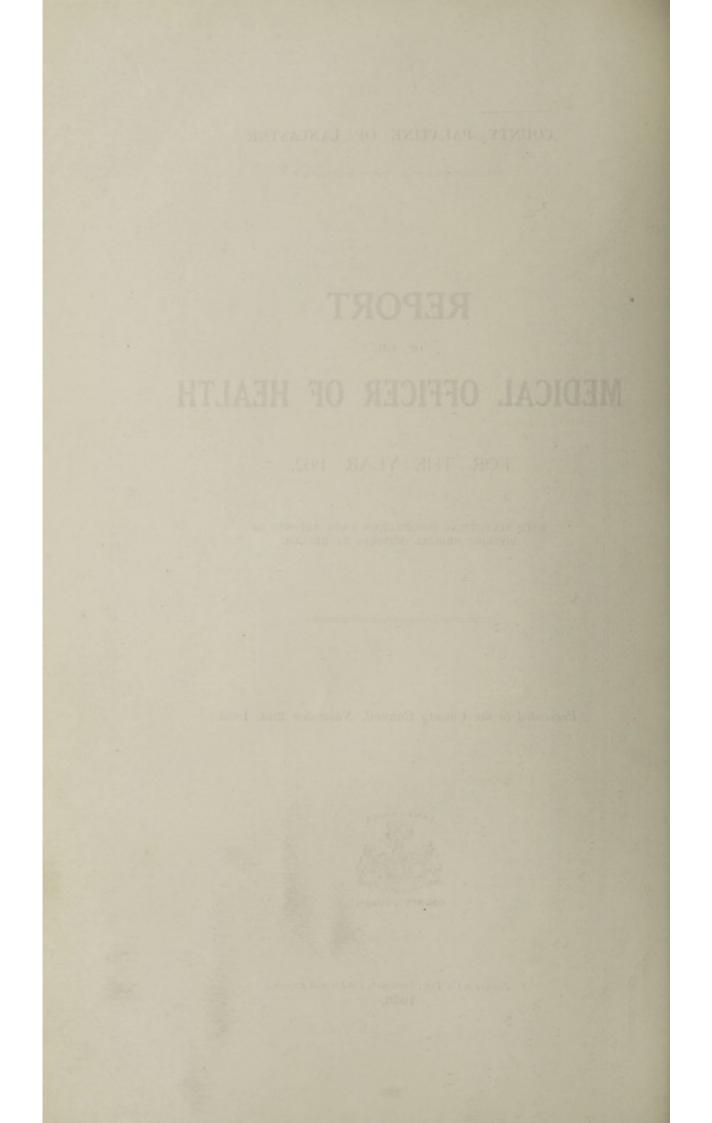
WITH STATISTICAL INFORMATION FROM REPORTS OF DISTRICT MEDICAL OFFICERS OF HEALTH.

(Presented to the County Council, November 2nd, 1933.)



COUNTY COUNCIL.

C. Tinling & Co. Ltd., Liverpool, London and Prescot. 1933.



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## PUBLIC HEALTH AND HOUSING COMMITTEE (1933).

3

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**Chairman of Committee :** 

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#### Vice-Chairman :

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Vice-Chairman :

H. F. JEFFERY, Esq., M.B., Ch.B., J.P.

#### (\* County Aldermen)

#### **County Aldermen :**

R.	J. CLEGG,	Esq., J.P.	
R.	SEPHTON,	Esq., M.R.C.S., J.	Ρ.

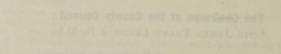
C. J. TRIMBLE, ESq., C.B., C.M.G., L.R.C.P., L.R.C.S.I., D.P.H., J.P., D.L. J. W. WATTERSON, ESq., M.B., C.M., J.P.

#### **County Councillors :**

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		x, Esq.,			J.P.
P. W.	POTTS	, Esq.			
C. DE	LISLE	SHORTT.	Esq.,	M.D.,	B.Ch.

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The Vice-Charmen of the county teams .

Chairman of Controllino 1

A TRAVERSE Sug. C.B. C.M.G. L.M.L.F. I. R.F. S. D. F. C.

County Aldermany

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#### REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

For the Year ended December 31st, 1932.

#### To the County Council of the County Palatine of Lancaster.

I have the honour to submit for your consideration the forty-fourth annual report on the health, sanitary condition and sanitary circumstances of the Administrative County of Lancaster for the year ended 31st December, 1932, together with the vital statistics relative to that period.

Annual Reports.—The Ministry of Health Circular 1269, dated 24th June, 1932, directed that annual reports of district Medical Officers of Health for the year 1932 be drawn up on lines similar to those of the preceding year, the request for a "Survey Report" containing a record of progress covering a period of years again being deferred.

To assist local Medical Officers of Health in the Administrative County in the preparation of their reports, and to ensure a measure of uniformity, a Summary Form containing all the requirements of the Ministry was again prepared in the County Public Health Department, and from these summaries much of the information given in this report is extracted.

The County report for 1932, in the main, follows on the lines of previous years; it reviews the progress made during the year in health matters, and contains detailed information with regard to the public health services of the County Council and the various Local Authorities; also the usual County and District vital statistics, records of notifications of infectious diseases, tabulations of sanitary work accomplished, &c.

Notwithstanding the continued economic difficulties there has been a progressive development in many health services, although their expansion may, in some areas, have been somewhat curtailed. The standard of efficiency of these services has generally been maintained. The gain to individual health by the thorough administration of the various communal health services cannot be valued in terms of money.

The policy of amicable and close co-operation between the health departments of the County Council and the Local Authorities has been well sustained.

During the year much of the time of the County Public Health Staff has been devoted to the inspection of districts, and preparation of reports, to assist the Parliamentary Committee in its work in connection with the review of districts under the provisions of the Local Government Act, 1929. These reports reviewed the sanitary circumstances of various localities, dealt with such matters as water supplies, provision of sewerage and sewage disposal, and other sanitary services. Community of interest was also taken into consideration, and due weight given as to whether the localities were provided satisfactorily with the essential public health services.

#### STATISTICS AND SOCIAL CONDITIONS OF THE COUNTY.

Area of Administrative County.—The area of the Administrative County as constituted on the 31st December, 1932, was 1,048,363 statute acres.

Review of County Districts.—Under Section 46 of the Local Government Act, 1929, the County Council has undertaken the first general review of districts. As a result, the following changes of boundaries were effected during the year 1932. Further alterations and adjustments have been decided upon, but did not become effective during the year now under report. ALTERATION OF BOUNDARIES IN THE YEAR 1932.

Whiston Rural.—The township of Speke (area 2,526 acres, population 384), was transferred to the City of Liverpool on the 1st April, 1932.

Great Crosby, Little Crosby, and Waterloo-with-Seaforth.—The urban district of Little Crosby (area 1,919 acres, population, census 1931, 1,097), was amalgamated with the urban district of Great Crosby on the 1st April, 1932. A small portion of the urban district of Waterloo-with-Seaforth (area 1-33 acres, estimated population 45), was also added on the same date to Great Crosby, whilst 2-53 acres and an estimated population of 126 was transferred from Great Crosby to Waterloo-with-Seaforth.

Sefton Rural and West Lancashire Rural.—The Sefton rural district (area 7,186 acres, population, census 1981, 2,595), was amalgamated with the West Lancashire rural district from the 1st April, 1982.

Prescot and Whiston Rural.—On the 1st April, 1932, portions of the townships of Eccleston (area 31 acres, estimated population 80), Knowsley (area 182 acres, estimated population 145), Whiston (area 253 acres, estimated population 1,725), were transferred to the Prescot urban district.

The only alteration in 1932 affecting the Administrative County area was the extension of Liverpool, whereby there was a loss of 2,526 statute acres.

**Population.**—Census 1931.—The population of the County of Lancaster was enumerated as at midnight 26–27th April, 1931. The total population of the Administrative County at that date was 1,795,073 (males 853,108, females 941,965). At the Census of 1921 the enumerated population was 1,743,824, the increase during the ten years was therefore 51,249, equal to 2.9 per cent. The trend of movement of population was towards the rural districts, the increase in the municipal boroughs and urban districts was only 1-6 per cent., against a percentage of 11-4 in the rural districts.

The feature claiming the most prominent notice is the large and growing number of decreases reported. Of the 99 municipal boroughs and urban districts no fewer than 54 record a loss of population during 1921–81, as compared with 45 in the preceding ten years, outstanding examples being those of Dalton-in-Furness and Hindley, where the populations have declined by 1,963 and 1,931 or 16-0 and 8-2 per cent. respectively. Seven of the 19 rural districts also record a decline as compared with four in 1921.

The districts showing the greatest percentage increase in population during the inter-censal period, 1921-1931, were :---

Urban districts		ercentage of 1921 pulation.			ercentage of 1921 opulation.	
Thornton Cle	veleys	 +64.2	Prestwich	1	and the second s	
Irlam		 +36.2	Formby		+26.1	
Great Crosby		 +33.3	Poulton-le-Fyle		+23.2	
Whitefield		 +31.9	Stretford			
Rural districts						
Barton-upon-	Irwell	 +55.4	Clitheroe		+27.9	
Warrington		 +32.2	Fylde		+25.2	
Preston		100.0	- j.ue		1.20.2	

The districts showing the most marked percentage diminution in population were :--

Urban districts.—	of 1921 population.		Percentage of 1921 population.
Dalton-in-Furness	16.0	Aspull	8.4
Grange	9.8	Church	8.8
Ashton-in-Makerfield	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Hindley	8.2
Rural districts			
Ulverston	9.7	Limehurst	6-3
Bury	6.6		STATISTIC

All the areas return increases in the number of occupied dwellings, with the exception of Aspull and Dalton-in-Furness, where decreases of 0.81 and 0.48 per cent. respectively are recorded. The largest recorded increment is that of 131.10 per cent. in Thornton Cleveleys, followed by Barton-upon-Irwell (R) 79.45 per cent., and Great Crosby, Irlam, Morecambe and Heysham (B), Whitefield and Preston (R) with over 50 per cent. each.

The average size of families in the several areas varies from 4-38 to 3-21 persons. The largest are found in Rainford (4-38), Aspull (4-37), Haydock and Golborne (4-30) each; the smallest in Trawden (3-21), Barrowford (3-24), Morecambe and Heysham (B) (3-28), and Wardle (3-29). In every area save Aspull the families of 1931 are smaller on average than they were 10 years ago. In the matter of room density the County average of 0.86 persons per room is a mean of variations in individual areas varying within the limits of 0.53 and 1.22. The areas exhibiting the worst conditions are Haydock, with the highest average of 1.22 persons per room, followed by Ince-in-Makerfield (1.13) and Aspull (1.08). In every area save Croston the density figure compared with 1921 shows an improvement.

Overcrowding has been reduced in a large majority of areas, and in some the improvement shown for the decennium has been considerable, e.g. Skelmersdale, Leigh (B), etc. As measured by the conventional "more than two persons per room" index, the overcrowded element is at its maximum in Haydock, where 19-92 per cent. of the population fall within the category. Billinge and Winstanley (17-19). Ince-in-Makerfield (16-52) and Widnes (B) (15-59) come next in order of magnitude.

ESTIMATED POPULATION, 1932.—The Registrar-General estimates the resident population of the Administrative County at the middle of the year 1932 at 1,802,700,

Table 2, pages 15 to 22, shows the Census 1931 enumeration of each County district, and the estimated population mid-year 1932.

The following table gives the area, population, persons per acre, and acres per person of the Administrative County as constituted on the 31st December, 1932, distributed between the non-county boroughs, urban and rural districts :--

		Popu	lation.	Persons	Acres
when the cotton unlie have been an short ity.	Area in Acres,	Census,	Estimate of Population,	per Acre.	per Person.
a mile has an adverse effect on the	31/12/1932.	1931.	1932.	Calculated on estimated population	
Municipal Boroughs (19)	90,028	592,530	590,350	6.55	0.15
Urban Districts (79)	254,686	940,532	945,850	8.71	0.26
Rural Districts (18)	703,649	261,627	266,500	0.87	2.64
Administrative County	1,048,363	1,794,689	1,802,700	1.71	0.58

Number of inhabited houses (1931), and number of families or separate occupiers (1931).— The number of private families and dwellings in the Administrative County as constituted at the date of the Census, 1931, (April 26/27), is given in the table below :—

				Po	OPULATION	κ.			
				Cer	nsus 1931.				
			1			Private Fa	milies and	Dwellings.	1 Carriel
	Persons.	Males.	Females.	Persons per Acre.	No. of Private Families.	Popula- tion in Private Families.	Struc- turally Separate Dwell- ings Occu- pied.	Rooms Occu- pied.	Rooms per Person
Urban Districts	1531112	725504	805608	4.4	399465	1472116	384845	1775688	0-83
Rural Districts	263961	127604	186357	0.4	65180	245047	63832	814545	0.78
Administrative County	1795078	853108	941965	1.7	464595	1717168	448677	2090288	0-82

# Social conditions, including the chief occupations of the inhabitants, and the influence of any particular occupation on public health :---

Occupations of County Inhabitants.—The detailed analyses of occupations of the County inhabitants as ascertained at the 1931 Census are not yet available. The numbers of persons engaged in various occupations as enumerated at the 1921 Census were given on page 10 of the 1931 County Health Report.

Social Conditions, etc.—There are as yet no exact methods for ascertaining the effects of the economic crisis and widespread depression on the general health of the population in the Administrative County, but many medical officers of health in their annual reports comment on this subject, examples of which are given below :—

Abram.—Those who have been out of work for any considerable time have suffered both mentally and physically. They have become mentally depressed and physically inefficient. This is noted when work is suddenly thrust upon them.

Chadderton.—Trade has been very bad for a considerable period, and the standard of living of many families is very low.

Colne (B).—The main occupation of the inhabitants of the towns are those connected with the cotton trade, which has been at a very low ebb for some years now, with the consequence that the standard of living has been reduced.

Failsworth.—During the year, with the depression in trade, the cotton mills have been on short time, and this has been the cause of a good deal of hardship.

Haslingden B.-The humid atmosphere of the cotton mills has an adverse effect on the respiratory system.

Padiham.—Regarding the general health of the inhabitants of the community, the Medical Officer of Health points out the large amount of unemployment is having a very serious and devastating effect, and he has come to the conclusion that unemployment always reacts on the health of the community owing to the consequent lack of proper nourishment.

Comments are also made in some reports on the influence of certain occupations on health :---

Abram.—Miners' nystagmus is prevalent. Miners also suffer from respiratory affections, rheumatism and gastric disturbances.

Brierfield.—The chief occupation is cotton weaving, and this is probably conducive to the prevalence of respiratory troubles.

Chadderton.-Bronchitis and asthma are common affections in those who have worked many years in the cardroom.

Clayton-le-Moors .- Bronchial and digestive diseases in weaving section.

Crompton.-Cotton operatives have a tendency to bronchitis, rheumatism and catarrhal conditions.

Ince-in-Makerfield .- Colliers subject to rheumatism, sciatica and bronchitis.

Padiham .- Increased susceptibility of weavers to influenza on account of shuttle kissing.

Prestwich.—Owing to confinement to offices and warehouses, anæmia and gastric troubles are the main complaints of the majority.

Ramsbottom.—Respiratory impurities due to dust, dermatitis from colours in dyeing, printing and weaving.

Rishton.—The danger of transmission of respiratory and infectious diseases, by the drawing of the cotton through the shuttle eyes, still persists.

Whitworth .-- Silicosis among quarrymen, bronchitis and asthma among card-room operatives.

Fylde (R) .-- Dyspeptic and rheumatic ailments due to work in the mills.

Rateable value and sum represented by a penny rate (local purposes).—The rateable value of the Administrative County area in 1932, according to the figures given in the summary forms supplied by the local medical officers of health, was £9,248,376, and a penny rate on the assessable value would produce £36,004.

#### VITAL STATISTICS.\*

Summary of County Statistics, 1889-1932.—The following tabular statement compares the County birth and death rates for the year 1932 with the previous year, and with the forty-three years (1889–1931), grouped in quinquennial periods :—

						PER 1,000 o	P POPULATION.		Maternal	Mortality Rate	Rate of
					Live Birth-rate	Death-rate	Death-rate from Tuberculosis of Respiratory System	Death-rate from Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still) Births	Deaths under One Year per 1,000 Live Births
Iean of 5	years										
1889			ars)		30.14	18.59	†1·33				157
1897-					27.30	17.02	1-09			10 100 100 100	167
1902-	1906				25.84	14.99	0.88	0.64		The steel of the	141
1907-	1911				23.55	14-11	0.87	0.75	_		126
1912-	1916				20.90	14.27	0.90	0.94	5.06		111
. 1917	1921				18.58	14.06	0.87	1.09	5.10	-	93
1922-	1926				16.68	12.54	0.69	1.22	5.23		81
1927-	1931				14.21	12.67	0.58	1.40	5.38	-	72
Year											
1931	2		1.1.1		13.85	12.86	0.56	1.49	4.83	4.58	70
1932	•				13-44	12.29	0.54	1-49	4.70	4.45	67
Increase of	deer	casa	in 193	2 on-	and a star						
			1927-		-0.77	-0.38	-0.04	+0.09	-0.68		-5
Previo					-0.41	-0.57	-0.02	Nil	-0.13	-0.13	

† Seven years.

\* The death-rates given in this Report, including the general death-rate, the cancer rate, and the maternal mortality rate for the County area and for the County districts, are "unweighted" or "crude" rates, that is, they are neither "standardized" nor "corrected."

Live Births and Birth-rates.—The live births registered in or belonging to the Administrative County during the year ended 31st December, 1932, numbered 24,239, compared with 25,014 in the previous year—a decrease of 775. In 1930 the live births numbered 25,342, or 1,103 more than in the year under report.

The sex of the children born alive in 1932 is shown below :---

Urban Districts Rural Districts	Males. 10528 1818	 Females. 10205 1688	 Total. 20733 3506
Administrative County	12346	11893	24239

The number of male births again exceeded those of females, the excess being equal to 1-87 per cent.; last year this percentage was  $2\cdot07$ , and  $2\cdot05$  per cent. in 1930.

The following table shows the County, urban, and rural live birth-rates for the year 1932, also the rates for each year in the preceding decennial period. For comparative purposes the birth-rates for the whole country are also given :-

		Liv	ve Birth	n-rate p	er 1,000	) of the	Estima	ated Po	pulatio	n.	
	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Urban Districts	18.28	17.42	16-62	15.99	15.66	14.59	14.64	14.08	14.07	13.90	13-50
Rural Districts	17-04	16-48	16-05	15.23	15.29	14.48	14.08	14.20	13-66	13.51	13-12
Administrative County	18.11	17-29	16-54	15.89	15-61	14.57	14-56	14.09	14-01	13.85	13-44
England and Wales	20-6	19.7	18-8	18-3	17.8	16.7	16.7	16-3	16-3	15.8	15-3

The table on page 14 shows the County and the urban and rural district live birth-rates since 1889 (the first year County statistics were available), and also the five year averages.

The live birth-rate for the Administrative County for the year 1932 was 13-44 per 1,000 of the estimated population (urban districts 13.50, rural districts 13.12). This rate has consistently declined each year since 1920—the year following demobilisation, and is again the lowest on record. The County rate is 0-41 per 1,000 below that of the year 1931, and 0-77 per 1,000 below the average of the 5 years 1927–1931. The fall in the County birth-rate since 1920 is equal to 9-53 per 1,000 of the population and represents a diminution in the number of births equivalent to 17,180 per annum. The decline in the rate during the last forty years is 18-49 per 1,000, or more than 33,000 births per annum.

The County birth-rate in 1932 was 1.9 per 1,000 below that of England and Wales.

In 52 of the 116 County districts the birth-rate in 1932 was lower than the death-rate.

The decline in the excess of births over deaths is shown in the following statement :--

#### Excess of births over deaths

Year	1921	 14,976	Year	1927	 3,347
.,	1922	 8,632	,,	1928	 4,803
	1923	 8,853	.,	1929	 186
	1924	 7,166		1930	 3,893
	1925	 5,781		1931	 1,802
	1926	 6,491		1932	 2,072

The highest district birth-rates in 1932 were recorded in :--Widnes (B) 20.1 per 1,000 of the population, Fleetwood and Haydock each 20.0, Ince-in-Makerfield 19.5, Litherland 18-5, Irlam 18.0, Prescot 17.9, Abram 17.2, and Aspull and Golborne each 17.0.

The lowest district birth-rates were :-Grange-over-Sands 6.7, Clitheroe (B) 8.3, Lytham-Saint-Anne's (B) 8.6, Great Harwood 9.2, Bury (R) 9.3, Church and Preesall each 9.4, Thornton Cleveleys 9.6, Accrington (B), Ramsbottom and Turton each 9.7, and Barrowford 9.9.

The number of births in each borough, urban and rural district, and the local birth-rates are given in Table 2, pages 15 to 22.

ILLEGITIMATE BIRTHS .- The births of illegitimate children registered in 1932 numbered 834, or 74 fewer than in 1931. The percentage to total live births was 3.44, as compared with 3.62 last year, and an average of 3.75 for the five years 1927-1931.

STILLBIRTHS .- There were 1,342 stillbirths registered in the Administrative County in 1982, representing 55-3 per 1,000 live births and a rate of 0-74 per 1,000 of the population. The variation of the stillbirth rates in County districts is shown in Table 2.

Deaths and Death-rates.\*-The total number of deaths registered in the Administrative County during the calendar year 1932, after correction for inward and outward transfers, was 22,167, compared with 23,212 in the year 1931-a decrease of 1,045.

[As from the 1st January, 1932, the Registrar-General has decided to discontinue the exclusion of deaths of non-civilians from local statistics which became necessary on the outbreak of war in 1914, and to revert to the pre-war practice of assigning these deaths in accordance with the general rules governing the statistical transfer of deaths occurring away from the area of usual residence. For this purpose single officers and men will be considered as resident where stationed and this rule will also apply to married officers and men, unless stated to have had a private residence].

\* See note on page 11.

## ADMINISTRATIVE COUNTY OF LANCASTER.

TABLE 1.-CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE DURING THE YEAR ENDED 31st DECEMBER, 1932.

TABLE		ADMINIS-							-	URBAN		S. 1400.0							AG	GREGA			L DIST	RICTS.				-
CAUSES OF DEATH.	Col.	TRATIVE COUNTY. TOTAL	Sex.	All						ARS.	35-	45-	55	65	75	All Ages.	0	1	2	5	15	EARS. 25-	35	45	55	65-	75-	Cal
		DEATHS. 22167	M	Ages.	0	1	2	5	15 364 324	25	555 593	1058 976	1835 1579	2417 2399	1632 2171	1452 1511	139 91	15 15	24 12	31 25	59 42	65 56	55 96	123 146	280 285	355 365	3016 378	
ALL CAUSES			M. F.	9626 9378	595	160	158	217	324	406	593	976	1079	2399	2171	1011		10	1.5				10	145		240		
Typhoid and paratyphoid fevers	1	14	M. F.	10 3				1 	2 1	3	1	1	1 			1				1 								1
Measles	2	136	М. F.	58 72	8 17	24 23	17 22	8 10			1					2	2											-
Scarlet fever	3	22	M. F.	10 9		$\frac{1}{1}$	5 5	42		<u>1</u>						ĩ				1				415				3
Whooping cough	4	113	М. F.	39 66	$\frac{23}{22}$	11 27	3 14	23								3 5	2.3	1	```1									4
Diphtheria	5	115	M. F.	48 61	····i	5	17 17	$^{20}_{37}$	4 3		1	1	~1		~~i	5 1		1 	2	21								5
Influenza	6	515	M. F.	$216 \\ 215$	6 5	4	5 3	6 5	$^{12}_{10}$	12 8	$\frac{28}{18}$	35 23	38 34	48 64	22 44	38 46	1			1	3	1	22	3 6	11 9	11	7 16	6
Encephalitis lethargica	7	59	M. F.	26 22	~~ <u>``</u> 1		3	$\frac{2}{1}$	73	$\frac{6}{2}$	···. 3	4 6	2 4	$\frac{2}{2}$		6 5		 	···; 1			1	$\frac{1}{2}$		3	1 2		7
Cerebro-spinal fever	8	36	M. F.	17 12	3 2	22	2 3	2 3	3 1	3 1	1		1			5 2	~~ <u>``</u> 1		1	3 1	1			***		***		8
Tuberculosis of respiratory system	9	975	М. F.	484 391	2	 1	2	5 17	86 112	95 102	92 87	$\frac{114}{30}$	75 29	$\begin{smallmatrix} 13\\10 \end{smallmatrix}$		56 44				$1 \\ 1$	9 9	16 11	17 11	5 4	15 6	22	1	9
Other tuberculous diseases	10	238	M. F.	109 95	10 7	8 8	19 10	10 11	20 23	8 7	$11 \\ 10$	8 9	11 4	3 5	1	17 17	<sub>1</sub>	4 2	12	3 2	5 1	$\frac{2}{3}$	3	12	1	1		10
Syphilis	11	50	M. F.	31 15	6 4	1	1	$\frac{1}{2}$		1	5 1	5 2	8 1	4 2	<sub>1</sub>	2 2					"i	1 1			1			11
General paralysis of the insare, tabes dorsalis	12	70	M. F.	61 12						···i	12 6	24 2	16 	9 3		42					***		11	~~ <u>``</u> 1		3		12
Cancer, malignant disease	13	2688	M. F.	1101 1245	1	1	1	2 3	4 3	13 15	37 98	$\begin{smallmatrix}132\\240\end{smallmatrix}$	$\frac{375}{340}$	390 339	$\begin{smallmatrix}145\\207\end{smallmatrix}$	145 197		`` <u>`</u> 1		1 		23	$\begin{array}{c} 6\\ 15\end{array}$	$\frac{12}{41}$	$\frac{49}{54}$	54 55	21 26	13
	14	335	M. F.	113 183		1		4	3 5	7	6 3	$\frac{10}{22}$	$^{31}_{56}$	39 67	$\frac{12}{23}$	13 26				2		~~ <u>``</u> 1	"i	1 3	$\frac{2}{6}$	7 14	1	14
Cerebral hæmorrhage, etc	15	1414	M. F.	547 694				2		~~ <u>``</u> 1	13 11	48 68	$     \begin{array}{c}       131 \\       139     \end{array} $	219 286	$     134 \\     186   $	76 97						1	<sub>1</sub>	3 6	$\begin{smallmatrix}15\\16\end{smallmatrix}$	32 35	25 38	15
Heart disease	16	4823	M. F.	1976 2133			24.04	12 11	3.2 29	37 66	60 91	196 189	451 397	608 717	$\substack{488\\631}$	320 394				$^{2}_{1}$	3 5	5 6	9 13	28 23	68 92	115 130	90 124	16
Aneutysm	17	55	M. F.	23 8							3 1	82	11 1	1 4										2	2			17
Other circulatory diseases	18	1134	M. F.	515 494		1		1			37	$^{16}_{21}$	87 69	217 188	190 207	48 77		···; 1				···; 1		2 7	6 10	21 25	19 33	18
Bronchitiš	19	997	M. F.	428 453	47	8 8	3 1	3 2	43	5 9	10 15	33 25	54 57	145 132	116 169	59 57	6 6	1	3	1		3	1	16	3 8	17 15	23 20	19
Pneumonia (all forms)	20	1505	M. F.	646 489	112 80	59 57	36 30	19 26	28 16	44 24	59 25	88 47	70 66	89 74	42 44	100 68	23 12	3 4	2 3	$\frac{5}{2}$	2 5	7 4	4	12 7	18 9	15 11	27	20
Other respiratory diseases	21	202	M. F.	87 87	5	31	32	4	47	4	2 14	18 10	19 13	12 13	13 16	15 13	2 1	···; 1	1	···2		···2	1	4	21	3 1	23	21
Peptic ulcer	22	145	М. F,	90 35					21	62	19 3	22 5	21 18	17 5	3 1	16 -4					1	···1	9 1	2	7	3 1	1	22
Diarrhoza, etc	23	172	M. F.	79 65	47 23	75	57	1		1	2 2	35	6	3 8	43	13 15	8	1	2			1	<sub>1</sub>	<sub>1</sub>	1	1		23
Appendicitis	24	149	M.	63 57			23	77	12	7	11 11	12 16	93	37	·~i	19 10			1	2	5 1	2	21		3	4		24
Cirrhosis of liver	25	57	M.	37 12		1		1		1	3	3	12 4	16 4		7								1	5	1		25
Other diseases of liver, etc	26	171	M. F.	44 112			1		1		1 4	7 13	12 30	13 37	9 23	6 9								1 2	2 2	2	1	26
Other digestive diseases	27	453	M. F.	171 213	9 13		8	115	8 6	13 12	12 24	26 25	38 43	35 50	20 29	29 40					4		1	3	2 9	10 8	9	27
Acute and chronic nephritis	28	840	M. F.	374	1		4	4	11 9	20 16	15 24	57 60	106 83	118 102	3.8 5.8	55 57					3	3 2	1 6	10 4	9 19	18 19	11 6	28
Puerperal sepsis	29	26	F.	30					ð	17	8					6						2	4					29
Other puerperal causes	30	78	F.	68				- 413	13	32	23					10				***	3	6	1					30
Congenital debility, premature birth malfermations, etc	. 31	937	M. F.	460	452	4	1	3 1								81 52	80 49		1			1						31
Senility	3	964	M. F.	327									25	80 105	245 391	63 73										7 9	56 61	32
Suicide	. 33	1 287	M. F.	180				1	13	12	29 11	37 17	55 13	27	62	40					1	8	5 1	5 2	14	6	1	33
Other violence	. 3	775	M. F.	473			3 26	52 23	63 11	57	63	53 13	55 18	41 28	39 49	76 36	4	1	5	3	15	8	4	16	12	1 6	7.9	34
*Other defined diseases	. 3	5 1741	M. E.	761			5 14 4 24		41		52 82	94	129 141	162 129	91 60	113 135	12	2		3	7 13	5 6	8 21	9 19	26 35	22 18	19 13	35
Causes ill-defined, or unknown	. 3	6 70	M F.							1	3	3	9	13 11	3 10	11 2								1	5	2 1	3	33
																												_

\* Includes-Poliomyelitis, 6 deaths. Polioencephalitis, 2 deaths.

The sex distribution of the persons dving in 1932 is shown below

1932

1931

		Urbar	n Distri	cts .			Males. 9,626		Female 9,57			otal. ),204	
		Rural	Distric	ets .			1,452		1,51	ı	2	2,963	
		Admin	nistrati	ve Cou	nty .		11,078		11,08		22	2,167	
	Under 1 Year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 at under		nd 45 45. und		5 and der 65	65 and under 75	75 and upwards	Total.
2	1641	352	374	494	789	92		10.000	303 3	979	5536	4477	22167
	1773	844	351	489	811	100	9 136	8 22	541 4	056	5720	4750	23212

Table 1, here inserted, is a classified statement of the causes of death in 1932, distributed in age groups and distinguishing the sexes, for the aggregate urban and rural districts.

\*County DEATH RATES .- The 22,167 deaths in 1932 are equal to a death-rate of 12.29 per 1,000 of the estimated population-urban districts 12.50, rural districts 11.09. These rates are not standardised to correct for the deviation of the sex and age distribution of the population. The County rate for the year under report is 0.57 per 1,000 lower than that of 1931, the reduction in the urban districts being 0.55, and 0.64 in the rural districts. As compared with the rate for the whole of England and Wales the County rate shows an excess of 0.2 per 1,000.

The table below gives the death-rates of the County from 1922 to 1932, distinguishing the urban and rural rates, and also gives the rates for England and Wales :---

411 BD		P.M.	De	ath-rat	e per 1,	000 of t	he Esti	imated	Popula	tion.	
ana TRI Mari Cali	1922.	1928.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.
Urban Districts	13-43	12.44	12.66	12.79	12-21	12.86	12.08	14.32	12.10	18.05	12.50
Rural Districts	11-99	11.45	11.77	11-86	10-69	11.94	10-95	12.12	10.56	11.73	11.09
Administrative County	13.23	12.30	12.53	12-66	11.99	12.72	11.91	14.00	11.87	12.86	12-29
England & Wales	12.9	11.6	12.2	12.2	11.6	12.3	11.7	13.4	11.4	12.3	12.0

The table on page 14, shows the County, urban and rural death-rates for each year since 1889, and also the quinquennial averages.

The highest district death-rates in 1932 were-Longridge 18-1, Mossley (B) 15-8, Morecambe and Heysham (B) 15.6, Milnrow 15.5, Trawden 15.3, Heywood (B) and Whitworth each 15.2, and Dalton-in-Furness and Haslingden (B) each 15.0.

The annual death-rates of districts with comparatively small populations are subject to considerable fluctuations; the following County districts had the highest death-rates during the period of five years 1928-1932 :---Whitworth 16-0, Grange-over-Sands and Morecambe and Heysham (B) each 15-3, Ulverston 15-2, Bacup (B) and Lees each 15-1, Carnforth and Longridge each 14-9, Heywood (B) and Mossley (B) each 14-8, Poulton-le-Fylde 14-6, and Littleborough and Royton each 14.5.

The districts with the lowest death-rates in 1932 were :- Clitheroe (R) 7.5, Rainford 7.7, Upholland 7.9, Blackrod 8.0, Great Crosby 8.7, Fleetwood and Haydock each 9.0, Warrington (R) 9-4, Preston (R) 9-6, and West Lancashire (R) 9-8. Extending over a period of five years, 1928-1932, the following districts had the lowest averages :--Clitheroe (R) 8.5, Warrington (R) 9.3, Irlam and Whiston (R) each 9.5, Rainford 9.7, Great Crosby 10.0, and Prestwich and Blackburn (R) each 10.1.

Details of the deaths in the various sanitary areas, classified under certain headings are given in Tables 2 and 3, pages 15 to 27, and the mortality rates of each district in 1932 are compared on pages 209 to 233, with the year 1931, and with the averages of the preceding five years.

# ADMINISTRATIVE COUNTY OF LANCASTER.

		LIVE	BIRTH-	RATE.	DI	EATH-RA	TE.	INFAN	T MORT	ALITY.
YEAI		County.	Urban Districts.	Rural Districts.	County.	Urban Districts.	Rural Districts.	County.	Urban Districts	Rural District
	···· ···	80-5	31-8	29.6	17.5	18-4	16-6	160	161	125
		29-3	29-7	28.1	18.5	18-9	16-6	152	158	126
891		31-93 80-70	32-45 81-11	29-48 28-01	21-09 19-00	21-70 19-34	18-19 17-31	157 150	160 155	139
892		30-95	31-35	28.94	19-97	20.37	17-94	177	183	145
894		29-19	29-49	27.70	16.16	16-42	14-87	134	138	109
Verage 6 years, 1	1889 1894	30-42	30-98	28-63	18.70	19-18	16-91	155	159	128
895		29-82	30.23	27.57	19-16	19-63	16-57	171	178	127
896		28.73	29.11	26-62	17-38	17.76	15-25	155	161	121
897		28-45 27-62	28-65 27-89	27-29 25-80	17-48 16-58	17-82 16-80	15-55 15-09	169 168	174	138
898		27-02	27-80	25.53	17.60	17-88	15-65	175	181	130 134
	but he hull	and the	ang) 000,	I mig to	0 11 120	tro relu	U. TRAY	ela 10), 9	for shi	Che Co
Average 5 years, 1	1895-1899	28-34	28-63	26.56	17-64	17-97	15-62	167	173	130
900		26-80 26-57	26-96 26-78	25.72 25.13	17·19 16·28	17-46 16-58	15·26 14·21	162 161	167 167	128 118
901		26-85	26.95	26.14	15-26	15-43	14-08	139	143	116
908		26.77	27.04	24.96	15.22	15-44	18-69	140	143	114
904		25-56	25.66	24-90	15-54	15.78	13-81	157	162	124
verage 5 years, 1	900-1904	26-51	26-67	25-37	15-89	16-13	14-21	151	156	119
905		25-06	25-22	23-99	14.32	14-52	12-99	182	137	101
906		24-99	25-11	24-22	14.62	14-81	13-33	139	143	109
907		24-23	24-47	22.60	14-40	14-59 14-61	13-11	125	129	96
908		24-86 23-57	25-05 23-67	23.60 22.91	14-45 13-96	14-01	13-31 13-11	131 115	136 119	97 87
werage 5 years, 1	905-1909	24-54	24.70	23 46	14.35	14-52	13-17	128	132	98
910		22-48	22-47	22.52	12-73	12-83	12-09	117	121	93
911		22-64	22.88	21.15	15-05	15-33	13-25	144	148	111
912		22.00	22.09	21.42	13-61	13.76	12-60	104	106	89
918		22.20	22.41	20.86	14.20	14-39	13.00	124	128	100
914		22-02	22.19	20.95	13.95	14-17	12-58	112	115	96
verage 5 years, 1	910-1914	22-26	22-40	21-38	13.90	14-09	12.69	120	123	97
915		19-78	19-91	18.95	15-32	15-60	18-57	119	123	94
916		18.54	18.54	18.59	14-81	14-47	13-32	99	101	82
		16-25 16-08	16-27 16-09	16-08 16-06	13-98 17-26	14-05 17-40	13-56 16-41	96	96 101	94
918 919		16-08	16.58	16-88	14.06	14-01	14-40	98	94	90 88
verage 5 years, 1	915-1919	17-45	17-47	17-31	14.98	15-10	14-25	101	103	89
20		22-97	22-30	22.98	12-74	12-83	12-19	91	95	67
21		20.76	21-06	18.94	12.27	12-31	11.97	88	90	76
22		18-11	18-28	17.04	13-23	13-43	11-99	85	87	75
23		17·29 16.54	17-42 16-62	16-48 16-05	12-30 12-53	12-44 12-66	11-45	80 81	82 84	67 68
					12 00		-			
verage 5 years, 19	20-1924	19-13	19-13	18-29	12.61	12.73	11-87	85	87	70
25		15·89 15·61	15-99 15-66	15·23 15·29	12.66	12-79	11.86	82 80	83 82	71
26		14.57	14.59	14.48	12.72	12:21	11.94	78	82	71 68
28		14-56	14-64	14.08	11-91	12-08	10-95	69	71	57
29		14'09	14.08	14.20	14.00	14-32	12.12	84	87	64
verage 5 years, 19	25-1929	14.94	14.99	14.65	12.65	12.85	11-51	77	79	66
	*** ***	14-01	14-07	13.66	11.87	12.10	10.56	64	64	58
30 31	1.1.1.1.1.1.1.1.1	13.85	13-90	18.51	12.86	13-05	11-73	70	72	63

### COUNTY BIRTH AND DEATH RATES FOR YEARS 1889-1932

ADMINISTRATIVE COUNTY OF LANCASTER.

TABLE 2-AREA, POPULATION, NO. OF STRUCTURALLY SEPARATE DWELLINGS OCCUPIED (CENSUS 1931), &c., IN EACH DISTRICT, TOGETHER WITH THE NUMBERS OF BIRTHS AND DEATHS REGISTERED DURING 1932. (Norm-Por Causes of Death, see Table 3, p. 23.)

								-	5											
Tuber- culosis	Respira-	System.	1,000 popul'n.	57-0	19-0	12-0	0-34	0-60	9-246	0-54	0-66	0-28	0-28	0-23	0-22	1.16	1-21	19-0	0-12	0-81
NLITY.	- 1 min	Total Total (Live and	Still) Birthn.	1-93	2-26	\$7-75	5.76	4-08	8.06	3-01	1	3.12	1	13-51	1	I	1	2-75	4-22	1
MATERSAL MORTALITY.		Per 1,000 Line	Births	8-47	2-42	41-66	6-00	10.9	8-52	3.13	1	3-31	1	14-70	1	ĩ	1	2.89	4-67	1
	.	.000 F	fotal	8	01 [1	13	\$	78	32	108	10	52	26	41	19	8	12	8	2	ŝ
1	a Year	Rateper 1,000 Live Births.	Leg. Illeg. Total	1	12	1	125	151	1000	===	1	H	1	1	1	250	1	1	1	Í
ALITY.	Ser Om			8	22	32	96	80	*	101	10	9	22	41	88	92	19 6-	g	51 23	20
INFART MORTALITY	Deaths of Infants under One Year.	T. A.	Leg. & Illeg.	°,	8	+ {	> 22	** {		7 34		} 16	+ {	e 4		2 0	* 4	> 21	1: {	*
NFANT	d Infa		Both Sexes	0	8-	-1	5"	60 10 10	410	10 <sup>10</sup>	- 1	12	+1	** [	**	4-4	- 1	<b>1</b>	12	-1
-	naths c		8		21	-11	12	2"	19 14	27	- 1	-	en	•	-		-	-	30	en
2	4		×.	1.1	L. 14	1-4	L 9	L. 31 I. 3	L. 1	L. 17 L. 17	11	L 8		1-1	1	L 3	L 3	E H	12	L
		Death	popul'n.	10-9	13-3	11-6	12-3	13-6	1-11	12-6	11-3	18-6	12-2	11.7	8-0	1-21	14-9	13-5	13-2	11-8
188.	tered.		No. of Deaths.	12	809	49	252	697	78	257	100	279	64	60	8	94	63	375	406	52
DEATHS.	Number Registered.		i.	24	398	34	ш	338	11	127	4	144	26	21	16	47	34	179	193	12
	Numbe		м.	19	271	R	141	359	34	130	e 51	135	28	55	13	47	35	196	213	40
	Som.	Rate	per 1,000 Total Birtha.	3	8	16	40	89	g	54	48	98	94	81	2	9	52	46	26	64
			Total No. of Still- births,			-	- 14	\$	+	1 18	-	18	-			*		11	22	-
	STILLBERTHS.	Number Registered.	Both Sexes	1	12	10	=	38	+1	11	10	18		-	-	71		10	27	- 1
	STILLE	mber I	14°	44	21	••	•	8"	11	21	-	-	- 1	en	en	11	04	11	20	•9
		Nu	M.	21		1 3	1 1	20		1. 1	1 4	L H	1 - 3		11		L -1	L. 6	L 21	1-1
BLRTTRS.		Live	Burth Rate per 1,000 popul'n.	17-2	2-6	11.3	16-2	13-3	17-0	15-4	11-11	14.7	0-6	13-3	16.0	10-7	16-1	12.6	14-2	7-6
			Total No. of Live 1 Births	118	413	48	333	630	120	314	g	202	52	8	88	88	53	346	457	83
	LIVE BORTHS.	gistered.	Both Serres.	118	100		317 3	687 333 }	117 3	5000 SUC	58 S	284 }	\$* ~	61	5 1	5.4 * 3	31	341 }	10 }	1 10
	Live	Number Registered.	4.°	10	187	11	a.	100	01 m	161	<b>÷</b>	132 8	21 es	42	1	- 1	81	176	219	5
		Nu	W	21	- 94	81	161	13	3.	144	\$1	152	L. 26 L. 26	L. 25 L	81	L. 36 L. 3	21 I	L. 165 I. 1	208	2
	6. of	Families, Census,	.1561	1,582 L.	12,206 L	1,043 L.	5,042 I.	13,561 L.	1,628 L.	5,101 L	2,258 L.	3,967 L.	1,611 L	1,126 L	881 L.	2,289 I.	825 L	7,096 L	7,985 L	1,717 L.
	struc- turally N	well- Fa	cocupied, 1 Cennus, 1931.	1,458	12,019	1,039	4,175	13,368	1,591	4,730	2,207	5,964	1,602	1,045	863	2,252	816	7,009	7,752	1,666
1			Estimate occ 1932. Ce	6,826	42,820 1	4,212	20,450	51,040 1	7,026	20,370	8,806	20,470	5,240	9,094	3,608	7,748	3,250	27,670	20,720	6,116
POPULATION AT ALL AGES.		_		-		-								-		-	-		-	
H H	1	_	1931.	6,660	42,591	4,150	20,546	51,573	5 7,195	19,989	1 8,461	1 20,690	5,259	6 6,111	2 8,509	7 7,696	4 2,192	2 27,450	4 20,796	8 6,187
		Statute	Acres	1,984		1,062	6,251	1,982	1,906	2,264	1,241	6,121	1,387	4,896	2,292	208	1,504	3,062	3,614	528
		*		:		i	i	(5	1	1	i	-	1	ey	I	1	1	-	-	-
		STRICT		:	1	1	rfield	yne (B	ŀ	1	I	i		matanle	I	1	1	1		1
		Usaas DISTRICTS.		1	Accrimpton (B)	:	Ashton-in-Makerfield	Ashton-under-Lyne (B)	1	1		(g	Barrowford	Billinge and Winstanley	I	:	I	uo	(0)	1
1 7		Case		Abeam	ngto	Adlington	n-in	0-0	Aspull	Atherton	Audenshaw	Bacup (B)	wfo	-	Blackrod	Brierfield	Carnforth	Chadderton	Chorley (B)	Church

L.-Legitimate. L-Illegitimate.

TABLE 2-continued.

MATERSAL MORTALITY.		1,000 Per 1,000 Total	Live (Liveand Births, Still, Births,	1	7-14 6-89	6-60 6-21	5-46 5-18	1	- 1	15-07 13-95	-1	1	5-19 4-95	4-71 4-52	2-49 2-36	4-32 4-19	20-83 20-20	1		
-	I.			105	11	12	36	1	10	47 15	12	1	10	81 4	80	67 4	31 20	1	81	
	Year.	Rateper 1,000	/6 Births.	230 1	142	181	200	1	100	1	1	1	166	-	82	33	813 3		1	
WITTY.	ler One	Rate	Les L	100	19	12	8	1	**	\$	74	48	8	88	14	5	15	11	80	÷
MORTI	nts und		Total Leg. & Illeg.	= 4	10	=	E.	1		1 19		*		18	200	11			. 10	
ISPANT MORTALITY.	Deaths of Infants under One Year.		Both Sexes	10		51 °	2"	11	=-		=	∞	50 M	118	35	30			=	
-	kaths.		'n.	4-	10	•	11	11		10	-	•	2-	* ]	10	21	-1	-	-01	
	н		, K	1		L 13			1 2 1	1 1	1	1 -	24	L II	118	L 14	L. 1	1.1	L 5	
		Death	per 1,000 popul'n.	14-7	13-1	13-7	12.5	11-5	15-0	14-8	13-8	10-6	11-5	10-0	11-3	9-0	12-4	12-5	10-1	
DEATHS.	tered.		Total No. of Deaths.	114	157	326	184	55	135	330	344	153	505	159	320	208	103	8	26	
Dg	Number Registered.		ц,	8	8	145	84	15	12	2967	122	12	226	38	160	z	48	T2	38	-
			M.	19	11	181	* 100	1.	80	263	122	76	271	81	160	120	2	39	38	
		Still Still	Fate per 1,000 Tetal Births.	18	34	60	19	1	\$	2	2	75	55	40	22	31	8	z	51	
		.peu.	Total No. of Still- births.	~ ~	s {	} 19	} 10	- ~	01 {		{	} 14	*	•	=	} 15	-	-	-	
	STILLEDUTIS.	Number Registered.	Both Sexes	- 1	+1	2"	21	11	21	\$**	=1.	=	2.0	-1	81	1 1		"		No. of Lot of Lo
	STIL	Sumber	Ľ.	04		9   98	71	11	10	20	71	=	2"	ee	21	• ا	-1	•	0	
			M.	14	74	1-1-1	1-	11	74	L. 1	L. 13 L. —	1- S	L. 13 L. 3	1-1	L 18	1. 1		L -1	L. 3	
BIRTHS		Live	Birth Rate per 1,000 popul'n.	13-4	11-6	12-8	12-4	11-0	15-2	1-11	10-9	12-0	18.1	13-3	14-2	20-0	11-6	11-0	17-0	
	HR.	d.	Total No. of Liwe Births.	} 104	} 140	303	} 183	12 {	} 158	} 396	} 193	} 172	517	212	101	1 462	94	8	811 {	1 1 N N
	LIVE BIRDES	Number Registered.	Both Sexes	100	111	262 11	173	# I	148	112	188	22.9	510	2005	12	11	Su.	21	1155	-
	-	vumber	ц.	11	12:0	155 6	12 4	= 1	2*	184	51	g o	2588	110	192	11	3-	10 **	3	-
		-	W.	L. 46 L. 3	1 - 88 L - 88	L. 137 L. 137	L. 98 L. 6	L. 10 L	L 26	L. 197 L. 13	16 . 'I	1 37	L. 301 L. 11		L 192 L 12	L. 203 L. 6	L 49	1 = 1 1	81	
-	No. of Private	Families, Census,	1901	2,101	3,250	7,011	3,909	519	2,779	10,385	4,726	3,318	321,11	41077	7,188	2,202	806'1	1,482	1,678	
No. of	struc- turally separate	Dwell-	compand, Census, 1931.	2,075	3,206	6,945	3,896	510	2,671	10,138	4,689	3,185	10,699	3,883	7,104	4,510	1,859	1,437	1,623	
			1932.	2,729	11,980	23,630	14,700	1,503	10,410	33,580	17,620	14,320	43,830	15,810	18,180	23,020	8,243	7,186	1,803	
POPULATION AT ALL AGES.	-		1931.	7,300	12,008	167,82	14,764	1,934	10,339	36,012	17,384	13,274	44,416	15,716	28,717	100'02	7,965	7,387	122'2	
1	Area	Statute		1,060	2,356 1	3,062 2	2,865 1	2,352	7,894. 1	6,959 3	2,594 1	1,009 11	17 29092	1,072 10	1,404 25	2,565 23	5,613 7	2,116 7	1,679 7,	
	-	55		-		-	1		-		1	-	er 1	-	-	e4	3	1	2	
		RICIS.		1	:	i	1	I	1	1	1								-	
	Dance Deserves	TURN		Claytom-le-Moors	(g)	1	:	1	Dalton-in-Furness	1	:		1	1						Comments of the

TABLE 2-continued.

B

MONTALITY. Tuber-	Restant	000 Per 1,000 Tetal System,	Births. Still Births.	50 8-47 7-93 0-43	85 8-54 7-66 0-55	45 5-68 5-20 0-72	62 0.67	36 12-50 11-97 0-92	96 3-10 2-94 0-83	48 5-34 5-20 0-44	0.36	84 0.73	63 4-25 4-06 0-53	1 - 0.30	16 0-24	10-0 II-2 85-2 85-10 0-01	16 16-94 16-12 0-21	84 5-93 5-60 0-39	91 6-00 5-55 0-40
	Year.	Rate per 1,000 Live Births.	Illeg. Total	142	333	1	1	8	142	1	1	162	1	1	1	8	1	3	1
WITH.	er One		H	48	23 6-	4	3	55	28	¢ļ	1	01 50	3	10	11	8	11	80	56
INTANT MORTALITY	Deaths of Infants under One Year.	-	Total Leg. & Illeg.	7 12	101	8	1 12	118	10 1	•	1	E .	15	10	1	101	. 1	10	. 15
NTANT	d Infac		Both Sexes	=-	00.04		11	51	8-		11	70	11	10	-1	22 FT	-1	1	1 11
-	eaths o	-	a.	***			-0	to est	::-	-0	11	8-	*5	41	11	5	"	第1	71
	9		M.	L. 8	9    -4	L - 5	L =	L. 10 L	L II	1-4		L. 14 L. 1	L 10	L - 1 L - 1	1-1	L 31	11	L. 31 L. 1	T II
		Death	per I,000 popul'n.	1-9	13-7	15-0	0-6	16-2	13-9	12-2	10-5	12-0	10-9	11-4	12-9	12-5	14-8	13-0	11-5
DEATES.	stered.		Total No. of Deaths.	129	173	249	16	No.	662	101	55	204	143	112	55	240	20	592	122
A	Number Registered		μ.	84	83	11	36	1112	139	100	22	122	12	94	18	212	45	912	20
			ж	28	. 84	127	545	185	160	91	00 00	142	\$	38	35	268	100	317	63
	Still-	Bate	Tetal Tetal Birtha	3	126	2	20	19	52	15	н	22	44	10	g	70	48	3	88
		ered.	Total No. of Still- births.	} 16	11 {	} 16	n {	11 {	} 18		1 {	11 {	н {	} «	} •	} == {	s {	} 40	} 16
-	STILL DIRTRS.	Report	Both Sexes	2-	16	16	10	11	a	**	1=	16		×	-0	20 HD	•• [	22	16
	STRU	Number Registered.	e,	01	91		10-1	-	•±	•	11			-1	•	16	e#	<b>a</b>	90
		Z	ż	1-	L B	11.	1-1-	1-1-	L 18	L -1	L -1	L .	L. 4	14	L. 3	L. 16 L. 3		L. 18 L. 1	L. 8
DIRTHS.		Live	Rate per 1,000 popul'n.	11-4	2.6	10-6	20-0	12-3	15-0	12-0	12-0	19-5	18-0	16-1	14-6	15-9	12-5	14-8	15-1
	-	-	Total No. of Live Births.	326	} {	} 176	702 {	320		3 187	}	100	\$ 235	} 148	60 {	808	50	} 674	164
	LIVE BIRMS.	Number Registered.	Both Sexes	8'	nn 6	173	302	302		181	19	114	220	144	34	3n	20	198	163
	1	Number	F.	106	2*	71	1 gg	161	168	gn	19 <sup>01</sup>	197 10	114	2-	8	189 7	11 -	552 6	21
		ALL I	W.	L. 121 L. 4	L. 58 L. 28	L. 29	L. 108 L	L 141 L 9	L. 167 L. 4	L 88 L 1	L 34	L. 217 L. 4	L. 116 L. 4	L. 62 L. 52	L 27 L 1	L. 294 L. 18	L 25 L 25	L. 322 L. 15	L 80
	No. of Private	Censury, Lensury, 1911		4,637	3,665	4,877	2,552	2,203	6,390	4,150	1,152	5,244	3,097	2,678	1,065	3'36'6	11311	10,799	2,820
No. of	turally separate	ings occupied	Census, 1931.	4,487	3,438	4,836	1,996	7,130	4,936	4,003	1,157	4,506	3,007	2,640	1,040	9,630	142'1	10,593	2,777
AGES.		Estimate	1932	20,810	12,620	16,560	10,330	25,910	21,400	15,180	5,478	21,890	13,010	9,763	4,092	43,700	4,700	45,460	10,790
AT ALL AGES.		_	1931.	18,255	12,789	16,639	10,350	25,948	21,632	15,680	5,199	21,761	12,901	222'6	1,001,6	43,333	4,738	45,317	10,071
	Leea .	Statute Acres.		3,785	2,868 1	1 205'8	2,411 1	3,658 2	2,612 2	3,257 1	3,053	2,320 2	1 212'9	1,004	208	3,482 4	No.	6,339 4	3,725 1
	-	1S Y		1			en E		-				-	-	1		1	-	**
	in the second	10100		I	1	1	1	1	1	1		1	i	I	i	1	1	-	
	Dista		1				1		1	1	-Roby		1	:	1		1	-	1
	Usnass Discourse			Great Crosby	Great Harwood	Hailingten (B)	Haydock .	Heywood (B)	Hindley .	Horwich .	Huytom-with-Roby	Ince-in-Makerfield	Irlam .	Keansley .	Kirkham .	Lancaster (B)	Lees	Leigh (B) .	Leyland .

ion) was also added ; a small area (2.63 acres, 126 popurcs, 45 populat Indian) was transferred from Great Crocky to Waterloo-with-Seatorth. Birth and death rates are calculated on an estimated with Great Crocky ; a small area from Waterloo-with-Seatorth [1-3]

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URAAN DISTRICTS.		AT ALL .	AT ALL AGES.	No. of													DTATES.				INFANT MONTALITY	MON A	ALLIA			MORTALITY.	TAL
URBAN DISTRICTS.	Area			struc- turally	No. of		Ln	LIVE BIRTHI	+			STILL	STILLBERTIES,			umber 1	Number Registered.	-		Death	Deaths of Infants	unts un	der Or	under One Year		-	
	Statute			Dwell- F	Families, Census,	~	Number Registered.	gistered		Live		umber	Number Registered		·	-	-	Deal	4.	-	-	_		Rate per 1,000		Per 1,000	Per 1,000 Total
	Acres	Censes, 1931.	Estimate of	occupaed, Census, 1931.	1931.	м.	a.	Both Sents.	Total No. of Live Births,	Birth Rate popul'n.	м.	£.	Both Sexes	Total No. of To Still- births.	per 1,000 N Total Births.	M. P	No. of Deaths.	tal per 1,000 of popul'n.		ż	F. Both Senes	Total Leg. & Illeg.		Illeg.		Births	Still) Rate per Still, 1,000 Beths, popul'n.
Litherland	887	15,959	16,510	3,442	3,765	L. 159 L. 3	141	00E	900	18-5	L 6 L 1		2°	11	1 28	106	1	182 11-0	0	=-	0 17	7 18	20	166	3	1	1
Littleborough	7,855	12,028	12,010	3,496	3,507		<b>Z</b> "	142	147	12-2	F - 7	*	~ •	26 10	39	18	84 1	162 13-4	1-	7		~		1	47	4	1
•Little Crosby	1	1,097	1	612	In	**   	,m.e.			0.95		11	~	1	-	1	1	1	3.6 L	11	11		1	1	1	1	1
Little Hulton	1,639	7,874	102'2	1,965	1,979	L. 52 L 1	38	1 20	16	11.8	7-14	-1	* -	5 62		52	48 10	101 13-1	1 1	=	**		1	1	22	10-98	19-01
Little Lever	808	4,944	4,364	1,390	1,425	L. 30 L	\$1 <sup>en</sup>	- 80°	. 61	13-2	*    - *	11	~ -	*		22	1	67 13-4	44	-	**	~~~	3	1	\$	16:33	15-62
Longridge	3,285	4,158	4,140	1,106	1,110	L 36 L 36	×-	80	64	15-4	е — Д Г — З	- 1			-	2	3	75 18-1	1-1-	-			16	500	11	62-50	02-69
Lytham Saint Anne's (B)	5,806	25,764	26,110	6,300	6,617	L. 113 L. 6	80	12 3	218	8-6	L 6	-1	~	1 31		164 1	195 31	337 13-4	1 1	-1	01		14	1	1	9-17	8.88
Middleton (B)	4,775	29,188	29,210	7,821	2,868	L. 190 L. 3	210 6	400	400	14-0	L 15	-1		19 44		197 1	180 31	877 12-9	1-	1 11	2-	7 33	8	111	98	7-35	00-2
Milurow	5,194	8,623	8,545	2,574	2,373	L. 49 L. 3	ų.,	200	26	11-3	L - 1	*	~	98 84		5	66 11	113 15-0	11	00		, ~		200	19	1	1
Morecambe and Heysham (B)	3,769	24,642	058'95	6,749	6,188 I	L. 134 L. 7	128 7	262 3 14 3	276	1.11	ь – Г – 6	+	10 }	11 38		81	205 38	389 15-6	44	10.04	11	11	1F	214	8	7-24	96-96
Mossley (B)	3,634	12,042	11,950	3,395	3,405	L. 80 L. 4	67	147 5	162	13-7	L 6	+1	~ -	9 55		50	16 18	169 15.8	44	-	8-	10	19	200	3	1	1
Netson (B)	3,465	38,304.	1 002'80	1,128 1	1, 182,11	L. 200 I. 9	206	14 }	420	10-9	L 10		~	18 41		225	265 40	12-8	14	10 12	8-		10	11	54	4-76	99-96
Newton-in-Makerfield	3,105	20,152	20,070	4,738	6,009 L	L. 145 L. 2	146	102	ž	14-7	L 9			16 51		114 10	103 217	10-8	1-1	6 19	71	7 22	22	1	81	3-37	3-20
Norden	8,858	4,348	4,376 1	1,754	1,257 L	L. 34 L	11	31	90	12-7	1-1	11	~	1 17		11	35 0	00 13-7	11	-	**	~~~	3	I	22	1	1
Ormskirk	15,608	17,118	17,240	3,917	4,005 1	L 135 L 5	316	8	192	14-5	L - 2			12 45		93 10	100 193	1111 D	14	0	2"	11	U	250	19	11-95 1	11-40
Orrell	1,617	6,949	7,005	1,682	1,849 L		21	113 }	115	16-0	11	-1		1 8		20	42	78 11-0	-1-	10	-1		19	1	19	1	1
Oswaldtwistle	4,885	14,218	14,000	3,816	3,969 L	L. 83	g o	120 }	183	13-0	1- °	~ 1	~ =-	12 61		z	181 HS	e 12-9	1-		-	· ·	34	1	52	1	-1

TABLE 2-continued.

AT ALL AGES.	CES.	No. ef	and and	Contract of				Bawrats.							DEATHS.	+			ISTAS	ISFAST MORTALITY.	VALUA.		Mo	MATERNAL MORTALITY.	Tuber-
-			No. of Private		LI	LIVE BIFTHS.	4			STILLBURTHS.	INTER.		4	Number	Number Registered.	d.		Death	Deaths of Infants under One Year	unts und	ler One	Year	1		- culosis of Reserve
	nate	Dwell- ings-	Families, Census, 1941.		mber R	Number Registered.		Live	Nu	mber R	Number Registered.		-inter-	-	-	2ª	anth -		-		Rate	Rateper 1,000	-	00 Per 1,000 Total	00 tory System.
1931. II	1932,	Centsur, 1931.	- m	м.	s'	Both Sexes.	Total No. of Live Births.	Rate popul'n.	М.	in a	Both No Sexes Str	Total R No. of T Still- Bi births.	Fate Per 1,000 N Total Burths.	, K	F. Deve	Total per No. of pol	per 1,000 popul'n.	M. F	F. Both Serves	Total Leg. & Illeg.		e Births.	Births.	Births.	ad Death Rate per 1,000 popul'n.
11,635	11,580	3,197	3,230	- 12 FL	8 -	11	. 146	12.6		01 m		10	3	35	2	165	13-3	e	10	-	3	2	1000	-	
3,366	3,254	860	883	L 14	8		2	11-6		-1		-	50	11	z	1	14-4	-	1 11	~~~	12	1		100 TO 100	10-0
2,043	2,110	552	356	L 10 L -	<b>R</b> I	81	8	7-6	11	-1		1	5		1	124	11.8			1	1	_			-
600'6	11,450	2,136	2,223	L. 98 L. 6	12×0	1186	196	17-9	L 3	•	~	6	43	19	48	109	9.9 L	91	90	, = , _		181 61	1	1	0.27
23,881	24,940	5,724	9,800	L. 135 L. 22	135	268	275	11-0	L 8 L 1		- 11	1	41		133	247	9-0 I.	1 10		18	2	142 65	1	1	0-48
24,675	24,890	6,894	6,913	L. 163 L. 9	22 m	12 326	338	13-5		21	~ =-	17	47 1	163	111 3	1 001	13-2 L	2"	6 16	\$ 18	\$	166 53	2.95	2.61	0.44
3,494	164'8	776	161	18	51 m	1 2	88	16-6	5   			4	61	8	18	15	7.7 1.7	-		~~~	55	1			- 1
14,929	14,900	4,222	4,239	L. 73	80	141 5	146	2-6	1 - 1 1	30	-	15	1 22	103	88	1 105	13-4 L	-	10	11 ×	2	400 82	6-84	6-21	0-53
28,387	28,400	8,079	8,005	L. 164 L. 3	143 6	8 200	316	11-0	L - 1	21	~	15	1 1	180	197 3	877 1	13-2 L	- 1	8	8	3			-	100
6,633	6,514	1,817	1,843	L. 45 L. 45	62 **	n n n	74	11-3		• 1		+	51	22	z	1 22	11-0 L	01 01	*		2	10			0-24
16,689	10,750	4,370	4,592	L. 135 L. 8	114	200	192	15-5		4.4	1 } 1	II I	1 07	112 1	121 2	233 1	13-9 L	16 18	3"	1 26	132	250 137	I	1	12-0
	6,177 6,172	1,347	1,673	1, 48 1, 28	24	87 6	88	15-0	*   		~ -	9		2	19	76 11	12-3 L		81	P R	114	- 107	1	1	0.32
	7,301 7,323	1,668	1,784	12 1-	4-	~ 8"	101	13-7	7		~ ==	12 10	106	42	22	85 11	11-6 L.		00	».	- 08	1	1	1	0-68
167,95	56,520	13,610	14,705	L. 346 L. 25	11	89 29	1255	13-0	L 12	81		12	57 3(	306	317 6	625 11	11.0 L	8" 21	90	, F	60	50 59	4-08	3.84	0-55
32,761	33,770	7,942	8,187	100	210 - 8	13 }	463	13-8	L 10 L 1	21		36 3	32 H	191	187 31	378 11	n-1 L	= 1		1 20	\$	4	1	1	0.65
10,132	10,020	2,625	2,717		<b>4</b> m	8°	26	9-6	*   34	101	~	1- 1-	67 13	28	74 10	132 13	13-1 L.	01 -1 01 -1	44		- 27	500 51	1	1	1-00
6,532	6,404	1,790	1,794	1 1	5 m		6	10-1	1- 0	11	~	-	8	9	46	92 14	14-8 I.			-	106 -	- 104	I	I	0-31

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With the part of t	POPULATION AT ALL AGES.	1.12	-					Brames.	-						DEATHS.			4	ISPANT MORTALITY.	ORTALI	1X.		~ %	MATTESAL MORTALITY.	
		1230	ruce mally N	D. of		LIVE BR	cres.			Smu	NULLER.	-		mber Re	gistered.	-	Å	aths o	f Infants	under	0 mil	Year.	-	-	Rengi
$ \  \  \  \  \  \  \  \  \  \  \  \  \ $	Estimate 00	D III AA	well- Par nuss Pried, 11	nilles, nsus, ns1.	Numbe	r Register				mber B	egistered.		inth ate		Total					Testal 1	Rate	per 1,0		,000 Tably	and Deat
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	i	100	131.											<u> </u>				2	Both L Series	eg. &	Leg. D	Beg. Tot		H.	No.
3.11 $1.0$ <th< td=""><td>2,547</td><td></td><td>188</td><td></td><td></td><td></td><td>-</td><td>10-6</td><td>1 - 1 -</td><td>-1</td><td>~ -</td><td></td><td></td><td></td><td>-</td><td>15.3</td><td></td><td>-1</td><td></td><td></td><td>=</td><td>- 16</td><td></td><td></td><td>1</td></th<>	2,547		188				-	10-6	1 - 1 -	-1	~ -				-	15.3		-1			=	- 16			1
3.00 $L_{10}$ 10 $T_{10}$ 10 $T_{10}$ 10 $T_{10}$ 11 $T_{10}$	11,710	85					} 111	2.6	14	07) and					-		1000	-1		15	-		1	1	0-4
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5,611	-					1 11	16-1		11	~ -					2-9	1	.71	*1		12		1	1	0-8
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	9,333	94					}	11-0		101	~ ~					10-0		••		x			-	E	0-3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	12,980	19				2	} 163	12.6			~					11-0		-1	***	a			-	-	12
7.81 $1^{-216}_{-216}$ 2.9         4.01         1.9         1.1         1.9         1.1         1.9         2.6         3.8         4.18         3.8         4.18         3.8         4.18         3.8         4.18         3.8         4.18         3.8         4.18         3.8         4.18         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         3.8         <	4,455		-		-	_	*	11-6		-		+	1000			14-8	11							1	÷-0
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3.688 $\begin{bmatrix} 1, 7\\ 2 \\ 1, 1 \\$	15,940	15	-	44	-	-		13-8	000	-	~ -					11-4	-	e=	19	10	-		-		
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0.076 $\begin{bmatrix} 1, 415 \\ 1, 15 \\ 15 \end{bmatrix}$ 390 32       5 87 32       201 $\begin{bmatrix} 1, 12 \\ 2 \\ 15 \end{bmatrix}$ 202       215       216       473       113 $\begin{bmatrix} 1, 25 \\ 12 \\ 11 \end{bmatrix}$ 21       21       21       71	5963	-		44				15-0		•• [	~ ~					15-2	L. 1 1. 1	.ts.pt	000	10					
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4,073       L. 63       3       139       3 166       113       L. 4       1       -6       35       85       130       114       11       26       11       26       -	2,901			44	10.00		} 35	11-9	100	-1	~ "		243			12-6		1-			1		1	1	1-02
389,465 L. <sup>10,134</sup> 337 2721 331 347 1330 L.600 400 1,118 31,168 33 9,626 9,678 19,204 12-60 L.668 564 1,327 31,118 66 118 31 1,327 31,111 66 118 68 4.72 4.72 4.47	14,590	10	12				-	11-5		-1	~				-	11-6		~		2			1	1	0-0
	1,536,500	384,	645 3FB,			20,012	\$ 20,733	and the	-	and the second sec	1,118 00		1		19,704	12-40	L.763 L. 53					5		69	

TABLE 2-continued.

Tuber-	eulosis of Respira-	System.	Rate per 1,000 popul'n.	0-52	0-17	0-26	0-57	0-27	1	19-0	0-25	0-31	0-85	0-80	0.50	0-19	I	0-48	0-30	0-45
MORTALITY.		Per 1,000 Total	Still) Births.	3.65	I	1	34-88	3-02	1	141	20-02	1	5-68	L	10-86	7-31	1	4-12	1	I
MORTA		Per 1,000	Births.	3-75	T	t	36-36	3-30	1	7-03	89-g	1	18-9	1	11-49	1-69	1	4-50	1	1
				g	2	99	198	12	13	16	8	2	88	12	н	3	1	24	88	19
	e Year.	Rate per 1,000	Illeg	\$35	212	111	- 1	-1	1	113	166	1	H	1	1	1	1	163	333	1
TILY.	tr Oth	Rat	_	46	92	22	ŝ	1	1	88	2	18	91	12	=	8	1	17	80	3
INTANT MORTALITY	Deaths of Infants under One		Total Leg. & Illeg.	118	2 4	=- {	- 4	-	-	#	11	•	11		-	-82	1	- 12	16	8
TANT	f Infa		Both Sexes	11 es	-	=-	-	11	17	50	21	•	16		- 1	81	11	2"		81
E	aths o		ai.	10 44	00 mil	41	**	•	1-	- 10 74	×9	*	9		11	= 1	11	**	••	
	De	1	ĸ	**** 	L 6 L -	L 1 L 1	L 4	L 14	1-	1 IS	L 5	1-1	L. 10	1-4	1-1	L. 12 L	11		L 10	L 13
		Death	per 1,000 popul'a	10-6	12-1	11-9	14.7	1.11	975	13-0	11-4	15-0	10-9	11-0	11-6	3-6	***	14-7	3-6	9.8
HS.	red.		Total p No. of p Deaths	180	181	210	129	242	10	203	133	124	124	96	11	208	-	1H2	156	42 65
DEATHS.	Number Registered.		4 4	101	01 1-	107	19	128	32	100	64	25 65	12	÷÷	39	163		128	15	112
	Number		ż	8	3	103	62	119	10	103	8	51	04	49	22	135	ł	121	81	121
	e.m	Burth	per 1,000 Total Births.	2	52	36	\$	18	12	5	22	34	8	8	10	48	166	17	46	41
			Total Paral No. of Edil-	16	4	*	+	n	10	н	10	+	4	1.	10	8		+	0	н
	STRADERTES.	Number Registered.	Both N Senes		+-	~ 1	~ ~		~ ~		~ -	1 2	- +	1 2	~ -	81	~		~	
	TILLE	lber R			**	-	es	14	-	-1	-1			-	-	- 00	-1	-1		49.1
		Num	N.	18	11	- e FE		L 1	"	21	-1	en	en	01 m		#1	-1	10	-	19
BINTHS.		Live	Birth Rate per 1,000 popul'n.	19-7	11.6 1	12-0 1	9.5 L	13-6 I	8-3 L.	14.0 L	15-1 L.	11.8 L.	14-1 L	10-9 L.	13-1 L.	12-6 L.	14-2 L	13-4 L.	II-I FI	13-2 L.
-		-	Total P No. of Per Live Pol	300	131	212	82	203	14	242	176	113	172	56	28	230	10		184	326
	ILETTES.	ered	-	257 _ s	1 2 1	~	18	~	~ = 1	~	~	~	~	200	~ 2"	~	~	~	~	~
	LIVE BERTHES.	Number Registered.	Both Sexes	11 11 11 11 11 11	2 12	84 209 2 3	3	144 206 5 7	==	117 237 12 115	73 170 6 6	47 110	74 169 2 5	5 - S -	40 40	11	l'a mt	2 200	181	18
		Numb	a'		10		81	-	81		16		1 36		10	1 167 5 7			24 87 2 18	6 152 8 102
			W.	L. 121 L. 151	44	L 123	44	L. 182	44	I. 120 I. 3	44	44	44	44	44	I. 211 I. 5	44	L. 116 L. 11	44	L. 156 I. 8
	No. of Private	Families, Censon,	1991.	4,252	2,845	5,047	2,496	5,615	1,576	3,938	2,796	34,54	2,757	2,201	1,647	7,073	Itt	4,421	3,399	5,400
No. of	struc- torally	Dwell-	Commun. Liss1.	4,210	2,827	250'9	2,465	5,498	1,569	3,861	2,778	2,396	2,623	2,166	1,629	6,967	625	4,391	3,267	5,318
NGES.		Constant of	1952.	16,880	11,310	17,590	8,739	22,190	8,872	16,850	11,550	9,505	11,360	8,656	6,634	30,830	1	16,540	16,450	25,200
POPULATION AT ALL AGES.			1931.	15,712	11,230	17,621	8,845	22,043	8,644	15,750	11,662	8,708	11,424	8,758	0,875	892,62	2,505	16,719	16,005	890/22
	2	Statute		6,762 1	19,915 1	40,711 1:	12,017	29,969 2:	32,170	38,633 11	1 165'22	\$4,628	11,574 1	4,689	70,207	53,000 21	1			
	An	Stat	8		19,5	40,3	12/		32,1	38,0	82.4	54,6			26,2	83,0	1	127,485	18,965	67,560
		TS.																		
		15TW1C		mell	1	1	1		1	-	1	1	1	-	I	1	1	1	1	eu
		RURAL DISTRICTS.		Rarton-upon-Irwell	Blackburn	Burnley	Bury	Chorley	Clitherne	Fylde	Garstang	Lancaster	Leigh	Limehurst	Lunesdale	Preston	Sefton	Ulverston	Warrington	•West Lancashire

and deaths for Setton are for period 1st January-31st March

TABLE 2-continued.

F.         Both         Total         Rateper 1,000         Per 1,000         Respira- town         Respira- town <threspira- t</threspira- 
Pertano popula, M. F. Both Leg & Szesi Ileg. 10-0 L. 8 8 16 L 16
113 102 215
11 4 15 } 16 46
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• On the 1st April, 1952, the Township of Speke (2,558 acres, 354 population) was transferred to the County Borough of Liverpool, and parts of the Townships of Ecclesten (31 acres, 89 population), Knowsley (182 acres, 185 population) and Whisten (253 acres, 1,726 population), were transferred to the Urban District of Prescot. Birth and death rates are calculated on an estimated population supplied by the Registrar General.

\* For the purpose of calculating the birth and death rates of the County an adjustment of population has been necessary oring to certain alterations of district boundaries on the 1st April, and the Registrar-General has supplied the following totals for this purpose := Rural Districts ... 267,120. Urban Districts ... 1,650,680. Administrative County ... 1,802,800. ... 1,802,800. ... 1,802,800. ... 1,802,800. ... 1,803,800. ... 1,805,800. Administrative County ... 1,802,800. ... 1,802,800. ... 1,802,800. ... 1,802,800. ... 1,802,800. ... 1,803,800. ... 1,803,800. ... 267,120. Urban Districts ... 267,120. Urban Districts ... 267,120. Urban Districts ... 1,605,800. Administrative County as constituted at 21st December, 1332. (a) Area of Administrative County as constituted at 21st December, 1332. (b) Enumerated population of Administrative County as constituted at County as constituted at County as constituted at 21st December, 1331.

CH URBAN AND RURAL DISTRICT IN THE YEAR 1932.	MORTALITY FROM SUBJOINED CAUSES.	alls, Canocer, mulig- nunt disease, munt disease, bernorthage, &c. Cerebral Cerebral diseases, diseases, diseases, contact disease, diseases, diseases, diseases, contact diseases, diseases, diseases, diseases, contact, &c. Diarrhoen, &c. Other therperal sepsis, diseases, diseases, contact, &c. diseases,	·         4         3         3         11         1         1         1         1         3         4         1         1         10         3         2	4 72 9 42 163 20 25 27 4 5 3 2 2 7 17 1 18 26 7 21 42	. 33 1 3 13 33 1 29 1 29 1 29 1 29 33 3 53 3	$ .  21  5  18  37  1  9  16  21  1  3  3  2  \dots  2  9  11  \dots  2  13  13  1  29  15  \dots  15  15  15  15  15  15 $	1 83 17 33 137 2 37 25 51 6 4 4 2 4 4 19 30 8 37 11 6 18 67	. 6 4 2 18 2 5 10 2 2 1 1 4 7 2 4	· 21 4 18 33 7 9 20 4 1 8 4 10 1 16 9 1 6 22	$ .  16  2  7  24  \dots  1  2  8  1  1  \dots  1  \dots  1  4  \dots  \dots  1  2  5  3  9  \dots \\ 0  \dots  0  0  0  \dots  0  0  0  \dots  0  0$	1 18 2 37 54 12 22 8 2 2 2 3 6 11 1 10 31 4 8 26	. 8 1 5 17 4 1 1 6 2 1 1 5	. 6 5 10 29 29 11 4 39 11 4 4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		10 01 11 10 40 40 40	3 56 6 33 80 1 17 18 27 3 4 3 1 1 5 7 15 1 8 8 6 6 30 1	.  57  6  26  97   25  10  18  2  3  6  4   3  11  18   2  13  1  5  11  *36  1  *36	+	2 17 6 30 2 3 5 1 1 1 3 3 9 2 1 6 11	.  16  4  3  34  1  10  10  11  3  3   1   2  6  13   1  5   1  2  16   1  2  16   1  5   1  2  16   1  5   1  5   1  5   1  5   1  5   1  5   1  5   1  5   1  5   1  5   1  2  16   1  5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5   1   5	.  48  4  10  71  1  11  15  16  2  2  2  2  1  6  10  12   2  13  20  7  15  22        .	$1  20  2  11  33 \ \cdots  6  22  8 \ \cdots  \cdots  2  2  1  \cdots  6  8 \ \cdots  1  5  12  1  6  15 \ \cdots \\$	. <b>10 11 11 11 11 11 11 11 11 12 13 13 13 14 15</b>	1         20         2         15         26          7         9         4         1           6         11          4         14	4 87 6 26 106 1 48 12 23 4 5 2 4 6 15 26 4 2 12 22 5 19 48 2 *Includes 4 deaths from Poliomyelitis.
THE		(nuder 2 years).		:	01	00	+	:	-	:	1	:	;	+	*	:	**	9		-		01	01		:	-
			1	10	1	00	+	-	:	-	01	-		-	-	-	+	e0	-	-		01	:	:	:	10
ICI	· S		-	*	:	-	9	:	+	-	01	:	:	:	-	-	00	61	:	-	00	61	:	:	-	+
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	Other violence.	9	4	19	-0	10	1-	65	00	10	-	0	1-	9	*	п	0	1-	-	1.	1.	10	*	19	01
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	premature birth, mailtormations, etc.	00	4	24	10	8	11	-	01	t-	:	ø	6	9	-	=	13	1.	-	16	6	4	-	21	1
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	Other puerperal				1		1	1			-	1						1	-	0.4		:	:		-
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	Other digestive			- 22		10	-		1		_	04		-		0	_	01		041		1	01	-	5
	Other diseases of liver, &c.		:		-		-				:	-		-	1.	-	1	-	1	0	1		-	_	-
	Cirrhosis of liver.	:	:	-		:	-		1	-	1	04	:	:	1		-		- 1	:	2	1		-	-
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	Diarrheea, &c. (under 2 years).	-	1	00	04	4	00	;	-	1	-	04	1	1	-	01	00	:	:	00	01	:		+	
1	Peptic ulcer.	04	1	-	-	00	1	01	:	1	:	-	1	+	1	00	-	01	F	1	I		:	+	See
CAUSES	Other respiratory discuses.	00	00	10	1	4	1	1	1	:	:	01	-	10	00	+	01	61	04	60	4	10	:	1.	See
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SUBJOINED	Bronchitis.	12	12	16	1-	8	19	4	80	9	-	4	<u>}-</u>	00	10	16	57	00	00	20	1	9	00	26	-
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	nant disease.	30	15	14	50	15	63	11	13	4	1-	24	68 80	26	10	15	58	30		16	15	16	1.	8	11
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	Syphilis.	00	: 01	6	: 64	01	: 01	1	-	1	:	1	01			00	-	+	;	00	:			10	-
	Other tuberculous	0	00		0	0	0	1.0	:			0	1.	21	:	24	19	2-	:	16	-	00	-	27	-
	Tuberculosis of respiratory system.	-		01	-	-	-	-		-	:	01	1	-		64	-	-		-	01			01	-
	Cerebro-spinal ferer.			:	09	-		:	:	-	:		:	:	:	-	01			-	- picks	:	:	:	
	Encephalitis lethargien.	-	00	2	-	-		:	:	-		:		10	10	00	00	:	:	-	:	1	:	-	
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	Seatlet fever.	-	÷	1	:	:	1	;	:	:	-	-	:	1	÷	1	:	:	:	1	:	-	:	:	1
	Measles.	1	Ţ	1	01	4	;	:	:	*	:	1	1	÷	1	9	4	:	:	80	:	00	1	01	
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	Total No. of Deaths from all ceauses.	69	I	20	1	86	ā	1				1	11	01	-	55	õi	16		ñ	14	II	*3	15	6.
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	URBAN DISTRICTS.	uo	Droylsden	Eccles (B)	Failsworth	Farnworth	Fleetwood	uby	poor	Golborne	Grange-over-Sands	"Great Crosby	Great Harwood	Haslingden (B)	lock	Heywood (B)	ley	rich	Huyton-with-Roby	Ince-in-Makerfield	-	sley	ham	aster	
	5	Denton	Droy	Reele	Fails	Farn	Fleet	Formby	Fulwood	Golb	Gran	*Gre	Grea	Hash	Haydock	Hey	Hindley	Horwich	Huyt	Ince-	Irlam	Kearsley	Kirkham	Lancaster (B)	Lees

WINNING OF OFTOWT	-	1							*	-				MORTALIT	VILLIV	FROM	1.22	SUBJOUND	DC	AUSES.														
URBAN DISTRICTS.	Total No. of Deaths from all causes.	bas blodgeT	Mensles.	Scarlet fever.	Whooping Cough.	Diphtheria.	Influenza.	Enceptro-spinal lethargica.	fever. Tuberculosis of respiratory system.	Other tuberculous disenses.	Syphilis.	General paralysis of the insame, tabes dorsalis.	Cancer, malig- nant disease.	Diabetes.	hæmorrhage, &c.	Heart disease.	Other circulatory	Bronchitis.	Pneumonia (all forms).	Other respiratory diseases.	Peptie ulcer.	Diarrhea, &c. (under 2 years)	Appendicitie.	Other diseases of	liver, &c. Other digestive diseases.	Acute and chronic nephritis.	Puerperal sepsis.	Congenital debility,	premature birth,	Senility.	Suicide.	Other defined	diseases.	or unknown.
Leigh (B)	592			- 00	10	-10	п	:		18	::	I	1	1.	40	87	8	0 33	30	0	1	:	-	61		18 26	:	4	50	19	10	3.4 *	12	
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Litherland	182	-	1	-	10	90	:	1		16	:	01	26	1	00		-	-	13	1	1	01	00	:		80	:	:	œ	1-	1	0		
Littleborough	162		-		1	-	£	:	:	02	::	1	16	4	11	30	1	11	02	61	:	-	1	-		10	:	:	10	10	4	+	: 21	
†Little Crosby	:		-	:	:	:	1	:										:	1	;	1	:	:	-	-	1	:	:		-	-			
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Lytham Saint Anne's (B)	337	:	:	:	:	+	0	:	1	12	:	1	35	90	26	16	- 20	0 8	0	9	-	1	01		+	0	:	04	00		01	0	51	-
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Padiham	1	155		:	:	1	01	1	:	9	:	1	14	01	10	- 15		1- 1-	8	01	1	-	-		01	*	-	1	10	ł=	-	60		
Poulton-le-Fylde	:			:	:	1	01	:	:	<b>01</b>	1	:	00	1	:	6	;	1-	-	:	:	;	00	1		-	-	1	00	1	1		:	
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						• 1	netud	<ul> <li>Includes one death from Po</li> </ul>	death	from	Polio-	encephalitis	halitis.		See 1	note of	on page	e 18.	++	See n	note of	1 page	19.											

JA DAL

# TABLE 3-continued.

	diseases. Causes ill-defined or unknown.		1 00		-	4					: 0	_	•		: .	: **		• •		:	:	: *		:	-
	Other defined	-6			*		-	-		-					!		-			-		-		1 1	2
	Other violence.	9			18	-	6	-	01	30	18	0 0	•		: 1	- 01		• •	• •			1.04		0 0	0
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	Senility.	14	-	-	13	+	15	10	10	5	1	1 0	2	. *	14			,	0	. 4			1 0	0 01	4
	Congenital debility, premature birth, malformations, etc.	14	-	1.	15	00	22	00	00	24				0 0	-	13	-	4		x		1 98	8 9	: •	03
	Other puerperal	:	:	-	i	1	1	÷	-	65				: 7			-			1			•	: 01	-
	Puerperal sepsis.	-	:	:	00	:	:	:	:	:				: :			:	1					: 1		:
	Acute and chronic nephritis.	10			30	1	10	:	00	5				2 65	k-	- 10	+	-	0	00	0		210	0 01	•
	Other digestive diseases.	00	-	1.	1	4			01	18	oc oc			-					-				2 0	-	01
	Other diseases of liver, &c.	-	-	-	10		01	-	:	00	9	1	-		-	:		:		00	1			0 04	09
	Cirrhosis of liver.	1	:	-	:	1	-	-	:	-	;				-	01	:	:		-	1	Lapi			1
	Appendicitis.	01	:	-	01	:	-	:		20	+				-	60	-	:	-	01		-	-	04	1
	Diarrhea, &c. (under 2 years).	01	-	-	:	-	-	:	1	60	-	:			-	-			:	-	-		-	-	-
	Peptic ulcer.	60	:	-	-	1	;	60	-	10	4	01		-		:	:	:	-	64	-	20		-	1
SES.	Other respiratory	+		63	1	:	:	:	-	10	01	-	-	:	:	01	:	:	+	01	-	00	01	:	- 00
CAUSES	(attro (attro).	14	01	14	55	1	16	30	10	15	5	10	x	+	+	=	11	60	9	×	01	52	9	-	13
INED	Bronchitis.	10	-	80	13	01	10	-	¢	19	19	10	*0	00	-	30	01	-	+		10	13	1-	01	6 uo a
SUBJO	diseases.	10	1	63	21 04	9	10	00	11	20	15	ø	12	01	6	90	+	1	-	60	60	19	19	0	13
1000	Aneurysm. Other circulatory	:	:	:	-	1	-	:	1	01	1		:	:	1	:	:	;	:	:		01	1	:	+ See
V FROM	Heart disease.	94	10	-90	95	15	51	12	14	116	z	88	12	a	39	50	39	13	19	30	13	29	12	30	24
VIIIA	Cerebral Dismorthage, &e.	10	:	12	55	1	œ	9	+	40	41	12	10	1	I	x	x	-	2-	0	F	25	10	9	2 mvel
low	Diabetes.	01	I	1	φ	×9	00	1	1	Ξ	10	00	+	1	-	+	00	-	1	:	1	4	00	01	Polio
	nant disease.	37	σ	32	5	14	24	10	0	38	26	8	1.	00	20	20	00 80		14	8		36	18	19	17
	the mane, tabes dor- salis, Cancer, malig-	-	1	:	01		80	1	:	01	61	:	:	:	:	-	:	:	:	01	;	1	60	:	
	Syphilis. General paratysis of	-	:			-	1	-	:	00	1	1	:		. :	-	:			64		:	:	:	
-	disenses.	œ	-	-		-	01	:	;	+	¢	-	1	:	:	-	-	;	-	01	-	-	65	-	tes o
	Other tubereulous	10	-	æ	10	10	12	01	15	00	18		01		10	21		10	00	+	-	10	se	+	· Includes
-	Tuberculosis of	:		;	:	:		-		-	-		:	:	1	01	-		2.						
-	Cerebro-spinal Cerebro-spinal	-		-	•	-	1		-	01			-	-		-				-	-	;		:	:
	Encephalitis			10	: 0		01	: 01	:	=	00	: 00	:	-		4	+	-				8			
-	Influenza.	-			-		-	-		10	1.		:	:		-		:			F		49	-	
-	Diphtheria.	-		-			01	-		-	81	-	1	:	-	-					1			-	:
	Cough.		:	:		:					-	-	1	-	1	-		-	00	-		-	4		1
	Seatlet fever.	:		1	1	÷	-	1	÷.	1	-	1	1	1	÷	1	1		1		i.	1		. :	:
	Measles.	1	-	1	1	-	00	1	1	04		:	-		-	04	1	:	:	1	-	+	:	1	-
	Typhoid and paratyphoid fevers.	:	-		1	1	1	:	1	:	;	:	;	;	:	:	:	:	:	61	-	;	:	:	:
	Total No. of Deaths from all causes.	330	51	201	377	<u>p</u>	233	76	85	025	378	132	92	39	142	166	138	45	94	144	99	384	183	133	126
		:	:	:	:	:	:	:	:	:	x		-:	:	:	A	1	:	:	:	:	-	:	:	-
	RICT	:	:	:	:	:	:		gtret	:	lebur	×	:	:	:	ukerle	:	:		:		afort			
	IISTI	•			B) .				-Lan		Pend	relev				h-Sha						h-Sei			:
	D N	-	:	tom	all (	1	:	dale	with	-	bun	Clev	e	1	-	-witt	-	-	1	-Dal	1	-wit	hton		
	URBAN DISTRICTS.	Radeliffe	Rainford	Ramsbottom	Rawtenstall (B)	Rishton	Royton	Skelmersdale	Standish-with-Langtree	Stretford	Swinton and Pendlebury	Thornton Cleveleys	Tottington	Trawden	Turton	Tyldesley-with-Shakerley	Ulverston	Upholland	Urmston	Walton-le-Dale	Wardle	+Waterloo-with-Seaforth	Westhoughton	Whitefield	Whitworth

	or unknown.	-	1	-	001			-							-					01	01	1.63	01		00 00 1		
	Causes ill-defined		:		99	:	:		1	1	;	1	÷	-	2	:	-	-	1				-	1	13	20	
l	Other defined diseases.	68	+	17	493	14	00	0	0	51	10	53	5	15	1=	11	Į	20	:	8	14	13	61.*	00	248	741	
ŀ	Other violence.	19	-	-	003 1	÷	1-	10	10	10	00	10	4	9	60	:	65	¢	-	1.5	φ	11	10	00	112 063 1	775 1741	
ŀ	Suicide.	+	:	:	242	01	60	-	+	60	:	01	-	+	60	-	01	00	1	01	-	5.0	10		2 22	287	
ŀ	Senility.	12	01	14	828	10	10	60	+	6	0	12	00	12	00	¥0	a	10	:	ø	00	16	10		136	964	
ŀ	premature birth,	12	-	0	801 8	9	+	t.	+	13	:	18	9	+	1.	02	***	14	:	10	0	16	10	10	133	937	
ŀ	Congenital debility.	60	:		68 8	-	:	:		1	:	01		:	:		:		:	:	:	:	-	:	68	181	
	Puerperal sepsis-	04			30				01	-		-	;		-		-	1					1	:	9.00	36	
ŀ	Postroral sensis.	10	-	. 9	128			0	0			13	10	-	+	0	+	19	•	90	01	. 9	•	-	1128	840	
1	Acute and chronic	14	-	-	110 7	10	00	6	1	1.	04	01	24	*	00	+	01	16		10	-	÷	10		446 7	528 8	
	Diber digestive	00		1	56 4	4		-	1	01	-		-	-	-					1	-			-	15	171 5	
	Other diseases of	01		+	40 1	24				-	-	-			-	•	-		-	-	2				8 49 1	1 10	
	Cirrhosis of liver.	04		04	20		:	: 60	:	10		-	-	: 01			:	01	:	10	1	-	01	-	88	149	뼒
	Appendicitis.	62	:		82 15		:	-			:	1		-	:		:	24	-					-	15 28	1 26	page :
I.	Diarrhees, &c.	00		-		01	-	01	1	:		01	:		-		:	60	-				-	-	8.8	145	i uo
	Peptie ulcer.	+	1	01	74 125	61	-	01		00		-	: :	-	: 00	; 69	:	1	-		: 00	00		-	74 15	1	note *
	Other respiratory diseases.		:	-1	-	10	64	-	-	30		0	-	9	6	1-	00	11		-	0	+	01	:	68 35 17	3 202	See n
	Pneumonia (all forms).	27			11135	-	3 1	3 1	0	4	92	10	10	04	9	10	-	5 1		+	5 1	6	1 0	00	- =	7 1303	++
	Bronchitis.	55		7 10	881	10	-	-	1	-	01		-+	-	10	60	00	0		-	-1	1-	-	04	- 30	4 997	21.
	Other circulatory	1			1009	hating		-	2	-	-	_	-			100	-	-	1		21			-	4 125	5 1134	on page :
1	Aneurysen.	:	:	:	31	1	1	1	:	:	:		-	-			:	:	:			:		8	10	35	on F
	Heart disease.	66		30	4109	8	40	70	30	99	68	22	38	61	ä	8	H	85	1	20	8	5 52	6 40	-	3 714	335 1414 4823	note
	Cerebral hæmorrhage, &e.	13	-	20	1241	I	II	1-	-	19	C.a	90			10		æ	19	:	50		1	-	-	124	1410	See
	Diabetes.		C1	00	66	1	04	10	:	00	-	-	-	04	50	-	01			-	02	04	-	-	296	1000	
	Cancer, malig- nant disease.	55	01	20	2346	26	19	16	13	88	oc	18	П	2.5	15	10	00	38	1	96	51	30	30	11	342	79 2088	clitis.
	General paralysis of the insame, tabes dor- table.	1	-	:	73	:	-	63	1	-	:	-	:	-	1	1	÷		:	;	:	1	:		• E		omyc
	Syphilis.	1	-	:	46	1	1	1	1	1		-	-	-	-	-	-	63	1	1	1	1	;		4.64	50	Poli
	Other tuberculous diseases.	13	:	:	204	00	1	1	:	1	01	4	-	Q.9	-	-	01	1	8	-	00	-	01	01	34	238	from
	Tuberculosis of respiratory system.	\$	60	5-	875	6	01	10	10	0	-	30	60	8	4	4-	64	9	:	30	10	12	*0	KO .	875	975	* Includes one death from Pc
1	Cerebro-spinal fever.	-	-	:	29	:	1	-	1	:	;	ť	:	:	4	:	;	:	:	-	01	:	:	:	1- 8	36	one d
	Encephalitis lethargica.	:	1	:	48	:	-	-	:	01	1	÷	i	1	1	:	:	;	:	00	-	-	-		11 48	59	ades -
I	Influenza.	13	:	1	431	00	+	30	01	10	1	01	12	+	+	60	1-	10		10	10	•	:	61	84 431	515	Inch
I	Diphtheria.	60	-	-	109	1	;	-	:	1	:	1	:	:	:	÷		1	1	;	-	-	-	1	109	115	
H	Cough.	1.	-		105	-	1	1	:	1	***	:	:	E	:	;		1	1	-	:	00	-	:	8 105	113	
	Seatlet fever.	:	1		19	-	1	:	:	:	÷	1	:	1	-	;	:	1	1	:	1	-	:	:	19	01	
li	Measles.	1	:		130	-	÷	:	;	I	÷	1	:	:	01	;	;	:	1	1	1	1	01	;	130	136	
	Typhoid and www.bioditianag	-	:		13	1	:	:	;	:	1	1	;	;	-	;	;	1	÷	:	:	-	:	:	13	14	
Ľ	and the second division of the second divisio	00	10	0	1	180	1:	210	129	5	29	203	133	124	124	96	11	298	04	244	156	243	215	78	2963	10	
	Total No. of Deaths from all causes.	473	=	170	19204	18	137	12	12	247		ñ		-				-					-		-	v 221	
	ž	:	:			E			:	:	1	-	:	:	:		:	:		:	:	:				Count	
	TRIC	:	:		tricts	RURAL DISTRICTS atton-upon-Irwell .	:		:	:	:	:	:	:	:	:	:	:	:	:	:	re	1		tricts	utive	
2	DIS				Dist	DIS		:	:	:	:	:	:	:	:			:		1	-	idashi		;	I Dis	histra	
	AN	(B)	11		Jrban	IAL.	un	y			-					urst				ton.	ngton	Lan	ton		Rura	dmit	
A CA .	URBAN DISTRICTS.	Widnes (B)	Withnell	Worsley	Total Urban Districts	RURAL DISTR Barton-upon-Irwell	Blackburn	Burnley	Bury	Chorley	Clitheroe	Fylde	Garstang	Lancaster	Leigh	Limehurst	Lunesdale	Preston	†Sefton	Ulverston	Warrington	#West Lancashire	‡ Whiston	Wigan	Total Rural Districts Total Urban Districts	TotalAdministrative County 22167	

PRINCIPAL CAUSES OF DEATH.—The relative importance from the point of view of mortality of various well-defined diseases is shown in the following statement :—

			No	o. of deaths in <b>1932.</b>	to	tal deat in 1932.	Percentage to total deaths in 1981.
Heart disease			 	4,823		21.7	 20.7
Cancer, malignant disease			 	2,688		12.1	 11-6
Cerebral hæmorrhage, &c.			 	1,414		6.3	 5.8
Pneumonia (all forms)			 	1,303		5.8	 6.6
Tuberculosis (all forms)			 	1,213		5.4	 5.5
Violence (including suicide)			 	1,062		4.7	 4.3
Bronchitis			 	997		4.4	 5.8
Senility			 	964		4.3	 4.8
Congenital debility, prema	ature	birth,					
malformation, etc.,			 	937		4.2	 4.0
Acute and chronic nephritis	-		 	840		8.7	 8.6
Influenza			 	515		2.3	 8.9
*Principal infectious diseases			 	497		2.2	 1.7
Other digestive diseases			 	458		2.0	 2.0

 Includes smallpox, measles, searlet fever, whooping cough, diphtheria, enteric fever, and diarrhœa (under 2 years).

Compared with the year 1931 decreases are recorded in the number of deaths in 1932 from influenza 407, bronchitis 368, pneumonia 247, and there were increases in the deaths from measles 75, cerebral hæmorrhage 61, violence 47, appendicitis 26, etc.

In the following paragraphs reference is made to the chief causes of death, and the deathrates given are calculated per 1,000 of the estimated population. As stated in the note on page 22, these rates are "crude" rates, and in considering these statistics the rapid ageing of the population as a result in the fall of the birth and death rates must be taken into account. The crude deathrates of diseases mainly affecting elderly people, such as heart disease, cancer, and cerebral hæmorrhage, overstate the real mortality averages.

HEART DISEASE.—The fatalities in 1932 classified under the term "heart disease" numbered 4,823, or 21-7 per cent. of the total deaths in the Administrative County from all causes, equivalent to a death-rate of 2-67 per 1,000 of the population. The Registrar-General in his statistical review for England and Wales states "the increase of crude mortality from heart disease is due, among other causes, to the increasing age of the population and to rapid increase of the record of myocardial degeneration in certification of the deaths of old people." The crude deathrates for the County for the last four years have remained practically stationary with a slight tendency to rise, but the following figures show a marked rise in the percentage of deaths classified as heart disease to the total deaths from all causes :—

The statement below gives the County ten years' figures :---

Year.	No. of Deaths.	Crude Rate per 1,000 of Population.	Percentage to total deaths from all causes.
1923	2,707	1.52	12.4
1924	2,776	1.55	12.4
1925	3,113	1.74	18.7
1926	2,995	1.67	18.9
1927	8,441	1.91	15.0
1928	3,506	1.93	16-2
1929	4,523	2.49	17.8
1930	4,230	2.34	19.7
1931	4,824	2.67	20.7
1932	4,823	2.67	21.7

The tabular statement below shows the number of deaths in the County area during the ten years 1923–1932 from heart disease at various age periods. The rise in the number of fatalities at the higher age periods will be noted :—

Year. 1923 1924 1925 1925 1927 1928 1929 1930 1931 1932			Ag	e period	s—Years.			
Year.	At all ages.	Under 5	5-15	15-25	25-35 35-45	45-55 55-65	65-75	75 and upwards
1923	2,707	7	44	77	283	1,005	821	470
1924	2,776	1	51	57	321	936	858	552
1925	3,113	5	39	74	242	1,072	1,050	631
1926	2,995	11	30	65	259	972	1,006	652
1927	3,441	5	33	62	284	1,120	1,143	794
1928	3,506	7	46	76	288	1,158	1,156	775
1929	4,523	3	29	82	821	1,389	1,556	1,143
1930	4,230	2	42	61	283	1,283	1,510	1,049
1931	4,824	4	35	59	<u>97   197</u> 294	453 971 1,424	1,656	1,352
1932	4,823	4	26	69	114   173	436   1,008	1,660	1,333
	1080	TOTOL			287	1444		1

District death-rates from heart disease.—The following districts produced the highest deathrates in 1932 :—Morecambe and Heysham (B) 4.99, Clayton-le-Moors 4.65, Burnley (R) 4.32, Ulverston 4.22, Fulwood 4.19, Longridge 4.10, Padiham 4.05, Whitefield 3.97, Accrington (B) 3.83, Radeliffe 3.77, Milnrow 3.74, Heywood (B) and Lytham St. Anne's (B) each 3.62, Nelson (B) 3.55, and Trawden and Blackburn (R) each 3.53.

Extending over a period of three years, 1930–1932, the following districts had the highest averages :--Morecambe and Heysham (B) 4-35, Ulverston 4-30, Burnley (R) 3-99, Fulwood 3-96, Lees, 3-74, Haslingden (B) 3-70, Barrowford 3-63, Poulton-le-Fylde and Whitefield each 3-57, Heywood (B) 3-54, and Grange-over-Sands 3-52.

CANCER (MALIGNANT DISEASE).—The recorded number of deaths in the Administrative County in 1932 due to cancer shows a slight decrease as compared with the previous year, viz., 2,688 against 2,705. The crude death-rate, 1.49 per 1,000 of the estimated population is exactly the same as in 1931. The County rate for 1932 is 0.02 below the rate for the whole of England and Wales.

The increase during recent years in the number of deaths registered as due to cancer is not in itself definite evidence of an increase in the fatality of the disease. Factors such as improvement in diagnosis, greater accuracy of certification, increased longevity, etc., must be taken into account. The changes in the mortality rates over a period of 33 years are shown by the following statistics.

Cancer records for the Administrative County are available since the year 1900, and below are given the number of deaths each year ascribed to this disease, and the County death-rates per 1,000 of the estimated population. For purposes of comparison the rates for England and Wales are also given :-

	 		Dea	th-ra	ite.		No	mber of			ath-re	
Year.	Number of Deaths.	A	dministrati County.	ive	England and Wales.	Year.		eaths.	Ad	ministrat County.		England nd Wales.
1900	 1072		0.54	1		1917		1713		1.09		1.19
1901	 1149		0.65			1918		1727		1.15		1.19
1902	 1113		0.60			1919		1793		1.07		1.18
1903	 1223		0.62			1920		1880		1.08		1.16
1904	 1229		0.65			1921		1981		1.12		1.21
1905	 1164		0.65	5	0.90	1922		2063		1.16		1.22
1906	 1214		0.69			1923		2076		1.17		1.26
1907	 1254		0.70			1924		2182		1.22		1.29
1908	 1283		0.71			1925		2273		1.27		1.33
1909	 1374		0.75	152		1926		2312		1.29		1.36
1910	 1333		0.74			1927		2411		1.33		1.37
1911	 1493		0.86	·	0.99	1928		2514		1.38		1.42
1912	1466		0.83		1.00	1929		2560		1.41		1.43
1913	 1618		0.93		1.06	1930		2564		1.41		1.45
1914	 1668		0.95		1.06	1931		2705		1.49		1.48
1915	 1577		0.94		1.01	1932		2688		1.49		1.51
1916	 1728		1.06		1.16							

During the thirty-three years the deaths certified as due to cancer in the County area have increased by about 150 per cent.

The incidence of cancer amongst males and females, as indicated by the mortality returns, is shown by the following figures :---

		ereenta neer d				ercenta	
Year.	Male.		Female.	Year.	Male.		Female.
1923	 43-4		56-6	1928	 45.6		54-8
1924	 46-8		53-2	1929	 43.1		56-8
1925	 45.8		54-2	1930	 46-0		53.9
1926	 47.1		52.9	1931	 45-4		54-5
1927	 46.3		58.6	1932	 46-3		53.6

The following table groups the cancer deaths in the County in certain age-periods, for males and females :—

			Total		-			Years.			
	Year.		Cancer Deaths.	Sex.	Under 25.	25—35.	35-45.	4555.	55-65.	65-75.	75 and upward
1923			2,076	м.	15					22.4	T. HERI
1020			2,010	F.			7		58	306	76
1924			2,182	M.	10	10			72	333	156
1021			2,102	F.	6	12	3		43	331	80
1925			2,273	M.	11		5	54		301	137
1000				F.	11	14		51 58		306	121
1926			2312	M.	10		8	56		336	158
				F.	11	12		60		837	123
1927			2,411	м.	12	6		56		339 372	144 99
		1	a barren a barren	F.	9	11		63		358	179
1928			2,514	M.	11	5		58		379	120
			1010101277	F.	9	14		61		402	197
1929			2.560	M.	13	5		58		370	134
				F.	11	13		67		443	191
1930			2,564	м.	10	6		54		407	149
		150		F.	4	14		64		378	214
1931			2,705	М.	9	11	40	189	897	438	146
				F.	1	29	111	256	416	441	221
1932			2,688	M.	10	15	43	144	424	444	166
		111		F.	9	18	113	281	394	394	233

					Pere at spe	entage to to cified age p	otal Cancer o eriods (crud	deaths e rates).	An es anni	the second
3	řear.		Sex.	Under 25.	25—85.	85—45.	45-55.	55-65.	65—75.	75 and upwards.
2.71	Cards Line	and of	mpold T mil i	%	%	%	%	%	%	%
1923			м.	0.7	2	3	22	0	14.7	3.6
			F.	0.5	4		27		16.0	7.5
1924			м.	0.7	2.		24		15.1	3.6
			F.	0.3	5		27.		18.7	6.2
1925			м.	0.5	3.		23-	-	13.4	5.8
			F.	0.5	6.		25		14.7	6.9
1926			м.	0.4	2.	5	24.		14.5	5.3
			F.	0.5	5.	2	26.		14.6	6.2
1927			м.	0.4	2.	7	23.		15.4	4.1
			F.	0-3	4.	6	26.	2	14.8	7.4
1928			М.	0.4	2.	1	23-	2	15.0	4.7
			F.	0.3	5.	6	24.	4	15.9	7.8
1929			м.	0.5	2.	0	20-	9	14-4	5.2
			F.	0.4	5.	1	26-	4	17.3	7.4
1930			М.	0.3	2.	6	21.	2	15.8	5.8
			F.	0.1	5.	5	25-	1	14.7	8.3
1931		***	м.	0.3	0.4	1.4	6.9	14.6	16.1	5.8
-		100-1	F.	0.03	1.0	4.1	9-4	15.8	16.3	8.1
1932	***	***	Μ.	0.3	0.5	1.5	5.3	15.7	16-5	6.1
			F.	0.3	0.6	4.2	10.4	14.6	14-6	8.6

	.01 6	Per	100,000 livi	ng at specifi	ed age period	is—		
1925 1926 1927 1928	Sex.	Under 25.	25-35.	3545.	45-55.	55—65.	65—75.	75 and upwards.
1000	TOTAL T	anter rolling						
1923	М.	8.9	19			2.9	984-0	921.5
	F.	2.5	35		30		840.3	1158-6
1924	M.	3.9	21			3-6	1064-4	970.0
	F.	1.5	43			0.7	759-5	1017.5
1925	М.	2.9	30	-4	31	4-7	984-0	1467.2
	F.	2.8	48	-9	31	6.8	847.8	1178-4
1926	м.	2.6	23	.5	33	4.3	1083-7	1491-4
	F.	2.8	41	-3	32	9.8	855-4	1069.5
1927	М.	3.1	26	.7	33	9.1	1196-2	1200.4
	F.	2.3	38	-9	34	8.5	903-4	1329-4
1928	м.	2.9	21	-4	34	8.6	1218.7	1455.0
	F.	2.3	49		33	3.0	1014-4	1463.1
1929	M.	3.4	21		31	9.4	1189.8	1624.8
	F.	2.8	45			6-6	1117.8	1418.5
1930	M.	2.6	27		32	4.8	1308-8	1806.7
	F.	1.0	49			9-8	953-8	1589-4
1981	M.	2.6	7.8	88.5	171.2	466-8	1038-1	1330.5
	F.	0.2	18.5	77.9	199-2	436-0	837-7	1265-3
1932	M.	2.8	10.7	36-0	130-4	498-6	1052-1	1512-8
1932	F.	2.5	11.5	79.3	218-6	412.9	748-4	1334-0

County cancer mortality shown per 100,000 of each sex living at various age-periods for the years 1923-1932\* :---

\* The mortality averages shown in the above table for 1931 and 1932 are based on the age and sex distribution of the population as at the Census 1931; the other rates are based on the 1921 Census.

The England and Wales mortality averages, showing the rise in the cancer death-rate of the whole country during the last 62 years, are set out below :---

Years.			er death-rate on persons living.
1871-1880	 	 	470
1881-1890	 	 	591
1891-1900	 	 	757
1901-1910	 	 	904
1911-1920	 	 	1117
1921-1925	 	 	1269
1926	 	 	1362
1927	 	 	1376
1928	 	 	1425
1929	 	 	1437
1930	 	 	1454
1931	 	 	1484
1932	 	 	1510

Statistics are not available as regards the County cancer deaths showing the anatomical distribution, but the table below, which has been prepared from the figures published annually by the Registrar-General, shows the preponderance with which certain sites are affected in both sexes.

DEATHS FROM CANCER AND THE DISTRIBUTION OF THE RECORDED FATAL CASES IN ENGLAND AND WALES, 1923-1982.

Site affected.		1923.	1924.	1925.	1926.	1927.	1923.	1929.	1930.	1931.	1932.
Buccal cavity and pharynx	 M. F.	2819 492	2814 522	2953 515	2894 515	3043 512	3109 508	$2928 \\ 529$	$2913 \\ 519$	$2951 \\ 514$	3040 536
Digestive organs and peritoneum	 M. F.	13621 12833	14289 13109	14838 13473	$15264 \\ 14311$	$15584 \\ 14059$	$\frac{15887}{14743}$	$16396 \\ 14955$	$16710 \\ 15230$	$17043 \\ 15368$	$17703 \\ 15493$
Respiratory organs	 M. F.	1405 542	1493 576	1642 651	1735 659	1794 665	1984 708	$     1991 \\     760 $	$2258 \\ 864$	2532 908	2688 920
Uterus	 F.	4363	4385	4467	4409	4428	4525	4455	4354	4341	4342
Other Female genital organs	 F.	1209	1241	1238	1382	1444	1483	1567	1645	1667	1785
Breast	 М. F.	34 4996	38 5153	39 5372	43 5296	41 5678	51 5878	$\begin{array}{r} 46 \\ 5044 \end{array}$		61 6381	49 6386
Male genito-urinary organs	 М.	2156	2295	2437	2474	2586	2822	2885	2947	3187	3259
Skin	 М. F.	566 427	585 460	572 432	$\frac{585}{427}$	589 475	$652 \\ 502$	664 494	627 447	683 480	630 527
Other or unspecified organs	 М, F,	1464 1741	1585 1844	$     1521 \\     1789   $	$1442 \\ 1784$	$     \begin{array}{r}       1461 \\       1769     \end{array} $	1508     1893	1374 1908	$     \begin{array}{r}       1401 \\       1856     \end{array} $	1320 1910	1460 1948
Total Cancer deaths	 М. F.	22065 26603	23099	24002 27937	24437 28783	25048 29030	26013 30240	26284 30612	26916 30967	27777 31569	28829 31887

Extracted from the Registrar-General's Statistical Review.

District death-rates from Cancer.—The County districts with the highest mortality rate from cancer in the year 1932 were :—Preesall 4·26, Grange-over-Sands 2·93, Mossley (B) 2·67, Lancaster (R) 2·63, Ulverston 2·49, Poulton-le-Fylde 2·45, Darwen (B) 2·44, Ramsbottom 2·34, Lees 2·33, Denton 2·21, Clayton-le-Moors and Thornton Cleveleys each 2·19, and Rishton 2·14.

Extending over a period of five years, 1928–1932, the following districts had the highest averages :—Preesall 2-52, Grange-over-Sands 2-42, Poulton-le-Fylde 2-30, Ulverston 2-07, Denton 2-00, Ulverston (R) 1-97, Urmston 1-92, Church 1-90, Lytham Saint Anne's (B) and Mossley (B) each 1-89, and Darwen (B) and Lees each 1-88.

Report No. 70, Public Health and Medical Subjects, was issued in May, 1933, by the Ministry of Health. One of the objectives of the enquiry preceding the issue of the report was an attempt to ascertain whether environmental conditions associated with occupation or industry, other than those already recognised as conducive to skin cancer, lay open to suspicion. The pamphlet contains a considerable amount of information with regard to these difficult questions.

PNEUMONIA (ALL FORMS).—A reduction is recorded in 1932 in the number of deaths from pneumonia, viz. 1,303 against 1,550 in the year 1931. The percentage to total deaths was 5-87, and the death-rate per 1,000 of the estimated population 0-72, in the urban districts 0-73, and in the rural districts 0-62.

BRONCHITIS.—There was also a reduction in the number of fatalities recorded as due to bronchitis, 997, as compared with 1,365 in 1931. The deaths from this disease represented 4-49 per cent. of total deaths from all causes, and a rate of 0.55 per 1,000 of the population—urban districts 0.57, rural districts 0.43.

INFLUENZA.—The mortality from this cause fluctuates considerably. In 1932 there were 515 deaths, 922 in 1931, 341 in 1930 and 1,690 in 1929. The death-rate in 1932 equalled 0-28 per 1,000 of the population, against a rate of 0-51 in the preceding year. School closure on account of the prevalence of influenza was considered necessary in only 2 districts.

TUBERCULOSIS (ALL FORMS).—The deaths assigned in 1932 to tuberculous affections in the aggregate numbered 1,213 as compared with 1,287 in 1931. Tuberculosis of the respiratory system contributed 975 deaths (1,021 in 1931), and other forms of tuberculosis 238 (266 in 1931). The death-rates per 1,000 of the population were :—Pulmonary 0.54, non-pulmonary 0.13. The deaths, and also the notified cases, are fully analysed on pages 158 to 163.

CEREBRAL H.EMORRHAGE contributed 1,414 deaths, 61 more than in the preceding year.

CONGENITAL DEBILITY, PREMATURE BIRTH, MALFORMATIONS, ETC.—Fatalities in 1932 assigned to this group totalled 937 or 13 fewer than in 1931. They represented 4-2 per cent. of the total deaths from all causes, and corresponded to a rate of 0.51 per 1,000 of the estimated population.

THE PRINCIPAL INFECTIOUS DISEASES.—Reference to the cases notified and the deaths from smallpox, measles, scarlet fever, whooping cough, diphtheria, enteric fever and diarrhora, and to the other notifiable diseases is made in the section of the report headed "Prevalence and Control over Infectious Diseases," pages 138 to 171. The total number of deaths ascribed to the seven diseases mentioned above was 497, or 2.2 per cent. of the total deaths from all causes. In 1931 the deaths numbered 415, or 1.7 per cent.

TRANSFERABLE DEATHS.—During the year under report the following "transfers" were made:—5,343 persons who, having a fixed or usual residence in the Administrative County, died in a district other than that in which they resided, and these (known as inward transfers) have been allocated to their proper districts; 5,413 deaths occurring in County districts of persons not belonging thereto were transferred to the areas to which they belonged. Infant Mortality.—The number of deaths of infants under one year registered in the Administrative County in the year 1932 was 1,641, or 7.40 per cent. of the total deaths at all ages. In 1931 the deaths numbered 1,773 and the percentage to total deaths was 7.63.

An analysis of the infant mortality of 1932 and the preceding four years is given in the following table :---

#### CAUSES OF INFANT DEATHS.

Causes of Infant Deaths.	No. of Deaths of Infants under 1 year.				
Causes of Imant Deatus.	1928.	1929.	1930.	1931.	1932.
Total—All Causes	1827	2161	1622	1778	1641
Measles	22	22	42	14	27
Scarlet Fever		2	1		
Whooping Cough	47	118	28	42	50
Diphtheria	6	7	3	2	1
Influenza	8	39	3	28	14
Encephalitis Lethargica .	1		2		1
Cerebro-spinal Fever	3	3	4	9	6
Tuberculosis of Respirator	y				
System	2	3	1	1	2
Other Tuberculous Diseases .	26	18	18	21	18
Bronchitis	130	182	79	122	91
Pneumonia (all forms)	248	392	169	287	227
Out D The D'	7	12	11	8	12
Di al contra di	133	130	127	98	84
Congenital Debility, Prematur	e				
Birth, Malformations, &c	846	893	856	929	917
Other Courses	848	340	278	212	191

The rate of infant mortality in the Administrative County in the year 1932 was 67 per 1,000 registered live births, as compared with a rate of 70 in the preceding twelve months; in the urban districts the rate was 68, and 65 in the rural districts. With the exception of the year 1930 the rate for the year under review was the lowest ever recorded for the Administrative County.

Reference to the tabular statement set out on the next page, which gives the infant mortality of the County in quinquennial periods, will show a progressive reduction in the infant mortality from 167 per 1,000 births in 1897–1901 to 67 in the year 1932.

The continuous decline in the birth-rate, with the consequent possible greater care of smaller families, has had considerable influence in the decline in the infant mortality rate, but much of the reduction can probably be attributed to the general improvement in the living conditions of the people, combined with the provision of ante-natal services and the more intelligent interest in the care and management of young children, fostered by the instructions given at child welfare centres and by the home visits of public health officials.

Notwithstanding this it is disturbing to find that of the total infant deaths in the County in 1932 (1,641) more than fifty-five per cent. were attributable to congenital debility, premature birth or malformations. This proportion remains persistently high and does not show the desired response to preventive measures.

The Medical Officer of Health of Eccles (B) in commenting on infant mortality states " that many of the stillbirths and infant deaths during the first month of life are due to unsuccessful efforts to determine pregnancy in the early stages cannot be doubted, but unfortunately many of the methods adopted to terminate pregnancy in achieving their object cause serious damage to the mother and often result in prolonged ill-health and suffering. That the practice of procuring abortion is prevalent is confirmed by the large proportion of still-births and early infant deaths while the low birth-rate is positive evidence of the wide spread practice of limitation of families. These are facts which we must face. We must consider whether it is better to allow the limitation of families by hole and corner methods to continue or to square up to the issue and consider whether it would not be better to direct the present tendency into safer channels."

C

		Rate	of Deat	hs of C	hil <b>dr</b> en	under 1	Year	to 1,000	Live I	Births.	
	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1980.	1931.	1932.
Urban Districts	87	82	84	83	82	74	71	87	64	72	68
Rural Districts	75	67	68	71	71	68	57	64	58	63	65
Administrative County	85	80	81	82	80	73	69	84	64	70	67
England and Wales	77	69	75	75	70	69	65	74	60	66	65

The following table gives the infant death-rates, County, urban, and rural, for 1932 and the preceding ten years, and also the rate for England and Wales :---

The tabular statement below shows the very considerable and progressive fall in the infant mortality of the Administrative County during the past 36 years :--

	IN	PANT MORTAL	ITY.
		aths under Year.	Percentage
Years.	 Per 1,000 Live Births.	Per 1,000 of the Estimated Population.	Deaths to Total Deaths at all ages.
1897-1901	 167	. 4.56	26.83
1902 - 1906	 141	3-66	24.46
1907-1911	 126	2.98	21.16
1912-1916	 111	2.40	16.86
1917-1921	 93	1.82	18.19
1922 - 1926	 81	1.37	10.94
1927-1981	 72	1.02	8.11
1932	 67	0.91	7.40

Death-rate amongst illegitimate children.—The statement following shows the differential incidence of mortality in 1932 amongst legitimate and illegitimate children.

	L	Mortality egitimate children.	r 1,000 live Illegitimate children.	ths. Total.
County		65	 118	 67
Urban districts		66	 116	 68
Rural districts		63	 132	 65

District infant death-rates.—The highest district infant death-rates in 1932 were :—Trawden 148, Royton 137, Atherton 108, Skelmersdale 107, Clayton-le-Moors 105, Tottington 104, Leigh (R) 98, and Hindley and Tyldesley-with-Shakerley each 96.

Extending over a period of five years, 1928–1932, the following districts had the highest infant death-rates :--Royton 112, Ince-in-Makerfield and Whitworth each 106, Clayton-le-Moors 98, Billinge and Winstanley 97, Hindley 96, and Adlington 95.

Low infant death-rates were recorded in 1932 in :--Croston, Grange-over-Sands, Huyton-with-Roby and Preesall each nil, Audenshaw 10, Lunesdale (R) 11, Lytham St. Anne's (B) and Clitheroc (R) each 13, Kirkham and Lees each 16, Fulwood 25, Withnell 28, and Formby and Longridge each 31.

In 6 districts in 1932 the rate was between 100 and 150 per 1,000 births.

.,	33	,,	,,	,,	75		100	,,
	49	· · · ·	,,	,,	50	,,	75	,,
,,	18	**	,,	,,	25		50	.,,
,,	12	,,	"	under :	25 per 1	1,00	0 births.	

The table on page 14, gives the infant mortality rate for the County and for the urban and rural districts since the year 1889, and on pages 209 to 233, each district rate in 1932 is shown contrasted with the previous year's rate and with the average for the preceding five years.

# GENERAL PROVISION OF HEALTH SERVICES IN THE COUNTY.

Hospital Accommodation.—SMALLPOX.—OTHER INFECTIOUS DISEASES.— Table 6, pages 139 to 152, shows the nature of the hospital accommodation, both for smallpox and other infectious diseases, provided in, or available for, each County sanitary district, and the table also gives for each district the number of cases removed to hospital in the year 1932, and the number of deaths in hospital.

Summarised, the position of the Administrative County at the end of 1932 as regards hospital accommodation for smallpox and other infectious diseases is shown in the following statement :---

		For allpox.	For infectious diseases other than smallpox.
No. of Districts	with their own Hospital	13	 18
Dansaria ". d Dansaria ". d Danshi W	constituent members of Joint Hospital Boards or Committees	83	 85
antical sciences income response of the second response of the secon	using other hospitals within the Administrative County (i.e., belonging to other urban or rural authorities)	11	 8
" "	using the hospitals of Joint Hos- pital Boards or Committees, or belonging to County Boroughs	53	 52
to entribute a	without hospital accommodation	6	 8

The districts stated to have no hospital accommodation available are as follow :---

For Smallpox : Ashton-in-Makerfield Blackrod Hindley. \* Little Hulton Lunesdale (R) Wigan (R) For other Infectious Diseases : Billinge and Winstanley Mossley (B) Clitheroe (R)

The following changes are reported in 1932 in the local arrangements for hospital accommodation :---

For Smallpox-

Wigan (R).—The use of the local smallpox cottage hospital has been discontinued, and the district now has no provision for smallpox isolation.

Carnforth.-Arrangement made with Lancaster (B).

\* Little Hulton.—Arrangement made with Salford C.B. said to be discontinued and no alternative provision made. (\* From the 1st April, 1933, this district is combined with the Worsley Urban district which has a smallpox hospital.)

For other infectious diseases :---

Carnforth.-Use of local hospital at Crag Bank definitely discontinued, and arrangement made with Kendal (B) (pending completion of new joint hospital).

Other comments by local Medical Officers of Health on their hospital accommodation include :---

Colne (B).—The isolation hospital at Jerusalem farm is only suitable for use in an emergency. Final arrangements regarding Colne becoming a member of the Burnley Joint Hospital Board still indefinite.

Lancaster (B), Morecambe and Heysham (B) and Carnforth.—A Joint Hospital Board has been formed for these districts and a new isolation hospital is in course of crection on the northern border of Lancaster.

Withnell.—For economy, the local hospital has not been used for many years ; cases usually sent to Blackburn C.B.

Whiston (R) .- Two new observation wards are being provided.

Under Section 63 of the Local Government Act, 1929, the County Council is required to make a survey of the hospital accommodation for the treatment of infectious disease provided by the councils of any districts wholly or partly within the County, and upon completion of the survey to prepare, in consultation with the councils of all such districts and, if necessary, with the council of any County Borough adjoining the County, and submit to the Minister of Health for his approval, a scheme for the provision of adequate hospital accommodation for the treatment of infectious disease within the County. The hospitals in the Administrative County have been surveyed by the County medical staff. An interim report on the smallpox hospital accommodation of the County has been presented to the County Public Health Committee, and a report on the whole question of hospital provision is now in preparation.

To the Ministry's queries "has any action been taken or advised with the object of securing that the hospital accommodation available is utilised to the best advantage," and "what action has been taken to shorten the stay of uncomplicated cases of searlet fever or to replace hospital treatment in suitable instances by nursing and supervision at home," many districts, including Carnforth, Chadderton, Clitheroe (B), Croston, Denton, Droylsden, Eccles (B), Farnworth, Haydock, Middleton (B), Standish with Langtree, Swinton and Pendlebury, Trawden, Widnes (B), Worsley, Warrington (R), etc., state that cases are now only removed to hospital where home isolation is impracticable or where some business is carried on. At Oswaldtwistle, 'except for special reasons,' hospital isolation of scarlet fever entirely discontinued. On the other hand in some districts a high percentage of removals still takes place. In many districts it is reported action has been taken with a view to shortening the period of stay in hospital of uncomplicated cases.

Contributions towards maintenance in isolation hospitals.—In the majority of County districts no attempt is made to recover the cost of maintenance of patients in isolation hospitals; in about twelve districts it is stated parents, or others responsible, are asked to contribute according to means.

REMOVAL OF CASES.—The following table gives the number and percentage of removals to hospital in 1932 of cases of smallpox, scarlet fever, diphtheria, and enteric fever, and contrasts the mortality of cases isolated in hospital with that of cases treated at home :—

			Hos	pital Treats	nent.		me ment.		ortality ent.
		Total cases notified.	Cases removed to hospital.	Per- centage of removals.	Deaths in hospital.	Cases treated at home.	Deaths at home.	In hospital.	At home.
Care Ila est			a le perto	100	age and the	and sold in	1000045	(II) m	1047
Smallpox	••••	4	4	100		100 <u></u> 010	-	an and a second	
Scarlet Fever		3349	2071	61.8	12	1278	10	0.57	0.78
Diphtheria		1550	1211	78.1	92	889	23	7.59	6.78
Enteric Fever		98	49	50.0	• 11	49	3	22.44	6.12

In 1931 the percentage of removals to hospital was :--Smallpox 100 (1 case only), scarlet fever 60.5, diphtheria 74-4, and enteric fever 50.5.

# Medical Services transferred to the County Council under the Local Government Act, 1929 :---

The Lancashire County Council decided that the Poor Law Functions of the Guardians as from the appointed day, namely, the 1st April, 1930, be co-ordinated with the General Health Services of the County, and that such functions be organised under the Clerk of the County Council as the Chief Official acting in a supervising and co-ordinating capacity, and as legal adviser; that the second official be the County Medical Officer of Health, who is responsible for the administration of Medical Services, Hospitals, Infirmaries, Workhouses or Institutions containing inmates requiring medical attention; and that the third official be the Public Assistance Officer, upon whom devolves—subject to the foregoing—such duties as may from time to time be assigned to him by the Public Assistance Committee.

The following table shews the Public Assistance Institutions, Hospitals, Infirmaries and Homes situated within the Geographical County :---

Former Union.	Institution.	Remarks.
Ulverston	Ulverston Institution	Wholly County.
Lancaster	Lancaster Institution and Infin Children's Home, Parkside	mary } Wholly County.
Lunesdale	Lunesdale Institution, Hornby	Wholly County.
Garstang	Garstang Institution	Wholly County
Kirkham Fylde	Fylde Institution and Infirmat Cottage Homes, Kirkham	ry}Institutions vested in the County. }Receive Blackpool County Borough cases under "User" agreement.
Preston		
	Ribchester Institution	Vested in the County Council. Re- ceives Preston County Borough cases under "User" agreement.
Chorley	Eaves Lane Institution	Wholly County.
Blackburn	Queen's Park Hospital Cottage Homes Working Boys' Home	} Vested in the Blackburn County Borough. Receive County cases under "User" agreement.
Clitheroe	Coplow View	Vested in the County Council. Re- ceives West Riding cases under "User" agreement.
Burnley	Primrose Bank Boys' Home	} Vested in the Burnley County Bo- rough. Receive County cases under "User" agreement.
Haslingden	Moorlands Institution, Infirmat Maternity Home	y and Wholly County.
Ormskirk	Ormskirk Institution	Vested in the County Council. Re- ceives Southport County Borough cases under "User" agreement.
Wigan	Frog Lane Institution Billinge Hospital	} Vested in Wigan County Borough. } Receive County cases under "User" agreement.

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Former Union.	Institution. Remarks.
Bolton	Fishpool House         Wested in Bolton County Borough.         Townley's Hospital         Receive       County cases under         Hollins Cottage Homes          under "User " agreement.         Working Boys' Home             Kingsgate Institution
Bury	Jericho Institution Vested in the County Council. Re- ceives Bury County Borough cases under "User" agreement.
Rochdale	Birch Hill Institution
Prescot	Whiston Institution and Infirmary Vested in the County Council. Re- ceives St. Helens County Borough cases under "User" agreement.
Leigh	Leigh Institution Wholly County.
Warrington	White Cross Institution and Mental Wards Wested in the Warrington County Borough. Receive County cases under "User" agreement.
Barton-upon-Irwell	Green Lane Institution} Wholly County. Park Hospital
Oldham	Boundary Park Institution Boundary Park Hospital Children's Scattered Homes Working Children's Homes
Ashton-under-Lyne	Darnton House
Manchester	Crumpsall Hospital Crumpsall Institution Rose Hill Convalescent Home Withington Hospital Use ted in Manchester City. Receive Prestwich and Failsworth cases under "User" agreement. Swinton Home Styal Cottage Homes Dr. Rhode's Homes
Salford	Hope Hospital
West Derby	Mill Road Infirmary, Liverpool          Alder Hey Hospital, Liverpool          Belmont Road Institution, Liverpool          Olive Mount Cottage Homes, Waver- tree, Liverpool          Kirkdale Homes, Fazaekerley          Kirkdale Homes, Liverpool          Smithdown Road Institution, Liverpool          Seafield House, Litherland          Deysbrook House, Liverpool          Walton Institution, Liverpool

The following table shows the treatment of In-Patients at Institutions and Hospitals under the control of the Lancashire Public Assistance Committee during the 12 months ended 31st December, 1932:---

INSTITUTION         No. of beds available for side.           OR         No. of beds available for side.           INSTITUTION         Mea.           Interview         Mea.	r sick, 1.									Nov of	No. of beds occupied.	ind.		
OR HOSFITAL. MAR. Mar. Women. Mar. 123 Mar. 123 123 123 123 123 123 123 123 123 123			*	+	\$	6.	*	8	4		10.		II.	15
	Children No. (under Adr 16 yrs.) sio	No. of No. of women signal.	Live Line Births.	Still- Births.	Deaths among the newly- born (i.e. under 4 wits.)	Deaths arroag children under year.	Maternal deaths.	Total No. of deaths.	No. of Patients discharged.	(a) Average.	(b) Highest.	(c) Lowest.	Surgical operations under general anus- thetics.	No. of Abdominal Sections.
	6 1	124 3	00	:	:		:	\$	88	139	149	130	:	1
68 73 88 8 82 93 24 19	8	330 8	1-	1				1	245	82	2.6	19	:	:
88 8 82 93 24 10	60	11 601	11		:	63	:	113	384	125	137	114		:
<b>3</b>	1 cot	12	:	:			:	+	11	90	11	9	:	:
24	13 1	372 106	103	4	:	1	-	89	381	139	155	125	:	:
		58	-	1				ш	68	8	41	24	:	:
Moorlands, Rawtenstall 113 151	2 2015	152 261	248	••	9	6	64	164	1,004	245	112	217		:
Ormskirk 162 144	30	844 29	10	60	60	80		170	684	546	296	325	9	:
Jericho, Bury 119 222	39 17	817 279	259	30	0	13		326	1,476	310	342	284	113	53
Whiston 353 253	100 2.	2,335 99	92	a	6	23	60	285	2,068	490	5300	450	359	140
Leigh 90 99	7 cots	588 21	18	60	1	œ	1	139	154	149	167	130	:	:
Park Hospital, Davyhulme 190 270	40 4,	4,694 583	192 1	30	18	44	+	384	4,309	320	390	285	2,488	338
Green Lane, Patrieroft 171 190	15	369	:	:				135	265	339	357	320		
Lake Hospital, Ashton-u-Lyne 172 253	61 61	2,299 387	1128 1	8	30	35	1	435	1,880	355	374	348	23	54
1,637 1.947	300													
Totals a., 3,503	15,	15,497 1,795	1,707	56	89	143	12	2,340	13,308	2,979	3,323	1001	3,019	222

PARTICULARS RELATING TO MENTAL PATIENTS IN PUBLIC ASSISTANCE INSTITUTIONS.

						No. of Beds.	HITT	Total
	Instit	ution.		-	Mcn.	Women.	Children.	number of Beds.
Ulverston				 	-	94		94
Ribchester				 	180	-		180
				 	24	44		68
Moorlands (Raw	tenstall	)		 	46	59		105
				 	55	56		111
				 	58	78	2	138
Whiston (Presco	5)			 	114	105		219
Leigh				 	24	28		52
Green Lane (Pat	ricroft)			 	74	84		158
Darnton House (	Ashton	-under	-Lyne)	 	52	87	T	189
					627	635	2	1,264

ACCOMMODATION.

No. of Long Stay Cases under Permanent Detention Order (Section 24, Lunacy Act).

1	Instituti	on.			, Men.	Women.	Children.	Total.
Ulverston					6	9		15
Ribchester					149			15 149
Chorley					3	2	The second se	
Moorlands (Rawter	istall)				20	36	and the second second	5
Ormskirk					29	43		56
Jericho (Bury)					45	60	1	72
Whiston (Prescot)				1000	95	93	-	105
Leigh					14	21	2	190
Green Lane (Patric	roft)				53			35
Darnton House (As	hton-un	der Lyn				60	7	120
Sarricon Trouse (IIS	incon-un	der-Lyn	c)		42	40	-	82
					456	364	9	829

No. of Short Stay Cases, i.e. Not on Permanent Detention Order in Institutions on the 3rd July, 1933.

	Institutio	n.			Men.	Women.	Children,	Total.
Ulverston								-
Ribchester						2		2
01					1			1
Moorley					1	2	-	3
Moorlands (Rawter	istall)				1			1
Ormskirk					2	1		8
Jericho (Bury)					2	4		6
Whiston (Prescot)					9	3		10
Leigh					8	0		12
Green Lane (Patric	roft)					1		4
Darnton House (As	hton und	T.			1	2		3
Darmon House (As	sitton-und	er-Lyne	:)		2	1		3
		-	-	-				
					22	16	_	38

aryat altargen a	Institution.			Men.	Women.	Children.	Total.
Ulverston				 5	9		14
Chorley				 6	6	PLAN PELL CLAPP	12
Moorlands (Rawt	enstall)			 22	19		41
Drmskirk				 15	14	1	30
fericho (Bury)				 7	17	1	25
Green Lane (Patr	icroft)			 7	30	4	41
Darnton House (.	Ashton-under	-Lyne)		 8	6	4	18
and grant they	a Division of	el altre	N/A curst	70	101	10	181

NO. OF CASES NOT UNDER ORDER (e.g. SENILE, ETC.).

SUMMARY.

think investor in the present of the	Men.	Women.	Children.	Total.
No. of Long Stay Cases under Permanent Detention Order (Section 24, Lunacy Act) No. of Short Stay Cases <i>i.e.</i> not on Permanent	456	364	9	829
Detention Order in Institutions on the 3rd July, 1933	22	16		88
No. of Cases not under Order (e.g. Senile, etc.)	70	101	10	181
And a second state of the	548	481	19	1,048

# SURVEY OF PUBLIC ASSISTANCE HOSPITALS AND INFIRMARIES.

For the purpose of ensuring that all the Public Assistance Hospitals and Infirmaries under the control of the Lancashire Public Assistance Committee are properly staffed and equipped, the County Medical Staff is making a general survey of all the Hospitals and Infirmaries. A detailed report on each Institution with observations and recommendations is being presented to the Public Assistance Committee. The following report on the Whiston Public Assistance Institution indicates the type of report presented to the Committee after an Institution has been surveyed by the County Medical Staff :—

# WHISTON PUBLIC ASSISTANCE INSTITUTION.

GENERAL DESCRIPTION.

The Whiston Institution is situated on the main road from Liverpool to Manchester, midway between Prescot and Rainhill. It serves a population of 188,373 for Public Assistance purposes, the districts in the area being :---

				opulation, 031 Census.
St. Helens County Borough		 	 	 106,789
Whiston Rural District		 	 	 22,873
Widnes Municipal Borough		 	 	 40,619
Huyton-with-Roby Urban Dist	rict	 	 	 5,199
Prescot Urban District		 	 	 9,899
Rainford Urban District		 	 	 3,494
				188,373

The total rateable value on the 1st April, 1930, was £997,016, of which £469,047 was apportioned to the St. Helens County Borough, and £527,969 to the County.

The Infirmary is on the east part of the site and is separated from the other units of the Institution by a roadway. It consists of six non-communicating blocks of wards, four of which were built in 1897, the remaining two being added in 1907. Two of the blocks (built in 1897) are two-storey buildings and four are three-storey buildings; these latter have recently been provided with lifts.

The Nurses' Home is situated on the opposite side of the Warrington main road, and is a self-contained unit, but apart from this the Infirmary is administered, and has supply services, in common with the whole Institution.

# Medical Staff (including Consultants).

Name.	Qualifications.	Nature of Appointment.
Hay, G. G. W.	M.B., Ch.B.	Medical Superintendent, Resident
Sawmy, P. G.	L.R.C.P.E., L.R.C.P. & S.G.	Assistant Medical Officer, Non-resident
Bywater, H. H.	M.D., F.R.C.S.	Ophthalmic Surgeon. Attends two days per month
Griffin, P. G. B.	L.D.S., R.C.S.	Dental Surgeon. Two half-days per week
Green, G. E.	M.R.C.S., L.R.C.P.	Visiting Physician. On request.
		Orthopædic Surgeon. On request.

Nursing Staff.

Superintendent Nurse.
 Assistant Superintendent Nurse and Sister Tutor.
 Night Sister.
 Home Sister.
 Assistant Home Sister.
 Maternity Sister.
 Charge Nurses.
 Probationers.

The Infirmary Buildings.

The six blocks of the Infirmary provide the following wards, which are classified as follows :---

				-	
A.1	•••	 •••	 	··· > Maternity.	
A.2		 	 		
B.1		 	 	Children (Male).	
B.2		 	 	Surgical (Male).	
C.1		 	 	Medical (Female)	
C.2		 	 	Children (Female	).
C.8		 	 	Medical (Female)	
D.1		 	 	Medical (Male).	
D.2		 	 	Medical (Male).	
D.3		 	 	Medical (Male).	
E.1		 	 	Children (Female	).
E.2.		 	 	Medical (Female)	
E.3		 	 	Surgical (Female)	
F.1		 	 	Medical (Male).	
F.2		 	 	(Unoccupied).	
F.3		 	 	Medical (Male).	

The above wards give the following number of beds :---

	edical (all form	usj			 297
(b) A	cute Surgical				 52
	aternity				 23
(d) C	<ol> <li>Children (including cots)</li> </ol>				 108

# **Operation Theatres.**

Two side wards attached to the main surgical wards have been converted into Operation Theatres. Owing to the fact that there is no inter-communication between the blocks, one theatre has been provided for male patients and one for female patients. In each case, however, the accommodation is limited. Operations are carried out in these improvised theatres, which require for their safe conduct an operating suite consisting of Operation Theatre, Anæsthetic room, Recovery room, Sterilising room and Changing room for the surgeon.

It is also preferable that the main theatre of a hospital should be reserved for "clean" cases, where perhaps the opening of joint or other cavities is involved. The present theatres are difficult to keep surgically "clean," the ventilation is very defective, and this greatly enhances the disadvantages of administering anæsthetics to patients actually in the Operation Theatre.

# X-ray Department.

The value of X-rays in the diagnosis and treatment of disease depends largely upon the type of apparatus used. The plant in use in this hospital was installed in October, 1924, at a cost of approximately £400. There is no screening stand, long exposures are necessary, and the results, in many cases, are not reliable. The general advance in electrical science which has been made during the last few years is well known, and is reflected to a notable degree in the improved design and technical efficiency of X-ray plants. Judged by modern standards the present machine is obsolete, and is considered dangerous both to patients and the operator. The newer plants, which in chest, abdominal and bone cases give a clear definition with only a short exposure, not only enable a lesion to be diagnosed with great accuracy, but also increase the "safety" factor for both patients and operator.

# Light Therapy.

A side ward of E.1 is equipped as an artificial sunlight and radiant heat room, and is also used for minor operations. Mercury vapour, carbon are and radiant heat lamps have been installed. The room is small, and the accommodation generally is not sufficient to deal with patients in an expeditious manner.

# Dispensary.

The dispensary is in a side ward of B.1, and there is suitable accommodation for the storage of drugs and dressings.

One dispenser is employed, and the Department functions in a satisfactory manner.

# Dental Treatment.

The dental room is on the ground floor of G. Block. A dentist attends at the Institution on two half-days each week. Indoor patients only are treated. The equipment is satisfactory.

This room is also used by the Assistant Medical Officer for interviews, treatment of outpatients, etc.

# Administrative Quarters.

The side ward in various Blocks are used for this purpose. The Medical Superintendent has the side ward in Block B.; the Matron's room is in Block A.; and Typists' room in Block D.

# Out-Patients' Department.

Special quarters for the treatment of out-patients have not been provided. Such cases are dealt with either in the wards or in the rooms set apart for special purposes.

# Pathological Laboratory.

The hospital does not possess a pathological laboratory. Material for investigation is sent to the County Mental Hospital, Rainhill, for examination and report, at a cost of 10s. per examination. This system is open to some objection. Modern methods of treatment, medical and surgical, depend more and more upon the correct interpretation of pathological examinations. Such examinations, bio-chemical, bacteriological, etc., call for the closest possible co-operation between the pathologist and the medical officer. The preparation of the patient and the collection of the specimen should be under the direct supervision of the pathologist, and in many instances he should have access to the cases and thoroughly acquaint himself with the clinical conditions in order that he may interpret his pathological findings in the best interest of the patient.

The above is a brief account of the accommodation provided for the various forms of medical and surgical treatment carried out at this Infirmary, and it is seen that Operation Theatres, Special and Administrative Departments have been established in the several side wards of the existing buildings, the cost of new construction being thus avoided. Whilst the Infirmary functioned mainly as a Poor Law Infirmary such improvisations were to some extent sufficient to meet the needs of the patients, but the developments which have taken place both with regard to the forms of treatment now advocated and the numbers and types of cases admitted suggest that administratively and technically the re-organisation of the hospital has now become a matter for serious consideration.

# PRESENT STATUS OF THE WHISTON INFIRMARY.

In recent years there has been a material alteration in the status of this Infirmary. Built to fulfil the purpose of a hospital for the sick poor, and in accordance with the contemporary designs of such buildings, it has gradually extended its functions, and now serves as a general hospital for the surrounding districts. The main factor which has brought about this change is the actual situation of the hospital. It stands midway between Preseot and Rainhill, on the main road from Warrington to Liverpool, and within a half-mile radius there is a population of approximately 18,000. In this area of the County there is a shortage of voluntary hospital beds. Between Warrington and Liverpool there are in fact only the two small hospitals situated in St. Helens. The accommodation in these is barely adequate for the needs of the Borough and their chronic and long stay cases are sent to Whiston. This shortage no doubt influenced certain large works in the neighbourhood to make arrangements with the late Board of Guardians for their employees to be admitted and treated in the Whiston Infirmary. The arrangements which are in existence at present include the following :-

Name,	Rates of Payment.
British Insulated Cables Hospital Fund	In-patients       £1 per week.         Out-patients       2s. 6d. per attendance.         X-ray Department       5s. per attendance.         Sunlight Department       1s. 3d. per attendance.         Massage Department       2s. 6d. per attendance.
Merseyside Hospitals Council.	Adults :—15s. per week for the first four weeks. 10s. per week for the next four weeks. Children under 16 years of age half the above rates.
Hulton Colliery Co., Limited.	Colliery employees contribute to a Hospital and Benevolent Fund 3d. a week. One-third of the gross amount is handed over to the Whiston Institution. No specific charge is made in respect of individual patients. The only cases treated within the scheme involve accident cases which occur in or about the colliery premises.
Stoves, Limited	A nominal payment of 5s. per case as an out-patient is made in respect of employees who attend at the Whiston Infirmary with foreign bodies in the eye, damaged fingers, etc.
Widnes Corporation	6s. per night for any case of Puerperal Pyrexia.
Lancashire County Council	Tonsils and adenoids and eye operations, 7s. 6d. and £1 11s. 6d. operation fee.
Lancashire County Council	Maternity cases, £2 2s. 0d. per week.

Further demands have been made upon the resources of this hospital owing to the increase in the weight of traffic on the Warrington-Liverpool road. The number of accident cases admitted is large. They are a particularly anxious type of case to treat, and they place greater responsibilities upon the Medical Staff than their mere numbers would indicate. The new Lancashire Road is also within the area and any accidents which may arise on this road in the vicinity would also be admitted to Whiston Institution.

The following shows the number of road accidents treated at Whiston during each of the last three years :--

			1930.	1931.	1932.
Road accidents	 	 	89	 122	 83*

The above facts explain why the Whiston Infirmary is functioning both as a Poor Law Infirmary and as a General Hospital.

A point of further importance is that an Infirmary in which the active treatment of acute medical and surgical conditions is carried out develops a system of out-patient treatment.

Cases attending the Out-Patient Department include :---

- (1) Former in-patients who require observation or treatment after discharge.
- (2) Accidents, casualties, or other emergencies.
- (3) Cases referred for consultation by duly authorised Medical Officers of the County Council.
- (4) Ante-natal and post-natal examinations and treatments.
- (5) Patients entitled to out-door medical relief.
- (6) Cases sent by private practitioners or under one or other of the Hospital Schemes.

Such a system provides that in many instances the duration of in-patient treatment can be shortened, cases being transferred to the Out-Patient Department as ambulatory patients. In other cases it is necessary for patients to attend for re-examination or treatment; this is especially advisable where there is danger of relapse. Occasionally there will be patients who, though unsuitable for home treatment, can be efficiently dealt with in a special section of the Out-Patient Department, e.g. electro-medical, massage, etc.

This Department, properly equipped and organised, is in fact a most important feature of a General Hospital, and not only saves very considerable maintenance costs, but gives a permanence value to the treatment provided, not easily obtained by other means.

At the Whiston Infirmary a system of out-patients has been created, but as there are no premises set apart for their reception and treatment, it is difficult to exercise proper supervision and so obtain full value for the time and labour expended.

<sup>\*</sup> The reduction in the number of road accidents is largely due to the diminution of heavy transport following trade depression.

# Statistics of the Infirmary.

The table below shows, in broad outline, the steady growth in the number of patients treated in the wards, and by the rise in the number of surgical operations, the more exacting nature of the work :-

Year. 1924 1925 1926 1927 1928 1929	   	 ···· ··· ···	Admission. 953 1,078 1,237 1,446 1,697 9,907	···· ··· ···	Discharges. 838 906 1,062 1,267 1,479	···· ··· ···	Births. 39 34 20 40 64 22	 Operations. 94 100 126 132 186
1928	 	 	2,207		1,479 1,844		64 62	186 256
1930	 	 	1,777		1,511		70	 284
1931	 	 	2,334		2,053		60	 360
1982	 	 	2,835		2,068		99	 458

A recent analysis has been made of the surgical work carried out, the total numbers and the exact nature of the cases operated upon being carefully ascertained. A wide field has been covered, and it is clear that the tendency is for these activities to increase.

# Maternity Cases.

In common with other suitably equipped hospitals the number of cases admitted to the maternity wards also tends to increase, and the reluctance of an expectant mother to enter a hospital for her confinement is rapidly diminishing. The accommodation provided is on the whole excellent and the patients receive skilled medical and nursing services. A maternity section is, however, not completely efficient unless ante-natal and post-natal services are provided, and little of this valuable type of work can at present be carried out at Whiston.

No. of Births year ended	No. of Births year ended
31st December, 1931.	31st December, 1932.
60	99

# The Special Departments.

The number of in-patients X-rayed during the year 1932 was 231, as against a total number of 149 for the previous year. The alteration in the type of case admitted is again stressed. The amount of time and labour expended in the investigation of patients depends largely upon the nature of the cases treated. An increase in the number of patients who require, for the diagnosis and treatment of their conditions, pathological or X-ray reports, etc., renders it necessary to provide additional staff and greater facilities in the matter of technical equipment.

Well-organised Special Departments greatly enhance the efficiency of the hospital as a unit. In such Departments complete records of the patients are kept; there is close medical supervision of the treatment given, and the work is co-ordinated not only with the medical services in the hospital wards, but also with outside practitioners to whose care the patients are ultimately discharged.

During the last decade notable advances have been made in various departments of medical science. The shortage of Voluntary Hospital beds is partly due to the fact that most hospitals have been confronted with the need for extending and re-equipping their Special Departments. A similar need exists at the Whiston Infirmary, but the buildings are ill-adapted for such purposes, and to provide the required facilities for the supervision and treatment of the patients new construction will be necessary.

# Out-Patients.

Reference has already been made to the Out-patients scheme, which was re-organised during 1931.

The table below shows the amount and character of the work done during the first six months of 1932, and there is little doubt that this branch of the hospital will continue to expand :----

# Table showing the Attendances of Out-Patients during the first six months of 1932.

			Dressings.		X-ray.		Sunlight.		Eye Dept.		Massage.	
	Mor	ith.	No. of Cases.	No. of Atten- dances.	No. of Cases.	No. of Atten- dances.		No. of Atten- dances.		No. of Atten- dances.	No. of Cases.	
January			 6	42	6	6	3	11	20	21	1	3
Februar	v		 10	30	4	7	3	8	20	23		
March			 17	119	12	12	8	61	16	16		
April			 14	127	4	4	10	66	29	29	1	5
May			 23	149	2	2	10	71	20	20	1	5
June			 20	113	9	9	8	46	18	19		`
Total			 90	580	37	40	42	263	128	128	3	13

This Department is open seven days of the week, with the exception of the Eye Department Section, and cases can attend at any time during the day or night. It consists of the following branches :—

Dressings. X-ray. Sunlight. Eye Department. Massage.

Any cases other than those admitted on a Relieving Officers' Order can be attended by payment of the following scale charges :---

Dressings		 	2s. 6d. each dressing.
X-ray	***	 	5s. each photograph.
Sunlight		 	1s. 3d. each exposure of Sunlight.
Massage		 	2s. 6d. each massage.
Eye Depar	tment	 	Relief cases only.

Cases who cannot pay the prescribed fees are recommended to apply for an Order to the Relieving Officer of the district in which they reside.

Out-patients are seen by either Dr. Hay, the Medical Superintendent, or by Dr. Sawmy, the Assistant Medical Officer, in the first instance, and on any other occasion when the Sister in charge of the particular Department considers it necessary.

A Sister is in charge of each of the above Departments.

Patients also attend the Out-Patients Department in connection with the Works' Hospital Schemes already referred to.

Cases from the County Borough of St. Helens are charged to the Public Assistance Committee of St. Helens, the total number of Attendances by St. Helens cases from October, 1931, to October, 1932, being 202.

Number of individual cases attending the Out-Patients I	Depart	ment		
during the year October, 1931—October, 1932		•••		370
Total number of Attendances				2,236
Attendances on Relieving Officer's Order, Prescot			455	71
Attendances on Relieving Officer's Order, Widnes			77	
Attendances on Relieving Officer's Order, St. Helens			202	734
Attendances other than on Relieving Officers' Orders				1,502

From the above it will be seen that approximately one-third of the Out-Patient Attendances are on the Order of a Relieving Officer.

As the work in the wards continues to increase, both with regard to numbers and more particularly with regard to types of cases treated, it will become increasingly difficult to give the necessary attention to Out-Patient cases, unless the Department can be centralised.

# STAFF AND SUPPLY SERVICES.

# Dutics of the Medical Superintendent.

The Medical Superintendent is the only Resident Medical Officer on the Staff. He undertakes all the ordinary work of the Hospital with the exception of routine work in three of the Ward Blocks and the Male Mental Wards. His medical duties are very exacting, and he is in addition Master of the Institution and Public Vaccinator. In his dual capacity as Medical Superintendent and Master his administrative duties are considerable and involve much clerical work.

# The Assistant Medical Officer.

This officer is non-resident.

# Nursing Services.

The Charge Nurses rank as Sisters in charge of Wards and are paid accordingly. There are no Staff Nurses, Probationers who have passed their final examinations and are deemed suitable being promoted to the rank of Sister.

# The Supply Services.

With regard to the supply services the Institution is one unit, and, with the exception of the kitchen accommodation, the provision made is satisfactory. The present central kitchen is small and poorly equipped, and to overcome these defects and to supply the needs of the patients methods have been adopted which are not in the best interests of the Hospital. The major portion of the hospital meals are in fact prepared and cooked in the separate Ward kitchens, and although it is necessary for Probationer Nurses to gain experience in sick cooking, the system in force is wasteful, and far too much of the Nurses' time is spent on work which should be carried out in a central kitchen.

SUMMARY OF OBSERVATIONS.

In certain respects the conditions at this Institution, particularly with regard to the Infirmary, are not satisfactory, the main defects being :--

- (1) Shortage of Medical Staff.
- (2) The non-employment of Staff Nurses.
- (3) Deficiencies in certain of the Special Departments :---
  - (a) Operating Theatre.
  - (b) X-ray Department.
  - (c) Electro-medical and Massage Department.
  - (d) Pathological services.
  - (c) Out-Patients Department (including ante-natal and post-natal clinics).
  - (f) Administrative Quarters.
  - (g) Unsuitable kitchen arrangements.

RECOMMENDATIONS OF COUNTY MEDICAL OFFICER.

1.-Staff.

- (a) It would appear to be a matter of some urgency to increase the Medical Staff. An Assistant Medical Officer, resident in the Institution, would relieve the Medical Superintendent of much routine work, and would enable him to devote more of his time to special cases and matters of administration. Quarters could be provided in Block G, the rooms in which are well adapted for the purpose. In order to attract the type of Officer required the salary should be at the rate of £250 per annum, with food and quarters.
- (b) A re-organisation of the Nursing Staff should be made, and as vacancies occur the position of Charge Nurse or Sister should be filled by a Staff Nurse, until five such appointments have been made. Only in very exceptional cases should a Nurse be appointed Sister unless she has had two years' experience as a Staff Nurse.

# 2.—Supply Services.

- (a) The present kitchen should be used to supply the needs of the Mental Wards and house portion of the Institution.
- (b) A new kitchen should be built to supply the Infirmary Wards.
- 3.—Administrative and Special Departments.
  - Administrative offices should be provided and the Special Departments extended and reequipped.
  - The new construction required should take the form of centralised administrative and special departments, including in the latter new X-ray equipment and laboratory facilities.

The above report was considered by the Lancashire Public Assistance Committee and the recommendations of the County Medical Officer are being acted on.

DISTRICT MEDICAL OFFICERS.—There are 133 District Medical Officers appointed to attend those poor persons resident in the Administrative County area who require medical attendance. In some instances the District Medical Officer supplies the requisite medicines, etc., to those persons on his medical relief list, whilst other District Medical Officers issue a prescription which is presented to a local chemist. These prescriptions, together with the accounts for the medicines supplied, are forwarded by the Chemists to the Central Office. The County Medical Officer has made arrangements whereby all the prescriptions are priced by the pricing bureau of the Lancashire Insurance Committee before they are scheduled for payment.

SUPPLY OF DRUGS, DRESSINGS, MEDICAL AND SURGICAL APPLIANCES.—A duplicate requisition for all drugs and dressings which are ordered by the Public Assistance Institutions and Infirmaries is forwarded to the County Medical Officer. All medical and surgical appliances or repairs thereto are ordered by the Central Office. This method ensures uniformity of practice throughout the County, facilitates the provision of whatever is required, and gives the County Medical Officer complete supervision over the expenditure.

SUBSCRIPTIONS TO VOLUNTARY ORGANISATIONS, ETC .- Local Authorities are authorised under Section 67 of the Poor Law Act, 1930, subject to the consent of the Minister of Health, to contribute by way of an annual subscription towards the support and maintenance of :--

- (a) Any Public Hospital or Infirmary for the reception of sick or infirm persons; or
   (b) Any Institution for blind or deaf and dumb persons or for persons suffering from any permanent or natural infirmity; or any Association for aiding such persons; or
   (c) Any Association for providing nurses or for aiding boys and girls in service; or
- (d) Any Society for the prevention of cruelty to children; or
- (e) Any other Institution which appears to the Council with the approval of the Minister to be calculated to render useful aid in the administration of relief of the poor;

provided that the foregoing shall not authorise any subscription to any Institution unless the Minister is satisfied that the persons receiving relief from the Council have, or could have, assistance therein in case of necessity.

The following statement sets out the subscriptions which are now being paid by the County Council to Voluntary Organisations, etc. :--

# HOSPITAL OR ASSOCIATION.

# SUBSCRIPTION.

										£	s.	d.	
	Accrington Victoria	Hospit	al							46	17	0	
		100 C										1000	
	**			·								0	
	No									128	7	0	
						-				12	17	0	
	Bolton Infirmary									61	4	0	
	Bootle Borough Ho	spital								17	19	0	
	Burnley Victoria H	and the second se								30	8	0	
	Bury Infirmary									26	2	0	
	Chorley Hospital									31	16	0	
	Colne, Hartley Hos	pital								32	18	0	
	Eccles and Patricro	ft Hospi	ital		· · ·					42	5	0	
	Fleetwood Hospital									24	2	0	
	Lancaster Royal In	firmary								74	2	0	
	Leigh Infirmary									75	1	0	
	Liverpool Hospitals	***								144	4	0	
	Lytham Hospital									18	14	0	
	Manchester Royal I	nfirmar	У							135	9	0	
										71	3	0	
	" Royal C	Children	's Hos	pital						41	6	0	
	" Ancoats	s Hospit	al							25	7	0	
				tion						8	18	0	
		10 m 10 m 10								31	11	0	
							***			1		0	
					ospital							0	
				cases								0	
			ital		***								
					•••							1.2.1	
			-									1.22	
	Detheed							***			-	100	
	Padium							***					
		average       46 17 0         ader-Lyne District Infirmary       76 8 0         a-Furness, North Lonsdale Hospital       6 14 0         n and East Lancashire Royal Infirmary       12 17 0         firmary       20 82 0         hospital       31 16 0         etley Hospital       42 5 0         d Patricroft Hospital       42 2 0         irmary       75 1 0         Hospital       13 1 0         Hospital       13 1 0         Hospital for Consumption       8 18 0         Royal Infirmary       135 9 0         St. Mary's Hospital       11 1 0         Hospital for Consumption       8 18 0         Royal Expended Home       0 16 0											
												1000	
	AL 1 1 1 1 1 1 1												
	C	-										1000	
	73 74 75 7	1											
			ital										
	Rochdale Infirmary											1.20	
	Salford Royal Hosp											1.31	
	Southport Infirmary												
	Waterloo Cottage H												
	Wigan Infirmary	a series and the series of the									100	0	
	Other Hospitals												
										1110	-	_	
									1	,799	13	0	
	Nursing Association	IS							]	,956	0	0	
3	Other Associations									372	9	0	
									-	-	-	-	
									£4	,128	2	0	

TUBERCULOSIS.—The Lancashire County Council, through the Tuberculosis Committee, has provided a complete scheme for the treatment of tuberculosis for the inhabitants of the Administrative County area.

The following statement is kindly supplied by Dr. G. Lissant Cox, the Central Tuberculosis Officer :--

Sanatoria and Hospitals.—Number of beds in sanatoria and hospitals occupied by County patients suffering from pulmonary and non-pulmonary tuberculosis, July, 1933 :---

		conary coulosis.	Non-Pu Tuber	Total.	
There is a subset of the sector many	Adults.	Children.	Adults.	Children.	
Sanatoria for early and intermediate cases	824	86		5	365
Training Colonies	4		6	1	11
Pulmonary Hospitals for advanced cases requiring isolation or nursing	275	3			278
General Hospitals and Infirmarics for surgical cases	1		6	3	10
Special Hospitals for surgical cases	22	3	91	135	251
Sanatoria and Hospitals taking observation cases	9	4	7	9	29
	635	46	110	158	
	6	81	2	63	944

**Tuberculosis Dispensaries.**—Twenty-four dispensaries have been established by the County Tuberculosis Committee, the dispensary areas covering the whole of the Administrative County. Details as to the situation of the premises, the medical and nursing staff, days and hours of sessions, etc., are given in Dr. Cox's Annual Report.

MATERNITY BEDS.—In the section of this report on Maternity and Child Welfare, reference is made on pages 190 and 193 to the facilities provided for maternity cases in the County Council scheme, and by the Local Authorities who themselves undertake maternity and child welfare work.

HOSPITALS FOR CHILDREN.—The district reports state that hospital provision for children is available at Accrington (B), Ashton-under-Lyne (B), Chorley (B), Colne (B), Fleetwood, Lancaster (B), Leigh (B), Lytham Saint Anne's (B), Morecambe and Heysham (B), Ormskirk, Ramsbottom, and Stretford. Other districts report that children are sent to general hospitals elsewhere, or to Public Institutions. The County Council arrangements for children are referred to on pages 56 and 193.

Institutional Provision for Unmarried Mothers, Illegitimate Infants, and Homeless Children.— Institutional accommodation for these classes is stated to be available at Great Crosby (Nazareth House), Heywood (B) (Simpson Hill), Kirkham (Cottage Homes), Stretford (Galloway Homes), Tottington (Holly Mount), Waterloo-with-Seaforth (St. Mary's Home), and Blackburn (R) (Wilpshire). Accommodation for these classes of cases is available at all the Public Assistance Institutions.

Maternity and Child Welfare Centres. —A list of the maternity and child welfare centres provided (a) by the County Council, and (b) by Local Sanitary Authorities, with the day and time they are open, is given on pages 182 and 191. Details as to the child welfare work carried out by the County Council Health Visitors are given on page 181.

Day Nurseries.—Day nurseries have been provided at Leyland (by the County Council) and at Morecambe and Heysham (B) (managed voluntarily).

# School Clinics, &c.--(A) BY COUNTY AUTHORITY ; (B) BY LOCAL AUTHORITIES.---

(A). COUNTY SCHOOL CLINICS, ETC.—The development of medical treatment has progressed still further, and since the last report additional Clinics have been opened at Thornton-le-Fylde, for the treatment of minor ailments, and at Droylsden for the treatment of defective vision.

The following is a list of the School Clinics open for treatment at the time of going to press, the kind of work which is undertaken in each being shown :---

Township.	Days and Times of Opening	Nature of work undertaken.	Remarks.
Ashton-in- Makerfield	Mon a.m. & p. a.m. & p		Nurse only.
	Tues a.m. p.m.	Minor ailments Orthopædie	Surgeon attends second Tuesday in each month only.
	Wed, a.m.	Ophthalmic	
	Thurs p.m. a.m. & p	Minor ailments .m Dental	Nurse only. Re-dressings.
	Fri a.m. & p	.m Dental	
Ashton-under Lyne (a)	Wed a.m.	Orthopædie	Surgeon attends third Wednesday in each month
	Fri a.m.	Orthopædie	only. Nurse only.
Ashton-under- Lyne (b)	Mon. Tues. Wed. p.m.	Artificial light	Doctor attends Tuesday and
	Fri.		Friday only.
Atherton	Mon p.m. p.m.	Artificial light Minor ailments	Nurse only. Re-dressings.
	Tues a.m. & p		
	Thurs a.m. a.m.	Minor ailments Artificial light	
	Fri a.m. & p	.m Dental	
Audenshaw	Mon a.m.	Minor ailments	
	Tues. a.m. & p	o.m Dental	
	Wed a.m. p.m.	Dental Ophthalmic	Open alternate weeks only.
	Thurs a.m.	Minor ailments	Nurse only. Re-dressings.
	Fri a.m. & p	o.m Dental	and the second state is a second station
Burnley	Thurs p.m.	Orthopædie	Surgeon attends second Thursday in each month only.
Carnforth	Mon a.m. a.m. & p	Minor ailments	Open alternate weeks only.
	Thurs a.m.		Open first Thursday in each month only.
	Fri p.m.	Minor ailments	Nurse only. Re-dressings.
Chadderton	Wed p.m.	Orthopædie	Surgeon attends third Wed- nesday in each month only.
	Fri p.m.	Orthopædie	Nurse only.
Chorley (a)	Mon a.m.		Nurse only. Re-dressings.
	Tues a.m. & p		
	Wed a.m.	The second second second second second	Open alternate weeks only.
	Thurs a.m.		
	Fri a.m. & p	o.m Dental	
Chorley (b)	Mon. { 2-3 p.m.	> Artificial light	
	Fri. [ 3-4 p.m.	Girls J	

				Nature of work	
Township.	Day	s and '	Times of Opening.	undertaken.	Remarks.
Crompton	Mon.		a.m.	Ophthalmic	Open alternate weeks only
	There		p.m.	Dental	Nume color De dessrie
	Tues.		a.m.	Minor ailments	Nurse only. Re-dressings.
	Thurs. Fri.		a.m. & p.m.	Dental Minor ailments	
	rn.		a.m.	Almor aliments	
Dalton-in-	Mon.		a.m.	Minor ailments	Nurse only. Re-dressings.
Furness	Tues.		a.m. & p.m.	Dental	
	Thurs.		a.m.	Dental	
			a.m.	Minor ailments	100
	Fri.		a.m.	Ophthalmie	Open alternate weeks only
Darwen	Wed.		a.m. & p.m.	Orthopædie	Surgeon attends third Wed nesday in each month only.
				0	
Davyhulme	Mon.		a.m.	Minor ailments	
and sufficiently an addition of	Tues.		a.m. & p.m.	Dental	
			p.m.	Ophthalmic	Open alternate weeks only
	Thurs.		p.m.	Minor ailments	Nurse only. Re-dressings.
	Fri.		a.m. & p.m.	Dental	
Design in the	alta plant		d hoursesses	Minor	Numero la Delanda
Droylsden	Mon.		a.m.	Minor ailments	Nurse only. Re-dressings.
	W. J		p.m.	Dental	
	Wed.		p.m.	Dental Minor silmente	
	Thurs.		a.m.	Minor ailments	Open monthly
	Fri.		p.m.	Ophthalmic	Open monthly.
Earlestown	Mon.		a.m.	Ophthalmic	Alternate weeks only.
mounts valupold.	at lenging		a.m. & p.m.	Dental	
	in transmission		p.m.	Orthopædie	Nurse only. Alternate Mondays.
	Tues.		a.m. & p.m.	Dental	
			a.m.	Orthopædic	Surgeon attends alternate
	THE REAL		A REAL PROPERTY.	Mission	Tuesdays in each month.
	Wed.		a.m.	Minor ailments	Nurse only. Re-dressings.
	Pat		a.m. & p.m.	Dental Minor ailmente	
	Fri.	•••	a.m.	Minor ailments	
Fleetwood	Mon.		a.m. & p.m.	Dental	
	Tues.		a.m. & p.m.	Dental	
	A uco.		a.m.	Minor ailments	
	Wed.		a.m. & p.m.	Dental	
	Thurs.		a.m.	Minor ailments	Nurse only. Re-dressings.
			a.m. & p.m.	Dental	
	Fri.		a.m. & p.m.	Dental	Turner
			a.m. & p.m.	Orthopædic	Surgeon attends third Friday
			a.m.	Ophthalmic	in each month only. Open alternate weeks only.
anan day a	alamatan ?	-			
Great Crosby	Tues.	)		D	
	Thurs.	8	a.m.	Dental	
	Fri.	)			
Hamlash	Mar		0.00	Minor ailments	Nurse only. Re-dressings.
Haydock	Mon.		a.m.	Orthopædie	Nurse only. Alternate weeks.
	Tues.		p.m. a.m.	Orthopædie	Surgeon attends alternate
				Minor ailments	Tuesdays in each month.
			a.m.	aunor auments	
	Wed.				Open alternate weaks only
	Wed. Thurs.		a.m.	Ophthalmic	Open alternate weeks only.
	Thurs.		a.m. a.m. & p.m.	Ophthalmic Dental	Open alternate weeks only.
			a.m.	Ophthalmic	Open alternate weeks only.
Horwich	Thurs.		a.m. a.m. & p.m.	Ophthalmic Dental Dental Minor ailments	Open alternate weeks only. Nurse only. Re-dressings.
Horwich	Thurs. Fri.		a.m. a.m. & p.m. a.m. & p.m.	Ophthalmic Dental Dental Minor ailments Dental	Start.
Horwich .	Thurs. Fri.		a.m. a.m. & p.m. a.m. & p.m. a.m.	Ophthalmic Dental Dental Minor ailments Dental Dental	Shines.
Horwich	Thurs. Fri. Mon. Tues.		a.m. a.m. & p.m. a.m. & p.m. a.m. p.m.	Ophthalmic Dental Dental Minor ailments Dental Dental Artificial light	Nurse only. Re-dressings.
Horwich	Thurs. Fri. Mon.		a.m. a.m. & p.m. a.m. & p.m. a.m. p.m. a.m. & p.m.	Ophthalmic Dental Dental Dental Dental Dental Artificial light Ophthalmic	Nurse only. Re-dressings.
Horwich	Thurs. Fri. Mon. Tues.		a.m. a.m. & p.m. a.m. & p.m. a.m. a.m. a.m. & p.m. a.m.	Ophthalmic Dental Dental Minor ailments Dental Dental Artificial light	Nurse only. Re-dressings. Open monthly. Surgeon attends first Wed-
Horwich	Thurs. Fri. Mon. Tues.		a.m. a.m. & p.m. a.m. & p.m. a.m. a.m. & p.m. a.m. & p.m. a.m. a.m.	Ophthalmic Dental Dental Dental Dental Dental Artificial light Ophthalmic	Nurse only. Re-dressings. Open monthly. Surgeon attends first Wed- nesday in each month
Horwich	Thurs. Fri. Mon. Tues.		a.m. a.m. & p.m. a.m. & p.m. a.m. a.m. & p.m. a.m. & p.m. a.m. a.m.	Ophthalmic Dental Dental Dental Dental Dental Artificial light Ophthalmic	<ul> <li> Nurse only. Re-dressings.</li> <li> Open monthly.</li> <li> Surgeon attends first Wednesday in each month only. Nurse attends first</li> </ul>
Horwich	Thurs. Fri. Mon. Tues. Wed.		a.m. a.m. & p.m. a.m. & p.m. p.m. a.m. & p.m. a.m. a.m. a.m. a.m. a.m.	Ophthalmic Dental Dental Dental Dental Dental Artificial light Ophthalmic Orthopædic	- the state of the
Horwich	Thurs. Fri. Mon. Tues.		a.m. a.m. & p.m. a.m. & p.m. a.m. a.m. & p.m. a.m. & p.m. a.m. a.m.	Ophthalmic Dental Dental Dental Dental Dental Artificial light Ophthalmic	<ul> <li> Nurse only. Re-dressings.</li> <li> Open monthly.</li> <li> Surgeon attends first Wednesday in each month only. Nurse attends first</li> </ul>

Township.	Days and Tir	mes of Opening.	Nature of work undertaken.	Remarks.
Irlam	Mon	a.m. & p.m.	Dental	
	Tues	a.m.	Minor ailments	
	Wed	a.m. & p.m.	Dental	
	Thurs	a.m.	Ophthalmie	Open alternate weeks only
	inuis	a.m. & p.m.	Dental	Open alternate weeks only
		p.m.	Orthopædic	Surgeon attends thir
				Thursday in each mont
	Fri	a m	Minor ailments	only. Nume only Do description
		a.m.		Nurse only. Re-dressings.
Kearsley .	Mon	a.m.	Ophthalmic	
	and second	p.m.	Minor ailments	Nurse only. Re-dressings.
	Tues	a.m. & p.m.	Dental	Nume only
	Wed	a.m.	Orthopædie	Nurse only.
	Wed	p.m.	Orthopædic	Surgeon attends first Wee
				nesday in each mont only.
	Thurs	a.m.	Minor ailments	
	Fri	a.m. & p.m.	Dental	
Langester	70.			C
Lancaster .	Tues	a.m.	Orthopædie	Surgeon attends third Tue day, alternate month
				Nurse attends alterna
				Tuesdays.
	Thurs	a.m.	Ophthalmic	Open by arrangement who
			Concession and the second	sufficient number of cas
				for treatment. Da
				changed to Monday durin summer months,
				summer months,
Leyland	Mon	a.m.	Minor ailments	Nurse only. Re-dressings.
address light a batter		p.m.	Orthopædie	Surgeon attends fir
		1		Monday in each mont
		Alternative start	14 August and and a second	only.
	Tues	a.m. & p.m. a.m. & p.m.	Dental Dental	
	Wed	a.m.	Ophthalmie	
		a.m. & p.m.	Dental	
	Thurs	a.m.	Minor ailments	
	12.2	a.m. & p.m	Dental	
	Fri	a.m. & p.m.	Dental	
Litherland	Mon	a.m. & p.m.	Dental	
	Tues	a.m.	Minor ailments	
		p.m.	Dental	
	Wed	a.m. & p.m. a.m.	Dental	Summer H 1
		a.m.	Orthopædie	Surgeon attends secon Wednesday in each mont
				only.
	Thurs	a.m.	Ophthalmie	The second second second second
		a.m.	Orthopædie	Nurse only.
	Fri	p.m. a.m.	Dental Minor ailments	
	rn	tiniti.	annor anneats	
Littleborough	. Mon	a.m. & p.m.	Dental	
	Tues	a.m.	Minor ailments	Nurse only. Re-dressings.
	Wed	a.m.	Ophthalmic	Open alternate weeks only
	Thurs	a.m.	Minor ailments	,
Milnrow	. Tues	a.m. & p.m.	Dental	
		a.m.	Minor ailments	
	Fri	a.m.	Minor ailments	Nurse only. Re-dressings.
Nelson	The l	The state addition	0.4	
Nelson	. Fri	p.m.	Orthopædie	Surgeon attends third Frida
				(a.m.) in each month only
Ormskirk (a)	. Mon	a.m.	Minor ailments	Medical Officer attends alter
				nate weeks only. (Re
				dressings by Hospital sta
	Fri	a.m. & p.m.	Dental	dressings by Hospital sta each day).

Township.	Days at	nd Tin	nes of Opening.	Nature of work undertaken.	Remarks.
Ormskirk (b)	Tues.		p.m.	Orthopædie	Nurse only, except second Tuesday in each month.
	Fri.		a.m.	Orthopædie	Surgeon attends first Friday in each month only.
Orrell	Tues.		a.m. a.m. & p.m.	Minor ailments Dental	Nurse only. Re-dressings.
	Wed.		a.m. & p.m.	Dental	
	Thurs.		a.m.	Minor ailments	
	Fri.		p.m.	Ophthalmie	Open alternate weeks only
Oswaldtwistle	Mon.		a.m.	Minor ailments	Nurse only. Re-dressings.
	Tues.		a.m.	Ophthalmie	Open alternate weeks only
	Wed.		a.m. & p.m.	Dental	Open anernate weeks only
	Thurs.		a.m.	Minor ailments	
	Fri.		a.m. & p.m.	Dental	
	rn.		a.m. æ p.m.	Dentat	
Padiham	Mon.	V	a.m. & p.m.	Dental	
all and a state of the	Tues.		a.m.	Minor ailments	
	Wed.		a.m. & p.m.	Dental	
			p.m.	Ophthalmic	Open every third week.
	Thurs.		a.m. & p.m.	Dental	
	Fri.		a.m.	Minor ailments	Nurse only. Re-dressings.
					alm W
Prescot	Mon.		a.m. & p.m.	Dental	
	anuma ana		a.m.	Minor ailments	Nurse only. Re-dressings.
	Tues.		a.m. & p.m.	Dental	
	Wed.		a.m. & p.m. p.m.	Dental Ophthalmic	Open first and last Wednes
	Thurs.	9	a.m.	Minor ailments	day in each month only.
	Antars.	/	a.m. & p.m.	Dental	
	Fri.		a.m. & p.m.	Dental	
			a.m. & p.m.	Orthopædie	Surgeon attends first Friday (p.m.) in each month only Nurse attends each Friday
					except first Friday (p.m.)
Preston	Wed.		a.m. & p.m.	Orthopædic	Surgeon attends fourth Wed nesday in each month only.
Ramsbottom	Mon.		a.m.	Minor ailments	Nurse only. Re-dressings.
	Tues.		a.m. & p.m.	Dental	
	Wed.		. a.m.	Minor ailments	
	Fri.		a.m. a.m. & p.m.	Ophthalmic Dental	Open alternate weeks only.
Rawtenstall	Wed.		a.m.	Orthopædie	Surgeon attends fourth Wed nesday in each montl only.
Dichton	Man		Sector Sector	Minor ailments	Nurse only Re-dressings
Rishton	Mon.		a.m. a.m. & p.m.	Minor ailments Dental	Nurse only. Re-dressings.
	Tues.		a.m. a.m. & p.m.	Ophthalmic Dental	Open alternate weeks only
	Wed.		p.m.	Orthopædie	Surgeon attends fourth Wednesday in each month
				S ST LAN	only.
	Thurs.		a.m. & p.m.	Dental	
	Fri.		a.m.	Minor ailments	
Rochdale	Mon.		a.m.	Orthopædie	Surgeon attends each week

Township.	Days and Time	s of Opening.	Nature of work undertaken.	Remarks.
	Tues	a.m.	Minor ailments	
	Wed	a.m. & p.m. a.m.	Dental Ophthalmic	Open alternate weeks only.
	Thurs	a.m. & p.m.	Dental	
	Fri	a.m.	Minor ailments	Nurse only. Re-dressings.
Skelmersdale	Wed	p.m.	Inspection	
Thornton-le Fylde	Mon	a.m.	Minor ailments	Medical Officer attends al- ternate weeks.
rynic	Thurs.	a.m.	Minor ailments	Nurse only. Re-dressings.
Tyldesley	Mon	a.m. & p.m. p.m.	Dental Orthopædic	Nurse only.
	Tues	a.m.	Minor ailments	
			Dental	
	Wed	a.m. & p.m. a.m.	Orthopædie	Surgeon attends second Wednesday in each month
	Thurs	a.m. & p.m.	Dental	only.
	Fri	p.m. a.m.	Minor ailments Ophthalmic	Nurse only. Re-dressings. Open alternate weeks only.
Ulverston	Mon	a.m. a.m. & p.m.	Minor ailments Dental	Nurse only. Re-dressings.
	Tues	p.m.	Orthopædie	Third Tuesday alternate months.
	Wed	a.m.	Minor ailments	
	Wed	a.m. a.m.	Dental	
	Thurs	a.m. p.m.	Ophthalmie Dental	Open alternate weeks only.
	Fri	a.m. & p.m.	Dental	
Walkden	Mon	a.m. & p.m.	Dental Ophthalmic	Open alternate weeks only.
	Tues	p.m. a.m.	Minor ailments	Nurse only. Re-dressings.
	Wed	a.m. & p.m.	Dental	in the start of th
	Thurs	a.m. & p.m.	Dental	
	Fri	a.m.	Minor ailments	
Westhoughton	. Mon	a.m.	Dental	
irestilougitton		a.m.	Minor ailments	
	Tues	p.m.	Artificial light	
	Wed	a.m. & p.m. a.m.	Dental Ophthalmic	Open every fourth Wed- nesday only.
	Thurs	a.m. & p.m. p.m.	Dental Minor ailments	Nurse only. Re-dressings.
	Fri	a.m.	Dental	1941
		a.m.	Artificial light	
Whitefield	. Mon	a.m. & p.m.	Dental	
	Tues	a.m.	Minor ailments	
	Wed	a.m. & p.m.	Dental	
	Thurs	a.m. & p.m.	Dental	Surmon attends this!
		a.m.	Orthopædie	Surgeon attends third Thursday in each month only.
	Fri	a.m. p.m.	Ophthalmic Minor ailments	Open alternate weeks only. Nurse only. Re-dressings.
Whitworth	. Mon	a.m.	Minor ailments	
	Thurs	a.m.	Minor ailments	Nurse only. Re-dressings.
	Fri	a.m. & p.m.	Dental	Rileita univ. Te
Wigan	. Mon	a.m.	Orthopædie	Surgeon attends first Mon- day in each month only.
				day in cach month only.

		MINOR A	ULMENTS.			DENTAL.		Орити	FALMIC.	ARTIFICIAL LIGHT.		
NAME OF CLINIC.	A	of School	not at	Inspection.	Children of School Age.	Children under 5 and not at School,	Nursing and Expectant Mothers.	Children of School Age.	Children under 5 and not at School.	Children of School Age.	Children under 5 and not at School	
of Distanting	in the second	12 101-21	- Theorem		LINCO X		a senere	- ages	at convolu	riger		
Ashton-in-Makerfield	2,107	1,020	8	5	1,992		***	885				
Ashton-under-Lyne			/						•••	489	205	
Atherton	586	629		2	1,296	18				790	1,244	
Audenshaw	1,982	906	48	42	1,904	26	1	402	24			
Carnforth	364	217	39	11	764	2	42	139	7			
Chorley	815	238	78	18	1,509		1	209	7	521	161	
Crompton	1,278	777	9	22	1,271	8		465	9			
Dalton-in-Furness	2,691	357	176	13	1,068	24	70	195	12			
Davyhulme	489	978	4	16	1,692	37	5	280	17			
Droylsden	1,289	290	87	14	581	9						
Earlestown	1,342	406	5		1,186	10	4	293	4			
Fleetwood	8,777	344	165	28	2,937	21	35	515	158			
Great Crosby					1,055			1 Ti				
Haydock	1,634	244	12	2	634	30	88	429	86			
Horwich	2,816	663			1,156	5	23	266		954		
Irlam	1,277	360	13	4	1,771	37	16	549	24			
Kearsley	2,224	571	35		1,743	18	13	825	21			
Lancaster								20				
Leyland	5,303	378	471	67	1,793	11	15	507	14			
Litherland	2,912	964	69	22	1,638	64	60	1,126	48			
T first berneral	2,118	459	19	25	917	11	4	438	68			
AEleman	1,386	159	40	9	612	3	2					
Ommedicate	2,947	78	41		685	12	6					
Ormall	1200	646	5	1	904	7	17	450	21	1 3		
	1,412	The second	(market)	1 Interna		1	18	259	4		1.1	
Oswaldtwistle	1,706	299	16	9	1,227			116	18			
Padiham	1,162	179	47	1	1,687	100	107	241	18			
Prescot	1,851	1,577	137	58	2,099	108	167					
Ramsbottom	1,139	275	7	7	1,523	4	1	875	1			
Rishton	2,064	275	70	23	1,747	4		487	6			
Rochdale								182	30			
Royton	4,169	1,182			1,316	1		457	4			
Thornton-le-Fylde	303	30	86	3								
Tyldesley	1,072	600	2	5	2,037	7		673				
Ulverston	2,724	466	270	-41	1,419	25	59	287	36			
Walkden	1,114	375		4	1,725	8	1	300				
Westhoughton	985	414			1,537	21	9	225		318		
Whitefield	1,863	488			2,463	16	12	651	21			
Whitworth	1,666	264	32	19	658	7	1					
Total	62,567	17,098	1,936	471	48,546	545	620	12,196	623	3,072	1,610	

Attendances.—The following table shows the number of attendances made at the various School Clinics during the year 1932 :---

Number of attendances made by children of school age ... Number of attendances made by Child Welfare cases ...

143,479 5,803

Total ... ...

149,282

55

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	been made with the following Hospitals etc., for the be marked with an asterisk being new arrangements
Ashton-under-Lyne Infirmary	Tonsils and adenoids, refractions, operative treat- ment of squint, X-ray treatment of ringworm.
*Ashton-under-Lyne Clinic (Secondary School cases)	Refractions, teeth.
Blackburn Royal Infirmary	Tonsils and adenoids, X-ray treatment of ringworm, refractions, *operative treatment of squint.
Bolton Infirmary	Refractions, tonsils and adenoids, X-ray treatment of ringworm, operative treatment of squint.
Burnley Victoria Hospital	Refractions, tonsils and adenoids, operative treat- ment of squint.
Bury Infirmary	Tonsils and adenoids, refractions, operative treat- ment of squint, X-ray treatment of ringworm.
Colne Hartley Hospital	Refractions, tonsils and adenoids, operative treat- ment of squint.
Darwen Clinic (Secondary School cases)	Refractions, teeth.
Davyhulme Park Hospital	Tonsils and adenoids.
Fleetwood Hospital	Tonsils and adenoids.
Lancaster Royal Infirmary	Tonsils and adenoids.
Leigh Borough Clinic	Tonsils and adenoids.
Liverpool Eye, Ear and Throat Infirmary (Myrtle Street)	Tonsils and adenoids, refractions, operative treat- ment of squint.
Liverpool St. Paul's Eye Hospital	Operative treatment of squint.
Manchester Ancoats Hospital	Aural cases (operative treatment), tonsils and adenoids, crippling defects.
*Manchester and Salford Hospital for Skin Disease	X-ray treatment of ringworm.
Morecambe Clinic (Secondary School cases)	Refractions, teeth.
Oldham Royal Infirmary	Refractions, operative treatment of squint, X-ray treatment of ringworm, tonsils and adenoids.
Ormskirk General Hospital	Tonsils and adenoids, refractions, eye operations.
Preston Royal Infirmary	Tonsils and adenoids, X-ray treatment of ringworm, refractions, operative treatment of squint, aural treatment.
Ramsbottom Cottage Hospital	Tonsils and adenoids.
Rawtenstall Clinic	Minor ailments, teeth, refractions.
St. Helens, Peasley Cross Hospital	Refractions, operative treatment of squint, tonsils and adenoids.
Southport Infirmary (Pilkington Road)	Tonsils and adenoids.
Stretford Clinie (Secondary School cases)	Tonsils and adenoids, refractions, aural treatment, teeth.
Ulverston Cottage Hospital	Tonsils and adenoids.
Warrington Infirmary	Tonsils and adenoids, refractions, operative treat- ment of squint.
Whiston Infirmary	Operative treatment of squint.
Widnes Accident Hospital	Tonsils and adenoids.
	Tonsils and adenoids.
Wigan (Tower Buildings)	Refractions.

Hosp made d

The following statement shows the number of individual children who received treatment under the Hospital scheme of the Lancashire County Council during the twelve months ended 31st December, 1932 :--

	Dise	ase o	or Defect.		Elementary Schools.	Secondary Schools.	Child Welfare,	Total.
Enlarged 1	Fonsils	and	Adenoids	 	1,994	15	97	2,106
Defective	Vision			 	704	69	19	792
Squint				 	52	1	1	54
Aural				 	2			2
Ringworm				 	81		1	32
Teeth				 	9	22		31

The following table shows the number of cases treated at each Hospital or Infirmary with which the Lancashire County Council has made arrangements :---

Hospital, Infirmary, or	Tonsils and Adenoids.		100	Defective Vision.			Squint.			Aural.			Ringworm.			Teeth.		
Treatment Centre.	E.	s.	c.w.	E.	s.	c.w.	E.	s.	c.w.	Е.	s.	c.w.	E.	s.	c.w.	E.	s.	c.w.
neoats	74	2	6							1								
shton-under-Lyne	70	ī	2	17	18		1											
shton-under-Lyne		2					-											
Clinic																	1	
lackburn	107		3	26	3	1	1			••••			4	***			1000	
olton	271	1	4	1	3	-					***							
	23		i	52		2	2			***					•••			
	17			1				***			•••		10	***			***	
olne	2			11									10	***	***	•••		
				10000										***		•••	•••	
	100	5	13											***	***	•••	1	
the state of the s	177	1000		***		***			***		***		***					
leetwood	161		16	***	***		***	***			***	***			***			
ancaster	17		1		•••						***							
cigh	94		1	***	***	***		***	110	***	***	***		***				
iverpool Eye, Ear and	ALC: N	1930	199	1000											1000			
Throat	89	1	5	4	***		27	1			***				***			
iverpool St. Paul's							4											
lanchester and Salford													13					
forecambe					12												11	
ldham	56		8	59			9								***			
rmskirk	107		10	119	8	9	1				***			***	***			
reston	191	1	.9	226	1	6	3		1	1			4	***	1			
tamsbottom	23																	
lawtenstall																9		
outhport	9																	
t. Helens	288		13	1			4											
tretford					11												9	
Ilverston	85	1	3															
Varrington	86			13					1000									
Vhiston																		
Vidnes	4		1															
Vigan	43	3	i															
Dr. Bywater				123		1												
Dr. Holmes				51	10													
				or	10													***
Total	1994	15	97	704	69	19	52	1	1	2			31		1	9	22	

# MINOR AILMENTS.

These include such defects as running ears, external eye disease, skin diseases, etc., and treatment for them is available for approximately 90,000 children. The number of individual children who received treatment under the County scheme during the year was 11,543.

# TONSILS AND ADENOIDS.

Arrangements are now in force with the following Hospitals and Clinics for the operative treatment of tonsils and adenoids :--Ancoats Hospital, Manchester; Ashton-under-Lyne Infirmary; Blackburn Royal Infirmary; Bolton Infirmary; Burnley Victoria Hospital; Bury Infirmary; Davyhulme Park Hospital; Fleetwood Hospital; Hartley Hospital, Colne; Lancaster Royal Infirmary; Leigh Borough Clinic; Myrtle Street Hospital, Liverpool; Oldham Royal Infirmary; Ormskirk Cottage Hospital; Peasley Cross Hospital, St. Helens; Preston Royal Infirmary; Ramsbottom Cottage Hospital; Southport Infirmary; Stretford Clinic; Ulverston Cottage Hospital; Warrington Infirmary; Widnes Accident Hospital; Wigan Royal Infirmary.

During the year the number of elementary school children who received operative treatment for this condition was 2,157, of whom 1,994 were treated under the County scheme.

# TUBERCULOSIS.

The treatment of tuberculous school children is in the hands of the Tuberculosis Committee of the Lancashire County Council, and all cases for treatment are referred to the Tuberculosis Officer for the area concerned.

# VISION.

The treatment of defects of vision is undertaken either in the Eye Departments of General Hospitals or in the Eye Departments of the County's own Clinics. In the former case it is undertaken by the Specialist Staff of the Hospital; in the latter case by part-time Visiting Specialists. Arrangements have been made with the following Hospitals :—Ashton-under-Lyne; Blackburn; Bolton; Burnley; Bury; Colne; Oldham; Ormskirk; Preston; St. Helens; Warrington; Whiston; Liverpool, Myrtle Street Eye and Ear, and St. Paul's Eye; Wigan (Tower Buildings); also at the following Clinies:—Ashton-under-Lyne; Darwen; Morecambe; Stretford.

Visiting Specialists attend the County's School Clinics in Ashton-in-Makerfield, Audenshaw, Carnforth, Chorley, Crompton, Dalton-in-Furness, Davyhulme, Droylsden, Earlestown, Fleetwood, Haydock, Horwich, Irlam, Kearsley, Lancaster, Leyland, Litherland, Littleborough, Orrell, Oswaldtwistle, Padiham, Prescot, Ramsbottom, Rishton, Rochdale, Royton, Tyldesley, Ulverston, Walkden, Westhoughton, Whitefield, and Wigan.

The number of children for whom Specialist eye treatment is available is approximately 121,000. The number of elementary school children who received treatment for defective vision or squint was 6,804, of whom 6,612 were dealt with under the County scheme.

Arrangements have also been made with certain firms of opticians, in connection with each Ophthalmic Clinic or Hospital, to supply spectacles at a fixed low charge. In necessitous cases the charge is reduced or remitted altogether. The number of children who either purchased glasses or received free spectacles under this scheme was 4,076.

In one area a local charity has arranged for the treatment of visual defect in elementary school children, and provides spectacles free of charge to every child requiring them.

# DENTAL DEFECTS.

The dental staff now consists of sixteen full-time and one part-time dental surgeons, each assisted by a nurse or dental attendant. Dental Clinies have been established in Ashton-in-Makerfield, Atherton, Audenshaw, Carnforth, Chorley, Crompton, Dalton-in-Furness, Davyhulme, Droylsden, Earlestown, Fleetwood, Great Crosby, Haydock, Horwich, Irlam, Kearsley, Leyland, Litherland, Littleborough, Milnrow, Ormskirk, Orrell. Oswaldtwistle, Padiham, Prescot, Ramsbottom, Rishton, Royton, Tyldesley, Ulverston, Walkden, Westhoughton, Whitefield, and Whitworth.

These Clinics serve schools with an average attendance of approximately 76,000 children. The number of elementary children who received treatment during the year was 28,491.

Apart from routine work, the dentists treat the following classes :---

- (a) Expectant and Nursing Mothers, on the recommendation of the Medical Officers ;
- (b) Children under school age, similarly ;
- (c) Casuals.

Casuals are of three classes :---

- (a) Urgent cases, e.g. toothache, dental abscess ;
- (b) Cases where the mouth has to be put into a clean condition previous to operation for tonsils and adenoids;
- (c) Cases in which the Medical Officer requests that dental treatment should be given for some other medical reason.

During the year 61,869 children were inspected by dentists : of these 45,623, or 73.7 per cent., were found to require treatment, and of those needing treatment 62.4 per cent. actually obtained it, as against the percentages of 78.2 per cent. and 68.8 per cent. respectively for the previous year.

		Total Inspections.	Percentage needing Treatment.	Percentage of those in previous Column actually treated.
1925	 	10,458	81.3	75-8
1926	 	18,676	80-7	77-3
1927	 	25,434	78.7	78-8
1928	 	34,037	74.6	67.2
1929	 	40,053	78.5	64-1
1930	 	46,550	77.0	66.1
1931	 	49,025	78-2	68.8
1932	 	61,869	78.7	62-4

In most of the areas for which dental inspection is available all age groups are now undergoing routine examination, rather more than half the elementary school population being covered. The table above shows the number of inspections, the percentages of those needing treatment and the percentages of the latter who actually obtained treatment during the last eight years. As each year has seen the influx of a new group, namely, the group aged 5 and 6 years, it is obvious that the condition of this group with regard to its dental state will influence the percentage of children needing treatment, diminishing the percentage if the teeth of the new group are in good order and increasing it if the teeth are in a worse condition than those of other entrants of previous years, other things being equal. The above figures include the special cases numbering 4,000-5,000 each year, and, if these are excluded, having been in most cases urgently recommended for treatment which has been carried out immediately, the corresponding percentages relating to the routine inspections can be calculated. The figures thus obtained show, in the first place, that there is little variation in the percentages of children undergoing routine examination and requiring treatment from year to year; they are all in the neighbourhood of 70-75 per cent. Whether due to imperfect tooth formation or subsequent destruction of enamel, or a combination of both, the same causes appear to be still at work, and the results in figures show little, if any, alteration by the introduction of the fresh groups in each year.

In the second place, the consent to treatment in the routine groups is disappointing. These consents have been given in the last few years in 58–65 per cent. of routine inspections recommended for treatment. The withholding of consent increases the likelihood of caries in the other teeth and the progress of caries in the teeth already affected. When a septic condition has been set up it is too late to save the teeth, and delayed action is a detriment to the child's health and a source of interference with the normal working of the dental scheme.

# ARTIFICIAL LIGHT TREATMENT.

Clinics have been established at Ashton-under-Lyne, Atherton, Chorley, Horwich, and Westhoughton for the treatment by artificial light of certain children in sub-normal health, and during the year 195 children received this form of treatment, making 4,680 attendances.

# INFECTIOUS DISEASES.

Of administrative procedures for the prevention of infectious disease the most important are :---

- The exclusion of children suffering from, or showing symptoms suggestive of, infectious disease, or who may, it is feared, develop disease after exposure to infection;
- 2.- The closure of schools or of departments of schools.

During 1932 it was found necessary to close 69 schools on account of the prevalence of infectious disease. Every endeavour has again been made by the Assistant County Medical Officers to work in close co-operation with the local Medical Officers of Health whenever the closure of a school or department was in question.

No.	of Schools	Closed	during	1932	by the	Sanitary	Authority
		(Ar	ticle 22	of the	Code	).	

Measles and WI	toopi	ng Coug	(h	 	 	 	1
Diphtheria				 	 	 	2
Measles and Chi	icken	-pox		 	 	 	1
Scarlet Fever an	nd So	re Thro	ats	 	 		i
Measles							29
				 	 	 	100
Mumps				 	 	 	4
Scarlet Fever				 	 	 	7
Whooping Coug	h			 	 		3
Disinfection					 	 	
				 	 	 	1
Conversion to V	Vater	Closets		 	 	 	1
							15-
							50

No. of Schools	Closed during	1932 by the School Medical Officer	
	(Article 23	(b) of the Code).	

Chicken-pox	 			 	 	 2
Measles, Mump	Influer	nza		 	 	 1
Whooping Cou Measles, Mump	Whom	ing Co		 	 	 1
Measles	 		ugn 	 	 	 1 8
Scarlet Fever	 			 	 	 6
						10222 (2)
						19
						PERSONAL PROPERTY.

Frequently requests are made that a school should be closed because the attendance has fallen considerably. The necessity for closure is not always obvious, for in Urban areas the children have opportunities of meeting in other places than the school.

In such cases, however, the School Medical Officer is empowered, under the Education Act, 1921 (Admin. Memo. No. 51, Art. 15), to give certificates to any school or department where the attendance, on account of the occurrence of infectious disease, has fallen below 60 per cent. of the number of children on the register.

The number of such certificates given during 1932 was 410.

SCHOOL HYGIENE.—The new schools provided by the County have every facility for a healthy school life which could be demanded reasonably. The older schools, admittedly, are in a much inferior position, but even here the correct use of whatever facilities exist can make up for many deficiencies. A clean, dustless school, with proper spacing of the children, is of great assistance in the prevention of infection, coupled with the intelligent observation of slightly ailing children and the rigid exclusion, for an adequate period, of those known to convey infection, e.g. cases of "sore throat." Too great a reliance is frequently placed upon chemical disinfection of the school premises, whereas, in fact, the sources of infection are not in the inanimate objects in the school, but in the persons actually in attendance.

Reports are received at every inspection of any defects found in the premises.

(B). LOCAL SCHOOL CLINICS, ETC.—Outside the area of the Administrative County for Elementary Education, *i.e.* the County School Medical area, there are the 19 Non-County Boroughs, and the following eight Urban Districts : Chadderton, Farnworth, Hindley, Ince-in-Makerfield, Radeliffe, Stretford, Swinton and Pendlebury, and Waterloo-with-Seaforth. In each of these areas a school clinic has been established.

Artificial Light Clinics.—The local reports of Ashton-under-Lyne (B), Brierfield, Chadderton, Chorley (B), Colne (B), Haslingden (B), Heywood (B), Hindley, Horwich, Lancaster (B), Leigh (B), Middleton (B), Stretford, Swinton and Pendlebury, Waterloo-with-Seaforth, Westhoughton, Widnes (B), etc., state that an artificial light clinic has been established or is available. In addition, there are the clinics established under the County Council's tuberculosis scheme.

Venereal Diseases Treatment Centres.—Particulars of the County Council scheme for the diagnosis and treatment of venereal diseases and a list of the Treatment Centres are given on pages 164 to 170.

Ambulance Facilities In almost every County district ambulance facilities are available	
both for infectious cases and for non-infectious and accident cases, and in the majority of districts	
for maternity cases, as will be seen below :	

		For infectious cases— No. of Districts.	For non- infectious and accident cases— No. of Districts.	For Maternity cases No. of Districts.
Motor Vehicle	 	105	112	80
Horse "	 	10	1	-
Nil	 	1	3	36

Vaccination.—THE VACCINATION ACTS, 1867–1907.—THE VACCINATION ORDER, 1930.— Under Section 2 of the Local Government Act, 1929, from the appointed day, the 1st April, 1930, the functions relating to vaccination, formerly discharged by Poor Law Authorities, shall be discharged by the Councils of Counties and County Boroughs as functions relating to public health.

The County Council resolved that these functions be carried out under the direction and control of the Public Health and Housing Committee.

The law relating to vaccination is contained in the Vaccination Acts 1867, 1871, 1874, 1898, and 1907. The Vaccination Order, 1930, rescinded from the 1st April, 1930, all the previous Vaccination Orders.

The Vaccination Acts require that every child shall be vaccinated within six months of birth, but parents may claim exemption by making a statutory declaration of conscientious objection before the child attains the age of four months, while vaccination may be postponed by a medical certificate. The Acts also provide for any person to be vaccinated or re-vaccinated by the public vaccinator of the district free of cost.

The vaccination service of the Administrative County was taken over by the County Council on the 1st April, 1930, in accordance with the Local Government Act, 1929, and at the present time (August, 1933) there are 139 Public Vaccinators and 55 Vaccination Officers functioning in the County area. The names of these officers and their respective areas follow on pages 64 to 69. The vaccination areas are coterminous with registration districts or sub-districts. On the change-over from the Boards of Guardians to the County Council there was no break in the continuity of public vaccination, and as the Law as to Vaccination remains unaltered, the work is proceeding practically on the same lines as before the transfer. Certain adjustments of areas may be necessary on completion of the review of registration districts under Section 24 of the Local Government Act, 1929, and the general review of County districts under Section 46.

NUMBER OF VACCINATIONS, AND RE-VACCINATIONS, EXEMPTION CERTIFICATES, ETC.—The Minister of Health, through the Registrar-General, requested that a Return, Form M379, be supplied relating to vaccination, etc., of children whose births were registered from 1st January to 31st December, 1931, and another Return, Form M379a, as to the number of persons successfully vaccinated and re-vaccinated during the year ended 30th September, 1932.

The tables M379 and M379a are given herewith. From the former, relating to the year 1931, it will be noted that of the 24,614 births included in the return, the number which at the time the return was made, had been registered as successfully vaccinated was 7,854 (being 31.9 per cent. of the whole), and the number registered as having died un-vaccinated was 1,183 (or 4.6 per cent. of the whole). Of the remaining children 110 (or 0.4 per cent. of the whole) had been registered as insusceptible of vaccination, or as having had smallpox; 220 (or 0.8 per cent.) as having their vaccination postponed by medical certificate; and 14,015 (or 56.9 per cent.) in respect of whom certificates of conscientious objection were received; leaving 1,282 (or 5.2 per cent.) as "removed," "not traced," or otherwise not accounted for. If from the births included in the return the deaths that took place before vaccination be first deducted, it appears that, of the surviving 23,481 children, there were registered at the time of the return 33.4 per cent. as successfully vaccinated; 0.4 per cent. as either insusceptible of vaccination, or as having had smallpox; 0.9 per cent. as under medical certificate of postponement, and 59.6 per cent. in respect of whom certificates of conscientious objection to vaccination had been obtained, leaving 5.4 per cent. as at the time still unaccounted for as regards vaccination.

The tables following show the position in regard to vaccination in the Administrative County and in the various divisions. The percentage of successful vaccinations in the County area is still declining and in the latest year for which vaccination statistics are available the percentage was only 33.4. Conversely the percentage of statutory declarations is increasing and has now reached 59.6 per cent. of the total births.

There is a wide variation in the number of vaccinations in the County divisions, for example, in the Ulverston area the percentage of successful vaccinations to total births was 68.4, 64.9 in the Ormskirk area, 61.1 in Prescot area, whilst in the Ashton-under-Lyne area the percentage was only 13.7, and in the Haslingden area 14.9. ADMINISTRATIVE COUNTY OF LANCASTER.

# VACCINATION RETURN FOR 1931.

Ministry of Health Form M. 379.

1981 inclusiv RETURN respecting the Vaccination of Children whose Births were registered from 1st January to 31st Decembe

	-			No. of Births in " Birth List Sheets " rorit-	No. of t and V o	t the "Varo	ination R	No. of these Barths entered by \$1st January, 1833, in Cois, 1, II, IV and V of the "Vaccination Register" (Birth List Sheets), vis.	1933, in Cols List Sheets),	. 1, II, IV vin.	remained un Registe	remained unsentered in the "Vaccination Register" on account of :	" Vaccination of :	Number of these Births remaining 31st Jan., 1903, veither antered		4	No. of Statutory Declarations of
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	Guardians' Committees Areas.	The same	tered 1st Jan. to 31st Dec. 1931.	Col. I. Success- fully Vacc.	Col. 1 Insus- ceptible of Vace.	Had Senall. por.	Col. IV. No. of Statutery Declarations.	the part of the second second	Col. V. Died Un- vaccinated.	Contraction of the	Removal to Dists. the V.O's of which have been apprised.			of Children under 14 received during 1982.	Footnote).	Conscientions Objection reed, by V.O. during 1902.
the in         300         301	Seat 1 - Lo	-	10000	01	03	+	13	9	2	-	80	6	10	11	12	12a	13
alter          1,230         711         2         -         402         1         40         10         10         10         20         710         20         710         20	5	:	:	509	336	00	1	142	6	18	9	1	1	60	347	15	142
and Gravity          1312         303         16          613         73         10         73         73         10         73         11         613         73         11         613         73         11         613         73         11         613         73         11         11         61         616	L		:	1,228	1112	64	1	402	I	46	16	13	15	23	716	26	344
an and Chordy          1.80         735         15         -         857         -         102         731         11         633         631         633         633         631         633         63	E		:	1,312	305	16	1	612	00	15	2	11	6.5	245	311	26	531
but and Clifteree         1,182         340         6         -         731         1         58         9         2         2         413         4	P		:	1,850	735	15	1	857	1	102	34	15	46	46	683	8	828
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	BI	ackburn and Clitheroe	;	1,182	346	9	1	121	1	88	6	01	64	8	413	16	730
upder          1,206         185         7         -         1,018         2         0         2         1         5         20         180         20           titk<           1,206         003         10         -         407         1         5         1         0         20         190         201 <td>B</td> <td></td> <td>:</td> <td>1,245</td> <td>195</td> <td>01</td> <td>1</td> <td>988</td> <td>1</td> <td>52</td> <td>00</td> <td>4</td> <td>1</td> <td>1</td> <td>722</td> <td>12</td> <td>1,034</td>	B		:	1,245	195	01	1	988	1	52	00	4	1	1	722	12	1,034
dirk          1,570         900         10         -         437         1         51         7         14         36         22         1,300         237           1           1,430         407         5         -         1,305         1         24         2         24         25         24         230         237         24         23         24	H		:	1,298	185	1-	1	1,018	01	09	61	1	10	20	180	80	186
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0	:	:	1,579	903	19	I	437	1	51	2	14	36	81	1,200	237	416
1          1,481         417         4         -         803         1         80         7         20         5         3         443         183           ale and Bury          2,112         363         7         -         1,515         -         86         7         34         48         22         454         108           ale and Bury          1,770         810         2         -         401         -         51         10         7         32         453         108           t           2,293         304         3         -         1,493         -         145         8         14         12         12         13         10         7         103         17         103           t          2,540         951         1         -         1,435         5         1         12         1	W		:	1,938	497	10	1	1,205	1	84	34	3	42	89	497	10	1.208
ale and Bury          2,112         363         7          1,515          86         7         34         46         52         454         108           t          1,770         810         2          401          51         16         13         16         7         924         57           t           2,983         304         3          1,405          145         8         14         12         12         924         57           t           2,540         951         1          145         8         14         12         12         93         34           t-upon-Irwell           1,118         205         3          132         31         13         23         32         136         164         7         34           u          1,004         27         23         31         16         16         16         16         16         16         7         34         36         37         36         36	Bo		:	1,431	417	4	1	895	1	80	2	20	10	00	443	18	946
t          1,376         810         2         -         401         -         51         16         13         16         7         924         57             2,383         594         3         -         1,405         -         145         8         14         12         12         613         34             2,349         561         1         -         1,405         -         145         8         14         12         12         613         34            2,349         561         1         -         1,405         -         132         31         23         32         136         1,040         75             1,118         205         3         -         1,230         11         29         32         136         1,040         75             1,004         21         15         1         64         16         16         1         2         270         2         70         2         2         2         2         2         2         2         2         2 <t< td=""><td>Ro</td><td></td><td>:</td><td>2,112</td><td>363</td><td>1-</td><td>1</td><td>1,515</td><td>1</td><td>98</td><td>2-</td><td>34</td><td>48</td><td>52</td><td>454</td><td>108</td><td>1,449</td></t<>	Ro		:	2,112	363	1-	1	1,515	1	98	2-	34	48	52	454	108	1,449
2,383       594       3       -       1,495       -       145       8       14       12       12       613       34         rupon-Irwell        2,540       951       1       -       1,181       -       1,181       -       1,181       -       1,181       -       1,181       -       1,181       -       1       132       31       23       32       108       1,040       75         m         1,118       205       3       -       826       -       53       10       9       1       2       270       6       7         inder-Lyne        1,004       211       15       -       1,290       1       6       16       16       1       2       270       6       7         inder-Lyne        1,004       21       15       -       16       16       16       16       16       27       270       6       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7       7	Pu		:	1,376	810	01	1	401	1	15	16	13	16	2	924	10	455
pon-Irwell          2,540         051         1          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          1,181          530          533         10         9         1         2         2         270         6           mder-Lyne           1,004         211         15          15         16         18         36         270         6         6           mder-Lyne               2 <td>Le</td> <td></td> <td>:</td> <td>2,283</td> <td>594</td> <td>00</td> <td>1</td> <td>1,495</td> <td>1</td> <td>145</td> <td>8</td> <td>14</td> <td>12</td> <td>12</td> <td>613</td> <td>10</td> <td>1,396</td>	Le		:	2,283	594	00	1	1,495	1	145	8	14	12	12	613	10	1,396
1,118     205     3      826      53     10     9     1     2     270     6       mder-Lyne      1,004     211     15      1,230     1     64     14     16     18     36     277     52       mder-Lyne       24,614     7,854     110      14,015     20     1,153     220     192     344     746     8,604     740	Ba		:	2,549	951	1	1	1,181	1	132	31	23	88	198	1,040	75	1,161
1,004         211         15         -         1,230         1         64         14         16         18         36         277         32           24,614         7,854         110         -         14,015         20         1,133         220         102         344         746         8,604         740	0		:	1,118	205	8	1	826	1	18	19	6	1	01	270	9	849
24,614         7,854         110         -         14,015         20         1,133         220         102         344         746         8,604         740	As		:	1,604	112	15	I	1,230	-	64	14	16	18	36	277	32	1,158
	PV	ministrative County Totals		24,614	7,854	110	1	14,015	20	1,133	220	192	344	746	8,604	740	13,664

# ADMINISTRATIVE COUNTY OF LANCASTER.

# Ministry of Health Form M.379a.

# VACCINATION .- Year ended 30th September, 1932.

RETURN showing the Numbers of Persons successfully vaccinated and re-vaccinated at the cost of the rates by the Medical Officers of the Poor Law Institutions and the Public Vaccinators during the year ended 30th September, 1932:--

				Number Vacci	of successful nations of per	Primary sons :—	Number of successful Re-vaccinations, <i>i.e.</i> , successful vaccinations
	Guardians' Committees Ar	eas.		Under one year of age.	One year and upwards.	Total.	of persons who had been successfully vaccinated at some previous time.
No.							No. of Contents of State
1.	Ulverston			239	9	248	11
2.	Lancaster			482	24	506	7
3.	Fylde and Garstang			217	14	231	14
4.	Preston and Chorley			431	20	451	4
5.	Blackburn and Clithero	e		292	9	301	6
6.	Burnley			125	49	174	8
7.	Haslingden			125	41	166	40
8.	Ormskirk			784	54	838	46
9.	Wigan			415	5	420	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
10.	Bolton			296	28	319	4
11.	Rochdale and Bury			256	19	275	10
12.	Preseot			743	22	765	8
13.	Leigh			516	29	545	15
14.	Barton-upon-Irwell			• 712	27	789	- 13
15.	Oldham			204	10	214	8
16.	Ashton-under-Lyne			178	14	192	15
	Administrative County	Total	s	6,015	369	6,384	213

Total Births "registered" in Administrative County-

Year ended	31st	December,	1931	 	 	 25,014
Year ended	31st	December,	1932	 	 	 24,239

Reference to Table M.379, page 62, will show the number of successful vaccinations, number of certificates of exemptions, etc., in the year 1931, in the various County areas. The statement below shows these figures in percentages to total live births after deducting the number of children who died un-vaccinated before the date of the return. For comparison the percentages for 1929 and 1930 are also given :—

nu i	boo are also given							
	Areas			Percentage of successful vaccinations.			Percentage of statutory declarations.	
			1929	1930	1931	1929	1930	1931
1.	Ulverston		 71.0	74.1	68.4	 24.0	22.0	28.9
2.	Lancaster		 67.7	62.8	60.1	 28.3	30.6	34-0
3.	Fylde and Garstang		 33.5	25.6	24-1	 44.5	51.9	48.5
4.	Preston and Chorle	v	 46.4	41-9	42.0	 44-2	48.4	49-0
	Blackburn and Clit		 37.9	85.8	30.7	 59.0	61.5	66-8
6.	Burnley		 16.7	14.6	16-3	 82-2	84.4	82-8
7.	Haslingden		 15.9	14.0	14-9	 80.4	83.6	82.2
8.	Ormskirk		 64.8	66.8	64-9	 28.2	26.1	28.5
9.	Wigan		 32.5	25.7	26.8	 61.3	66.2	64-9
10.	Bolton		 84.4	81.4	30-8	 62.5	66.5	$66 \cdot 2$
11.	Rochdale and Bury		 23.6	20.2	17.9	 68.5		74.7
12.	Prescot		 68.3	66.9	61.1	 27.8		34-7
13.	Leigh		 32.8	80.0	27.7	 64.4	67.0	69-9
14.	Barton-upon-Irwell		 43.3	41.2	39.3	 42.7	46.0	48-8
15.	Oldham		 24-2	22.8	19.2	 72.8		77.5
16.	Ashton-under-Lyne		 16.4	13.6	13.7	 74.8	78.2	79-8
	Administrative C	ounty	 38.0	34.9	33.4	 54.9	58.1	59-6

# PUBLIC VACCINATORS AND VACCINATION OFFICERS.

Public Vaccinator.	District.	Vaccination Officer.	District.
W. G. Southern	Broughton West, Angerton, Dunnerdale with Seath- waite, Kirkby Ireleth.	J. Swainson	Blawith, Claife, Conisto Hawkshead, Satterthwait Skelwith, Subberthwait
W. R. Penny	Blawith, Haverthwaite (part), Egton-w-Newland, Lowick, Subberthwaite, Lands common to Lowick and Subberthwaite.		Torver, Angerton, Brought West, Dunnerdale wi Seathwaite, Kirkby Irelet
W. E. L. Allen	Claife, Hawkshead, Satter- thwaite.	the first	
R. F. C. H. Buchanan	Coniston, Skelwith, Torver.		
F. J. Charlton	Lower Allithwaite, Upper Allithwaite, Broughton East, Cartmell Fell, Grange, Lower Holker, Upper Holker, Haverthwaite (part), Staveley. Aldingham, Dalton, Urswiek, Lands common to Alding- ham and Urswiek.	W. Dickinson T. T. Woodburn	Lower Allithwaite, Upper Al thwaite, Broughton Eas Cartmell Fell, Grange, Low Holker, Upper Holke H a verthwaite (part Staveley. Aldingham, Dalton, Urswie Lands common to Aldin ham and Urswick.
. G. Petrie	Mansriggs, Osmotherley,	W. Walker	Ulverston, Colton, Egto
	Pennington, Ulverston.		Lowick, Mansriggs, O motherley, Penningto Lands common to Lowic and Haverthwaite, Subbe
. W. Christie	Ulverston Poor Law Inst.	A12	thwaite (part).
	LANCASTER.	AREA No. 2.	
Mather	Heaton-w-Oxeliffe, Lancaster B., Middleton, Overton, Lancaster Institution.	Miss A. Dunderdale	Lancaster B, Aldeliffe, Ashto w-Stodday, Coekerhan Coekersand Abbey, Ell- Over Wyresdale, Scotfort Thursdale, Scotfort
		A Aver	Thurnham.
<sup>2</sup> . W. Moss	Priest Hutton, Silverdale, Warton-w-Lindeth (except Dudley), Yealand Conyers, Yealand Redmayne.	A. Ayer	Bolton-le-Sands, Carnfort Heaton-w-Oxeliffe, Middl ton, Overton, Morecaml and Heysham B., Prie Hutton, Silverdale, Slyne-v Hest, Warton - w - Lindet
. W. Hogarth	Morecambe and Heysham B.		Yealand Conyers, Yealar Redmayne.
2. S. Jackson, junr	Bolton-le-Sands, Carmforth, Slyne-with-Hest, Dudley (part of Warton), Borwick, Halton, Nether Kellet, Over Kellet.	(a) gauge of and along since in the press first particulation in total 1 per give plate of the rel	
V. Boys-Stones	Aldeliffe, Ashton-w-Stodday, Cockerbam, Cockersand Abbey, Ellel, Over Wyres- dale, Scotforth, Thurnham.		
. J. Acheson	Caton, Claughton, Gressing- ham, Hornby, Melling, Roeburndale, Tatham, Wennington, Wray, Cants- field, Arkholme, Quernmore, Lunesdale Institution.	W. Danson	Lunesdale R.
. G. Mathews	Burrow-w-Burrow, Ireby, Leek, Tunstall, Whitting- ton.		
	FYLDE AND GARST	ANG. AREA No.	3
. Thursz	Marton.	J. A. Jump	Marton,
Wylie	Fleetwood.	J. Cardwell	Fleetwood, Carleton, Elswich
K. Thomas	Poulton, Carleton, Singleton, Elswick, Hardhorn-w-New-		Hardhorn-w-Newton, Pou ton, Singleton, Thornto

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FYLDE A	AND GARS	TANG.	AREA No.	3—continued.
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Public Vaccinator.	District.	Vaccination Officer.	District.
A. H. Penistan	Thornton Cleveleys.		
W. Haddow	Medlar-w-Wesham, Freekle- ton, Kirkham, Clifton-w- Salwick, Newton-w-Scales, Treales, Roseacre and Wharles, Ribby-w-Wrea, Plumptons, Weeton-w- Preese, Greenhalgh-w- Thistleton,	J. P. Langley	Kirkham, Medlar-w-Wesham, Freekleton, Clifton-w-Sal- wick, Newton-w-Scales, Treales, Roseaere and Wharles, Ribby-w-Wrea, Plumptons, Weeton-w- Preese, Greenhalgh-w- Thistleton,
Н. М. Сооре	Lytham St. Anne's B, Bryning- w-Kellamergh, Westby, Warton,	R. J. Waring	Lytham St. Anne's B., Bryning w-Kellamergh, Westby, War- ton.
H. R. Parkinson	Wesham Institution, Kirk- ham Cottage Homes.		
N.R. Ussher	Barmacre-w-Bonds, Bleas- dale, Cabus, Claughton, Cleveleys, Forton, Garstang, Holleth, Nateby, Nether Wyresdale, Winmarleigh, Garstang Institution.	W. H. Barton	Garstang R., Preesall.
A. Gibb	Bilsborrow, Catterall, Gt, Eccleston, Kirkland, Inskip-w-Sowerby, Myers- cough, Upper Raweliffe-w- Tarnacre.		La Pretencia.
S. A. Nield-Faulkner	Hambleton, Out Rawcliffe, Pilling, Stalmine-w-Stay- nall, Precsall.		A A CAPE COL

# PRESTON AND CHORLEY. AREA No. 4.

D. J. Davies	Samlesbury, Cuerdale, Ribble- ton.	H. Smith	Fulwood, Longridge, Walton- le-Dale, Preston R.
R. Slater	Barton, Broughton, Fulwood, Lea, Ashton, Ingol and Cottam, Woodplumpton.	and the second	
E. W. Johnson	Dutton, Ribehester Dilworth, Alston, Hothersall, Grim- sargh, Elston, Haigh- ton, Whittingham, Goos- nargh, Ribehester Institu- tion.	res Barradad Illinos Alexandra Galantes Alexandra Mandales Alexandra Mandales Alexandra Mandales Alexandra Mandales	all punket
S. Sharples	Farington, Little Hoole, Much Hoole, Hutton, Howiek, Longton, Penwortham, Walton-le-Dale.		A W. Batter Cal
J. Rigby	Chorley B., Charnock Richard, Coppull, Duxbury, Welch Whittle.	T. Clare	Chorley B., Chorley R., Croston, Leyland, Withnell, Adlington.
C. M. Willmott	Leyland, Cuerden, Euxton.		Construction in the second second
C. Peddie	Clayton-le-Woods, Brindle, Heapey, Whittle-le-Woods.		
T. W. P. Leighton			
	Hoghton, Wheelton, Withnell.		
W. Taylor	Croston, Bretherton, Eccles-		and an manufacture of the
W. Taylor	and the second se		D. C. Parena in Arg
W. Taylor W. C. Rigby	Croston, Bretherton, Eceles- ton, Heskin, Mawdesley, Ulnes Walton. Rivington, Adlington, Ander- ton, Anglezarke, Heath		and an manufact. 3. G
W. C. Rigby	Croston, Bretherton, Eccles- ton, Heskin, Mawdesley, Ulnes Walton. Rivington, Adlington, Ander-		D. C. Parriana in Ann A. P. Ball I. P. Marson in In R. S. Marson Inn R. J. Wannaghter Ray
A. R. Martin	Croston, Bretherton, Eceles- ton, Heskin, Mawdesley, Ulnes Walton. Rivington, Adlington, Ander- ton, Anglezarke, Heath		D. D. D. Parrient in Any A. P. Hall Any D. D. D. Marson

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BLACKBURN AND	CLITHEROE.	AREA No. 5.
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Public Vaccinator.	District.	Vaccination Officer.	District.
D. O'Driscoll	Balderstone, Mellor, Clayton- le-Dale, Osbaldeston, Ramsgreave.	G. G. Dickinson	Blackburn R., Church, Clayton-le-Moors, Darwen B., Great Harwood, Oswald- twistle, Rishton.
J. T. T. Ramsay	Livesey, Pleasington, Witton.		Balan I and Balance
W, A, Smith	Darwen B., Tockholes, Eccles- hill, Yate and Pickup Bank.	and print of the second	State of the second sec
P. H. Stewart	Church and Oswaldtwistle.		
J. P. Davidson	Clayton-le-Moors.	Concept Anna and an	and the second second
J. Ferguson	Rishton.		
J. K. Cumming	Great Harwood.	in this same	
H. B. Lawrie	Billington, Dinckley, Sales- bury, Wilpshire, Little Mit- ton, Henthorn and Cold- coats, Pendleton, Whalley, Wiswell.	J. Peters	Little Mitton, Pendleton, Whalley, Wiswell.
L. Patchett	Aighton, Bailey, Chaigley, Chipping, Little Bowland, Leagram, Thornton-w- Wheatley.	Mrs. A. Raweliffe	Aighton, Bailey, Chaigley, Chipping, Little Bowland, Leagram, Thornton-w- Wheatley.
W. E. Barker	Chatburn, Clitheroe B., Down- ham, Mearley, Twiston, Worston.	Mrs. M. A. Hargreaves	Chatburn, Clitheroe B., Down- ham, Mearley, Twiston, Worston.
J. S. Cooper	Clitheroe Institution.	Same 114	Transferrer and a fighter

# BURNLEY. AREA No. 6.

G. Young		Briefcliffe, Cliviger, Worsthome-w-Hurstwood.	J. Clegg	Burnley R., Barrowford, Brier- field, Colne B., Nelson B., Padiham, Trawden.
J. Haworth		Dunnockshaw, Habergham Eaves, Ightenhill.		
W. Jackson		Barley, Barrowford, Blacko, Brierfield, Goldshaw, Higham, Nelson B., Old Laund, Roughlee, Wheatley Carr Booth, Reedley Hallows.		and the second s
A. W. Eadie		Colne B., Foulridge, Trawden.	Front of the destruction of the	and have be prophetically
J. W. J. Forsythe	· ···	Altham, Hapton, Northtown, Padiham, Read, Sabden, Simonstone.		

# HASLINGDEN. AREA No. 7.

D. G. Paterson	 Accrington B. No. 1.	J. Parkinson	Accrington B.
A. P. Hall	 Accrington B, No. 2.	classic staged at	
J. P. Brown	 Bacup B. (3 Wards).	J. H. Berry	Bacup B.
T. S. Shaw	 Bacup B. (3 Wards).	and a contraction that	and the second s
R. J. Warrington	 Rawtenstall B. No. 1.	F. J. Hobson	Rawtenstall B.
M. Murchison	 Rawtenstall B. No. 2.	ALC: NO.	A state of the second stat
W. M. Watson	 Haslingden B., Moorlands Institution.	A. E. Jump (Resigned from 30th September, 1933).	Haslingden B.

# ORMSKIRK. AREA No. 8.

Public Vaccinator,	District.	Vaccination Officer.	District.
G. G. Rigby	N. Meols, Scarisbrick (part).	Mrs. L. Dandy	Hesketh, N. Meols, Rufford, Tarleton.
W. P. O'Regan	Aughton, Bickerstaffe, Burs- eough (part), Halsall, Lathom (part), Ormskirk, Scarisbrick (part).	N. Bottomley	Bickerstaffe, Bispham, Burs- cough, Lathom, Scarisbrick, Simonswood, Skelmersdale.
C. V. H. Nesbit	Downholland, Lydiate, Mag- hull, Melling, Simonswood.	N. C. Lyon	Altear, Aughton, Downholland, Halsall, Formby, Lydiate, Maghull, Melling, Ormskirk.
H. B. Wickham	Bispham, Hesketh, Rufford, Tarleton.		1. 11. 51. 10 miles and 10 miles
A. B. Sykes	Altear and Formby.		
J. W. Pitt	Burscough (part), Lathom (part).		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
J. Graham	Skelmersdale.		La Contraction of the
H. C. Haslam Fox	Ormskirk Institution.		
W. F. Jones	Aintree.	J. C. Howarth	Netherton, Aintree.
J. F. Webb	Great Crosby, Little Crosby, Waterloo, Ince Blundell, Lunt, Thornton.	R. W. Jackson	Seaforth, Waterloo, Great Crosby, Little Crosby, Ince Blundell, Thornton, Lunt,
J. C. Mann	Litherland, Seaforth, Nether- ton, Ford, Sefton.		Sefton, Litherland, Ford.
	Application and all a	-In-	the later and th
T. Kan and H. And	WICAN	AREA No. 9.	
Contraction and and and and and and and and and an	WIGAN.	AREA No. 5.	1
G. H. Ormsby	Parbold, Shevington, Standish, Worthington, Wrightington.	J. H. Richards	Parbold, Shevington, Standish, Worthington, Wrightington,
L. Unsworth	Blackrod.	R. Armour	Aspull, Haigh, Blackrod.
R. A. Cooke	Aspull, Haigh.		Alarma Tana in Makashald
M. J. Duffy	Hindley (except Platt Bridge).	C. D. T. Mortimer	Abram, Ince - in - Makerfield Hindley.
A. R. Erskine			
H. Aspinall		P. H. Danais	Ashton-in-Makerfield.
H. Winstanley	Ashton-in-Makerfield.	E. H. Boggis C. A. Mather	Difference in the standard Come
J. T. Shirlaw	Dalton, Upholland.	C. A. Mather	Dalton, Upholland.
R. O. Mather	Billinge and Winstanley.	Statistics and	dul
A. Matheson	Orrell.	and the second	the second second
The second second second	BOLTON.	AREA No. 10.	
G. P. Alderson	Turton (excluding Belmont Ward), Edgworth.	J. Openshaw	Farnworth, Kearsley, Horwich Little Hulton, Little Lever Westhoughton, Turton.
H. Robinson	Turton (Belmont Ward).		Treation future
J. M. Stirling	Farnworth and Kearsley.	Constant of Constant of Constant	
J. S. Sewell	Horwich.	ALL ADVISION OF THE PARTY	No. of the second secon
J. H. Marsh	Little Hulton.		
E. C. Racker	. Westhoughton,	a Cattern Brees.	and an a more in a
W. Mottershead	. Little Lever.	Land Constant of	Carlot and an and an and and and an
E. S. Gawne	. Townley's Hospital, Fishpool Institution.		

# ROCHDALE AND BURY. AREA No. 11.

Public Vaccinator.	District.	Vaccination Officer.	District.
W. H. Carse	Norden.	W. M. Law	Norden.
P. A. Ashcroft	Littleborough, Wardle.	T. Bradley	Littleborough, Wardle, Whit-
A, L. Pirrie	Whitworth.		worth.
J. B. Searr	Milnrow,	P. Fairbank	Milnrow.
H. N. Crossley	Birch Hill Institution, Cottage Homes.		
W. Greenlaw	Tottington, Ainsworth.	A. Walker	Ramsbottom, Walmersley,
C, W, Crawshaw	Ramsbottom, Walmersley- cum-Shuttleworth,		Tottington.
I. Flack	Radeliffe.	S. Mills	Radeliffe, Outwood, White-
W. P. Ferguson	Whitefield, Outwood, Uns- worth.		field, Unsworth, Ainsworth, Prestwich.
J. A. Jamieson	Prestwich.		
J. Boyd	Heywood B., Birtle-cum- Bamford.	A. Royds	Heywood B., Birtle-cum- Bamford.

PRESCOT. AREA No. 12. H. B. Bates ... Eccleston (part). J. S. Fox ... Windle. A. Griffin ... Windle. Eccleston(part), Huyton-with-Roby, Knowsley, Prescot, Rainhill, Tarbock, Whiston. G. E. Green ... J. Hitchen ... Eccleston, Huyton-with-Roby, Knowsley, Prescot, Rainhill, Tarbock, Whiston. Widnes B. (part), Halewood (part), Ditton, Bold, Cronton, Hale, Hale-wood, Widnes B. C. Nelson W. T. Bridge Bold, Cronton, Widnes B. (part). A. Patton ... F. C. Robbs ... Hale, Halewood (part). Rainford, Kirkby. F. Prosser Rainford, Kirkby. R. Fairelough G. G. W. Hay ... Whiston Institution.

# LEIGH. AREA No. 13.

J. J. Jones	 Leigh B. (part).	P. Barnes Leigh B., Leigh R, Atherton,
G. E. Hayward	 Atherton.	Golborne, Tyldesley-w- Shakerley.
T. Gray	 Astley and Tyldesley.	H. D. Mathew in Hilberge and Westmitery.
J. D. Gallagher	 Leigh Institution.	4. Hallander Drive
J. Bennett	 Cuerdley, Great Sankey, Penketh.	E. Houghton Houghton, Arbury, Middleton, Poulton-w-Fearnhead, Rix-
R. B. Sephton	 Houghton, Middleton, Ar- bury, Poulton-w-Feamhead, Rixton-w-Glazebrook, Southworth-w-Croft, Woolston-w-Martinscroft, Culcheth, Leigh B. (part), Golborne, Lowton, Kenyon.	ton-w-Glazebrook, South- worth - w - Croft, Woolston- w-Martinscroft, Winwick-w- Hulme, Cuerdley, Penketh, Great Sankey.
W. Valentine	 Newton-in-Makerfield, Winwick-w-Hulme, Bur- tonwood.	R. L. Bent Newton-in-Makerfield, Haydock, Burtonwood.
B. Coffey	 Haydoek.	
G. A. Sinclair	 Padgate Cottage Homes.	In C. Barbert Weillandpleten
J. D. Giles	 Culcheth Cottage Homes.	W. Mattershead Inthe Level.
	and the second	and the second second second second

# BARTON-UPON-IRWELL. AREA No. 14.

Public Vaccinator.	District.	Vaccination Officer.	District.
E. H. Forrest	Eccles B.	B. A. Kinder	Barton R., Eccles B., Irlam,
C. Moffatt	Irlam, Barton Moss.		Stretford, Swinton and Pendlebury, Urmston,
T. B. Wolstenholme	Davyhulme, Flixton, Urms- ton.	D. M.M. J. M. Maran	Worsley.
W. T. Westwood	Stretford (part).		G. V. Amenory, M.D. Co.
J. T. Walker	Stretford (part).		A MARTIN POLITY AND
J. P. Williams	Swinton, Clifton.		M. C Y. Representation 1. 17
W. J. Cowan	Worsley.		A. C. CRAWYORD, M.H.
D. W. Davidson	Green Lane Institution.	D., CLEDEROS.	A LOCAL CONTRACTOR OF ME
T. M. Popple	Pendlebury.	C. F. Settle	Pendlebury.
D.P.H.	J. A. Tours, M.H. Chul	C. M.R. CAR	Repairing M. Gard, M.

# OLDHAM. AREA No. 15.

J. H. Burns E. P. Maitland	Chadderton. Crompton.	F. H. Mellor	Chadderton, Crompton, Middleton B., Royton, Failsworth.
H. W. McH. Wallace	Middleton B.		
R. P. Parker	Royton.		
E. Barnes	Failsworth.		

# ASHTON-UNDER-LYNE. AREA No. 16.

	the second s		
J. W. Ford	Droylsden, Little Moss, Woodhouses, Audenshaw (part).	J. B. Higginbottom	Audenshaw, Droylsden, Bardsley, Little Moss, Waterloo and Woodhouses.
J. S. MacGill	Denton, Audenshaw (part).	C. Barber	Denton.
B. Bowman	Ashton-under-Lyne B. (part), Bardsley, Hurst and Waterloo.	H. B. Firth	Ashton-under-Lyne B.
C. H. Spencer	Ashton-under-Lyne B. (part).		
D. M. Sproull	Alt and Lees.		
H. A. Logan	Hartshead, Mossley B.	J. Cooper	Mossley B., Alt, Hartshead, Lees,
W. E. C. Thomas	Damton House (Institution), Lake Hospital.	De Martinet Australia	

### PUBLIC HEALTH OFFICERS OF THE COUNTY AND OF LOCAL AUTHORITIES

### COUNTY STAFF.

### (Jointly with the School Medical and Child Welfare Department).

### **County Medical Officer of Health and School Medical Officer :** J. J. BUTTERWORTH, M.D., Ch.B., D.P.H.

Chief Assistant County Medical Officers : F. HALL, M.D., Ch.B., D.P.H., Barrister-at-Law . E. H. SCHOLEFIELD, M.A., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.

- Assistant County Medical Officers : G. V. ASHCROFT, M.D., Ch.B., M.R.C.P., D.P.H. H. HOLROYI L. E. H. R. BARKER, B.A., M.B., Ch.B., D.P.H. R. J. BATTY, B.Se., M.D., Ch.B., D.P.H. W. C. V. BROTHWOOD, M.D., Ch.B., M.M., D.P.H.

- CATHERINE L. CORBETT, M.B., Ch.B., D.P.H. A. C. CRAWFORD, M.B., Ch.B., D.P.H., D.T.M. R. W. ELDRIDGE, B.Sc., M.D., Ch.B., M.R.C.S., L.R.C.P., D.P.H.
- S. C. GAWNE, B.Sc., M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.

WINNIEFRED M. GRAY, M.A., M.B., Ch.B., D.P.H.

- H. HOLROYD, M.B., B.S., D.P.H. (Deccased October, 1932).
- GLADYS H. HUTCHINSON, M.B., Ch.B.
- J. R. JAGGER, M.B., Ch.B., D.P.H.
- G. G. JOHNSTONE, M.C., M.A., M.D., B.Ch., D.P.H.
- J. H. PORTER, M.A., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H. A. V. Stocks, M.A., M.B., B.Ch., D.P.H. J. A. Томв, M.B., Ch.B., D.P.H.

- C. ROBERTSON WILSON, M.B., Ch.B., D.P.H.

A. CLEAVER, L.D.S. (part-time).

E. V. POLLITT, L.D.S. A. W. POOLE, L.D.S.

A. E. SHAW, B.D.S. T. H. WIGNALL, L.D.S. F. W. WILLIAMS, B.D.S.

1933).

G. G. WRAY, M.D., Ch.B., D.P.H. S. N. WRIGHT, M.Sc., M.B., Ch.B., D.P.H.

### Dental Surgeons:

Ophthalmic Surgeons (part-time) :

I. F. McAsh, L.R.C.P., L.R.C.S., L.R.F.P.S., H.D.D., L.D.S.

J. F. PENMAN, M.B., Ch.B. (Deccased, May,

T. SNOWBALL, M.A., M.B., Ch.B. W. Sykes, L.R.C.P., L.R.C.S., L.R.F.P.S. J. M. WISHART, M.B., Ch.B., F.R.C.S. (Edin.)

G. E. PLOWRIGHT, M.B., Ch.B., D.O.M.S. G. A. RENWICK, M.B., Ch.M.

- H. J. APPLEYARD, L.R.C.P., L.R.C.S., L.D.S. F. D. MANNERS, L.D.S.
- MARGARET E. CALDWELL, L.D.S.

R. Ackers, L.D.S.

- J. B. DAVIES, L.D.S. F. J. W. DEWHURST, L.D.S.
- R. E. HODGSON, B.D.S. J. KERSHAW, L.M.S.S.A., L.D.S.
- W. A. LINNELL, L.D.S.
- T. G. LLOYD, L.D.S.
- E. Allan, M.B., Ch.B.
- H. H. BYWATER, M.D., Ch.B., D.Ch.O., F.R.C.S. (Edin:).
- O. M. DUTHIE, M.D., Ch.B.
- G. A. Jelly, F.R.C.S., L.R.C.P., L.S.A., D.P.H. N. MacInnes, M.A., M.B., Ch.B.
- J. M. MORRISON, M.B., Ch.B.

(Resigned January, 1933).

- H. G. PARKER, F.R.C.S., (Edin.) L.R.C.P., L.R.F.P.S. (Deceased, February, 1933).

# Honorary Consulting Orthopædic Surgeon : SIR ROBERT JONES, Bart., K.B.E., C.B., F.R.C.S., LL.D., D.Sc. (Deceased, January, 1933).

Orthopædic Surgeons (part-time) : C.S. T. P. McMURRAY, M.Ch., F.R.C.S. (Edin.). H. PLATT, M.D., M.S., F.R.C.S.

E. S. BRENTNALL, M.B., F.R.C.S. (Edin.) B. L. McFarland, M.D., M.Ch. (Orth.), F.R.C.S.

Biddulph Grange Orthopædic Hospital-Senior House Surgeon : ISABEL VALLANCE, M.R.C.S., L.R.C.P.

FRANCES A. ROBERTS, M.B., Ch.B.

FRANCES A. ROBERTS, M.B., Ch.B. (Appointed 1932). September, 1932).

DILLAS MACLEAN, M.B., Ch.B. (Appointed February, 1933).

Matron :

Miss M. ROCHELL.

### **County Sanitary Officers :**

A. T. EGINTON, F.S.I. (Chief). J. MERCER. T. PICKERING.

R. KEELEY.

Principal Clerk, and County Inspector Shops Acts : J. E. GEE.

**County Inspector of Midwives :** 

Miss E. J. B. WRIGHT.

Organiser and Lecturer under Venereal Diseases Scheme (In co-operation with the British Social Hygiene Council):

Miss M. M. TIPPER.

29 Veterinary Surgeons (part-time) (For purposes of the Milk and Dairies Act).

63 School Nurses and Health Visitors. 4 Orthopædic Nurses.

### **County Analyst :**

G. D. ELSDON, B.Sc., F.I.C.

Assistant Orthopædic Surgeons (part-time) S. M. MILNER, M.A., M.B., F.R.C.S. H. POSTON, M.B., M.Ch.

Consultant Obstetrician (Litherland Clinic): J. W. BURNS, M.D., F.R.C.S. (Edin.).

(Appointed February, 1933).

Junior House Surgeons: HELEN M. DICK, M.B., Ch.B. (Resigned August,

(Edin.).

## PUBLIC HEALTH OFFICERS OF LOCAL AUTHORITIES.

August, 1933.			
URBAN DISTRICT.	Public Health Officers.	URBAN DISTRICT.	Public Health Officers.
Abram	M.O. A. R. Erskine. S.I. H. Allen.	Crompton	M.O. K. D. Murchison. S.I. F. Taylor.
Accrington (B)	M.O. A. Greenhalgh. S.I. J. A. Hindle. S.I. J. E. Spencer.	Croston	M.O. A. Duckworth. S.I. H. W. Chadwick.
and distant	S.I. J. R. Woodcock. H.V. 1.	Dalton-in-Furness	M.O. G. H. Patterson (whole time with Grange, Ulverston, and Ulver-
Adlington	M.O. W. C. Rigby. S.I. T. Warwick.		ston R). S.I. W. E. Caine.
Ashton-in-Makerfield	M.O. H. Winstanley. S.I. D. Gamble. S.I. T. Whitter.	Darwen (B)	M.O. J. Robertson (whole time). S.I. C. R. Walsh.
Ashton-under-Lyne (B)	H.V. 1. M.O. J. W. Talent (whole		S.I. F. Littlecott. S.I. E. P. McGlynn. H.V. 2.
Astron-under-type (5)	time). S.I. C. S. Handforth. S.I. T. C. Ward.	Denton	M.O. W. Stewart. S.I. A. C. Brocklehurst.
Aspull	H.V. 3. M.O. R. A. Cooke. (L. Cooke	Droylsden	H.V. 1. M.O. A. W. Laing.
and the Party of the	to 12th Aug., 1932). S.I. J. Occleshaw.	Didyisten	S.I. J. P. Kershaw (F. Schofield to 1st Aug., 1932).
Atherton	M.O. W. H. Leigh. S.I. F. Markland.	Eccles (B)	M.O. J. E. Spence (whole time).
Audenshaw	M.O. W. P. T. Daniel. S.I. H. M. Doxey.		S.I. C. W. Laskey (to 30th Sept., 1932). S.I. G. V. Hulse.
Bacup (B)	M.O. J. W. McKinney. S.I. A. E. Barnes. H.V. 2.		S.I. H. R. Taylor. S.I. K. F. Johnson. H.V. 5.
Barrowford	M.O. R. G. Markham (whole time with Nelson B). S.I. W. S. Green.		M.O. P. J. Webb. S.I. J. A. James. H.V. 1.
Billinge and Winstanle	Mather to 30th Nov., 1932).		M.O. A. G. Glass (whole time with Kearsley). S.I. H. T. Ogden.
Blackrod	S.I. J. J. Perkins. M.O. J. W. Unsworth. S.I. A. Gillibrand (J. Moore		S.I. D. Davies. S.I. S. Seel. H.V. 2.
Brierfield	to 27th April, 1982).	Fleetwood	S.I. G. Pilkington. S.I. A. Dale.
Carnforth	H.V. 1. M.O. E. S. Jackson.	Formby	M.O. M. G. Garry.
	S.I. F. Holt.	Fulwood	S.I. J. Hodge. M.O. C. J. Trimble.
Chadderton	S.I. A. Ashworth. S.I. H. Prenton. H.V. 2.	Golborne	S.I. F. Higginson. M.O. J. Bennett.
Chorley (B)	NO A Anderson (whole		S.I. A. Clough. H.V. 1.
	brooke to 30th Sept. 1932). S.I. W. Heaps.		M.O. G. H. Patterson (whole time with Dalton, Ulverston, and Ulver- ston R).
	S.I. R. P. B. Lund. H.V. 2.		S.I. T. Huddlestone.
Church	M.O. F. W. Pare. S.I. F. Howarth.	Great Crosby	S.I. J. Almond. M.O. J. K. Cumming.
Clayton-le-Moors	M.O. L. Tattersall. S.I. J. H. Bridge.	Great Harwood	S.I. A. Eddleston. H.V. 1.
Clitheroe (B)	M.O. W. E. Barker. S.I. J. Bolton. H.V. 1.	Haslingden (B)	S.I. R. Austin.
Colne (B)	M.O. G. M. D. Lobban (who time).	le	S.I. A. Warburton. H.V. 1.
	S.I. A. Fortune. S.I. R. R. Overend. H.V. 2.	Haydock	M.O. A. Dowling. S.I. J. Evans.

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## PUBLIC HEALTH OFFICERS OF LOCAL AUTHORITIES-continued.

URBAN DISTRICT.	Public Health Officers.	URBAN DISTRICT.	Public Health Officers.
Heywood (B)	M.O. J. Brooks (whole time) S.I. J. E. Cropper. H.V. 3.	Middleton (B)	M.O. S.T. Beggs (whole time). S.I. T. Turner, S.I. S. Hacking, H.V. 3,
Hindley	M.O. R. K. Nisbet (whole time). S.I. T. France. H.V. I.	Milnrow	M.O. O. R. I. Love, S.I. T. Warrington,
Horwich	M.O. J. S. Sewell, S.I. C. Coop, H.V. 2.	Morecambe and Heysham (B)	M.O. J. W. Watterson. S.I. H. Morgans. S.I. W. S. Makin. S.I. T. H. Ashbrook.
Huyton-with-Roby	M.O. A. W. McDonald. S.I. H. Gorton.	Mossley (B)	M.O. L. White. S.I. E. Slater, S.I. H. B Bell, H.V. 1.
Ince-in-Makerfield	M.O. G. H. Potter. S.I. W. Thorpe. H.V. 2.	Nelson (B)	M.O. R. G. Markham (whole time with Barrowford). S.I. J. W. Ingham. S.I. S. Grindrod,
Irlam	M.O. J. W. Roberts. S.I. R. Rutter. S.I W. Whitfield.	Newton-in-Makerfield	S.I. S. Haydock. H.V. 2, M.O. H. E. Watkins, S.I. H. Asheroft,
Kearsley	M.O. A. G. Glass (whole time with Farnworth). S.I. E. Shaw.	Norden	H.V. 1. M.O. W. H. Bateman, S.I. A. E. Duncan,
Kirkham	M.O. W. Haddow, S.I. J. R. Holmes,	Ormskirk	M.O. J. Young, S.I. E. J. Wright, S.I. T. Burrows.
Lancaster (B)	M.O. J. D. Buchanan (whole time) S.I. H. Scholefield, S.I. W. W. Jackson,	Orrell	M.O. K. Fraser. S.I. B. Preston (J. Farri- mond to 30th Sept., 1932).
	S.I. W. Combey H.V. 4.	Oswaldtwistle	M.O. A. E. Townley, S.I. P. J. Fisher,
Lees	M.O. J. Currie. S.I. H. Boardman,	Padiham	M.O. J. W. J. Forsythe. S.I. G. Egner.
Leigh (B)	M.O. J. C. Beckitt (whole time).	Poulton-le-Fylde	M.O., J. K. Thomas. S.I. W. G. Woolley,
	S.I. E. Jackson. S.I. W. T. Frost. S.I. A. N. Nicklin.	Preesall	M.O. S. A. Nield-Faulkner, S.I. H. Turner.
Designing	H.V. 6.	Preseot	M.O. S. M. Green. S.I., J. E. Hart.
Leyland	M.O. C. M. Willmott, S.I. H. Cheetham.	Prestwich	M.O. H. C. Burbidge. S.I. L. T. J. Trippier.
Litherland	M.O. T. D. Williams. S.I. H. Harrison.		M.O. W. S. Haydock (whole time). S.I. W. Holt.
Littleborough	M.O. J. T. R. MacGill. S.I. H. E. Williamson.	Painford	H.V. 2.
Little Hulton	M.O. J. H. Marsh. S.I. J. T. Davies.	A CONTRACTOR OF THE	M.O. F. Prosser, S.I. E. S. Rosbotham, M.O. H. Lawrie,
Little Lever	M.O. W. Mottershead. S.I. T. Grant.		S.I. H. Barlow (G. A. Shaw to 14th May, 1932). H.V. 1.
.ongridge	M.O. E. W. Johnson, S.I. J. Marshall.	Rawtenstall (B)	M.O. J. E. Helm. S.I. W. E. Hoyle, H.V. 2.
	S.I. H. Yates.	C. M. THE SHERING STREET	M.O. J. Barr. S.I. C. Woodcock.
	H.V. 2.	2	M.O. W. L. Bentley. S.I. J. Butterfield. H.V. 1.

# PUBLIC HEALTH OFFICERS OF LOCAL AUTHORITIES-continued.

oblic health officials			
URBAN DISTRICT.	Public Health Officers.	URBAN DISTRICT.	Public Health Officers.
Skelmersdale	M.O. H. E. Marsden. S.I. E. Huntington.	Withnell	M.O. T. P. Leighton. S.I. A. Penney.
Standish-with-Langtree	M.O. R. J. Ormsby, S.I. A. A. Smith.	Worsley	M.O. T. E. Kavanagh. S.I. W. Allen.
Stretford	M.O. E. H. Walker (whole time).	RURAL DISTRICT.	
	S.I.         S. Massey.           S.I.         T. E. Bowker.           S.I.         H. Wrigley.           S.I.         L. F. Atherton.	Barton-upon-Irwell	M.O. D. W. Davidson. S.I. R. G. Child.
Barthillipens Lonson (1)	S.I. G. A. Farrow. S.I. Miss McGarvie, H.V. 4.	Blackburn	M.O. C. M. Bradley. S.I. H. Eccleston.
Swinton and Pendlebury	M.O. G. H. Hogben (whole time). (H. C. Mulhol- land to 31st Jan., 1932).	Burnley	M.O. H. J. Robinson. S.I. A. Johnson,
	S.I. P. E. Berry. S.I. L. A. Marshall. S.I. A. S. Kershaw. S.I. G. E. Taylor.	Bury	M.O. H. Smith. S.I. H. Parkinson.
Thornton Cleveleys	H.V. 2. M.O. A. H. Penistan. (F. S. Rhodes died 21st		M.O. J. Rigby, S.I. H. F. Froes, S.I. A. Fowler,
The Brenness From	May, 1932). S.I. H. Fenton.	Clitheroe	M.O. J. M. Postlethwaite. S.I. W. H. Jackson.
Tottington	M.O. G. Crawshaw. S.I. L. Kenyon. S.I. J. F. Smithie (part time).	Fylde	M.O. W. Haddow. S.I. F. S. Roscoe,
Trawden	M.O. W. Alexander. S.I. J. H. Tatham. M.O. H. Robinson.	Garstang	M.O. N. R. Ussher, S.I. J. Cook.
	S.I. A. McMorrine.		S.I. J. B. Cook.
Tyldesley-with- Shakerley	M.O. T. E. Fliteroft. S.I. G. Yates. H.V. 1.	Lancaster	M.O. W. Edmondson. S.I. J. Littlefair. S.I. A. Halhead.
Ulverston	M.O. G. H. Patterson (whole time with Dalton, Grange, and Ulver- ston R).		M.O. S. H. Ryan. S.I. J. Monks.
Upholland	S.I. C. T. Hague. M.O. F. H. Browne. S.I. A. Hunt.	Limehurst	M.O. G. F. Bowman. S.I. R. Thompson.
Urmston	S.I. K. G. Hunt. H.V. 1. M.O. D. W. Davidson.	Lunesdale	M.O. B. J. Acheson. S.I. E. Ellis.
Urmston	S.I. J. Heath.		of the state of a link and
Walton-le-Dale	M.O. C. J. Trimble. S.I. N. Baron.	Preston	M.O. C. J. Trimble. S.I. T. Ashcroft. S.I. H. Collier.
Wardle	M.O. D. G. MacGill. S.I. E. A. Stewart.	and the second ball in a	M.O. G. H. Patterson (whole
Waterloo-with-Senforth	S.I. J. H. Cannell. S.I. A. E. Jones.	Ulverston	time with Dalton, Grange, and Ulver- ston U.D.)
Westhoughton	H.V. 2. M.O. W. H. Leigh.		S.I. T. Hudson. S.I. J. F. A. Ellwood.
restricting	S.I. J. C. Almond. S.I. F. J. A. Green. H.V. 2.	Warrington	M.O. J. Bennett. S.I. F. W. Kerfoot.
Whitefield	M.O. A. J. Young S.I. B. Hodgson.	West Lancashire	M.O. H. E. Marsden. S.I. T. G. H. Hunter. S.I. J. Ainsworth.
Whitworth	M.O. T. J. L. Forbes. S.I. J. J. Cordingley. M.O. A. Jones (whole time).	Whiston	M.O. T. U. Mercer. S.I. W. H. Bone.
Widnes (B)	S.I. J. G. Macdonald. S.I. C. A. Pénnington. S.I. E. F. Starkey.	Wigan	S.I. C. Hitchin. M.O. R. J. Ormsby. S.I. E. A. Lyne.
	H.V. 7.	At a manda at many pa	S I. E. A. Lyne.

PAYMENTS TOWARDS SALARIES OF PUBLIC HEALTH OFFICERS.—Under the Third Schedule (3) of the Local Government Act, 1929, payments towards the salaries of public health officials are made by the County Council to the Councils of 19 boroughs, 78 urban districts, 19 rural districts, and two port sanitary districts. The total payments during the financial year ended March 31st, 1933, amounted to £28,315 16s. 7d., of which £9,919 0s. 11d. was in respect of Medical Officers of Health, and £18,396 15s. 8d. for Sanitary Inspectors. Contributions towards the salaries of Medical Officers of Health are made to all districts, and as regards Sanitary Inspectors to all districts except Trawden and Upholland.

VETERINARY OFFICERS.—It is stated that in over fifty districts the part-time services of veterinary surgeons are available, by arrangement, for the inspection of dairy cows, &c., other than as required by the Tuberculosis Order. In 15 districts an annual retaining fee is paid; in the remaining districts remuneration is by way of fees.

For the purposes of the Milk and Dairies (Consolidation) Act, 1915, in connection with the inspection of cattle in cases where tubercle bacilli have been found in milk, the County Council employ, as required, 29 Veterinary Surgeons resident in different parts of the County area. These Veterinary Surgeons are also employed by the County Council for the purposes of the Diseases of Animals Acts.

Professional Nursing in the Home.—(A) GENERAL. (B) FOR INFECTIOUS DISEASES.—From the replies given by local Medical Officers of Health as to the nature of arrangements made by the Local Authority in the district for (a) general nursing, and (b) for infectious diseases, e.g. measles, etc., it appears that in very few areas are arrangements made by the authority for general nursing. The work of District Nursing Associations is referred to in the next paragraph. For the nursing of infectious cases, the following local authorities, amongst others, are willing to provide nursing assistance, if required :—Atherton, Barrowford, Chorley (B), Colne (B), Darwen (B), Great Crosby, Heywood (B), Lancaster (B), Little Hulton, Middleton (B), Morecambe and Heysham (B), Nelson (B), Orrell, Oswaldtwistle, Padiham, Rawtenstall (B), Swinton and Pendlebury, Widnes (B), Barton-upon-Irwell (R), etc. In a number of districts the Health Visitors, it is stated, undertake the nursing of cases such as measles, whooping cough, puerperal fever, and ophthalmia neonatorum.

In 65 districts, it is stated, the local authorities contribute to voluntary hospitals.

District Nursing Associations.—In 108 County districts, 216 nurses are employed by District Nursing Associations; in 77 of these districts the Association is affiliated to the Lancashire County Nursing Association. Financial assistance is given by the Local Authority to the Nursing Association in the following districts:—Ashton-in-Makerfield, 2/6 per visit; Ashton-under-Lyne (B), £50 per annum; Atherton, £100 p.a.; Audenshaw, £10 p.a.; Barrowford £25 p.a. and 1/per visit; Carnforth, £20 p.a.; Chadderton, £6 6s. p.a.; Chorley (B), £30 p.a.; Colne (B), £400 p.a. to the Hartley Hospital, whose staff undertakes district nursing; Darwen (B), £10 10s. p.a. and 1/- per visit; Droylsden, £10 p.a.; Farnworth, £10 10s. 0. p.a. and 1/6 per visit; Great Crosby, £100 p.a.; Huyton-with-Roby, £10 p.a.; Lancaster (B), £75 for midwifery and £60 for home nursing; Little Lever, £13 13s. p.a.; Middleton (B), £20 p.a.; Morecambe and Heysham (B), £25 p.a.; Nelson (B), £10 p.a. retaining fee, £18 p.a. contribution, and 1/- per visit; Newton-in-Makerfield, £20 p.a.; Oswaldtwistle, £10 p.a.; Padiham, £50 p.a.; Prestwich, £10 p.a.; Radeliffe, £10 10s. p.a.; Rainford, £10 p.a.; Rawtenstall (B), 4d. per visit to children under five years of age; Wardle, £10 p.a.; Whitworth, £5 p.a.; Widnes (B), £50 p.a.; Worsley, £8 8s. p.a.; Whiston (R), £3 3s. p.a., etc. In 1933 the County Council made a grant of £1,250 for the County and District Nursing Associations; other County grants to Nursing Associations are referred to on page 177.

LANCASHIRE COUNTY NURSING ASSOCIATION.—The following information has been supplied by the Superintendent of the Lancashire County Nursing Association :—

NO.	10	local Nursing	Associations	affiliated to	the County	Nursing	Associ	iation	 142
No.	of	Nurses emplo	yed by the a	ffiliated loca	l association	15 .			 194

The tabular statement on page 75 shows the number of visits, etc., paid by Nurses of the Lancashire County Nursing Association to "public health" cases in the Administrative County during the year 1932 :---

Name of Disease.	No. of new cases.	No. of visits.	Number conval- escent.	Number sent to hospital.	Number died.	Number removed from books for other causes.	Number remaining on books.
Pneumonia (except bronchial or complicating measles)	763	15,300	544	42	136	12	29
Fuberculosis (all cases)	174	6,482	63	30	52	2	27
Puerperal pyrexia and puer- peral fever	28	670	22	5	1		
Influenza (uncomplicated)	321	3,293	306		7	1	7
Measles	116	549	113		_	3	-
Measles with pneumonia	- 20	348	17	1	2	-	
Ophthalmia neonatorum	7	219	6	-	-	1	_
Chicken-pox	17	107	12			5	_
	36	259	36	_	_		_
	22	68	22	_			
	2	28	2				
Pemphigus neonatorum Other diseases in children						and and the	
under five years of age	1,272	15,427	1,180	21	29	9	33
Erysipelas	22	351	19	2	-	10.1-50	1
Mumps	2	4	2	-	-	-	-
Cerebro-spinal fever	6	57	-	2	4	-	-
Membranous croup	5	23	5	-	-	-	-
Scarlet fever	2	7	-	2	-	-	-
Typhoid fever	2	10	-	2	-	-	-
Encephalitis lethargica	6	151	2	-	3	-	1
Тотац	2,823	43,353	2,351	107	234	33	98
Concept Strategic and	N	lidwifery	Cases	1			
Number of midwifery cases atte Number of deaths of mothers hospital or elsewhere (no de	from al	l causes,	whether	taking	nent) place at 		1,71 in 
Number of times medical aid	sent for :-	and a second					51
<ul><li>(a) for mother during</li><li>(b) for mother during</li></ul>							78
(c) for mother during						1	19

75

Maternity Cases .--

Number of maternity	cases	attende	d (0	loctor	engaged,	midv	vife act	ing as	mate	rnity	040
nurse)											678
Number of deaths of m	others	(matern	ity o	cases)							1

Number of deaths of infants under a month old ... ... ...

642

51 41

142

... ... ... ...

...

...

Midwives.—No local authority, apart from the County Council and a few Municipal Maternity Homes, employs or subsidises a practising midwife. The number of midwives practising in the County area at the end of the year 1932 was 735. The work carried out by the County Council under the Midwives Acts is detailed on pages 172 to 178.

Legislation in Force.-The district health reports contain lists of special Local Acts or Local Orders, and of the byclaws in force relating to public health.

### SANITARY CIRCUMSTANCES IN THE COUNTY.

Water.—As stated in previous reports the populous portions of the Administrative County are, on the whole, well supplied with a constant, plentiful, pure and wholesome water supply. Many of the County rural districts also, as will be seen from the tabular statement on page 80, have public water supplies available for certain parishes or parts of parishes. There are, however, a number of parishes or parts of parishes, and outlying portions of urban districts, where the supply is inadequate or unsatisfactory. The provision of an efficient and pure water supply in many rural areas presents serious problems. For financial reasons rural areas must largely depend for supplies on local sources, and in many instances these sources are not free from the danger of pollution, are unreliable in times of drought, and often of doubtful quality. The cost of constructional works is usually prohibitive. A further difficulty encountered in the consideration of this problem is the absence of reliable data with regard to existing and potential sources of supply.

The Ministry of Health in Circular 1338, dated 12th May, 1933, draws the attention of County Councils and Rural District Councils to the need for improvement in rural water supplies. Cooperation between these bodies is advised, and it is urged that they exercise the powers conferred upon them by the Local Government Act, 1929, to contribute towards the cost of parochial schemes. A thorough survey of rural areas is needed in order that reliable information may be obtained as to the conditions of existing supplies and the availability of new supplies. The most economical course appears to be the development of local resources, except perhaps as regards villages which lie on or near a trunk main of a larger centre of population. In certain urban or semi-urban areas, owing to the amenities now possessed by the inhabitants and the increase in domestic consumption of water, the available supplies are none too plentiful.

The Ministry of Health advocates the setting up of Regional Advisory Committees.

Lunesdale (R).—Application for grant towards the cost of a scheme for the supply of water from the Manchester Corporation's Thirlmere Aqueduct to the township of Nether Kellet. The capital cost of the scheme is estimated at £3,010. The County Public Health and Housing Committee have decided to make a grant subject to the Rural District Council also contributing to the expenditure.

The following table shows the source of the water supply to each sanitary district, and the number of dwelling-houses supplied direct from the mains, or from stand pipes :---

### WATER SUPPLY.

DISTRICT.	TON TORIS BUILDER BUILDER	Approximate Number of Houses Supplied.			
	SOURCES AND QUALITY.	Direct.	BY STANDPIPE.		
URBAN.	and the sector (many d for section	meta weikes with	Them To badman		
Abram Accrington (B)	Liverpool Corporation. Constant. Dean Clough, Mitchell House, and Burnley Road reservoir; also deep well at Altham.	$\begin{array}{c}1564\\12446\end{array}$	n lan malant		
Adlington	Blackrod U.D.C. and Manchester	1059	and rear		
Ashton-in-Makerfield	Corporation. Good. Own works and 100,000 gallons daily from Liverpool Corpora- tion (Rivington).	4260	rol (b) 4		
Ashton-under-Lyne (B)	Ashton-under Lyne, &c. Water- works Joint Committee. Excellent.	All.	So, of ferrers of		
Aspull	Bolton Corporation and Blackrod	1630	Sumber of death		
Atherton Audenshaw	U.D.C. Good. Manchester and Bolton. Constant. Ashton-under-Lyne, &c. Water- works Joint Committee. Good.	4973 2400	 Not Do Tadattak		
Bacup (B)	Moorland. Excellent. (Private supplies to 821 houses).	5143	Vamber of dear		

District.			Approximate Houses S	
DISTRIC	T.	SOURCES AND QUALITY.	DIRECT.	BY STANDPIPE.
URBA	N.			
Barrowford		Nelson. Constant	All.	Great II. Irwood
Billinge and Win	stanley	Old quarry workings. Fair	1074	Hadingfor (B)
Blackrod		Own Waterworks. Rivington	900	
Brierfield	2089	gathering ground Good. Nelson Corporation. Good	2200	···· Seatspeak
Carnforth	7531	Carnforth Waterworks Co., Ltd.	782	Hoyward (II)
Chadderton	2022	Reservoir at Withets. Good. Oldham Corporation ; Heywood	7379	Hindby
Characterion		and Middleton Joint Water Board; springs and wells for		
Charlen (P)		a few houses. Liverpool Corporation (Rivington)	8420	Hayton-with-H
Chorley (B)	4757	Good	All.	Ince-m Makers
Church		Accrington District Gas & Water Board and Oswaldtwistle U.D.C.	All	
Clayton-le-Moor	s	Accrington District Gas & Water Board.		biann mild
Clitheroe (B)		Upland. Excellent	All.	
Colne (B)		Laneshaw and Bents reservoirs. Springs and Moorland. Pure	7282	
Commission		and very soft. Constant. Oldham Corporation mainly.	3918	Sirkham
Crompton	0000	Excellent	498	Loncadre (B)
Croston		mere.	Practically	Few in Marton
Dalton-in-Furne	88	Reservoir at Poaka Beck, Barrow Corporation.	all.	Village.
Darwen (B)		Moorland. Soft	10450	Inabral
Denton		Manchester Corporation. Good	All except 6.	6 Innatradital
Droylsden		Manchester Corporation. Very good.	3870	Littleborough
Eccles (B)		Manchester Corporation	All.	Little Hulton
Failsworth		Oldham Corporation. Manchester supply 36 houses in outlying	4187	
Thereas are		parts. Good.	7643	
Farnworth		Bolton Corporation-Upland gathering grounds. Soft.		9 Caravana
Fleetwood		Fylde Water Board. Good	5198	2 Caravans.
Formby		Southport and District Water Board. Very good.	2181	
Fulwood	-00112	Upland gathering area. Good	1608	
Golborne		Bulk supply from Ince. Wells in	1782	
Goldonike in	6108	Golborne, but controlled by Ince U.D.C., hard and frequently dis-		
		coloured. Constant, but pressure varies considerably and a booster		
		plant has been installed by the		Newton-In-Make
Grange-over-Sa	nds		Practically all.	
Great Crosby		Ground. Liverpool Corporation. Constant.	5473	16 houses on 3 standnings 14
70			I	standpipes, 14 of which are

77

standpipes, 14 of which are wooden bungalows at Hightown.

District.		Sources in Ourses		E NUMBER OF SUPPLIED.
. Distact.		Sources and Quality.	DIRECT.	BY STANDFIPE.
Urban.			2 anoral	Tan I
Great Harwood	• •••	Dean Clough reservoirs. Good	All except 6.	been make
Haslingden (B)		Bury and District Joint Water Board. Springs and wells. Constant.	4228	Without a state
Haydock		Rivington reservoirs. Good	2089	8
Heywood (B)		Heywood and Middleton Water Board, Good,	7781	
Hindley		Rivington reservoirs, Liverpool	5022	
Horwich		Corporation. Good. Moorland and Pumping Station. Good.	4173	
Huyton-with-Roby		Liverpool Corporation. Excellent.	1275	29 houses by
Ince-in-Makerfield		Council's own deep wells at Gol- borne and Liverpool Corporation	4757	8 taps. 10
Irlam		(Rivington reservoirs). Good. Manchester Corporation supply 3,183 houses; Warrington Corp- oration 9 houses; 1 from well, and	8192	·····
Kearsley		6 without proper supply. Good. Bolton Corporation; upland	2627	of an approximation
Kirkham		gathering ground. Soft. Fylde Water Board. Good	1079	
Lancaster (B)	Aner	Wyresdale north side, moorland	9900	About 400 by
Lees		surface and springs. Good. Oldham Corporation	All	90 standpipes.
Leigh (B)		Liverpool Corporation, Rivington	10565	Dallania-Ferry
Leyland		waterworks. Constant Clayton-le-Woods, and Thirlmere	2874	Destroyed
Litherland		Liverpool Corporation. Very	3785	Desperation of the
Littleborough		good. Rochdale Corporation, reservoir	I	2
Little Hulton		at Ramsden. Good	8250	in the second
Little Lever		Bury and District Joint Water	All.	Alterediate
Longridge		Board. Good.	All but one.	
Lytham Saint Anne's		Preston Corporation. Good	1020	
MELUIA (D)		Fylde Water Board. Excellent	7047	he man state of the
Milmour		Heywood and Middleton Water Board.	8297	At farms.
		Rochdale and Oldham Corpora- tions. Good.	2320	becomber
Morecambe & Heysha	um (B)	Lancaster Corporation reservoirs, millstone grit.	7712	Callenna
Mossley (B)		Swineshaw and Yeoman Hey reservoirs. Moorland. Good.	8816	
Nelson (B)		Moorland. Good	All.	
Newton-in-Makerfield		Deep wells (3) with headings in red sandstone and two deeper boreholes. Constant.	All (except 13)	
Norden		Heywood and Middleton Water Board and Rochdale Corpora- tion. Excellent.	821	Const Consta
Ormskirk		Deep wells in red sandstone. Constant.	4094	85
Orrell		Reservoir at Bispham under Wigan Corporation. Good.	1690	

DISTRICT.SOURCES AND QUALITY.DIRECT.BY STANDURBAN.OswaldtwistleOwn works, moorland. Fairly good. Pendle Hill. Good3520PadihamPendle Hill. Good3875Poulton-le-FyldeFylde Water Board. Good973PreesallFylde Water Board. Sometimes muddy in terminal mains. Constant.600PrestwichManchester Corporation. GoodAllPrestwichManchester Corporation, Bury and District Joint Board, and Hey- wood and Middeton Water Board. Good.Approx	PIPE.
OswaldtwistleOwn works, moorland. Fairly good.3520PadihamPendle Hill. Good3375Poulton-le-FyldeFylde Water Board. Good973PreesallFylde Water Board. Sometimes muddy in terminal mains. Constant.600PrescotManchester Corporation. GoodAllPrestwichManchester Corporation, Bury and District Joint Board, and Hey- wood and Middleton WaterApprox. 6000	
Padihamgood. Pendle Hill. Good3375Poulton-le-FyldeFylde Water Board. Good973PreesallFylde Water Board. Sometimes muddy in terminal mains. Constant.600PrescotLiverpool Corporation. GoodAllPrestwichManchester Corporation, Bury and District Joint Board, and Hey- woodApprox. 6000	
Poulton-le-FyldeFylde Water Board.Good973PreesallFylde Water Board.Sometimes muddy in terminal mains. Constant.600PrescotLiverpool Corporation.GoodAllPrestwichManchester Corporation, Bury and District Joint Board, and Hey- wood and Middleton WaterApprox. 6000	
PrecsallFylde Water Board. Sometimes muddy in terminal mains. Constant.600PrescotLiverpool Corporation. GoodAllPrestwichManchester Corporation, Bury and District Joint Board, and Hey- wood and Middleton WaterApprox. 6000	
Prescot         muddy in terminal mains. Constant.       Mains.         Liverpool Corporation.       Good        All.          Prestwich         Manchester Corporation, Bury and District Joint Board, and Hey- wood and Middleton Water       Approx.	
Prescot         Liverpool Corporation.       Good       All.          Prestwich         Manchester Corporation, Bury and District Joint Board, and Hey- wood and Middleton Water       Approx.	
District Joint Board, and Hey- wood and Middleton Water	
Board, Good,	
Radeliffe Bury and District Joint Water 7061	
Rainford St. Helens Corporation. Good Nearly all	
Ramsbottom Bury & District Joint Water Board. 3895 Good. Some private supplies.	
Rawtenstall (B) Bury & District Joint Water Board supply three-fourths, remainder private. Good. 5762	
Rishton Accrington District Gas and Water 1750 17 Board, Good.	
Royton Oldham Corporation. Good 4393	
Skelmersdale Artesian well. Good 1398	
Standish-with-Langtree Liverpool Corporation. Anglezarke Practically all.	
Stretford Manchester Corporation. Good. 14548 Three wells (to farms). Fair.	
Swinton and Pendlebury Manchester Corporation. Good 9269	
Thornton Cleveleys Fylde Water Board. Good 3089	
Tottington Bury and District Joint Water 1548 Board, Constant,	
Trawden Boring on Boulsworth Hill. Ex- 700	
Turton Bolton Corporation. Constant. 3012	
Tyldesley-with-Shakerley Manchester Corporation (Thirl- All mere). Good.	
Ulverston Reservoir at Pennington, Nearly all. Few hot Ulverston (R.). Good. Rosside	
Upholland Two deep wells. Good 1295	
Urmston Manchester Corporation. Good. All	
Walton-le-Dale Deep well at School Lane, Bamber 3346 5 Bridge, and Thirlmere reservoir, (Manchester Corporation).	
Wardle Rochdale Corporation. Good 775	
Waterloo-with-Seaforth Liverpool Corporation. Good 7420	
Westhoughton Bolton Corporation. Satisfactory. 4030 8	
Whitefield Upland surface. Variable All	
Whitworth Rochdale and Bacup Corporations. 2158	
Widnes (B) Deep well in sandstone. Excellent. 8979	

WATER OUT	LI COMMUNIC			
Distri	Contract of the	Sources and Quality,		E NUMBER OF SUPPLIED.
DISTRI	er.	SOURCES AND QUALITY.	DIRECT.	By STANDPIPE.
Urba	N.			in'i
Withnell		Liverpool Corporation. Good	775	26
Worsley		Bolton and Manchester Corpora- tions. Constant.	All but one.	(and springs)
		Tide Water Baint Coal		Poutton-le-Fyl
RURA	L.	Sand Water Board - Sound State VI able	1	
Barton-upon-Irv	vell	Manchester and Bolton Corpora-	Practically	
		tions. Good.	all.	topent.
Blackburn		Blackburn, Manchester and Dar- wen Corporations. Remainder	2500	
-		from private reservoirs and wells.	ALL	
Burnley		Council's own waterworks and those of adjoining towns. Upland	5144	Approx. 20
		surface and springs. Quality		
Bury		mostly good, a few fair. Bury and District Joint Water	1074	150
Bury		Board ; Heywood and Middleton	1974	150
		Water Board ; Bolton Corpora- tion. Very good.		
Chorley		Mainly Manchester Corporation	4390	Rawelloutall (1)
		(Thirlmere); Rivington supplied		
		by Liverpool Corporation ; private supplies and wells.		
Clitheroe		Springs and wells ; auxiliary	1285	275
		supply from Clitheroe Corpora- tion to Whalley if required.		
Fylde	•••	Fylde Water Board. Constant	4296	Shelpereddale
Garstang		Principally from Fylde Water	2315	25
		Board ; Manchester Corporation,		ALL WOLCH COLUMN
		and private mains, all constant. Shallow and deep wells, upland		
		springs and streams,		Swinter and P
Lancaster		Lancaster, Manchester, Heysham, and Carnforth. Good. Some	1835	28
		roof water supplies and wells,		
Leigh	1945	satisfactory; other supplies bad. Manchester, Liverpool, and	2650	notomittoT
	007	Warrington.		a data a data
Limehurst		Mostly Ashton-under-Lyne and District Waterworks Committee;	90% (27 houses by	5
		Oldham Corporation. Constant.	Oldham)	
Lunesdale		Thirlmere, Caton reservoir, pri- vate supplies.	2040	diamer 57 miler
Preston		Preston and Manchester Corpora-	7138	Compared a
		tions, Fulwood U.D.C., Fylde Water Board. Constant.	10000	
Ulverston		Various. Chiefly Pennington and	Not recorded.	Epholiand
		Seathwaite reservoirs. Cartmell supplied by Grange Good.		
Warrington		Warrington and Liverpool Cor-	3473	Watter-le-Dal
		porations. Very good, but	1000	
		rather hard. Also few wells in outlying parts.		
West Lancashire		Upland water, surface, deep wells,	6095	20

Upland water, surface, deep wells, etc. Constant, except in Rufford where there is a shortage at times.

Mainly from Liverpool, St. Helens, and Widnes Corporations. Constant. Wells in outlying districts—not always depend-

arious. Chiefly springs, wells and moorland. Fair.

6095

4208

1329

20

12

West Lancashire ... ... Whiston

....

able.

... Various.

## Wigan

The following comments are made by district Medical Officers of Health in regard to the local water supplies :---

Billinge and Winstanley.—" The supply has been of ample quantity, but in view of the findings at a recent analysis one can hardly consider the quality from the Cobmoor source as satisfactory, nor may one regard the Shaley Brow supply as entirely free from risk of contamination, and in consequence of the limited quantity of water to be obtained from St. George's tunnel we are at present left with the Upholland supply as the most constant in quantity and quality. We are fortunate, however, in that we have another as yet undeveloped source in the district, which has undergone all the tests satisfactorily, and which, if present arrangements mature, will be able to supply us with the whole of our water. Pending such developments, the unsatisfactory source of supply has been discontinued, and the area is at present being supplied chiefly with Upholland water."

Golborne.—The water supply during the year has again been very unsatisfactory. At its best, it is very hard, and it has frequently been discoloured with an insoluble deposit, which latter has caused continual incrustation in the mains. On account of the incrustation the bore of the mains becomes greatly reduced, causing such a diminution in pressure that houses in the higher parts of the district have at times been unable to draw water for varying periods. The Ince Urban District Council, who supply the water, reported 12 months ago that the deposit was only a temporary phase owing to fresh boring operations. This, however, does not appear to be so, and unless there is a great improvement in the near future the Council will have to consider the question of seeking release from the Act of Parliament which gives Ince the monopoly of supplying the district.

Haydock.—An open reservoir existing in the midst of a crowded population is always liable to contamination and is a constant source of anxiety. The Council is strongly recommended to warn the inhabitants when water—which is a temporary measure during the interruption of the regular supply—from this source has to be consumed, to enable them to take precautions of boiling it before using it for drinking purposes. The Council have now under consideration the construction of a more suitable reservoir.

Newton-in-Makerfield.—The water supply is now adequate since the new well completed last year was connected to the mains, and its quality has always been satisfactory.

Ormskirk.—Frequent complaints as to shortage, especially at the beginning of the week, have been received from the Burscough and Newburgh areas. A scheme to remedy these defects is under consideration, and will most likely be in operation in 1933.

Oswaldtwistle.—There is risk of contamination from the manuring of land adjoining the gathering ground, and in this connection Cocker Cobbs farm on the gathering ground was acquired by the Council during the year 1928. In previous reports reference has been made to the threatened inadequacy of water supply to the township in general and to the negotiations with a private firm; these negotiations have, however, broken down.

Turton.—There is very occasional liability to lead solvency due to the peaty character of the gathering ground, but the water is submitted to analysis several times during the year, so any contamination by dead or other matter is detected and immediately remedied; also every possible precautionary methods are adopted at the source to maintain its purity.

Chorley (R).—Brindle water supply.—This year a beneficial improvement has been accomplished by the carrying out of a water scheme in this township. Mawdesley water supply.—This township is urgently in need of a water scheme. At the present time the inhabitants have to depend on wells and springs, and where these are not available the building of additional houses is retarded.

Clitheroe (R).—There were a number of complaints from the people of Wiswell that the water was foul smelling and that there was a brown sediment coming through the pipes. The reservoir was cleaned out and apparently the water is now satisfactory. There are several farms and small hamlets where the supply is not so good. The local Authority have purchased the water rights on Whalley Moors and have fenced round the gathering grounds.

Lunesdale (R).—Several schemes suggested to improve the water supplies to the villages of Gressingham, Over Kellet, Nether Kellet and Millhouses, but nothing has yet been done. In the case of Over Kellet and Nether Kellet several samples have been analysed and were found to be unfit for drinking purposes. To rectify this it is proposed to take a supply from the Thirlmere main, this appears to be the only alternative.

F

Ulverston (R).—Years ago the Council formulated water supply schemes and considered matters from the point of view of necessity and with due regard to the public health. The foremost question in these days appears to be purely one of finance. The question of preserving the health of the public should far outweigh any monetary consideration, and discontinuation of grants does not mean that schemes of water supply, already planned, will be shelved indefinitely. Egton-with-Newland and Lowick.—There can be little doubt that a water supply to the several important villages in these townships is much more necessary than it was over thirty years ago, when the question was first under consideration. Many new houses have been built, whilst baths and w.c.'s have become general, and further, the villages of Penny Bridge and Greenodd are very popular summer resorts. It is hoped that the Council will not allow the absence of a grant-inaid to warp their consideration of the necessities of these villages. Osmotherly (Broughton Beck).— The water supply to the hamlet of Broughton Beck has been the subject of report since the year 1928. The supply is at all times most unsatisfactory, and after a short period of drought fails entirely. Not only so, but the sources from which the ordinary supplies are taken are open to grave pollution from several farms. The Engineer has presented a gravitation scheme to the Authority which should be quite satisfactory, and should not lay any too heavy a burden upon the ratepayers.

West Lancashire (R).—The township of Bispham is almost dependent on wells, but it is hoped that a supply from the new bore hole at Wrightington will shortly be available. Plans for the mains throughout the township have already been drawn.

Wigan (R).—In various parts of Wrightington, water has to be carried from wells, where there is always the danger of contamination, either animal or human. The Council have commenced a scheme for providing Appley Bridge with a water supply which it is intended will ultimately supply the whole of Wrightington, and also, if required, the surrounding parishes. The Parish of Dalton is without a public supply of water, with the exception of a few houses supplied by outside authorities. The supply available consists of wells and springs, which generally are in a poor condition. A piped supply is urgently needed for this parish.

Improvements and Extensions in 1932.—The following are extracts from the local reports :— Aspull, reservoir of 100,000 gallons capacity and new pipe lines completed ; Lancaster (B), new storage reservoir under construction at Langthwaite ; Littleborough, main extended in the Hollingworth Road district, and 13 houses supplied ; Morecambe and Heysham (B), new 12" main to West End district ; Ormskirk, a new water tower of 150,000 gallons capacity, and 4,207 yards of mains installed during the year ; Ulverston, 681 yards of new water mains laid to replace inefficient and defective mains ; Burnley (R), 870 yards of 6" main in place of 3" main laid in Read ; Garstang (R), completion of 50 miles of new water mains by the Fylde Water Board ; Lancaster (R), a scheme to provide water from the mains of the Fylde Water Board to the townships of Cockerham, Thurnham, and part of Ashton-with-Stodday, was commenced in October—mains also extended to meet building developments ; Leigh (R), mains have been extended in Risley, Newchurch, and Astley ; Lunesdale (R), mains renewed at Halton ; Wigan (R), a new 4" main laid to the Leyland Mill area of Haigh—this district has now an abundant water supply. Extension of mains :—In many districts water mains have been extended to new housing estates, new property, etc. ; Bacup (B), 274 yards ; Chorley (B), 300 yards ; Middleton (B), 464 yards ; Walton-le-Dale, 2,329 yards ; Whiston (R), 4,477 yards, etc.

Possibilities of contamination, due mainly to surface contamination, are reported from :-Abram, open storage reservoir; Billinge and Winstanley, catchment area, which is agricultural land; farmers advised to discontinue use of nightsoil on catchment area; Darwen (B), possibility of contamination in vicinity of dwelling houses; Haydock, open emergency reservoir used occasionally during breakdown of ordinary supply (used 3 times during 1932); Morecambe and Heysham (B), two samples analysed from a suspected defective source were found to be unsatisfactory; the defect was remedied; Oswaldtwistle, from manuring of land adjoining gathering ground, 23 samples examined and the results showed evidence of pollution. Council are seeking compulsory purchase order for land acquisition; Ramsbottom, manured fields in the case of private supplies; Thornton Cleveleys, samples from wells showed some contamination from cultivated land; Burnley (R), a slight possibility from gathering grounds of one or two supplies, two samples examined—supplies condemned; Garstang (R), shallow wells by surface drainage; Leigh (R), three surface wells found to be contaminated are not now in use, three found contaminated with excretal matter—supplies closed; Lunesdale (R), several results showed water unfit for drinking purposes—proposed to obtain a supply from the Thirlmere water main; West Lancashire (R), about 50 per cent. of the samples from private wells are unsatisfactory ; Whiston (R), some of the wells are liable to contamination ; Wigan (R), two samples unsatisfactory ; and wells closed ; Heywood (B), Water Board have acquired the whole of the gathering ground so as to ensure a pure supply of water.

Liability to plumbo-solvent action :—A few instances are reported :—Colne (B), supply is liable to acidity from the peaty gathering ground, but is corrected by the addition of lime after filtration; Darwen (B), the water is slightly acid and is treated with sodium carbonate before sand filtration, and limestone is also placed in the bed of the brook at the intake; Haslingden, (B), satisfactory except for plumbo-solvency, the Water Board are taking action with regard to this; Haydock, strongly plumbo-erosive; Heywood (B), the water is filtered and receives an admixture of lime to prevent plumbo-solvent action; Leigh (B), slight possibility, but corrected by limestone and soda-ash; Burnley (R), one small supply which serves about 20 houses liable to plumbosolvent action; Chorley (R), tin-lined pipes are insisted upon in new buildings.

Insufficient or unsatisfactory supplies are reported upon from :—Dalton-in-Furness—Outlying districts ; Ormskirk—Burscough and Newburgh (Scheme in preparation) ; Ramsbottom— Nuttall Village and Holcombe ; Burnley (R)—Townships of Read and Sabden (parts) ; Fylde (R)— Parishes of Treales, Roseacre, and Wharles ; part of Warton ; Lunesdale (E)—Gressingham, Over Kellett, Nether Kellett, Tatham ; Preston (R)—Outlying areas ; Ulverston (R)—Greenodd, Pennybridge, Lowick, Broughton Beck ; Warrington (R)—Part of Cuerdley ; Whiston (R) a few isolated houses, chiefly in Kirkby and Bold ; Wigan (R)—Dalton and part of Wrightington.

**Rivers and Streams.**—A very considerable portion of the Administrative County, including the main industrial area, is under the jurisdiction of the Mersey and Irwell and the Ribble Watershed Joint Committees as regards the pollution of rivers and streams. Elsewhere the County Council is the Authority.

The local reports contain references to the action taken to prevent or minimise the pollution of rivers, streams, ditches, etc. At Golborne further attention has been given to pollution from the artificial silk works. At Littleborough complaints have been received of very disagreeable odours from the effluent of a silk works both before and after it is discharged into the river. The pollution of Sankey Brook, Warrington (R), has received special attention during the year; extensive dredging has been carried out in a joint scheme estimated to cost £5,000. This stream receives a large quantity of trade effluents.

The Joint Advisory Committee on River Pollution has given consideration to the question of the admission of trade effluents into the public sewers, etc.

Among the local comments are :--

Hindley—It was necessary to draw attention to the pollution of Borsdane Brook, due to the discharging of ochrey water from colliery workings. Amicable arrangements have been made with the parties concerned, and every effort has been made to mitigate the nuisance.

Newton-in-Makerfield.—Since the new sewage works in Golborne came into service, the pollution has not been so severe; there has been a vast improvement in the water in Newton Lake. Although still polluted from Golborne, and in a lesser degree from Haydock, there must be still further considerable improvement when the whole of the sewage works in Golborne have attained the full activity. The Newton Brook below the lake is still polluted by the dye works in Newton, and by the Newton sewage. As the sewage works have already been partially brought into action, and will, in the next month or two, be complete, there will be practical elimination of every form of pollution from this source.

Garstang (R).—The rivers and streams are seriously polluted from some of the sewer outlets. The sewerage schemes of Garstang, Bonds, and Bowgreave should be completed and the sewage treated before entering the river. The pollution of the rivers is aggravated by the large quantities of water extracted in the higher reaches for water supply purposes.

Drainage and Sewerage.—Each district report gives briefly the character of the sewage disposal works and the method of treatment, and also refers to any extension or improvement in character and sufficiency of the works, together with a statement of extension of sewers, &c., which has taken place during the year.

Amongst the schemes reported by local Medical Officers of Health as having been initiated or carried out during the year are the following :--Carnforth, schemes approved for sewering Lower Crag Bank district, and for a relief sewer for Highfield district, the latter was completed in February, 1933; Eccles (B), works greatly extended during the year; Fleetwood, main sewerage system in progress for western portion of district; Fulwood, improved sprinklers at the sewage works; Golborne, the old "contact" beds have been replaced by an entirely new system of "automatic sprinklers"; Heywood (B), complete redrainage insisted upon as conversions to w.c.'s occur, lack of sewers handicaps installation of w.c.'s; Ince-in-Makerfield, new sewer completed; Kirkham, scheme in hand for improving Orders Lane sewer; Leyland, new sewerage works opened during the year-sedimentation and filtration; Littleborough, 9" sewer provided in the Whitelees district, new 24" sewer to the river to discharge the effluent from artificial silk works, new mill, etc., to replace existing defective stone sewer; Newton-in-Makerfield, sewage works being completed; Ormskirk, large scheme in progress; Prestwich, extension to sewage disposal works nearing completion; Radcliffe, works extended and modernised; Rainford, works almost completed; Whitworth, new detritus pits and screening chambers, percolating filters, humus tanks and ejection chambers and storm water tanks have been constructed, alterations Among the comments by district Medical Officers of Health are the following :--

Abram.—A scheme for improving the sewerage of Bickershaw and Plank Lane has been approved by the Ministry of Health, and the work will be completed in 1933.

Adlington.—The most notable sanitary improvement in 1932 has been the completion and modernisation of the sewage disposal works at Harrison's farm, and the construction of a new sewer.

Golborne.—Perhaps the most important event has been the installation of a completely new system of sewage treatment, in place of the old filter beds. Three of the latest type of automatic sprinklers have been crected, with new settling tanks and new arrangements for dealing with storm water. Ample room is left for the installation of further sprinklers as the district develops.

Lancaster (B).—The Town Council adopted a scheme in 1932 to discharge the bulk of the town's domestic sewage and trade wastes into the Lune at Stodday, further down the estuary. Hitherto, the outfalls, with one exception, have been within the Borough, and in the summer months many children use the polluted river water as an open-air bath.

Leyland.—Application was made to the Ministry of Health for borrowing powers to the extent of £33,000 to finance a drainage and sewage disposal scheme.

Burnley (R).—The sewerage scheme at Old Laund Booth (Wheatley Lane) was completed during the year and has effected a great improvement in the sanitary condition of the village. Sewerage schemes are required for the parishes of Cliviger, Dunnoekshaw, Higham, Hapton (Lane Ends area) and Briercliffe (Lane Bottom area).

Bury (R).—A new sewerage system is required for the village of Ainsworth, and improvements to the Ringley works are needed in order to provide for conversion of privies in the village of Ringley.

Clitheroe (R).-Certain townships-viz., Aighton, Chaigley, Little Bowland, Little Mitton. Pendleton, and Leagram-are without a proper drainage system.

Garstang (R) .- Sewerage schemes are needed for Garstang, Bonds and Bowgreave.

Limehurst (R).—The question of the proper sewering of the parishes of Littlemoss and Woodhouses, with the necessary disposal works for the treatment of the sewage, cannot be put off indefinitely, and the same comments may be applied to parts of the parishes of Alt and Hartshead.

West Laneashire  $(\mathbf{R})$ .—Too much cannot be said against the antiquated cesspool, especially in cases where, as so frequently happens, it is in close relationship to a cottage with a small amount of land, where the onus of emptying it devolves upon the tenant, and, as a result, the land becomes filth-sodden and a menace to the community.

Ulverston (R).—Allithwaite Lower (Allithwaite).—For many years the necessity has been emphasised for the adoption of some comprehensive method for dealing with the sewage of the village of Allithwaite, and with the extension of building this has become more than ever urgent. A sub-committee has been appointed to consider the question, and it is hoped that at no very distant date a scheme will be promulgated. Coniston.—In the report for 1931 stress was laid on the necessity for a more comprehensive scheme of sewerage and sewage disposal for Coniston, and it is now reported that by the extension of the nine-inch sewer (170 yards) seven cottages, known as 'The Forge,' and four cottages, known as 'Dixon Ground,' have been connected with the main sewer.

Warrington (R).—Owing to the continued fouling of ditches in almost every parish by the effluents from the large number of septic tanks—at present the main method of dealing with house-hold sewage—the question of the provision of an adequate sewerage scheme for the whole district becomes yearly more urgent in order to minimise the nuisance arising from the smells which come therefrom, and, more important still, the spoiling of the natural drinking water supply for animals.

Wigan (R).—The unprecedented number of buildings crected during the year brings the question of a comprehensive scheme for the sewering of the three central parishes appreciably nearer. Water courses are becoming more fouled and annual charges for keeping them clean are increasing. A scheme was prepared for the sewering of Wrightington, Shevington and Parbold. The estimated cost was £45,000, including the provision of three disposal works. Unfortunately the financial condition of the country caused the Government to reduce the Unemployment Grant to such an extent as to prevent the Council considering the scheme further without putting a tremendous burden on the rates.

Local Government Act, 1929.—Since the last County Report only one application has been received by the County Council for a grant under Section 57, viz. from the Huyton-with-Roby Urban District towards the cost of sewerage extensions and the reconstruction of sewage works. The cost of the combined schemes is estimated at £53,534. This application is now under consideration.

**Closet Accommodation.**—Table 4, pages 86 to 92, shows approximately the number of the various types of closet accommodation in each of the County districts at the end of the year 1932.

This accommodation may be summarised as under :---

				Urban districts.	Rural districts.	County.
Privy Middens			÷	 8,415	14,222	22,637
Privy Closets				 12,892	19,088	31,980
Pail Closets				 19,484	10,439	29,873
Water Closets				 324,450	31,610	356,060
Waste-water Close	ts			 82,715	3,916	86,631
Ashpits (excluding	midde	ens)		 40,008	7,809	47,317
Movable Ashbins				 333,741	31,231	864,972

The figures below, collated from local health reports, indicate the action taken in the County districts during 1932 and the preceding four years to abolish the insanitary types of privy, &c., accommodation :---

		1928	1929	1930	1931	1932
Privies converted to Water Closets	 	2845	2724	2522	2417	1883
Privies converted to Pail Closets	 	199	165	204	146	152
Pail Closets converted to Water Closets	 	1401	1543	2730	2229	1736

Progress is reported in 1932 in the direction of abolishing the privy midden and the substitution of the water-carriage system—in Skelmersdale 252 privies were converted, Golborne 229, Whitefield 152, Aspull 101, Burnley (R.) 100, Ulverston (R) 80, Ince-in-Makerfield 78, Leigh (R) 66, Ormskirk 61, etc. Reference to Table 4, pages 86 to 92, will show the relative high proportion of privy closets still in existence in certain districts, for example, Ince-in-Makerfield 1859, Ormskirk 1134, Standish-with-Langtree 851, Abram 813, Orrell 736, Rainford 672, Tottington 499, Billinge and Winstanley 496, Upholland 465, Skelmersdale 439, etc., and in the rural districts where there are still over 19,000 privy closets.

The following paragraphs are extracted from the local reports :---

Ashton-in-Makerfield.—The Medical Officer of Health suggests that the present pail closets should be converted to water closets, as the pail closets are most objectionable and very expensive to scavenge.

Golborne.—It is worth recording that further progress in the matter of closet conversions has been made, numbering 229, leaving only 155 still to be dealt with, included in which are 51 in outlying districts where such conversion is not practicable. Over 90 per cent. of the houses in the district are now on the water-carriage system after about five years' work.

Hindley.—Further progress was made, and 208 fresh water closets were provided during the year, in lieu of 197 pail closets, 3 privy closets and 2 waste-water closets. Power was granted by the Ministry to raise a loan of £5,000 to complete the scheme.

Oswaldtwistle,—Until a plentiful supply of water is assured conversions of closets have to be proceeded with cautiously. This particularly affects the village of Belthorn, the supply there being insufficient to allow of fresh water closets being installed generally.

Skelmersdale.—The steady improvement in the health conditions of the town is in no small part due to the Council's progressive policy of gradual conversion of the closet accommodation of all dwelling-houses to the water-carriage system. Two hundred and fifty-two conversions took place during 1932, making a total of three hundred and twenty-six during the past five years. ADMINISTRATIVE COUNTY OF LANCASTER.

# TABLE 4-CLOSET ACCOMMODATION.

15	Fresh W.C.'s.		554	60	:	:	ingen	80	-	9	15		10	80	T	2	19	14	1
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s pus	Pail Closets to Fresh W.C.'s.		135	:	89	-	61	1	-	529	8		:	-	:	483	-	17	
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Gart.	No. of Freshwater Closets.	879	3833	1021	837	4658	1153	3377	1535	3694	356	306	570	655	704	3733	8201	406	285
Service Hitle	No. of Ashpits (excluding middens).	186	48	x	2855	732	10	:	66	10	750	48	9	1850	289	61	10	680	866
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	Appendix Constant Constant	Haslingden (B)	Haydock	Heywood (B)	Hindley	Horwich	Huyton-with-Roby	Ince-in-Makerfield	Irlam	Kearsley	Kirkham	Lancaster (B)	Lees	Leigh (B)	Leyland	Litherland	Littleborough	

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1 9 D	Pail Closets to Waste W.C.'s.	:		:	:	:	55	:	;		:		:	:	-	-	11:	-	:		
stows pump 1927-1931.	Pail Closets to Fresh W.C.'s.	9		60	36	:	64	30		1912			I			14	11.1	10	45		
I 927-	Privy Closets to Pails, &c.	;		(*	+		:				:			;	10	13	31.		14		
TOTAL CONVERSIONS DURING 1927-1931.	Privy Closets to Waste W.C.'s.	1		:	:	:	10	:	:	;	:		:	:	20.00		dif.		:		
TOTAI	Privy Closets to Fresh W.C.'s.	396		ø	214	:	84		:	:	326		92	:	11	4	3		272	100	
	Waste W.C.'s. to Fresh W.C.'s.	:		13	2	:	01	14	01		:		:	*		01	1.0		01		
1932.	Pail Closets to Waste W.C.'s.	;					:			-	;		:	:	and the		11.2			:	
DURING 1932	Pail Closets to Fresh W.C.'s.				01	:	:	9	i	8			1			-	11	63	10		
SIONS 1	Privy Closets to Pails, &c.	:		10		:	:	:			1		:	:	100		1		00		
CONVERSIONS	Privy Closels to Washe W.C.'s.	:				:	:	:	5	:			:		11		715	1			
	Privy Closets to Fresh W.C.'s.	1			14	:	::	:	:	:	252		46	:	1	7	56		렩	38	
ud	Council's Contributio towards Cost of Conversion.	Pedestal	ashbin	three as	Half-cost	:		Half-cost	10 to 54		Pails-whole	half-cost	Minimum of \$2 per closet	£5 per W.W.C.	340	Half-cost	Pedestal and		Half-cost	Half-cost	
	No. of Waste Water Closels.	:		190	1381	:	1419	3796	936	946			1	13	137	15	149	239	1617	565	
	No. of Movable Ashbins.	2051		5910	5895	195	3411	0837	1486	3620	688		603	5102	9259	3070	764	341	1124	2049	
	Closets.	2320	141	7180	6157	197	2449	3251	519	3.592	933	-	798	880.5 1	9112	3040	1004	199	1798	2855	1
	No. of Ashpits (excluding middens)	241	A.V.	217	585	:	99	449	160	30	128	8	25	38	:	13	255	268	6111	606	
	No. of Pail Closets.	24		135	50 50 50 50	:	447	554	12	21	26	14	40	131	12	28	255	290	80	1	
N.	No. of Privy Closets	59		45	ų	672	84	24		60	439	=	851	1	9	13	409		204	150	
Privy Middens.	No. of Middens.	59	-	<b>23</b>	55	632	38	24		01	210	N	388	1	60	13	348	:	88	88	
		:	Ĩ.	;	:	:	:	:	:	:	:	1	:	:	:	:	:	:	:	:	
		:		:	:	:	:	:	:	:	:		:	:	:	:	:	:	:	:	
	ucrs.	:		:	:	1	1	:	:	:	:		1	:	:	:	:	:	:	:	
	URBAN DISTRICTS.	:		:	:	:	:	:	:	:	:		:	:	:	:	:	:	:	:	
	RBAN	:		:	:	1	:	:	:	:			gtree	:	ebury	:	:	:	;	kerley	
	n	1		:	:		::	(B)	:		e		th-Lan	:	I Pend	eveleya	:	:	:	th-Sha	
	Louise p	Prescot		Prestwich	Radeliffe	Rainford	Ramsbottom	Rawtenstall (B)	Rishton	Royton	Skelmersdale		Standish-with-Langtree	Stretford	Swinton and Pendlebury	Thornton Cleveleys	Tottington	Trawden	Turton	Tyldesley-with-Shakcrley	

1	Fresh W.C.'s.					-		-			-		-	+1	-		
5 YEARS,	Waste W.C.'s. to	:	:	:		36	:	-	<b>a</b> .	1	I	1		1794	I	:	
	Pail Closets to Waste W.C.'s.	:	:	:		:		:		:	:	1		27	1	;	:
1931.	Pail Closets to Fresh W.C.'s.	F		:	317	:		:	1	259	: 0	213	:	8504		55	Ш
IST-1931.	Privy Closets to Pails, &c.	-		:	Ħ	:		1	:	:	:	:	00	233	10	65	63
TOTAL CONVERSIONS DURING 1927-1931.	Privy Closets to Waste W.C.'s.	:	:	:	1	:	:	:	:	:	1	:	-	30	-		:
TOTAL	Privy Closets to Fresh W.C.'s.	43	152	01	11	10	:	825	282	:	109	:	767	10882	162	9	1.
- AL	Waste W.C.'s. to Fresh W.C.'s.	1	1	1	01	10	:	:	1	1	00	:	1	122	1	:	4
1932.	Pail Closets to Waste W.C.'s.	:	:		:	:		:	:	1	1	:				:	;
DURING 1932	Pail Closets to Fresh W.C.'s.	*:	:	:	20	:		:	:	378	:	4		1354		9	28
d SNOI	Privy Closets to Pails, &c.	1		:	1	:	:	-	:	:	ø	1	1.6	63	æ	:	œ
CONVERSIONS	Privy Closets to	:	:	:	:	:			:	:	:	1	:		:	:	
0	Privy Closels to Fresh W.C.'s.	-81	00	8:	04	00	=:	-	152	:		E	26	1424	-	:	100
	Council's Contribution towards Cost of Conversion.	pd Save-Hall	£5 per closet	1	Half-cost	£4 per closet		Half-cost	Half-cost	Each case considered	\$5 10s. per closet	Up to £4 10s. per closet			1	Whole cost in Livesey	:
1	No. of Waste Water Closels.		- :	11	301	48	:	109	151	161	1446	44	81	82715	-	81	2418
10111	No. of Movable Ashbins.	2069	580	2504	2883	650	7728	3295	2822	1254	8879	383	3525	333741	1008	1550	2508
1000	No. of Freshwater Closets.	2284	843	2513	2759	480	1576	8759	2944	1329	7478	420	4128	324450	1200	2005	1489
	No. of Ashpits (excluding middens).	58.0	107	Ŧ	203	9	36 1	619	x	588	15	251	403	10008	81	:	1946
1 and	No. of Pail Closets.	9	24	:	266	154	6	9	34	356	ø	342	19	19434 4	01 01	798	670
	No. of Privy Closets.	41	465	14	31	\$	:	170	28	:	213	:	96	12802 1	210	:	Taala486
Privy Middens.	No. of Middens.	35	310	*	30	3	:	118	28	:	213	1	48	8415 1	134	:	
1000		:	:	:	:	:	:	:	:	:	. :	:	:	:	i	:	:
-		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	;
	STS.	:	:	:	:	:	:	:	:	:	:	í	:	:	CTS.	:	:
	URBAN DISTRICTS.	:	:	:	:	:	:	:	:	:	:	:	:	:	RURAL DISTRICTS	:	:
	AN D	:	:	:	:	:	orth	:	:	:	:	:	:	cts	RAL D	:	1
	URB		:	:	de	:	h-Seaf	g	:	:	1	:	:	Distri	RUI Iuwell	:	:
		Ulverston	Upholland	Urmston	Walton-le-Dale	Wardle	Waterloo-with-Seaforth	Westhoughton	Whitefield	Whitworth	Widnes (B)	Withnell	Worsley	Total Urban Districts	RUH Barton-upon-li well	Blackburn	Burnley
1		1 5	D	0.	W	W	W	M	M	M	M	M	M	F	B	B	B

A DUTE

I

18.	Waste W.C.'s. to Fresh W.C.'s.	1 :		;	01					:	:	:		:	1.44	1	23	1817	1
5 YEARS.	Waste W.C.'s.	:	:	-	:	:	:	:	:	:	:	:	1	;	1122	11:5	-	1 28	-
URING I.	Presh W.C.'s.		23	10	14	39	14		24	:	231	01	93	81	5	ACT	726	8230	
TOTAL CONVERSIONS DURING 1827-1931.	Pails, &c.		15	50	-	36	50		114	10 .	65 2		84	69	Parts C	. 15	10		-
191 192	Privy Closets to		*7	01		69	G4		=	-	•		80	-	Puls:	Closen	61	848	_
AL CON	Privy Closets to Waste W.C's.	1	-	-	:	:	:	1	:	-	:	:	:	:	[aug	dis.	11	8	
TOT	Privy Closets to Fresh W.C.'s.	111	136	01	102	14	100	10	202	10	16	307	15	160	135	11	2083	12965	
	Waste W.C.'s. to Fresh W.C.'s.	:	:	:	:	:	:	::	:	:	:	:	:	:	Wang.	11:00	4.0	525	
1932.	Pail Closets to Waste W.C.'s.	:	:	-	:	;	:		;	;	:	;	:	:	Cong L	416 I	1	1	
DNING	Pail Closets to Fresh W.C.'s.	:	t-	01	:	10	1	1	141	+	40	:	9	01	103	1	381	1785	
I SNOIS	Privy Closels to Pails, &c.	51	=	:	:	+	œ		4	:	:	:	15	9	e0	8	88	152	
CONVERSIONS DURING 1932.	Privy Closels to Waste W.C.'s.	:	:	;	;	:	;	:	:	:	:	:	:	:	Late I	A G		I	
0	Privy Closels to Fresh W.C.'s.	88	14	-	55	9	19	99	-40	26	9	80	1	27	Laise a		459	1883	
u	Council's Contributio towards Cost of Conversion.	:					:	25 per closet	Whole cost			:	:	Half-cost in Auchton and	Magbull Half-cost	n Con		1	
	No. of Waste Water Closets.	100	1.1.1	316	14	;	16	1	517	:	425	:	15	80	- IA MARK	A sector	3916	6631	
	No. of Movable Ashibitas.	538	3.589	ecord	2241	1048	521	614	1325	316	1945	301	2743	2141	2138	485	31231	336060 364972 86631	
	No. of Freshwater Closets.	1108	1833	390	2822	913	383	960	277	675	3524	1591	1578	2709	2459	365	31610	60603	
	(exelution gaibuloxe)	100	153 1	no record	556 2	558	466 1	69	333	242		1150 1	14 1	754 2	601 2	173	7309 31	17 10.	-
	No. of Pail Closets.	194	1899	200 Fe	182	966	336	84	646	10	1005	4 1	1799	756	546	280	10439 7	123 4731	-
	No. of Privy Closets.	790	1929 18	379	1399	298	824 2	1586	162 (	1357	2470 10	1719	113 13	2763 7	1380 2	823 2		80 29873	-
Privy Middens.		322	638 19	579 5	1596 13	304	426 8	870 15	113 1	-			72 1			499 8	19088	17 31980	-
N	No. of Middens.	65		in :	13	æ ::	*	30 ::		1131	2470	1192	1	2865	1011		14222	22637	-
					:	:													
		•							•		:			:	:			1	
	RICTS	:		:		:	-		:		:		-	-	:			:	
	RURAL DISTRICTS.	:							-		:				:		:	ounty	Int
	URAL	:					:	:			:	:			:		licts	tive Co	Church of
	R	:		:	:		:		:	:	1	:		ashire	:		d Distr	inistra	1
	Interest	Bury	Chorley	Clitheroe	Fylde	Garstang	Lancaster	Leigh	Limehurst	Lunesdale	Preston	Ulverston	Warrington	West Lancashire	Whiston	Wigan	Total Rural Districts	Total Administrative County	TARDA

Public Cleansing-Refuse collection and disposal, and public cleansing are, according to the local reports, undertaken in the County districts as follow :---

By local authority in 92 districts.

pool contents :---

By authority and contract, or by contract only in 13 districts. By authority, by contract, and/or by owners or occupiers in 11 districts.

The importance of a proper system of public cleansing is more generally recognised than formerly, but, as will be seen above, about 20 districts are yet without an efficient scheme. In about 80 districts the contents of privy middens are still removed in the day time. Motor vehicles for refuse removal have been provided in 77 County districts.

Briefly summarised the replies of local Medical Officers of Health to the Ministry's questions on this subject are :-

(a) Method of collecting dry house refuse :—	Chiefly by motor and covered carts. Ashbins in the majority of cases are emptied weekly ; ashpits vary from 3 to 4 weeks.
(b) Method of collecting refuse from earth closets and privies :	By motor and covered carts. Period varies from 1 to 5 weeks.
(c) Method of disposing of dry house refuse :—	In 24 districts dealt with at destructor ; 21 districts by controlled tips, in the majority of the remaining districts deposited on tips, and in a few instances on agri- cultural land.
(d) Method of disposing of refuse from earth-closets and privies :—	In the majority of districts refuse from earth-closets and privies used for manurial purposes; in a few instances it is disposed of into the sewers or removed to the destructor.
(e) The method of cleansing cesspools :-	-Special tumbler cart used in most districts where cess- pools exist; in a few instances cleansing of cesspools left to owners or occupiers.
(f) Arrangements for disposal of cess-	In the majority of districts used on land for manurial

Attention has lately been drawn by Circular 1311 to the cost of public cleansing, the need for special attention to the general organisation of the service, the possibilities in the way of obtaining income from refuse, etc., and many local reports this year contain references to the unnecessary extra work and cost imposed upon this service by the huge quantities of waste paper and other refuse which could readily be burned by householders.

The references on the subject of public cleansing by local Medical Officers of Health include :---

purposes, in a few instances disposed of into the sewers.

Bury (R) .- Public cleansing is carried out by contract in Ainsworth, Unsworth, and Birtlecum-Bamford, and is generally satisfactory. A further extension of this system should be made so as to include the parish of Outwood or provision made for the work to be performed by the Council's employees.

Chorley (R) .- Hoghton is more .n need of public scavenging than the remaining townships in this category, because here there is a predominance of pail-closets which cannot be neglected without dire results.

Garstang (R) .- The townships of Great Eccleston, Pilling, Hambleton, Stalmine, St. Michael's Village, and portions of the townships of Cabus, Catterall, Forton, and Cleveleys require a public system of scavenging.

West Lancashire (R) .- The necessity of a scavenging scheme for Maghull, which has so frequently been commented upon, is at the time of writing under consideration by the Health Committee, and tenders are now being sought both for Maghull and for the adjacent urbanised area of Lydiate. Scavenging is desirable in that portion of Bickerstaffe which extends from the Skelmersdale boundary to Four Lane Ends; it has become urgent in the townships of Hesketh and Tarleton. The provision of a scheme for Tarleton is now under consideration.

**REFUSE DESTRUCTORS.**—Destructors have been provided in 27 districts, viz., Accrington (B), Brierfield, Chadderton, Chorley (B), Clitheroe (B), Colne (B), Crompton, Darwen (B), Droylsden, Grange-over-Sands, Heywood (B), Irlam, Lancaster (B), Composition, Darwell (B), Dioyisten, Anne's (B), Middleton (B), Morecambe and Heysham (B), Nelson (B), Ormskirk, Padiham, Prest-wich, Radeliffe, Ramsbottom, Stretford, Swinton and Pendlebury, and Widnes (B). Trade refuse and offal from Barrowford are dealt with at the Nelson (B) destructor.

Destructors are said to be required at Haydock, Hindley and Orrell. On the other hand at Eccles (B) and Royton the use of the destructors has been discontinued in favour of controlled tipping.

Sanitary Inspection.—The following table gives the number of premises visited, the defects or nuisances discovered, and the results of the action taken. The number of nuisances abated during the year was 57,654; notices served totalled 31,550, and legal proceedings were instituted in 18 cases.

### SANITARY INSPECTIONS DURING 1982.

and besternen offeren up	sir .	FECTS OR IANCES.	Not	. OF TICES	ince silo	LEGAL PROCEEDINGS.
URBAN DISTRICTS.	No. of p visite No. dis- covered.	No. abated.	In- formal.	Statu- tory.	No.	Result.
Abram	910 336	207	56	22		in Mithodial rollecting dry he
Accrington (B)	3351 1897	1769	187	76		and an and a second
Adlington	15 15	15	15			the Marland an collection refused
Ashton-in-Makerfield	657 1218	1157	312	109		earth choicts and provins :
Ashton-under-Lyne (B)	3821 710	687	326	8	mand	(a) Mathon of disposing of dry
Aspull	476 831	642	231	118	2	Order for abatement in each case.
Atherton	2176 725	721	376	125		
Audenshaw	1445 366	353	31	2	10001	(a) Method of disposing of refuse
Bacup (B)	797 365	858	292	55	1	Case dismissed.
Barrowford	427 129	129	129	1		
Billinge and Winstanley	118 98	98	98	8		and The needbod of richards and
Blackrod	345 161	126	10	15		
Brierfield	125 82	76	39	43		() Arrangements for disposed of
Carnforth	117 61	61	58			pool contents
Chadderton	1140 838	725	838	48	10.00	Attention his lately have de
Chorley (B)	3171 1057	922	1057	in an b		for special attention to the port
Church	90 40	40	-40			mnessenty extra mult and con-
Clayton-le-Moors	185 271	232	94	1		
Clitheroe (B)	3143 457	445	246	do-alle	og lo	
Colne (B)	6738 433	461	651	88	1	Order to abate and costs 10/
Crompton	3188 373	332	283	24		some floridard, and is generally, a
Croston	30 15	15	15			
Dalton-in-Furness	1285 91	102	91	14		
Darwen (B)	5574 3351	2978	3283	827		
Denton	2517 465	493	234			
Droylsden	1960 633	621	337	4	3	Order granted in each case.
Rocles (B)	1950 2461	2074	1058	250		Village, and portions of the town
Failsworth	2654 1307	1213	127	286		
Farnworth	1618 3211	3089	622	305		
Fleetwood	4656 1023	884	190	3		
Formby	279 79	75	79	9		
Fulwood	9 4	4		1	1 mar 10	
Golborne	460 119	119	102	diam		
Grange-over-Sands	18 8	8	8	dalo-	1.0	
Great Crosby	1860 621	599	214	7		
Great Harwood	842 802	302	96			
Iaslingden (B)	3181 742	706	390	74		
Iaydock	1740 254	254	228	1		
and a second of the second	and the second second		10000000	and ages	ACCE AND	

URBAN DISTRICTS.	No. of premises visited.	NUISA	ECTS OR ANCES.	Nor	OF ICES FED.		LEGAL PROCEEDINGS.
.Hawili,	No. of vis	No. dis- covered.	No. abated.	In- formal.	Statu- tory.	No.	Result.
Heywood (B)	2936	811	733	257	13		
Hindley	1083	1091	1006	116	44		
Horwich	2906	821	761	311	25		
Huyton-with-Roby	541	282	226	162	31		
Ince-in-Makerfield	1399	1421	1366	569	17		
Irlam	561	703	694	329	19	0	
Kearsley	266	214	203	29	2	G.,	
Kirkham	321	51	51	46	1		
Lancaster (B)	4057	1358	1179	293	65	1	Fined 5/- and costs.
Lees	423	201	184	54			
Leigh (B)	1320	1201	1187	546	53		Walter to Date
Leyland	217	105	67	105	38		
Litherland	851	2134	2120	523	14		
Littleborough	207	423	388	43	7		
Little Hulton	2467	458	398	125	25		
Little Lever	163	98	96	98			
Longridge	487	25	25	25			
Lytham Saint Anne's (B)	2469	425	407	277	1	1	Order to abate and pay costs.
Middleton (B)	4726	806	723	688	22		
Milnrow	1575	574	552	284	3		
Morecambe and Heysham (B)	2561	356	344	31	3		
Mossley (B)	210	178	173	178			Const. Const. Second and and and and and and and and and a
Nelson (B)	5147	209	205	145	9		
Newton-in-Makerfield	2240	273	259	164	5		
Norden	110	97	32	61	39		
Ormskirk	000	302	268	302			Allegeler
Orrell	100	144	127	111	10		
Oswaldtwistle	010	301	362	283	5		
Padiham		1471	1446	515	61		
Poulton-le-Fylde	100	71	68	66			burner - Parmers
Preesall	0.05	115	112	10	111	4	Orders granted in 3 cases ; one case
Prescot	010	142	142	215	47		dismissed.
Prestwich		1658	1658	583	48		
Radeliffe	1011	436	348	422	17	1	Withdrawn and agreement made.
Rainford	-	110	110		30		
Deschatter		459	274	50			
		440	410	466			and a second sec
The last	000	261	250	70	8		States and an and a second design and a second seco
	1070	254	250	162	14		and a second sec
		69	69	69			Martin and and an argula
		275	263	112			and house a strictly house to be
Standish-with-Langtree .	. 653	213	203	112		1	Total Administrative County 11200

### SANITARY INSPECTIONS-continued.

URBAN DISTRICTS.	No. of premises visited.	NUISA	ECTS OR ANCES.	Not	OF ICES VED.	and a	LEGAL PROCEEDINGS.
firmer,	No. of vi	No. dis- covered.	No. abated.	In- formal.	Statu- tory.	No.	Result.
Stretford	12386	2639	2639	385	33		inter
Swinton and Pendlebu-y	2640	1091	1225	1094	13		India and a second second
Thornton Cleveleys	1429	523	312	517	6	1.011	Normality
Tottington	450	141	115	15	27		Harthen-controlled
Trawden	20	2	2	2		·	and in the second second
Turton	1899	130	150	147	3		Interne and an and and
Tyldesley-with-Shakerley	1733	151	127	57	6	1.02	Kaunice 200
Ulverston	19	14	14	14			TER
Upholland	177	42	41	42			Trank or an and the second second second
Urmston	263	101	97		92		fast in the second
Walton-le-Dale	1408	319	300	285	- 84	1	Fined 10/
Wardle	381	35	84	35			Log land
Waterloo-with-Seaforth	7558	8211	3040	902	199		Sta
Westhoughton	1797	390	306	389	43	1	Order to abate.
Whitefield	3048	835	812	138	9		Little Halten
Whitworth	276	292	290	66			Link Large - 10-
Widnes (B)	6830	2542	2491	683	99		Instantin
Withnell	43	15	15	15			Lordness Salas Anne's (11)
Worsley	1987	255	236	121	23		outs
Total Urban Districts	160811	58690	54924	26190	3392	16	and a second sec
RURAL DISTRICTS.		1000		100 m		and a	(Ser (II) meseral has schemelest
Barton-upon-Irwell	1018	165	158	115	5		are
Blackburn	1053	67	66	58			Network (11)
Burnley	467	182	176	46	19		Newton (a. Mahainfahl
Bury	372	98	57	62	33		Number
Chorley	1229	150	150	62	26	000	and
Clitheroe	1757	203	186	28	2		Constant and and and and
Fylde	337	185	188	185	27	2	Order and costs in each case.
Garstang	1274	109	106	102	7		Tadilors an an and
Lancaster	1019	94	84	94	8	12	net supported by the
Leigh	1186	335	827	226	48		Roomer's Havener's
Limehurst	5698	118	40	47	12		210
Lunesdale	263	66	52	46	1		Prest which in the prest of
Preston	2210	127	120	- 30	62		Hadeline
Ulverston	2044	197	144	197	84		Dia hat hat hat hat
Warrington	1658	383	302	26	136		Marinebottum
West Lancashire	6026	388	387	89			Bandratead (II)
Whiston	178	97	89	97	-	100	Mahina
Wigan	50	130	98	42	6		Burton 1030
Total Rural Districts	27834	3089	2730	1552	416	2	Bulling and an analyzing
Total Administrative Count		61779		27742	3808	18	standal-with-Langury
					-		

Smoke Abatement.—The following table shows the action taken by local authorities to control the nuisance from excessive smoke pollution, and gives the number of smoke observations (2,597) taken during the year.

In 1931 the observations numbered 2,486.

SMOKE ABATEMENT.

URB	AN D	ISTRI	CTS.		No. of Smoke Observa- tions.	Time limit allowed. Minutes per hour.	URBAN DISTRICTS. No. of Smoke Observa tions. Time limit allowed. Minutes per hour.
Abram					7		Horwich 18 *5
Accrington (	B)				4	8 to 7	Huyton-with-Roby
Adlington						12	Ince-in-Makerfield
Ashton-in-M	akerfie	ld				8	Irlam 54
Ashton-unde	r-Lyne	e (B)			14	4	Kearsley 4 *2
Aspull						5	Kirkham 3 6
Atherton					37	*21	Lancaster (B)
Audenshaw					2	4	Lees 9 4
Bacup (B)	1.				8		Leigh (B) 142 *2
Barrowford					18	10	Leyland 2 to 6
Billinge and	Winst	anley				10	Litherland 8 *2
Blackrod					8	8	Littleborough 110 *2
Brierfield						*2	Little Hulton 9 *2
Carnforth							Little Lever 4 *2
Chadderton					34	*2 to 4	Longridge 35
Chorley (B)					11	8	Lytham Saint Anne's (B) 120 *21
Church	1				4	8	Middleton (B) 105 *4
Clayton-le-M	loors				19	10	Milnrow 6 *2
Clitheroe (B	)						Morecambe and Heysham (B) 4 *2
Colne (B)					152	5 to 10	Mossley (B) 10
Crompton					48	*3	Nelson (B) 130 *5
Croston	1.24						Newton-in-Makerfield 4 4
Dalton-in-F	urness	no kitalu	E.egu	10	Calua D	15	Norden 5 *2
Darwen (B)					12	5 to 7	Ormskirk 30 8
Denton						4	Orrel!
Droylsden		oral. Is			205	*2	Oswaldtwistle 10 4 to 7
Eccles (B)					47	*2	Padiham 19 *2
Failsworth		(1999)			97	*2	Poulton-le-Fylde
Farnworth					67	*2	Preesall 10 3
Fleetwood				190	1910222	A	Prescot // 10 53
Formby					11	4	Prestwich 15 *2
Fulwood				•••	A	14. mar	Radcliffe 44 4 to 6
Golborne		1		,	4	2	Rainford
Grange-ove	r-Sand	s s					Ramsbottom 6
Great Crosl	y				2		Rawtenstall (B) 5 2
Great Harv	rood					10	Rishton 20 5
Haslingden	(B)				78	*2	Royton 12 6 to 8
Haydock							Skelmersdale
Heywood (	B)				112	*3	Standish-with-Langtree
Hindley					16	5	Stretford 41 *2
						* Minutes	per half hour.

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URB	AN D	ISTRI	CTS.	No. of Smoke Observa- tions.	Time limit allowed. Minutes per hour.	RUF	AL D	ISTR	ICTS.	No. of Smoke Observa- tions.	Time limit allowed. Minutes per hour.
Swinton and	l Pendl	cbury		 256	•2	Barton-upon	Irwell			 33	
Thornton Cl	leveleys			 3	4	Blackburn				 22	
Tottington				 7	12	Burnley				 5	*5
Trawden		*		 		Bury				 18	5
Turton				 30	6	Chorley				 8	8
Tyldesley-w	ith-Sha	kerley		 25	*4	Clitheroe				 2	
Ulverston				 		Fylde				 2	
Upholland		•••		 	5	Garstang				 6	
Urmston				 		Lancaster				 	
Walton-le-D	ale			 		Leigh				 16	6
Wardle				 -4-4	5	Limehurst				 12	8
Waterloo-wi	th-Scafe	orth		 14	4	Lunesdale				 	
Westhought	on			 6	*2	Preston				 	
Whitefield				 21		Ulverston				 	
Whitworth				 	*5	Warrington				 	*2
Widnes (B)				 		West Lancas	hire			 	
Withnell				 4	6	Whiston				 2	
Worsley				 39	*2	Wigan -				 ,	
-	101	_		12		Total Rural I	District	8		 121	
Total Urban	Distric	ts		 2476		Total Admin	istrativ	e Cot	inty	 2597	

SMOKE ABATEMENT-continued.

\* Minutes per half hour.

In a number of districts co-operative action with industry on the smoke question is reported upon, and in some instances as a result improved methods of stoking were adopted.

Premises and Occupations which can be controlled by Byelaws or Regulations.—OFFENSIVE TRADES.—Offensive trades have been established in about 71 districts, the premises numbering 597. These are chiefly tripe boilers, gut scrapers, tanners or leather dressers, fat melters and oil works, soap boilers, &c.

RAG FLOCK ACTS, 1911 AND 1928.—Action under these Acts is reported from Chadderton, Chorley (B), Colne (B), Oswaldtwistle, Wigan (R), etc.

FACTORIES, WORKSHOPS and WORKPLACES.—The table below is a summary of the action taken in the County districts during the year 1932, and shows the number of inspections made, and the defects found :—

### FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES. INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS.

		1 - 1 -	Number of			
Premises.		Inspections.	Written Notices.	Occupiers prosecuted.		
Factories	 	 8761	208	haven and haven		
Workshops	 	 7843	187	(II) antigeneers		
Workplaces	 	 2037	41	indexis		
TOTAL	 	 13641	436	weiling		

### FACTORIES, WORKSHOPS AND WORKPLACES-continued.

									Number of offences in
Particul	ars.	Found.	Remedied.		respect to				
Nuisances under the Public Healt	h Acts :*	Same	Int	-	14				
Want of cleanliness					***	387	384	1	
Want of ventilation						26	26		
Overcrowding						2	2		
Want of drainage of floors				***		30	2 29		
Other nuisances						245	245	3	
	insufficient	ι.				-48	42		
Sanitary accommodation	unsuitable	or defe	etive			146	136	1	
	not separa					15	10		
Offences under the Factory and W									
Illegal occupation of underg			(s. 101	0					
						52	47	6	
(Excluding offences relating Sections mentioned in the S (Factories and Workshops 7	to outwork chedule to	and off the Mir	fences nistry	of H	r the calth				
franciss and rearingly a	Тот					951	921	11	

### 2.-DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

• Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

COMMON LODGING HOUSES.—The local reports show that there are 77 common lodging houses in 33 districts; the majority are described as "fairly good." Unsatisfactory premises are reported at Colne (B), two are in a "clearance" area.

HOUSES LET IN LODGINGS.—Reference is made in 21 districts to this class of accommodation. New bye-laws have been adopted at Heywood (B). It is reported that bye-laws are required at Chorley (B), Morecambe and Heysham (B) and Ormskirk.

TENTS, VANS, SHEDS, ETC.—Where these exist regular supervision apparently takes place. In many districts steps have been taken to remove or abolish the structures. Legal proceedings were necessary at Fleetwood, Preesall, Chorley (R), etc. A conference between the Urban Council and the van dwellers at Stretford resulted in an agreement that all vans would be vacated by June, 1933, the Council undertaking to re-house the displaced inhabitants. Bye-laws are required at Great Harwood, Morecambe and Heysham (B), Wardle, Widnes (B), Garstang (R), etc.

Canal Boats.—Inspection of canal boats—183 in number—are reported from 10 districts ; 25 infringements were noted.

Chief Sanitary Requirements of Districts.—The information given under this head is extracted from the reports of local Medical Officers of Health.

URBAN	d Dis	TRICTS	i.	ada ga	CHIEF SANITARY REQUIREMENTS.
Abram			e edar		Scheme for improving sewerage of Bickershaw and Plank Lane, now been approved by Ministry of Health and work will be completed in 1933.
Accrington (B) .					Further conversion of pail closets to fresh water closets.
Adlington .					Improvement of private streets and back passages.
Ashton-in-Makerfi	ield				Substitution of water closets for pail closets, and increased water supply.
Ashton-under-Lyr	ne (B	)			Interator an anteration of the second of the
Aspull					Conversion of privies to fresh water closets. Paving of back yards, and repairs to property.
Atherton					Paving of back streets, yards, etc.
Audenshaw .					
Bacup (B)					Clearance of a certain congested slum area. Provision of public abattoir.
Barrowford .					Grat Ibread

### CHIEF SANITARY REQUIREMENTS.

CHIEF SANITARY	REQUIREMENTS-continued.	
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URBAN D	ISTRICI	rs.		CHIEF SANITARY REQUIREMENTS.
Billinge and Winstan	ley			Demolition of property beyond reasonable repair.
Blackrod				Conversion of privies. General property repairs.
Brierfield				Scheme for sewering of Marsden Heights area now approved—work to be carried out during 1933.
Carnforth				Highfield relief sewer—work completed in February, 1933. Lower Crag Bank—Ministry approval received for sewering and sewage disposal works for this area. Tender received and work expected to commence in April, 1933.
Chadderton		:		Conversion of pail closets and abolition of open ashpits. Re-surfacing of secondary streets.
Chorley (B)	100			Public mortuary. Public wash-house and baths.
Church	10044.0		10.000	Abolition of pail closets and ashpits,
Clayton-le-Moors				Erection of more houses.
Clitheroe (B)				Additional small houses to let at low rental.
Colne (B)				Further representations to be made regarding clearing of slum areas.
Crompton				Demolition of insanitary property. Building of additional houses. Smoke abatement.
Croston				Extension of sewer. Improvement of sewage outfall works. Conversion of privies. Cottages at a reason- able rent.
Dalton-in-Furness				Provision of better housing and water to out-lying dwellings.
Darwen (B)				Pitching, paving and arching over of river bed in vicinity of dwelling-houses and shops.
Denton				Abolition of remaining privy middens, dry ashpits, waste-water and hand flushed closets. Paving of back passages. Steam disinfector. Public abattoir. Abatement of smoke nuisance. More houses of the working class type.
Droylsden				Paving of more private streets.
Eccles (B)				Accommodation for infectious diseases cases at a reasonable cost.
Failsworth				Paving, metalling and kerbing of private streets and passages.
Farnworth				More houses and demolition of old ones.
Fleetwood				New mortuary. New abattoir.
Formby				Extension of sewers where possible.
Fulwood				Making up of more streets.
Golborne				Public sanitary convenience near bus terminus. Paving of back streets, passages and yards. Greater water pressure and purer supply. Provision of a mortuary.
Grange-over-Sands				· ·······
Great Crosby				Bacup (B)
Great Harwood				

CHIEF SANITARY REQUIREMENTS-continued.

URBAN DISTRICTS.	CHIEF SANITARY REQUIREMENTS.
Haslingden (B)	Public abattoir. Public baths.
Haydock	Conversion of remaining privies. Paving of back passages and approaches to houses. Sewering of certain areas. Paving of several school playgrounds. Refuse destructor.
Heywood (B)	Completion of conversion scheme and demolition of houses unfit for habitation.
Hindley	Public abattoir. Refuse destructor. Paving of yards and back passages (proceeding).
Horwich	Abolition of waste-water closets. Public abattoir. Plant for filtration of water supplies.
Huyton-with-Roby	Inspection, draining and proper paving of all back courts and yards. Improvement of sewerage arrange- ments. Completion of conversions. Inspection and necessary action with regard to undesirable property.
Ince-in-Makerfield	Abolition of privy midden system, which will be possible as soon as the sewerage work is completed.
Irlam	Provision of sanitary conveniences for both sexes in suitable situations on main road.
Kearsley	More houses. Demolition of insanitary property.
Kirkham	Conversion of remainder of privies into water closets.
Lancaster (B)	Demolition of unfit houses.
Lees	Abolition of ashpits.
Leigh (B)	Diminution of pollution by smoke. Supply of cleaner milk. Bye-laws for houses let in lodgings.
Leyland	Improvement and making up of side streets and demolition of unfit houses.
Litherland	Sentimental Statement of Statements of
Littleborough	Standish with Langebox
Little Hulton	Reconstruction and improvements of insanitary property. Public abattoir. Extension of sewer. Worsley Rd. sewage works inadequate.
Little Lever	Conversion of remaining privies to fresh water closets. More low-rental houses to replace old property.
Longridge	Separate and Peridicitory
Lytham Saint Anne's (B)	Themion Cleveless
Middleton (B)	Public baths and wash houses. Clearance of unfit houses. Central public sanitary convenience. Disposal of refuse—salvage plant.
Milnrow	Conversion of pail closets. Paving of streets and yards.
Morecambe and Heysham (B)	Erection of 250 houses. Increased provision for sewerage at Bare and Torrisholme.
Mossley (B)	Ultrantin
Nelson (B)	C plusiand enverse as severe a strength of the house.
and the second se	Constitution and and and and and and and and and an

### CHIEF SANITARY REQUIREMENTS-continued.

URBAN DISTRICTS.	CHIEF SANITARY REQUIREMENTS.
Newton-in-Makerfield	More houses. Paving and draining of all back streets. Conversion of all privies and pails to water-carriage system.
Norden	Conversion of pails and privies to water closets.
Ormskirk	Houses. Conversion of privies.
Orrell	Destructor. Hospital for infectious diseases.
Oswaldtwistle	Extension of sewer and water supply to certain districts. Clearance schemes and demolition of individual unfit houses.
Padiham	Demolition of condemned unhealthy area and the re-building of suitable houses.
Poulton-le-Fylde	Arrangements for the disinfection of bedding and clothing.
Preesall	Making-up of unpaved streets. Demolition of old houses and provision of new ones.
Prescot	Erection of houses for working classes. Enlargement of sewage disposal works. Closing of insanitary houses. Paving of back passages.
Prestwich	Sewering of Simister.
Radcliffe	Abolition of all dry ashpits. Cleansing of all back streets. Bye-laws to control more effectively the fish-frying trade. Replacement of tippler or waste water closets by fresh water closets.
Rainford	Houses at lower rents. (Plan now under consideration).
Ramsbottom	Conversion of tippler closets to fresh water closets. Consideration of unfit and back-to-back houses as required by Ministry of Health Circular 1331.
Rawtenstall (B)	story? which are not seen at some but
Rishton	Abolition of ashpits.
Royton	Clearance schemes.
Skelmersdale	Abolition of privies and substitution of water closets.
Standish-with-Langtree	Further conversion of privies to fresh water closets and substitution of covered ashbins for open ashpits. Demolition of insanitary areas and back-to-back houses. Working-class houses.
Stretford	Completion of work anticipated in "Housing pro- gramme."
Swinton and Pendlebury	
Thornton Cleveleys	Making up of further private streets.
Tottington	Further conversion of privies to water closets. Improve- ment of water supply to certain areas, (now being dealt with).
Trawden	Substitution of ashbins for ashpits.
Turton	Continued conversion of privies to fresh water closets.
Tyldesley-with-Shakerley	Total abolition of ashpits and privies.
Ulverston	Mastey (B)
Upholland	More houses.
Urmston	

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## CHIEF SANITARY REQUIREMENTS-continued.

URBAN	Dist	RICTS.	1.00	-	CHIEF SANITARY REQUIREMENTS.
Walton-le-Dale					Further closet conversions. Abolition of ashpits and provision of ashpails. Draining and construction of back passages and side streets.
Wardle					Houses.
Waterloo-with-S	eafort	h			teritorio de la construcción de la company de selas los destas en en
Westhoughton					Provision of houses at low rents. Paving of back streets yards and school playgrounds.
Whitefield					Paving of back streets and passages.
Whitworth					Houses, especially in Whitworth Ward. Improvement of secondary streets and back streets.
Widnes (B)					Houses.
Withnell					Continued conversion of pail closets, and provision of covered ashbins. Drainage of Ollerton Cottages area
Worsley					Conversion of remaining privies and ashpits. Paving of streets and passages. Central slaughterhouse.
RUR	AL D	ISTRICT	8.		and later they take
Barton-upon-Irv	vell				Additional sewering in Clifton and the Trafford Park portion of Davyhulme. Public conveniences for the township of Flixton.
Blackburn					and and all developed and an annual of the developed at parts
Burnley					Sewerage schemes for several villages and conversion of privies to fresh water closets. Paving and draining of private streets. Houses at low rents to replace old property. Provision of private sanitary accom- modation within the curtilage of each house.
Bury					Sewerage system for Ainsworth village. Extension o sewage works at Ringley.
Chorley					Sewerage schemes for Higher Wheelton and parts o Whittle and Clayton-le-Woods. Water scheme for Mawdesley. New slaughterhouse Bye-laws. In adequate water supply to the western area to be
					remedied.
Clitheroe					New drainage system for Hurst Green, Chipping Downham and Pendleton.
Fylde					Water supply to Treales, Roseacre and Wharles Sewer extension in Warton.
Garstang		• •••			Sewerage schemes and scavenging in several townships
Lancaster					Improvement of the Slyne-with-Hest sewer outfall.
Leigh					Sewerage scheme for Lowton and Culcheth. Conversion of privies to fresh water closets.
Limehurst					Extension of humus tank capacity at sewage works Completion of conversions of privies to fresh wate closets in Bardsley and Waterloo. Reduction in number of ashpits. More attention to dairies, cow
					sheds, and slaughterhouses. Making up of private streets and passages.
Lunesdale					
Preston					Sewering of certain areas. Further closet conversion and extension of water supplies.
Ulverston					Water supply to Greenodd, Lowick, and Broughton Beck. (Present supply liable to dangerous pollution)
Warrington					Paving of streets and passages, especially in Huntle, Street, Sankey. Sewers for Great Sankey and Poulton-with-Fearnhead. Better sewage treatment in many areas
West Lancashi	re				in many areas. New pavilion block for isolation hospital. Scavengin for three townships.
Whiston					Further conversion of privies and pail closets. Working class dwellings.
Wigan					Sewerage scheme for Parbold, Appley Bridge an Shevington. Water supply for Dalton.

### HOUSING.

From a perusal of the local reports and statistics it appears that in many districts special attention has been devoted during the year under review to the housing problem. New houses erected in the County area in 1932 numbered 9,926, including 2,548 by local authorities. Inspections for housing defects numbered 66,293. In many districts, from the comments of the local Medical Officers of Health, it is obvious, however, that the housing conditions in certain areas are unsatisfactory and not according to present standards. The need for additional houses at an economic rent within the means of the poorer paid members of the working classes is emphasised, and an accelerated rate of progress in clearance work is desirable as regards many insanitary groups of dwellings.

The Ministry of Health by Circulars 1238, 12th January, 1932, 1331, 6th April, 1933, and 1334, 22nd May, 1933, etc., draw the special attention of local authorities to the housing needs of the country, the former stressing that efforts should be concentrated on the provision of a type of house which can be built at a low cost and can be let at a rent within the means of the lower-paid workers. The Government consider that the present rate at which the slums are being dealt with is too slow, and they press for a speedier end to the evil and an end within a limited time. It is considered that present conditions are favourable to the success of a vigorous campaign of slum clearance. With these points in mind the Minister of Health desires to receive, before the 30th September, 1933, the housing programme of local authorities. These programmes, it is stated, should as far as practicable be drawn on the basis of clearing all areas that require clearance not later than 1938.

The Ministry of Health in their Circular respecting the contents of Medical Officers' annual reports indicate that it is unnecessary to repeat in the County report the local statistical particulars as to housing, but for the information of the County Public Health and Housing Committee, and as a matter of general interest, a brief summary of the district housing statistics is given.

Housing Statistics for the year 1932 .- The following statement summarises the housing activities in the various districts in the Administrative County during the year 1932, as extracted from the local health reports :---

NEW HOUSES .- Number of new houses erected during the year :--(a) Total (including numbers given separately under (b) ) 9926 (i) By the Local Authority ... ... ... .... 2543 (ii) By other Local Authorities .... ... 5 ... (iii) By other bodies and persons ... ... 7378 (b) With State assistance under the Housing Acts : (i) By the Local Authority and see and see 2526 (ii) By other bodies or persons ... ... 31 ... 1. INSPECTIONS .- Inspection of Dwelling-houses during the year :--(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ... ... 37,207 (b) Number of inspections made for the purpose 66,293 (2) (a) Number of dwelling-houses (included under sub-head (1)) which were inspected and recorded under the Housing Consolidated Regulations, 1925 9,118 .... .... (b) Number of inspections made for the purpose 16,877 .... (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... 1066 (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 ... ... ... ... ... 18,237 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 ... ...

13,733

		105	
8. Ae	tion u	nder Statutory Powers during the Year :	
	A	Proceedings under sections 17, 18 and 23 of the Housing Act, 1930 :	
		(1) Number of dwelling-houses in respect of which notices were served	0.50
		(2) Number of dwelling-houses which were rendered fit after service of formal notices :	878
		(a) By owners	713 5
	В	-Proceedings under Public Health Acts :	
		(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3,531
		(2) Number of dwelling-houses in which defects were remedied after service of formal notices :	
		(a) By owners	2,938 53
	с	-Proceedings under sections 19 and 21 of the Housing Act, 1930 :	
		(1) Number of dwelling-houses in respect of which Demolition Orders	Subdraw Man
		(2) Number of dwelling-houses demolished in pursuance of Demolition	187
		Orders	93
	D.	-Proceedings under section 20 of the Housing Act, 1930 :	
		(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	8
		(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	Mantaulif.
	Е.	-Proceedings under section 3 of the Housing Act, 1925 :	
		(1) Number of dwelling-houses in respect of which notices were served requiring repairs	63
		(2) Number of dwelling-houses which were rendered fit after service of formal notices :	
		(a) By owners	74 3
		(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to	
		close	45
	F.	-Proceedings under sections 11, 14, and 15 of the Housing Act, 1925 :	
		(1) Number of dwelling-houses in respect of which Closing Orders were made	1
		(2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	7
		(3) Number of dwelling-houses in respect of which Demolition Orders	8
		(4) Number of dwelling-houses demolished in pursuance of Demolition Orders	15
		the test test test out the set	

Nore.—Sections 11 to 15 of the Housing Act, 1925, have been repealed by the Housing Act, 1930, but the proviso to Section 64 of the Act of 1930 continues in force any Closing Orders and Demolition Orders made before the operation of the Act (15th August, 1930), and houses subject to those Orders must continue to be dealt with under the relative provisions of the Act of 1925.

Table 5, pages 106 to 108 shows the number of new houses crected during the year in each County district, and also the total number of houses inspected for housing defects, the number found unfit for habitation, and the number found not reasonably fit for habitation.

The action taken by the local authorities under the Statutory powers in regard to housing is shown, in total, in items A to F in the tabular statement above.

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# ADMINISTRATIVE COUNTY OF LANCASTER.

## TABLE 5—HOUSING. SUMMARY OF WORK CARRIED OUT DURING THE YEAR 1932.

		ERECTI	EW Hous	YEAR.	104.120	UNFIT DWELLINGS.								
URBAN DISTRICTS.		By	By other	Assistan	State or under sing Acts.	Total No. in-	No. of In- spec-	No. of Houses in- spected	No. of In- spec-	No. found unfit	No. found not	No. rendered		
	Total.	Local Author- ity	Bodies or Persons.	By Local Au- thority.	By other Bodies or Persons	spected for Housing defects.	tions made	under Housing Con. Regs. (included in total col.)	Sec. De	for human habita- tion.	reason-	fit as result of informal action,		
a de beilen		1 43		in the second	16 470	and see	Basel	Ju an	tunit?	THE .				
Abram Accrington (B)	89 96	86	3 24	86	***	280	847	32	134	17	171	102		
Adlington	28	72 26	24	60 26		181	181	149	149		157	126		
Ashton-in-Makerfield	24		24			545	189	226	226		44 360	44 811		
Ashton-under-Lyne (B)	116	86	30	86		176	478	143	412	81	87	48		
Aspull		Intities	10 19		11 1000	429	1046	145	191	1	374	219		
Atherton	94	68	26	68	6	508	675	75	97	61	372	243		
Audenshaw	116		116			296	906	16	16		14			
Bacup (B)	9		9			487	1106	54	86	54				
Barrowford	2		2			68	68	18	18		64	64		
Billinge and Winstanley	49	-4-4	5	44		118	120	20	30		10	90		
Blackrod	33	28	5	23		148	221	7	7	9	12	6		
Brierfield	22		22			159	159	187	137		25	3		
Carnforth	1		1			117	896	56	56			61		
hadderton	198	120	78	120	12.00	967	2228	129	190	61	777	688		
Chorley (B)	29		29			1124	2893	145	234	1.1.1	1057	922		
hurch	6		6			90	180	21	50		18	18		
layton-le-Moors	29	24	***	24		175	210	30	92	9	21	140		
litheroe (B)	16		16			148	148				56	82		
Colne (B)	11		11			579	2989	316	556	18	115	118		
rompton	1	•••	1			249	366	33	76		30	23		
roston	4	***	4			66	66					12		
alton-in-Furness	6	1.076	6			1285	1285	160	160	25	76	23		
Darwen (B)	8	1	7		127-1	4485	4711	131	270	85	96	80		
Denton Droylsden	169		169			277	329	48	95		45	37		
Seales (D)	328 69		328			447	447	168	168		168	150		
- Barrant b	106		69 106			166	166	87	87		166	85		
answorth	218	205	18	205		286 969	301	72	72		93	91		
lectwood	295	190	105	190		294	4561 838	325	2520	128	577	458		
ormby	118		113			41	46	100 26	462		70	68		
'ulwood	84		84			100	100	an at	26	2	37	24		
olborne	39	30	9	30		70	80	20	20		20	20		
range-over-Sands	9		9			16	16	3	3		20			
reat Crosby	422		422			356	715	63	181	2	34	29		
reat Harwood	4		4			87	103	16	33		16	16		
laslingden (B)	41	39	2	39		815	481	285	415	6	60	51		
laydock	38	26	12	26		264	490	106	174	land	226	226		
leywood (B)	-4-4		44			52	83	18	84	12	40	36		
indley	16		16			1083	1083	25	25	9		687		

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TABLE 5-continued.

URBAN DISTRICI Horwich Huyton-with-Roby Ince-in-Makerfield Irlam Kearsley Kirkham Lancaster (B) Lees Leigh (B) Leigh (B) Leyland Littleborough Littleborough Little Hulton Little Lever Longridge Longridge	rs.   	Total. 20 36 199 30 54	By Local Author- ity.  192	By other Bedies or Persons. 20 56	By Local Au- thority.		Total No. in- spected for Housing defects.	No. of In- spec- tions made for the pur- pose.	No. of Houses in- spected under Housing Con. Regs. (included in total	No. of In- spec- tions made for the pur- pose.	No. found unfit for human habita- tion.	No. found not reason- ably fit for human habita	
Huyton-with-Roby Ince-in-Makerfield Irlam Kearsley Kirkham Lancaster (B) Lees Leigh (B) Leyland Litherland Littleborough Little Lever Longridge		20 56 199 30	Author- ity,	or Persons. 20	Local Au- thority.	other Bodies or	for Housing	made for the pur-	Housing Con. Regs. (included in total	made for the pur-	human habita-	for human	result of
Huyton-with-Roby Ince-in-Makerfield Irlam Kearsley Kirkham Lancaster (B) Lees Leigh (B) Leyland Litherland Littleborough Little Lever Longridge		56 199 30		In Real			Housing	for the	Regs. (included in total col.)	for the pur- pose,			result of informal action.
Ince-in-Makerfield Irlam Kearsley Kirkham Lancaster (B) Lees Leigh (B) Leyland Litherland Littleborough Little Hulton Little Lever Longridge		199 30		56			262	262	25	25		262	223
IrlamKearsleyKirkhamLancaster (B)LeesLeigh (B)LeylandLitherlandLittle HultonLittle LeverLongridge		30	192				138	138	36	36	30	99	74
KearsleyKirkhamLancaster (B)LeesLeigh (B)LeylandLitherlandLittleboroughLittle HultonLittle LeverLongridge				7	192		1050	4000	187	400	7	409	370
KirkhamLancaster (B)LeesLeigh (B)LeylandLitherlandLittleboroughLittle HultonLittle LeverLongridge		54		30			62	62	10	10		62	54
Lancaster (B) Lees Leigh (B) Leyland Litherland Littleborough Little Hulton Little Lever Longridge			50	4	50		91	138				91	72
Lees Leigh (B) Leyland Litherland Littleborough Little Hulton Little Lever Longridge		12		12			25	43	5	13			4
Leigh (B) Leyland Litherland Littleborough Little Hulton Little Lever Longridge		289	152	137	152	8	186	187	51	52		186	288
Leyland Litherland Littleborough Little Hulton Little Lever Longridge							84	23	72	21		18	18
Leyland Litherland Littleborough Little Hulton Little Lever Longridge		160	120	40	120		665	1387	304	1186	94	489	546
Litherland Littleborough Little Hulton Little Lever Longridge		68		68			41	76	15	30	15	6	6
Littleborough Little Hulton Little Lever Longridge		120		120			554	1889	84	81		550	536
Little Hulton Little Lever Longridge		14	8	6	8		185	394	42	78			
Little Lever Longridge		39	87	2	37		261	580					243
Longridge		1		1			23	43	9	15		9	6
and the second sec		12		12			100	100	30	30		8	8
Lytham Same Anne's	(12)	66	AULI	66			231	231	80	80		31	25
Middleton (B)		88	53	85			195	485	116	172	12	79	68
Million		1	(has	1			87	273	28	92		10	22
Milnrow	····	1111	***	411			113	120	22	24	2	29	28
Morecambe & Heysha	un (B)	411											
Mossley (B)		3		3	1		210	-400	17	39		178	
Nelson (B)		61	23				634	920	98	139	8	59	6 100
Newton-in-Makerfield		78	50				209	650	93	128	31	20	
Norden		83		33			25	75	15	45		15	
Ormskirk		199			1 3		319			46		* 815	
Orrell	. a (a.	24	1.12	24	10000		87	110	1.2.	40	1 200	80	1
Oswaldtwistle		14		14			-489	1000		131	1.000	342	1 100
Padiham		4		4			68	197		18		68	
Poulton-le-Fylde		8		8			49	82		28		10	10
Preesall		11		11	4	7	91	208	and the second	66	1	4	
Prescot		29		29			264	304	253	264	- 4	28	100
Prestwich		381	171	210	163		748	983	58	153	2	51	715
Radeliffe		49		49			72	89	46	52	8	26	6
Rainford		30	24	6	24		52	20			1	30	2
Ramsbottom		-46		-4-6			38	97	36	72	9	29	23
Rawtenstall (B)		108	84	24	84		130	130	55	55	55	75	21
Rishton		3		1			200	500				160	150
Royton		12		19			54	54			3		1
Skelmersdale		28	10	12	16	1	1 2 2 3	1.11.11	and the second second				
Standish-with-Langtr					10		250	250					
Stretford		67	25	3			250 185	13038		1000	1.5815	and the second	. 5

TABLE 5-continued.

TABLE 5-continued.	1		tw Hous		1	1		Unr	T Dwal	LINGS.	2000	
URBAN DISTRICTS.		By Local	By other Bodies	Assistar	State ace under sing Acts	No. in-	spec-	under Housing	No. et	f No. Sound unfit		No.
	Total.	Author- ity.	er Persons.	By Local Au- thority.	By other Bodies or Persons		g made	Con. Regs. Oncluded in total col.)	tions made for the	for	ably fit for human	fit as result of informal
Swinton and Pendlebury	696	131	565	131		740	4137	288	878	57	319	387
Thornton Cleveleys	111		111			203	345					35
Tottington	12		12			4	9			3	1	3
Trawden	1		1			25	30					
Turton	81		31			685	685	60	60		30	30
Tyldesley-with-Shakerley	78	52	26	52		130	287			2	51	45
Ulverston	37	22	15	22		188	300	17	25		185	185
Upholland	49	40	9	40		46	57			26		
Urmston	95	45	50	45		38	38	30	60	3	27	
Walton-le-Dale	31		81			175	175	55	55	1	27	27
Wardle	6		6			45	45	45	45		23	28
Waterloo-with-Seaforth	9		9			1818	2022	150	331		1636	1554
Westhoughton	-40	12	28	12		98	885	57	497	2	54	182
Whitefield	61		61			215	235	90	120	6	85	29
Whitworth	. 7		7			67	67					antes
Widnes (B)	119		119			1165	1165	564	564	8	601	341
Withnell	8		3			48	55	25	33		8	11
Worsley	212	124	88	124		78	150	61	116	14	64	50
Total Urban Districts	7716	2481	5230	2464		1	59680	-	13943	1034	12504	18112
RURAL DISTRICTS.	1	Calla.	ois		1	-					-(80.)	alar M
Barton-upon-Irwell	486	6	480	6		15	26	10		2	13	12
Blackburn	45		45		1	193	230	CT		2	30	80
Burnley	62		62			131	154	16	28		28	11
Bury	5		5			872	440	35	53	3	21	57
Chorley	55	112.	55			353	475	256	378	7	117	109
Clitheroe	10	mass	10		10	465	465	18	18	1	8	8
Fylde	364	-	364			337	337	79	79		9	51
Garstang	46		46			78	129	10	20		38	12
Lancaster	36		36			342	342	294	294		8	8
Leigh	11		11			976	1136	204	204		1	
Limehurst	83		33		10	246	246	15	15		210	137
Lunesdale	12	6	6	6		106	142	8	6		1	101
Preston	328		328			102	130	DECO		***		
Ulverston	36		36			57	57					
Warrington	118		118			128	384	57	171	3	28	31
West Lancashire	-94	44	250	44	***	119	453	96		***	71	7
Whiston	221		200			-			383	3	85	85
Wigan	48	6	42			1176	1211	1140	1173	4	33	30
Total Rural Districts	48 2210	62				50	156	42	103	4	38	82
Total Urban Districts	7716	62 2481	2148	62	10	5246	6613	2268	2934	32	733	621
Total Administrative County	9926		5230	2464			59680		8943			13112
/ / /	9926	2543	7378	2526	31	37207	66293	9118 1	6877	1066	13237	13733

New Houses.-The statement below gives the number of new houses crected in the Administrative County during the past 10 years :--

	No. of		No. of
Year	new houses	Year	new houses
1923	3283	1928	6646
1924	4891	1929	8940
1925	6859	1930	6336
1926	8397	1931	8640
1927	10470	1932	9926
		Tot	tal 74,388

#### HOUSING CONDITIONS.

The following information on the housing conditions in the County area has been extracted from the local reports :---

1 .-- GENERAL OBSERVATIONS AS TO HOUSING CONDITIONS .-- Ashton-under-Lyne, two compulsory Purchase Orders approved by Ministry, land required for expansion; Bacup (B), back-to-back and self-contained houses prevail; Billinge and Winstanley, worse conditions in Billinge Chapel End, the houses are of stone, old, badly situated, damp, defective in light and ventilation and in bad repair ; Clitheroe (B), considerable number of back-to-back houses ; Crompton, about 90 houses are old and of bad construction, 131 back-to-back houses ; Colne (B), 665 back-to-back and 504 single houses still exist; Darwen (B), dampness is common and drainage of sites necessary; Farnworth, many houses have fallen into disrepair ; Ince-in-Makerfield, parts are badly congested ; Lancaster (B), approximately 500 houses (including those in yards and courts) about 100 years old are lacking in light, ventilation and proper convenience ; Ormskirk, some very old houses in courts are not up to standard ; Oswaldtwistle, 50 back-to-back houses, 20 without backyards and 200 over 100 years old ; Padiham, some back-to-back, back-to-earth, and single houses ; Preesall, 66 poor and of old type, 22 demolishable; Prescot, about 50 per cent. of the total number of houses were erected prior to 1890, of which approximately 6 per cent, are unfit for habitation; Ramsbottom, some back-to-back houses, about 100 years old, under consideration; Rawtenstall (B) 205 houses in bad condition-Corporation propose to close them and replace by new ones; Ulverston, some very old and dilapidated cottages and no attempts made to meet shortage; Burnley (R), stone-built houses prevail, about 130 back-to-back and a number of single and back-to-earth houses, sanitary accommodation inadequate, not worth modernising and modern houses too expensive; Leigh (B), approximately 10 per cent, are 100 years old and below reasonable standard ; Mossley (B), standard not high, houses with two bedrooms prevail and have no fixed bath; Ulverston (R), no action likely to be taken to provide better housing conditions; West Laneashire (R), improving generally, dampness still prevails in old type cottages and in some of the new villa type where built of solid walls.

2.—SUFFICIENCY OF SUPPLY OF HOUSES.—Extent of Shortage, &c.—In about 74 districts, a shortage of houses is reported by local Medical Officers of Health, and measures are indicated for meeting the shortage. Increased population or the likelihood of such is reported in 17 districts and a decreased or probable reduction of population reported in 15 others. Sites are reported to be too expensive or difficult to find in 7 districts. Danger of mining subsidence restricts availability of safe building sites in 5 districts. There is very little available land in 2 districts. Sanction required for purchase in one district, and negotiations are proceeding for purchase of land in another district. The following are a few of the observations :-- Chadderton, 5 year programme (265 houses); Denton, private enterprise has done a good deal, scheme for 82 houses in abeyance; Hindley, erection of 80 houses contemplated; Huyton-with-Roby, 36 houses in course of erection ; Lancaster (B), about 150 houses erected in 1932, and a further 150 are in progress ; Leigh (B), 84 houses completed and 330 others in course of erection ; Litherland, scheme for 50 houses in hand ; Middleton (B), scheme for 157 houses completed ; Milnrow, awaiting permission to build 50 houses; Morecambe and Heysham (B), about 250 houses required at a rental of 10/-, scheme approved, but afterwards deferred ; Ormskirk, proposal for 50 houses at Burscough ; Padiham, shortage in 4 wards, new housing scheme in operation ; Preesall, scheme in preparation for 20 houses; Prescot, approximately 500 houses required, 27 acres of land acquired; Royton, about 150 houses required, scheme under consideration; Skelmersdale, 24 houses erected and a further 6 in course of erection; Standish-with-Langtree, great lack of cheap houses, scheme for 40 houses almost complete, further 150 contemplated ; Swinton and Pendlebury, 589 applicants, 71 houses under construction and further 70 in progress, land pur-chased, many houses erected by local authority and private enterprise; Tyldesley-with-Shakerley, further 52 houses contemplated ; Wardle, proposal to erect 80 houses on Birch Road ; Widnes (B), approximately 600 required, arrangements made for 208 and local authority will gradually provide remainder; Limehurst (R), negotiating for crection of subsidy houses in Bardsley; Whiston (R), general shortage at reasonable rents, erection of 100 houses contemplated.

Shortage of houses is reported in a number of other districts, in many of which it is said to be considerable.

3.—OVERCROWDING.—References to overcrowding are made in approximately 50 districts— Abram, 50 cases ; Billinge and Winstanley, 36 recorded cases ; Crompton, 8 or 9 bad cases and 70 moderate ; Darwen (B), many instances of two families in one house ; Eccles (B), 15 cases reported ; Golborne, considerable ; Great Harwood, 20 cases ; Heywood (B), prevalent ; Kearsley, considerable ; Lancaster (B), population of 1,686 living more than two in a room ; Leigh (B), about 6 per cent. of houses overcrowded ; Litherland, number of houses with more than one family ; Little Hulton, large families in small houses ; Middleton (B), 17 cases discovered— 177 cases on register ; Morecambe and Heysham (B), chiefly in houses let off in rooms ; Ormskirk, 100 cases ; Padiham, about 80 tenements with more than two occupants per room ; Prescot, 16½ per cent. of houses overcrowded ; Skelmersdale, 52 cases ; Standish-with-Langtree, about 50 cases ; Waterloo-with-Seaforth, considerable ; Westhoughton, considerable ; Widnes (B), houses in Coppull ; Whiston (R), considerable ; Wigan (R), some cottages tenanted by large families.

Causes of overcrowding are stated to be inability to pay rents, trade depression, and lack of houses.

To cope with the overcrowding, houses have been crected in many districts, schemes are in progress or contemplated in several others. In some cases, large families are given preference and, in one district, back-to-back houses are being altered as they fall vacant.

4 .- FITNESS OF HOUSES .- Difficulties found in action under the Public Health Acts or under the Housing Acts include the excessive cost of repairs, old property not worth extensive repairs or beyond repair, and rent arrears retarding the carrying out of repairs. Mining subsidence is reported as creating difficulties in one instance. Special measures taken or suggested *e.g.* in relation to particular types of insanitary property or in regard to arrangements made for the gradual carrying out of programmes for repair, include regular inspections, the conversion of back-to-back houses, the scheduling of property for replacement, etc.; Accrington (B), property scheduled for replacement ; Atherton, demolition of insanitary property and alterations to others ; Chadderton, 65 houses to be dealt with under the Housing Act, 1930; Clayton-le-Moors, few back-to-back houses converted to through houses ; Clitheroe (B), survey report under consideration ; Colne (B), five year programme arranged in 1931 for 125 houses to be repaired, 135 houses demolished and 150 new ones provided ; Huyton-with-Roby, clearance areas scheduled ; Irlam, 4 houses demolished ; Middleton (B), scheme under consideration ; Newton-in-Makerfield, application made for several clearance areas and a further one to be made for closing 24 houses ; Oswaldtwistle, abolition of back-to-back houses; Preesall, clearance order in hand for 17 houses, with provision of new small back-to-back houses; Preesan, clearance order in hand for Pr houses, with provision of new small houses; Radeliffe, certain small isolated groups of houses reported and remain to be dealt with; Ramsbottom, representations made with regard to 9 houses; Standish-with-Langtree, two areas awaiting agreement; Stretford, five years programme; Tyldesley-with-Shakerley, programme under the Housing Act, 1930; Royton, notice on owner in clearance area; Widnes (B), much required under the Housing Act, 1930, in relation to clearance only—no improvement scheme contemplated ; Worsley, clearance order obtained—other schemes contemplated ; Garstang (R), re-survey of old houses. Houses without adequate internal water supply are reported—at Billinge and Winstanley 28, Chadderton 63, Great Crosby 22, Lancaster (B) 329, Mossley (B) 56, Ormskirk 44, Oswaldtwistle 90, Radcliffe 30, Garstang (R) 535, Limehurst (R) about 5 per cent., West Lancashire (R) 20 and Whiston (R) 90; most of these houses are supplied from wells or springs, others from standpipes. A few houses in various other districts are supplied by standpipes. Referring to the extent to which houses have no water closet or other adequate sanitary accommodation within their own curtilage, it is reported that at Clitheroe (B) there are 104, Colne (B) 178, Hindley 107, Lancaster (B) 163, Leigh (B) 1,000, Radcliffe 418, Standish-with-Langtree 1,614, Tottington 200, and Lancaster (R) approximately 4 per cent. At Abram, 801 houses have privies; at Ince-in-Makerfield, approximately 3,539 houses have combined accommodation and 418 such houses in Radeliffe.

5.-UNHEALTHY AREAS.-According to reports, unhealthy areas exist in about 26 districts and several schemes have been submitted : Ashton-under-Lyne (B), approval of Ministry of Health obtained in respect of two compulsory purchase orders; Atherton, three small areas-clearance order procedure being taken-one order nearly completed, 27 houses demolished; Bacup (B), an area of 54 houses and certain other premises suggested for clearance; Colne (B), inquiry to be held regarding clearance of Windy Bank, plans prepared and land acquired for re-housing estate; Dalton-in-Furness, houses known as Gibraltar scheduled for clearance; Eccles (B), inquiry held; Farnworth, order confirmed for 3 areas involving 41 houses-further orders awaiting confirmation for 9 areas involving 88 houses ; Haslingden (B), Huyton-with-Roby, and Orrell, areas under consideration ; Padiham, considerable portion of Clay Bank Ward was condemned in 1930, but no action has yet been taken by the local authority ; Prestwich, 24 houses in Perkin's Yard area in progress of demolition, 9 houses in Hope Square area (compulsory purchase order sanctioned by Ministry); Royton, certain areas to be cleared; Standish-with-Langtree, 2 areas inspected and declared-particulars being prepared for Ministry, 33 insanitary houses at Standish Lower Ground under consideration ; Swinton and Pendlebury, 3 clearance areas confirmed and 2 others under consideration; Whitefield, a few areas scheduled and necessary action being taken ; Widnes (B), proposal to deal with an area on east side of Waterloo Road comprising 104 houses, also individual unfit houses in other parts; Worsley, one area of 12 houses made a clearance area, and other small areas under consideration.

6.—BYE-LAWS RELATING TO HOUSES, HOUSES LET IN LODGINGS, AND TO TENTS, VANS, SHEDS, ETC.—Existing bye-laws are adequate in most areas. In some districts difficulties are found in dealing with van dwellers.

7.—GENERAL HOUSING OBSERVATIONS.—Information given under this head is, for the most part, contained in the foregoing paragraphs. There is a good demand for houses at low rents. A difficulty to contend with in many districts is the finding of alternative accommodation.

8.—HOUSING SCHEMFS.—Schemes have been prepared or are under consideration in approximately 70 districts. Several of the earlier schemes have been completed.

The following comments are made by local Medical Officers of Health in their annual reports :---

Abram.—Considerable number of new houses still required to abate overcrowding and to relieve the occupation of houses by more than one family.

Ashton-in-Makerfield.—The Council is preparing to build 100 more houses and will expedite improvements.

Atherton.—There exists a considerable shortage of houses and this statement is supported by the fact that there are still 850 applicants for houses on the waiting list. The houses now in course of erection will be totally inadequate to meet the demands. Of 60 houses found to be unfit, 51 were scheduled for clearance order procedure, 6 were dealt with as individual unfit houses, 2 were demolished voluntarily, and the remaining one was closed voluntarily by the owner.

Chorley (B)—Overcrowding still exists, but improvement is slowly taking place. The reasons for overcrowding vary, but are mainly (1) inability to pay the rent of a larger house, (2) sub-letting, and (3) disinelination to move to another house or to another part of the town; 922 defective houses were rendered fit for habitation during the year.

Clitheroe (B)-There are over 200 single and back-to-back houses which, although of substantial construction, are not of a type to comply with modern housing standards.

Colne (B).—In many parts are rows of back-to-back houses tottering in their senility and decay. Their defects are so manifest and the unhealthy living conditions they create so obvious, that one can only view them with disgust, and with reflection an urge comes to sweep them away. That there are still areas in Colne which require to be dealt with as clearance or improvement areas cannot be denied. . . . These occupants although paying extortionate rents in many cases, considering the class of property, are condemned to exist in insanitary and dilapidated buildings one can hardly call them dwellings, lacking in the simple amenities of life and lead a drab, cheerless existence, preyed upon by illness. . . . In the Borough there still exist 665 back-to-back and 504 single type houses; the remainder are of the through type. So long as rows of back-to-back houses exist, deficient in light and ventilation, aggravated by narrow streets, the absence of gardens or back yards, unventilated food stores, and sanitary conveniences a distance away from the houses, one cannot describe the general standard of housing as satisfactory.

Denton.-Inability to pay existing rents is the chief cause of overcrowding.

Eccles (B).—During the year steady progress has been made in improving the housing conditions in the Borough. Five small areas which were considered unfit for habitation were the subject of an inquiry by an Inspector of the Ministry of Health, and in respect of three areas and a portion of the fourth the Clearance Orders were confirmed.

Haydock.—The supply of workmen's cottages is inadequate for the needs of the district, but the Council is endeavouring to meet this requirement. During the year 38 houses have been built by the Council.

Ince-in-Makerfield.—During 1932, 192 more houses have been erected by the Local Authority as part of the housing schemes, and altogether 410 houses have been erected. Although there are no real slums, certain parts of the district are badly congested, and a definite shortage of houses causes some overcrowding.

Lancaster (B).—During 1932, 152 Council houses were completed, in addition to 137 by private enterprise. A further 150 Council houses have been completed since the end of 1932 or will soon be completed. The five years' programme, adopted by the Council in January, 1931, provided for the building of 800 houses and the demolition of 200 unfit houses by the end of 1935. The estimated number of houses to be demolished is between 300 and 400; the number of unfit houses is considerably greater. The number of overcrowded houses increased from 255 to 388 during the ten years, 1921 to 1931, and this despite the large provision of new houses during the same period. The unfortunate fact from the point of view of public health is that overcrowding is most prevalent in the less habitable houses. When the five years' programme was drawn up, early in 1931, it was estimated that there were nearly 500 unfit houses in the Borough, and that about 400 of these ought to be demolished. Towards the end of 1932 the Committee considered representations from the Medical Officer in respect of a number of unfit houses. Litherland.—At the time of writing the Council have in progress the erection of 50 houses. There is still a great demand for houses of the working class type.

Little Hulton.—The clearance or re-construction of several areas many times recommended is still under consideration, the difficulties being the type of tenant, the large families involved, and the inability or disinclination to pay an increased rent.

Little Lever.—There are many houses in the district which are very old and which compare very unfavourably with modern houses. The district would be greatly improved if these old houses were demolished and replaced by modern cottages. The great need of the district is the provision of additional modern cottages at low rentals. Plans have been passed for the erection with financial assistance under the Housing Act, 1924, of 24 of these cottages in 1933, containing a superficial area of 760 feet, but this figure is totally inadequate for the district. There is a large waiting list of people who are anxious to live in a modern cottage.

Orrell.—There still remain 80 single tenements without through ventilation, and back-toback houses. Some of these are getting into a bad state of repair.

Oswaldtwistle.—About 500 houses are over 100 years old and the remainder range from modern to 80 years old. There is a shortage of four-roomed houses, let at low rents, and the matter is under consideration. . . . Eighteen of the "back-to-back" type require reconstruction.

Padiham.—Overcrowding is due to two factors : (1) scarcity of houses. (2) inability of some of the inhabitants to pay the rents of available houses which is due again to the large amount of unemployment. The one blot on the present Local Authority's many activities has been its failure to proceed with the demolition of the portion of Clay Bank Ward comprising 33 houses, which were condemned in 1929 as unfit for human habitation.

Prescot.—Approximately 50 per cent. of the total number of houses in the district were erected prior to 1890 and about 6 per cent. are to-day unfit for habitation;  $16\frac{1}{2}$  per cent. of the dwelling-houses in the district are overcrowded.

Ramsbottom.—Some properties of a hundred or more years old—back-to-back—have served, however inadequately, their day and generation, and ought to be demolished and new houses more in keeping with present day public health requirements erected in their place.

Skelmersdale.—During 1931 the Council embarked upon their first housing scheme, twentyfour houses have been erected and tenanted, and a further six are being erected. The tenants have been selected only from houses where overcrowding exists. The standard of the houses in the district is poor generally; dampness is prevalent, and a deplorable number of the houses are still provided with privy middens. Houses are mainly in long rows of cottage type, and are usually tied together with iron bars to counteract subsidence from subjacent colliery workings.

Swinton and Pendlebury.—Some owners, happily not many, are asking extortionate rents for houses that become decontrolled; 12/6 per week is being asked for houses that were 4/6 to 5/- pre-war.

Ulverston.—Thirty-six houses have been erected during the year, and for these there were one hundred applicants, the tenants being chosen from the worst cases of overcrowding. The Medical Officer of Health states that plans had been prepared for an additional eighteen houses, but the plans did not reach the Ministry until after the subsidy had been withdrawn. The Council are unlikely to proceed further with the matter, and it is doubtful whether private enterprise will meet the need.

Whitworth.—Instead of tinkering with worn-out and insanitary houses, most of which would be better knocked down, the immediate aim should be to provide new houses at an economic rental, then displacement could be carried out.

Burnley (R).—There are about 150 back-to-back houses, and several back-to-carth houses. The majority of these smaller and older houses are in fairly good repair, but lack through ventilation and adequate and readily accessible sanitary accommodation.

Ulverston (R).—The district is not in a satisfactory position with regard to houses for the working classes. There are dwellings that are quite unfit for habitation and should be closed, and many more which fall far below a reasonable standard of fitness, but on account of the lack of alternative accommodation, it has been impracticable to recommend closure. As the Ministry have now withdrawn the subsidy, it is impossible to build houses which can be let at a reasonable rent, and under the circumstances we can simply condemn ourselves to a policy of drift, unless the Council is prepared to adopt a much more public spirited-attitude than they have shown in the past.

West Lancashire (R).—The Council's policy of further housing schemes has helped greatly to ameliorate the housing shortage. There is still a need for houses, particularly those of smaller type with two bedrooms. A notable step forward is the launching of a town planning scheme. Whiston (R).—During the year a special housing survey was undertaken in the townships of Bold, Eccleston, Whiston, Rainhill and Tarbock to ascertain the extent of overcrowding; 1,023 houses were inspected, nearly 200 of which were found to be overcrowded. Particulars were forwarded to the Minister of Health and sanction was obtained to proceed at once with the crection of 100 houses.

Wigan (R).—The need for houses at an economic rent for small wage earners is being met by the Authority in erecting houses in Shevington, Wrightington and Dalton. Many old houses are in poor condition, and several are scheduled as unfit for human habitation; others are on the border line, and it will soon be a question as to whether they are worth re-conditioning.

The Housing (Rural Workers) Acts, 1926 and 1931.—The County Council has delegated its powers and duties under the 1926 Act to the following 39 districts :—

Non-County Boroughs (	17):		
Accrington	Darwen	Lancaster	Morecambe and Heysham
Bacup	Eccles	Leigh	Mossley
Chorley	Haslingden	Lytham St. Anne's	Nelson
Clitheroe	Heywood	Middleton	Rawtenstall
Colne	and the state of the		
Urban Districts (19) :			
Farnworth	Prees	all	Upholland
Horwich	Rams	bottom	Wardle
Litherland	Rishte	on	Westhoughton
Littleborough	Stretf	ord	Whitworth
Little Hulton	Swint	on and Pendlebury	Worsley
Milnrow	Trawo	len	and the state of the second state of the
Newton-in-Makerfie	ld Tyldes	sley-with-Shakerley	
Rural Districts (3) :			
Bury	Clithe	roe	Whiston

The following table shows the number of applications received up to 30th June, 1983, by the County Council for grants under the Housing (Rural Workers) Act, in respect of the area under their jurisdiction. No applications have been received for loans.

Purpose for which	applic	of dwelling pect of wh ations for ave been-	ich grants	Assist promis the Co	ed by	Assist giver the Co	1 by	No. of dwellings	
assistance required.	Made to the Council.	Refused by the Council.	With- drawn by appli- cants.	Total Amount of grants promised	No. of dwel- lings con- cerned	Total Amount of grants paid	No. of dwel- lings con- cerned	On which work has been finished	On which work has been commenced and not finished
	1000	201200		£		£	-	The second	1999
Conversion into dwellings of buildings not previously used as dwellings	11	2	2	700	7	700	7	7	
Improvement of existing dwellings	14	1	8	986	10	936	10	10	
Total	25	3	5	1636	17	1636	17	17	

On the 22nd May, 1933, the Ministry of Health issued Circular 1335 on "Rural Housing" to County Councils and Rural District Councils. The Minister states that he recognises that the provision of housing accommodation in rural districts, especially for agricultural workers and other workers of low rent-paying capacity, presents special difficulties. The immediate need in most rural districts is for improving the existing housing conditions. The Housing (Rural Workers) Acts, 1926 and 1931, afford a most satisfactory and economical method of providing improved accommodation for agricultural workers. Part IV of the Housing Act, 1930, gives to County Councils a special responsibility in relation to the provision of houses in rural districts, and by Section 34 enables contributions to be made by the County Council towards the cost of the provision of houses by Rural District Councils, and requires a contribution to be made where houses are required for the accommodation of the agricultural population of the district.

During the year 1932 only 2 applications were received by the County Council for financial assistance under the Housing (Rural Workers) Acts ; one of these, on investigation, did not come within the provisions of the Act, and in the other case a grant was made.

Under the Housing Act, 1930, an application was received from the Warrington Rural District Council in respect of houses provided by the Council in the Parish of Woolston-with-Martinscroft for the accommodation of members of the agricultural population, and the County Council (July, 1933) resolved to make the statutory contribution of £1 per house for 40 years in respect of ten houses.

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# INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.—Many references are made in the local reports to the action taken during the year in regard to the milk supply. From the table on pages 116 to 119, it will be noted that in the County Council area there are over 7,800 cowkeepers, and in addition 3,669 dairymen or purveyors of milk. The farms number about 7,274, and the approximate number of cows is 103,400.

Much time and attention, both of the County and local public health officials, has been devoted to the question of the milk supply, mainly with the object of obtaining a high standard of purity in the milk, and the improvement of farm premises. Elaborate cowsheds and costly dairy premises may not be essential to the production of clean milk, but properly constructed sheds and dairies greatly facilitate this end. Milk of a high standard of bacteriological purity cannot be produced without very considerable care and attention to detail on the part of the farmer and his employees. A good sanitary environment for the cows, and regular grooming and cleaning, are vital factors, and are equally as important as a clean dairy. The County and Local Authorities are endeavouring to impress upon producers the necessity of a rigid standard of cleanliness in all stages of production, and it is only fair to state that, whilst there is still need for further improvement both in the matter of premises and methods of production, during recent years this educational work is undoubtedly producing good results. It is, however, again emphasised that special and constant attention must be paid by the public health authorities to farms and farm premises, with a view to creating and sustaining a greater interest in their general management, to the necessity for the careful housing of the stock, and for scrupulous cleanliness at all stages of milk production and storage. These are the basic needs to raise milk production to the desired standard.

The general public can assist very materially to this end by demanding milk of a high standard of cleanliness. Support should be given to those enlightened producers who are endeavouring to supply an article of high standard, and milk of questionable cleanliness should be rejected.

Inspections of farm premises by the local officials in 1932 exceeded 16,000, and a large number of routine inspections were made by the County Sanitary Officers in co-operation with the local officials. These joint inspections resulted in very considerable improvements being effected in cowsheds and farm premises generally. At the time of these inspections 143 samples of milk were taken by the County staff and despatched for examination for tubercle bacilli, bacterial count, etc.

The local reports show that in a number of districts owners voluntarily undertook works of improvement, including re-construction of cowsheds, extensions, ceilings raised, floors concreted, walls cemented, additional window area and improved ventilation. In Rishton £1,200 was expended on re-modelling dairies and cowsheds; at least £1,000 was spent in Blackburn (R) in improvements, including paving of farm yards and providing water supplies; Darwen (B), £79 in general improvements to ceilings, floors, windows, water supplies, etc.; Burnley () £730; Waterloo-with-Seaforth £650; Bacup (B) £632; Westhoughton £580; Leigh (R) £570; Worsley £550, etc.

A few comments by local Medical Officers of Health are here given :---

Bacup (B).—At some farms no provision is made for the storage of milk between the intervals of milking. More overalls are being provided for the use of milkers, and greater care is being taken during the processes of milking so as to produce a clean milk.

Colne (B).—During the year a campaign was commenced (in conjunction with the County Council) for a biological examination of all milk produced within the Borough, but owing to pressure of work on the department the work of sampling had to be curtailed.

Kearsley.—The results of the bacteriological examinations of some of the milk samples indicated manurial contamination at some point in the process of production, and is probably due, either to insufficient washing and grooming of the cows before milking, to carelessness in the thorough washing of hands, or to ineffective sterilization of utensils.

Middleton (B).—With a view to obtaining reconstruction of buildings, the following recommendation was made to the Health Committee :—" That conferences be arranged with the owners or their agents at the farm buildings and that the conditions requiring attention to bring the cowsheds into a satisfactory state be placed before them, and the result of each meeting be reported to the Health Committee. It is suggested that the meetings be arranged by the Sanitary Inspector and that the Medical Officer of Health, Sanitary Inspector and representative from the County be present at each meeting."

Ulverston.—A good deal of improvement has been effected in the condition of many of the cowsheds and, as time goes on and old prejudices are removed, still further advances may be seen in the production of pure milk, which the public is beginning to demand.

Westhoughton.—There is a general tendency towards the production of a more clean and wholesome milk supply. A notable improvement has been the erection of separate can-washing and dairy premises, and the adoption of a good standard of floor construction in cow-houses at several farms. The use of the sediment tester has been continued during the year, and the results have been gratifying. Whitefield.—Though much has been done and achieved, there is still room for certain improvements to be carried out, the most important being the installation of adequate steam sterilizing plants, as it is a recognised fact that where such plants have been installed the milk has kept sweeter for a longer period than where utensils have been cleansed by other methods.

Blackburn (R).—Farmers and owners have continued to render willing help in making improvements to shippons and dairies whenever defects have been pointed out to them by the Local Authority. Many samples have been tested for sediment, and the very high standard of cleanliness obtaining proves that the farmers generally are successfully doing their utmost to provide the public with clean milk.

Burnley (R).—Note is made of many improvements in farm buildings, the greater interest taken by the farmers in keeping the cows and shippons clean, and the adoption of clean methods in milking and in the storage and distribution of the milk.

Chorley (R).—The steady improvement in the cleanliness of the milk-producing farms is noticeable. It is being realised that cleanliness in production is essential to maintain the keeping quality of the milk.

Lunesdale (R).—The handling and distribution of milk supplies has much improved during the last two years. Greater care is taken in cleansing the kits and washing the hands of the milkers before they begin their work.

Ulverston (R).—Endeavour is made to ensure that the milk supply is produced under decent circumstances, but there are still some sheds that are grossly insanitary.

Warrington (R).—Clean milk is being produced in greater quantities than ever before, but there are still some milk producers whose ideas of what clean milk is and how it is to be procured need a lot of revising.

Some of the local authorities employ a veterinary surgeon to make periodical inspections of the cattle housed in their districts. It is stated that on these inspections some 7,000 animals were examined.

MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.—During the year under report 179 notifications that tubercle bacilli had been found or were suspected in milk supplies were received by the County Public Health Department from local Medical Officers of Health under Section 4 of the Milk and Dairies (Consolidation) Act, 1915. In each case one of the 29 Veterinary Surgeons retained by the County Council visited the farm and examined the cattle, and at the same time a County Sanitary Officer inspected the farm premises.

The number of cattle inspected on the first visits was 4,033; 73 re-visits were necessary owing to tubercle bacilli being found in samples of milk from groups of cows. The Veterinary Officers immediately gave notice respecting 14 animals showing definite clinical signs of tuberculosis and these were slaughtered under the Tuberculosis Order, and in addition a number were recommended for slaughter owing to their poor condition.

Altogether, in this connection, 1,190 samples of milk were submitted to the biological test for tubercle bacilli, the samples from individual cows being also examined microscopically. Of these samples 652 were unmixed milk (milk from individual cows) and 117 were reported positive, the animals concerned being promptly notified to the County Agricultural Department for slaughter under the Tuberculosis (Animals) Order, 1925. Of the remaining 538 samples from groups of cows, 73 were positive. The latter were followed up until the offending animal or animals were discovered.

Under Section 8 (3) of the 1915 Act, the County Authority was requested in six instances, by the officials of County Boroughs, to obtain "appeal to cow" samples at farms in the Administrative County.

The County Agricultural Committee's reports show that during the year 1932 the number of cases reported under the Tuberculosis Order, 1925, was 643, and the number of animals slaughtered by order 585.

The officials of 49 local authorities submitted 1,231 samples of milk for bacteriological examination, 107 of which were reported positive.

The steps taken to prevent the adulteration of milk by the County Council as the Authority under the Food and Drugs (Adulteration) Acts are referred to on pages 125 to 138; 3,118 samples of milk were analysed in 1932. The action taken under the Milk (Special Designations) Order, 1923, is set out on pages 119 to 124. DATRIES, COWSHEDS AND MILKSHOPS.—The number of cowkeepers and dairymen or purveyors of milk in each district is shown in the following table :—

DAIRIES, COV	SHEDS AND	MILKSHOPS.
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		Cowĸ	EEPERS.	DAIRYMEN OR PURVEYORS OF MILK (other than cowheepers).	Arrangements for
URBAN DISTRI	CTS.	Number.	Number of Inspections.	Number.	Veterinary Inspection of Dairy Cows.
Abram		16	62	1	-00 v.1 mint
Accrington (B)		56	114	64	Yes.
Adlington		16	36	25	
Ashton-in-Makerfield		40	132	8	When required.
Ashton-under-Lyne (B		6	24	245	When required.
Aspull		14	56	24	When required.
Atherton		19	67	34	Yes.
Audenshaw		9	28	84	a fine thirt begin th
Bacup (B)		86	142	2	When required.
Barrowford		25	26	9	
Billinge and Winstank	y	87	75	8	
Blackrod		33	41	Bon machines	11) dormalize When
Brierfield		7	32	49	the start to and the start
Carnforth		16	32	17	
hadderton			30	104	When required.
horley (B)		26	94	110	When required.
burch		4	12	18	Mineran Dar
layton-le-Moors		a later and	32	35	an alog day if you have
litheroe (B)				11	- mail bern kille au
olne (B)		A LA LA PROPERTY A	98	72	and a self of the second
			132	27	
and in the second states			51	1	The real many sell
Dalton-in-Furness		and the second states	279	17	When required.
and the second second second		a settitube es haus	247	210	Yes.
				The most brant wh	A co. entrationals to
Denton		A second s	124	57	
Droylsden		the rest in the second second	93	55	direct offerstat m
Eccles (B)		Colorse Control	42	158	Yes.
ailsworth			157	56	Survey and the state of the
farnworth			122	160	Yes.
'leetwood			58	89	
Formby		. 20	78	6	A the shirt walk w
Aulwood			21	20	When required.
folborne		The lot to de and	50	6	
Trange-over-Sands		Party and in Tank of the	36	a she fahren i	When required.
Great Crosby		. 19	122	9	
Great Harwood		. 21	56	5	S. J.L. Street
Haslingden (B)		. 101	119	29	When required.
Haydock		. 15	131	3	inder surger to de
Heywood (B)		. 39	92	20	When required.
Hindley		24	103	3	When required.

URBAN DISTRICTS	Cowk	EEPERS.	DAIRYMEN OR PURVEYORS OF MILK (other than cowkeepers).	Arrangements for
	Number.	Number of Inspections.	Number.	Veterinary Inspection of Dairy Cows.
Horwich	 30	148	38	Yes.
Huyton-with-Roby	 15	83	2	
Ince-in-Makerfield	 • 3	35	16	
Irlam	 4	18	22	
Kearsley	 5	10	38	
Kirkham	 10	328	4	
Lancaster (B)	 16	139	67	
Lees	 2	27	36	
Leigh (B)	 59	148	146	Yes.
Leyland	 54	110	4	
Litherland	 7	51	12	When required.
Littleborough	 70	146	1	in the second
Little Hulton	 13	31	23	Contrast Street and sold it
Little Lever	 11	87	5	
Longridge	 32	130	3	
Lytham Saint Anne's (B)	 32	130	49	Yes.
Middleton (B)	 74	238	64	When required.
Milnrow	 84	326	1	
Morecambe and Heysham (	17	66	84	Yes.
Mossley (B)	 17	87	2	When required.
Nelson (B)	 32	161	20	Yes.
Newton-in-Makerfield	 18	46	41	When required.
Norden	 41	9	1	
Ormskirk	 20	54	17	
Orrell	 17	190	25	
Oswaldtwistle	 67	190	17	
Padiham	 12	21	17	
Poulton-le-Fylde	 11	- 41	11	···· pland
Precsall	 42	12	· · ·	
Prescot	 6	104	7	
Prestwich	 11	56	55	
Radcliffe	 21	66	38	
Rainford	 27	27	13	*** 30000000
Ramsbottom	 51	19	6	
Rawtenstall (B)	 184	246	49	
Rishton	 27	200	85	
Royton	 23	69	6	Yes.
Skelmersdale	 12	36	18	

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### DAIRIES, COWSHEDS AND MILKSHOPS-continued.

Standish-with-Langtree

URBAN DISTRICTS.		Cowke	EPERS.	DAIRYMEN OR PURVEYOBS OF MILK (other than covkeeperd).	Arrangements for Veterinary Inspection
CREAN DISTRICTS.		Number.	Number of Inspections.	Number.	of Dairy Cows.
stretford		4	27	229	When required.
winton and Pendlebury		8	49	- 57	Yes.
hornton Cleveleys		82	281	15	When required.
ottington		47	120	2	
frawden		85	85	21	
Curton		122	426	3	
Fyldesley-with-Shakerley		24	118	12	Yes.
Jlverston		27	325	8	When required.
Jpholland		38	70	6	
Jrmston		6	8	17	Imalga
Valton-le-Dale		60	114	28	
Wardle		46	62	1	and an and a lot
Waterloo-with-Seaforth		18	89	85	
Westhoughton		84	374	22	
Whitefield	• • • •	6	99	10	
Whitworth		35	136		When required.
Widnes (B)		32	96	80	Yes.
Withnell		85	82		
Worsley		20	80	18	When required.
				a fully	
Fotal Urban Districts		8047	9932	3360	A. (0) months
					- Contraction of the second
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1.1	
RURAL DISTRICTS			-	- 446	
RURAL DISTRICTS			1	1 1 1 1 1 1	
Barton-upon-Irwell		42	45	26	-tarin beau
Blackburn		351	1120		There are substituted
Burnley		390	356	1	shit fin then they
Bury		120	187	123	Val Reared
Chorley		294	815	7	
litheroe		309	733	1	
Fylde		424	385	38	
arstang		617	376	1	installet
ancaster		332	480	2	The second second
.eigh		60	204	2	
		75	14	25	
unesdale		411		2	Without an an an and a sold
Preston		704	131	30	
Jlverston		205	856	4	When required,

DAIRIES, COWSHEDS AND MILKSHOPS-continued.

DAIRIES, COWSHEDS AND MILKSHOPS-continued.

RURAL DISTRICTS.	Cown	CEEPERS.	DAIRYMEN OR PURVEYORS OF MILK. (other than conkeepers).	Arrangements for Veterinary Inspectic	
	Number.	Number of Inspections.	Number.	of Dairy Cows.	
Warrington	77	154	22		
West Lancashire	90	263	18		
Whiston	122	260	6	When required.	
Wigan	135	340	6		
Total Rural Districts	4758	6219	309	and and and and and and and and and and and and and and and and	
Total Administrative County	7805	16151	3669	eyterni Alaestoon Ittae Ballon	

THE MILK (SPECIAL DESIGNATIONS) ORDER, 1923.—Under this Order the County Council in the year 1932 issued 50 licences for the production and distribution of Grade A milk, an increase of 5 on the previous year.

The table following shows the number of licences issued under the Order.

THE MILK (SPECIAL DESIGNATIONS) ORDER, 1928.

LICENCES ISSUED, 1932.

			Licences issued	Licences issued		L	icences in	soed b	y Local	Authorities.		
URBAN	DISTD	ICTS	by Ministry of Health.	by County Council.	No. of E		Licences ct of :	issued	in	No. of Licences issued in respect of " Pasteurised " Milk,		
UNDAN	DISTR	1015.	" Certified "	"Grade A "	" Certified "	(Tube Test	ade A rculin ed) ''		de A " äk,	Pasteurising Plants.	Retail	
			Milk.	Milk.	Milk.	Bott- ling	Distri- bution	Bott- ling	Distri- bution	France.	Distributors.	
Abram			 								2	
Acerington (B)			 ***		1				1	1	50	
Ashton-in-Mak	erfield		 							1	2	
Ashton-under-l	Lyne (I	3)	 							2	2	
Aspull			 								2	
Atherton			 								2	
Audenshaw			 					***	1		1	
Bacup (B)			 								1	
Barrowford			 	1				***				
Billinge and W	instanl	ey	 		***					***	1	
Brierfield			 								1	
Chadderton			 		2						13	
Chorley (B)			 						5	1	1	
Clayton-le-Moo	TS		 	1				1	1		8	
Colne (B)			 		1							
Darwen (B)			 		3			***	3		38	
Denton			 					***			1	
Droylsden			 						111	1	1	
Eccles (B)			 		1			***	***		1	
Failsworth			 						***	1	7	
Farnworth			 					***	5	1	4	
Fleetwood			 			***		***	1		9	
Formby			 		1			•••			1	
Fulwood			 	1		111		1	1	•••	***	
Golborne			 								1	
Great Crosby			 		2		2		1			

MILK LICENCES—continued.	
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				Licences issued	Licences		Lie	rences is	sued by	Local	Authorities.	
URBAN	DIST	RICTS.		by Ministry of Health.	by County Council,	No. of D	ealers' I		issued	in	in resp	nces issued sect of sed " Milk
				"Certified" Milk.	"Grade A" Milk.	"Certified " Milk.	"Gra (Tuber Testo Mi Bott- ling	rculin ed)"	"Grad M Bott- ling	de A " ilk, Distri- bution	Pasteurising Plants.	Retail Distributors
Great Harwood	1				1							
Haslingden (B)				1		1				1		10
Haydock												1
Hindley												20
Huyton-with-H	toby			1								
Ince-in-Makerf	ield	***							***			20
Irlam	***									2		
Kirkham						2				3	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	In St. THEORY
Lancaster (B)					1	1000				11		
Leigh (B) Leyland										2		1
Litherland								1		1		1
Little Hulton											and the strength	1
Longridge					3		1		1			
Lytham Saint	Anne	's (B)		1	1	11				4		
Middleton (B)						1	1	1	1	2		1
Morecambe an	d Hey	sham (	B)		1	4	1	1	1	1		
Nelson (B)						1	1	•••		5		
Newton-in Mal	kerfiel	ld	***							•••		1
Norden		•••				1 10						
Orrell Oswaldtwistle						1.1.1				1	1	6 11
Poulton-le-Fyl	de				2					2		1
Prestwich						2					1	5
Radeliffe										1		
Rawtenstall (H	3)							1				2
Rishton												6
Standish-with-	Langt	tree										8
Stretford						8		1		6		6
Swinton and P		bury				3		8		***		8
Thornton Clev		***			***	1				7		1
Tyldesley-with Ulverston										1		3
Urmston					1	1			1	1		
Walton-le-Dak				1	2					5		
Waterloo-with						1				2		
Whitefield						8				1		
Widnes (B)								1				
Withnell				1								-
Worsley			•••							1		1
RURAL I		RICTS.										
Barton-upon-I						2			1	1		2
Blackburn			•••		7	2				2		2
Burnley Bury					4							
Chorley					5				6			1
Clitheroe					1							1
Fylde					9				1	8		1
Garstang					1							(I) constants
Laneaster					2							- contract
Preston					1							
Warrington		••••										(11) -1
West Lancashi Whiston		•••			2				2	2		1
Whiston Wigan		•••	•••	1	1				***			2
Wigan					1		•••					
		Total	1.7.0	5		60		11		90		Longer

**EXAMINATION OF " GRADE A " MILK SAMPLES.**— The following statement summarises the results of the examinations of milk samples taken by the County staff during the year from the farmers licensed in 1932 for the production of "Grade A" milk :—

Lieence No.       Bacteria growing on standard agar at $37^{\circ}$ C, in 48 hours.       Absent = -       Cells and c.c.       Extra cous cous c.c.         1.       1,440       -       -       -       -         1.       1,440       -       -       -       -         2.       1,730       +       -       -       -         1.       1,440       -       -       -       -         2.       1,730       +       -       -       -         1.000       +       -       -       -       -         1.000       +       -       -       -       -         380       -       -       -       -       -         3.       5,700       +       +       -       -         4.       1,420       -       -       -       -         4.       1,420       -       -       -       -         5.       2,533       +       -       -       -         6.       2,450       -       -       -       -         6.       2,450       -       -       -       -         13,300       +       +	Total
37° C, in 48 hours. per c.c.       and Cellular Cellular c.c.       and Cellular Cellular products       Materia cous         1.       1,440       -       -       -       -       Products       Materia cous         1.       1,440       -       -       -       -       -       -       -         2.       1,730       +       -       -       -       -       -       -         2.       1,730       +       -       -       -       -       -       -         1,900       -       -       -       -       -       -       -       -         1,000       +       -       -       -       -       -       -       -         3.       5,700       +       +       -       -       -       -       -         4.       1,420       -       -       -       -       -       -       -         5.       2,533       +       -       -       -       -       -       -         6.       2,450       -       -       -       -       -       -       -	Total Sedimen
per c.c. $1-0$ $0-1$ $0-01$ Cellular     cous       1. $1,440$ $   -$ 2. $1,730$ $+$ $ -$ 2. $1,730$ $+$ $  1,900$ $   1,900$ $   1,900$ $   1,900$ $   1,900$ $   1,900$ $   1,900$ $   1,900$ $+$ $  1,000$ $+$ $  380$ $   4.$ $1,420$ $  4.$ $1,420$ $  5.66$ $+$ $  5.$ $2,533$ $+$ $ 6.$ $2,450$ $ -$	ds Sedimen
1. $1,440$ -       -       -         2. $1,730$ +       -       -         2. $1,730$ +       -       - $1,900$ -       -       -       - $1,900$ -       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $1,000$ +       -       -       - $380$ -       -       -       - $4.$ $1,420$ -       -       - $440$ +       -       -       - $5.$ $2,533$ +       -       - $5.$ $2,533$ +       -       - $6.$ $2,450$	11 11
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	.015 
4. $1,420$ $   3,600$ $    440$ $+$ $   5.66$ $+$ $   5.$ $2,533$ $+$ $  6.$ $2,450$ $  -$	12
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566 + 5. $2,533 +$ 6. $2,450$	
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6. 2,450	
6. 2,450	
6. 2,450	
18 300	
	122
1,600 + + -	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	1.22
7. 3,400 + + -	
190	
10.000 F 10.000 F 0.000 F	24.1
8. 3,800	
76 +	
AL PARTY THE THE THE THE THE	
9. 513 6 Trac	e 6
1.815 36	36
790 + 14 "	14
390 22 2	24
	15
10. 13,100 +	1111
1,720 + + -	
2,400 +	
78	
11. 3.700	
484,000 + + +	
825,000 + + +	
70,100 + + +	
20,200 + + -	
12. $250 +$	
230	
13. 460	
3,130 + + -	
14. $126,000 + + -$	
41,100 + + +	
15. 6,900	
50 +	

\* Standard :---Not more than 200,000 bacteria per c.c. and no B. Coli in 0-01 of a c.c.

"GRADE A" MILK-continued.

	*Cultivation. Bacteria growing	P	*B. Coli. resent = .bsent =	+	Pr	irt Estimati arts per 100	
cence No.	on standard agar at 37° C. in 48 hours.	1.0	0.1	0-01	Cells and Cellular	Extran-	Total
	per c.c.	c.c.	c.c.	c.c.	Products	Materials	Sediment
10	1.000						
16.	4,800 142,000	-	-	-			
	219,000	+++++++++++++++++++++++++++++++++++++++	+++++	+			
	127,000	+	+	++++			
	580	+	<b>T</b>	- -			
	000						
17.	830	+	+				
	4,800	+	+	-	10000		
	412,600	+	+	+	DONTE		
18.	1,100	-	-	-	DRE		
	116	-	-	-			
10	0.000	-	i yer		6.700		
19.	8,800	+	+	-			
20.	1,200	-	-				
20.	1,200	-		_			
	1,040	+	+	-			
	1,930	+	- -	-			
	1,000	10					
21.	1,100	+					
	1,960	÷	+	-	- 722.5		
	820	÷	-	-			
					1000		
22.	2,400	+	-	-	OMAC REAL		
	2,200	+	-	-	LUDA E		
-		1					
23.	550	+ •	+	-			
	100	-	-	-			
24.	10.250						***
	10,350 2,780	+++++++++++++++++++++++++++++++++++++++		T	51	2 6	53
	12,033	+	-	-	31 43	Trace	87
	27,533	+	+	-	16		43 16
1000	74,500	+	+	+	14	2	16
Same in	1 1,000	1	-	1		-	10
25.	3,800		-		32	Trace	82
	1,800	-	- 1				
	1,170	+					
26.	830		-	-			
	360	-	-	-			
	180	-	-	-			
	480	+	-	-	107		
27.	9,300						
-1.	9,300	-			(HIT TO )		
	100		-	-	385,000		
28.	970	-	-	_	Course - 7-25.		
	910		-	-	Const Species		
	63,000	+++	+	+	Care and		
	366	-	-	-			
29.	10,000	+	-	-			
	630	+	-	-			
20	0.000	-	100		-		
30.	3,800	-	-	-	38	8	46
	1,847	+	-	-	46	3	49
	485 4,700	-		-	12	Trace	12
	4,700	++++		-	24	22	26
	4,000	4	+	-	25	2	27
81.	2,500	_		-	02	and the state	
	1,500	+ 1	-	E	A CONTRACTOR OF A		

\* Standard :-- Not more than 200,000 bacteria per e.e. and no B. Coli. in 0-01 of a e.e.

# "GRADE A" MILK-continued.

123

State State State	* Cultivation.	P	*B. Coli		Dirt Estimation. Parts per 100,000.			
States	Bacteria growing		bsent =		Pa	rts per 100,	000.	
Licence No.	on standard agar at 37° C, in 48 hours.	and a			Cells and	Extran-	Total	
Plant in the	per c.c.	1.0 c.c.	0·1 e.e.	0.01 c.c.	Cellular Products	cous Materials	Sediment	
	- I'm m				Troducts			
32.	1,370	-	-	-			The state of the s	
a later of the second	700	17	-	-		No gia anti-	the second	
and the hope of	16,100 7,300	++++	+++++	+	and the second		and the second second	
Belessencer.		1		T				
83.	520 4,400	=	-	=				
Freezend Delles	1,020		_					
a second second second	698	+	-	-				
34.	740	+	+	_	15	Trace	15	
	965		-	-	5		5	
	1,897	-	-	-	30	"2	32	
85.	630	-	-	-				
	750	-	-	-				
	310	1	-	1	11 1. 1. 1.	Index times		
	960	+	-	-	- Section of			
36.	17,500	+	+	-	and brine .			
	597,000	+	+	+				
	678,000	+	+	+				
-Serificial	1,070 37,100	++++	++++	-+	E	a souther		
at the Minister	51,100	T	100	1 star	A REPORT OF THE POST	JI MAY 9	n rabuall	
37.	7,660	-	-	-	Lange 198			
- and -	66	-	-	-				
38.	5,300	-	-	-	Start Start	NA ADDRESS	and and	
a controloution a	1,700	-	-	-	10.00	protonal.	MARCH ST.	
o the Public Han	180	+	-		Contact of	Corne 2018	a su patroora	
Chieve and the second	100	-	-	-		a marent	-	
39.	1,700	-	-	-	All and I all	in shall	Chapter V	
and its monthly part	230	+	-	-	2	C. Shiney	11.10000000	
10	550	-				and in the second	in the second	
40.	550 580	+	1	<b>—</b>	in she of	e entri trop	and states in	
and the second second		In the second			Lune an	-Laute to	Involution	
41.	500	+	-	-	Para and	Casgor all	to induit setting	
42.	1,160	- 1		-	The same of	and states	a Landa Strate	
Prount of money	980		-	-	pollet pdf		ALC: NO. OF THE PARTY OF THE PA	
10 HILL 11	610	-	1	-	A Press Rept	and the second second	and Impoursed in	
And states and states	173	1000	-		A STATE OF THE OWNER			
43.	820	+	-	-			Distant in the	
The Start French In	400	-	-	-	and mer		Burnstein	
Street commend they	1,360,000 120	+	+	+		1 1 1 2 3	11 hor	
task or lines sould of	120	=	-	-	and the second second			
and the second second		1000	St. Part		84	Trace	34	
44.	930 200	I OT	-	-	04	Trace		
ried timored aver	200 250	-	-	-	and the state	and the last	and the second	
Contraction Laboration		a course	A PORT		52	Trace	52	
45.	260,330 1,400	+	=	-	52	Trace	02	
A REAL PROPERTY AND A REAL	920	+	-	-	- 011 B.		and the second second	
allower was house	220	-	-	-	and the second	Chine and	in a biological day	
Serve a transferration	and have been all the second	C Turner	1017 -	et une	22	Trace	22	
46.	230 880	-			22	Trace		
	300	-	1		C. SHOWER	A STATE OF THE OWNER	a sector sector	
	1,480	+	+	-	and the second	NO THE	Profil approx	
	740				and the second se			

\* Standard :-- Not more than 200,000 bacteria per c.c. and no B. Coli. in 0.01 of a c.c.

"GRADE A" MILK-continued.

	* Cultivation.		*B. Coli resent = Absent =	+ 201700		rt Estimati ts per 100,0	
icence No.	Bacteria growing on standard agar at 37° C. in 48 hours.	1.0	0.1	0.01	Cells and Cellular	Extran- cous Materials	Total Sediment
	per c.e.	c.c.	c.c.	c.c.	Products	Materials	
47.	300	_		_	100,1		
	610	-		_ 1			
	400		-	- 1			
	43 .	-	-	-			
48.	44,000	-	_	-	14	Trace	14
	45,500	+	+	-	23		28
49.	126	+	-	-			
50.	66	+	_	_			

\* Standard :-- Not more than 200,000 bacteria per c.e. and no B. Coli. in 0.01 of a c.e.

The "keeping quality " of these samples was reported as follows :---

1 sample		i day
33 samples	 	2 and under 4 days
86 "	 	4 ,, ,, 6 ,,
12 ,,	 	6 days or over

76 of the samples were examined for tubercle bacilli and 7 were reported positive.

REPORT OF THE REORGANISATION COMMISSION FOR MILK.—In April, 1932, the Minister of Agriculture and Fisheries appointed an Agricultural Marketing Reorganisation Commission charged with the duty of preparing a scheme or schemes for regulating the marketing of milk.

The Commission issued its report early in 1933.

The main features of the report are in connection with the production, distribution and marketing of milk and the price policy, but certain chapters are of interest to the Public Health Authorities.

Chapter VI deals with the law as it affects milk ; Chapter X relates to the importance of improvement in quality of milk, and also recommends the compulsory routine inspection of dairy cattle and suggests a revision of the present official designated grades of milk. It also advocates a whole time veterinary service, recommends an amendment of the law as to the sale of milk, and makes suggestions as to the qualifications of sanitary inspectors.

Inspection of Meat and Other Food.—Comments are made in most of the local reports on the action taken with regard to the inspection of meat and other food, including inspection of slaughter-houses, meat shops, stalls and vehicles, and places where food is prepared.

UNSOUND FOOD.-The following statement shows approximately the amount of unsound or diseased food condemned and destroyed by the local health officers during 1932 :--

- On account of Tuberculosis.—161,508 lbs. of meat (including weights of carcases and parts of carcases); many parts (weights not stated); 174 whole carcases; sets of organs, heads, plucks, livers, etc.
- For other reasons.—391 whole carcases; 89,631 lbs. meat (not classified); 530 livers and 160 lbs. liver; sets of organs, lungs, heads, plucks, etc.; 165 lbs. and 15 tins corned beef; 40 lbs. bacon; 26 turkeys; 1 goose; 6 fowls; 62 rabbits; 841 lbs., 30 tins and 6 boxes fish; 4 bags mussels; 1310 lbs., 13 barrels, and 2 boxes apples; 392 lbs. raspberries; 260 lbs. and 3 boxes tomatoes; 168 lbs. pears; 76 lbs. plums; 9 baskets gooseberries; 143 tins mixed fruits; 6 boxes grapes; 586 lbs. vegetables; 39 tins and 28 lbs. milk; 24 lbs. jam; 16 bottles pickles; 15 lbs. cake; 1 cheese; 41 assorted tinned goods; 22 bags raw sugar; 14 lbs tinned ham; 106 lbs. sausages; 119 meat pies and 3,006 lbs. unclassified food.

Legal action in connection with food supplies was found necessary at Colne (B) for exposing for sale unsound food, fined £10 and costs; at Eccles (B) two prosecutions for exposing diseased meat for sale, fines of £1 10s. 6d., and £2 10s. 6d. inflicted; at Leigh (B) one prosecution, fined £50.

Meat Inspection.—In March, 1932, the Ministry of Health issued Memo 62/Foods on a system of meat inspection recommended by the Ministry for adoption by local authorities and their officers. It contains general instructions to inspectors, methods of examination of carcases, etc.

THE PUBLIC HEALTH (CLEANSING OF SHELLFISH) ACT, 1932.—This Act, passed on the 16th June, 1932, authorises the provision of means for cleansing shellfish. County Councils may contribute towards the cost of tanks or other apparatus on such terms as may be agreed.

Following a complaint from a Yorkshire town, samples of cockles were obtained by one of the County Sanitary Officers from the north-west coast.

SLAUGHTERHOUSES.—These premises number 683—registered, 278; licensed, 405. In a few instances proceedings were taken under the Public Health Meat Regulations for failing to give notice of intention to slaughter.

PUBLIC ABATTOIRS .- Public abattoirs have been provided at Accrington (B), Chorley (B), Clitheroe (B), Colne (B), Darwen (B), Fleetwood, Great Harwood, Lancaster (B), Lytham Saint Anne's (B) (2), Newton-in-Makerfield, Oswaldtwistle, and Stretford.

Food Poisoning.—Outbreaks of illness suspected to be due to food poisoning were reported from Litherland, "surprise eggs" (sweets), negative; Morecambe and Heysham (B), 5 persons removed to hospital; and West Lancashire (R), salmon suspected but negative on examination.

Bakehouses.—From the local returns there are 2,635 bakehouses in use in the Administrative County area.

Food and Drugs (Adulteration) Act, 1928, etc.-The following paragraphs and tables are extracted from the annual report for the year 1932 of the County Analyst, Mr. G. D. Elsdon, B.Sc., F.I.C. :-

The Acts and Regulations relating to the adulteration of food and drugs in force in 1932 are as under :---

The Food and Drugs (Adulteration) Act, 1928. Section 4 of the Milk and Dairies (Amendment) Act, 1922. Condensed Milk Regulations, 1923 and 1927. Dried Milk Regulations, 1923 and 1927. Preservatives in Food Regulations. Sale of Milk Regulations, 1901 and 1912. Sale of Butter Regulations, 1902. Artificial Cream Act, 1929.

During the year under review a total of 5,531 samples has been submitted for examination and report, viz. :--

Food and Drugs (Adulterat	ion) A	ct, 1928	 5,245
"Appeal-to-cow" samples			 87
Fertilisers and Feeding Stu	ffs Act	, 1926	 30
Drinking waters			 65
Effluents and brook waters			 10
Specimens from Coroners, 1	Police,	etc.	 28
Miscellaneous Samples			 66
			5,581

These numbers are compared with those for previous years in the following table, where "appealto-cow" samples are included under Food and Drugs Act samples.

Yea	r.	Food and Drugs Act.	Fertilisers and Feeding Stuffs Act.	Waters and Effluents.	Coroners, Police, etc.	Miscel- laneous.	Total.	
912		5,158	8	75	26	37	5,294	
918		5,179	125	63	2	40	5,409	
914		5,018	57	71	15	50	5,211	
915		5,041	14	63	2	18	5,138	
916		4,847	2	45	9	16	4,919	
917		4,820	5 0	14	25	38	4,902	
918		4,792	5	62	13	10	4,882	
919		4,848	0	66	11	44	4,969	
920		4,782	4	59	19	21	4,835	
921		4,919	1	47	14	29	5,010	
922		4,977 .	0	62	37	33	5,109	
923		4,948	3	71	15	74	5,111	
924		4,995	31	60	22	47	5,155	
925		4,589	9 -	63	51	43	4,755	
926		4,841	2	45	10	298	5,196	
927		4.396	7	77	18	44	4,542	
928		5,000	19	159	86	181	5,895	
929		5,079	26	124	28	75	5,827	
930		5,090	28	127	4	54	5,303	
931		5.226	28	59	50	85	5,448	
1932		5,332†	- 30	75	28	66	5,531	

TOTAL NUMBER OF SAMPLES EXAMINED, 1912-1932.

\*Including "Appeal-to-cow" samples.

...

It will be observed that the number of samples taken in the five latter years has tended to be greater than in earlier years, that for 1932 being greater than in any year since the County Laboratory was taken over completely by the County Council in the year 1912.

The following table gives details of the 5,245 samples examined under the Food and Drugs Acts in 1932 :---

TOTAL SAMPLES EXAMINED DURING 1932.

Samples.		Nu	mber exami	ned.	Nun	aber adulters	ated.	Percen- tage of
Samples.		Formal	Informal.	Total.	Formal.	Informal.	Total.	Adulters tion.
Almond Oil			3	3		1000	Penoni	Food
Alexander Country			28	23				
			65	65		1	1	1.5
			1	1		***	111101	10.00
			66	66				
Dismuth Misture			21 3	21 3	1 ···	2	2	9.5
Blane Mange Powder			3	3				- di tiber
Downw			12	12		Rent		
Boric Acid			2	2				ter la ser la
			150	150				
			2	2				
			5	5				
			6	6		***		
			84	84				
			13 75	13				
Coconnt			3	75 8				
ad Liver Oil			1	1				
"affee			146	146		a dollar and	111 30	
Tottoo and Chicam			3	3				ap Che
Coffee and Chicory Es			1	1				
			29	29				
			5	5				
ream			6	6				
			1	1		1	1	100.0
			31	31				
Law Substitute			6	6			•••	
2			- 4 51	4				
Anna Calta Tablata			2	51 2				
Zuseluntus Oil			2	2		***		
Sah Conned			14	14				
Neh Docto			17	17				
Fish, Potted			1	1	114.1.1			
			17	17				
and the second se			3	3		Diner.		
		1	11	12	***	1	1	8.8
			1	1	***			***
		··	5	5				***
linger Cround			1	1	***			***
Incomin			83	83		111.0		
Prover Decomping			13 12	13 12		***		
Internet Destau		2	8	10				
Jealth Salta			5	5				
Lonor			3	3				
Iypophosphites, Syru			1	1				
odine, Tincture of, we	1. N. 1.		1	1				
		2	61	63	1	. 3	4	6-3
and the second se			26	26				
and Substitute			140	140				
emonade Douden			2	2				
emon Cheese			3	3 8		1	1	33-3
incard			1	1				
innorios Dourdon			n	11				
Inmosio			5	5				
Iagnesia, Citrate of			. 2	2				
Ingmosia Fluid			1	1				
		2	111	113				
			12	12		1	1	8.3
	•• •		5	5				
Inst Desta			21	21				1
deat Paste deat Pie			27	27			11444 111	COURSE

Samples. ilk ilk, Condensed ilk Food		Formal.	Informal.	and the second		Number adulterated.			
ilk, Condensed	1001		1 1 1 1 1 1 1	Total.	Formal	Informal.	Total	Adulter tion.	
11. The d		3071	47	3118	145	2	147	4-7	
ilk Food			13	13					
			1	1					
incemcat			3	3			***		
lustard			29	29					
utmeg, Ground			1	1					
atmeal		1	12	13					
live Oil			8	8					
araffin, Liquid			1	1					
epper			115	115					
ermanganate of Potash			1	1					
ickles			4	4					
udding			2	2					
uinine, Ammoniated	100.00	in me	07875		a start and a start and a start	Mar Sterne			
Tinctur	re or		1	1					
aspberry Vinegar			3	3					
hubarb, Tincture of			1	1					
lice			41 36	41 36					
tice, Ground			9	9					
ago		•••	3	3					
alt				17					
auce		2	17 24	26	1	2		11.5	
ausages			1	1			3	11.5	
eidlitz Powder odium Bicarbonate			26	26					
T			1	1					
CONTRACTOR OF THE OWNER			21	21					
			13	13		1	1	7.7	
			48	43					
alahan Tablata			10	10	Contraction of the second				
maste			55	55					
vrup			6	6					
apioca		16	22	22					
artar, Cream of		2	36	38	1	1	2	5.3	
artaric Acid			2	2					
Yea			66	66					
Treacle		Harden er	8	8					
legetables, Canned			6	6					
legetables, Dried			1	1					
Vinegar			3	8					
Vine, Ginger, Essence			2	2					
least				2					
east Tablets			1	1					
		ather the	dillos dillo	1 70 100	1 - m 7. 4	all cost :		and the second	
		IN COM	Jobl min	CI burn h	on a starter	and the sea		1 101	
in of mills solids other th	onin:	di palite	Tota de	o meet	1	and State of	Provide .	1001-	
Total		3,083	2,162	5,245	148	16	164	3.1	

## SAMPLES EXAMINED DURING 1932-continued

Of these 5,245 samples, 164, or  $3\cdot 1$  per cent. were returned as adulterated. In the following table this percentage of adulteration is compared with those for the previous six years, and for the four quarters thereof :---

	Ist Qu	arter.	2nd Q	uarter.	3rd Q	uarter.	4th Qi	arter.	Whole Year.	
Year.	No. of samples.	% of Adult.	No. of samples.	% of Adult,						
1926	 1216	8.5	1074	2.8	956	2.8	1507	1.7	4758	2.5
1927	 819	$2 \cdot 0$	1215	3.2	910	2.5	1397	1.5	4341	2.3
1928	 1182	3.0	1248	4.6	1046	2.5	1457	1.9	4988	3.0
1929	 1268	$2 \cdot 8$	1204	4.0	1158	8.1	1368	1.5	4998	2.8
1930	 1311	8.2	1295	2.3	1059	8.0	1322	1.8	4987	2.6
1931	 1280	8.6	1858	1.8	1112	2.9	1896	2.6	5146	2.7
1982	 1326	8.2	1875	4.1	1143	3.3	1401	1.9	5245	3.1
Fotal	 8402	8.1	8769	8.8	7879	2.8	9848	1.8	34398	2.7

PERCENTAGE OF ADULTERATION-ALL SAMPLES.

It will be seen from the above table that the figure for adulteration for the whole year is the highest recorded since before the year 1926, and that it is 0-4 per cent. above the average for the whole seven years. A comparison of the above table, which gives the adulteration figures for all samples, with table on page 129, which contains those for the samples of milk, shows that this increase in adulteration is due entirely to the larger amount of adulteration which has been found among the milks; in fact the adulteration figure for samples other than milk is lower than it has been for many years, as is shown in table on page 129. In spite, however, of the increase the figure must still be regarded as a comparatively low one. Before the year 1924 the annual figure for adulteration had varied between 7-5 per cent. and 3-5 per cent., whilst the average for the whole of the 21 years since 1912 is 4-4 per cent. Moreover, the figures for the County of Lancaster are low when compared with those for the whole of England and Wales.

MILK.—The County Analyst reports:—There is no complete official definition of milk in this country, neither is there any standard for milk. The Sale of Milk Regulations of 1901 and 1912 are not infrequently referred to as standards, but this is incorrect. The Regulations are :—

Where a sample of milk (not being milk sold as skimmed, or separated, or condensed milk) contains less than 3 per cent. of milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-fat, or the addition thereto of water.

Where a sample of milk (not being milk sold as skimmed, or separated, or condensed milk) contains less than 8.5 per cent. of milk-solids other than milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk-fat, or the addition thereto of water.

Where a sample of skimmed or separated milk (not being condensed milk) contains less than 8.7 per cent. of milk solids other than milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1907, until the contrary is proved, that the milk is not genuine, by reason of either the addition thereto of water, or the abstraction therefrom of milk solids other than milk-fat.

Milks examined during the year 1932.—During the year 1932, three thousand one hundred and eighteen milks have been examined, of which one hundred and forty-seven, or 4.7 per cent., have been returned as adulterated. This figure is much less than that usually found for the whole of England and Wales, which was 6.4 per cent. in the year 1931.

The number of milks examined is very much greater than that of any other article, indeed it exceeds the sum of all the other articles. In the following table the samples have been divided into milk and samples other than milk.

LUI CAROLE	and a la		Milk.		San	Samples other than Milk.			
Year		No. of Samples.	No. of Adult. Samples.	% of Adult.	No. of Samples.	No. of Adult. Samples.	% of Adult.		
1926		2714	99	3.6	2039	21	1.0		
1927		2412	52	2-2	1929	47	2.4		
1928		2771	95	3.4	2162	51	2.4		
1929		2757	115	4-2	2236	25	1.1		
1980		2949	99	3.4	2038	29	1.4		
1981		3010	112	8.7	2136	27	1.3		
1982		8118	147	4.7	2127	17	0-8		
Total		19731	719	8.6	14667	217	1.5		

# 129 Percentage of Adulteration-Milk and other Samples.

In the following table the percentage of milk adulteration is given for the past seven years :---

attended Billion Co.		1st Qu	arter.	2nd Qu	arter.	3rd Qu	arter.	4th Qu	arter.	Whole	Whole Year.	
Year	r.	No. of samples.	% of Adult.									
1926		704	5.1	555	4-9	526	2.7	929	2.4	2714	3-6	
1927		464	2.4	643	8.4	468	1.1	837	1.7	2412	2.2	
1928		746	4.0	666	4.8	562	8.6	797	2.0	2771	8.4	
1929		711	4.4	712	6.5	549	4.6	785	1.9	2757	4.2	
1930		778	4.1	786	2.5	646	4:0	789	2.8	2949	8.4	
1981		702	5.4	834	2.4	676	3.8	798	8.5	3010	8.7	
1932		749	4.2	809	6.8	706	4.8	854	2.8	3118	4.7	
Total		4854	4.4	5005	4.8	4183	3.6	5789	2.4	19731	8.6	

PERCENTAGE OF ADULTERATION-MILK SAMPLES, 1926-1932.

The average composition of the whole of the milks examined, including "appeal-to-cow" samples, is given in the table below, from which it will be seen that the average fat content is 3.77 per cent., whilst that for solids-not-fat is 8.85 per cent. These figures are :---

### AVERAGE COMPOSITION OF MILKS, 1932.

Month.	Number of Samples.*	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
January February March	769 293	$12{\cdot}62 \begin{cases} 12{\cdot}70 \\ 12{\cdot}64 \\ 12{\cdot}54 \end{cases}$	$3.75 \begin{cases} 3.84 \\ 8.75 \\ 3.67 \end{cases}$	$8{\cdot}87 \begin{cases} 8{\cdot}86 \\ 8{\cdot}89 \\ 8{\cdot}87 \end{cases}$
April May June	844 277	$12{\cdot}50 \begin{cases} 12{\cdot}48\\ 12{\cdot}58\\ 12{\cdot}44 \end{cases}$	$\scriptstyle 3 \cdot 67 \begin{cases} 3 \cdot 67 \\ 3 \cdot 72 \\ 3 \cdot 61 \end{cases}$	$8.83 \begin{cases} 8.81 \\ 8.86 \\ 8.83 \end{cases}$
July August September	724 197	$\begin{matrix} \cdot \\ 12 \cdot 49 \\ 12 \cdot 46 \\ 12 \cdot 61 \end{matrix}$	$3.72 \begin{cases} 3.64 \\ 3.75 \\ 3.79 \end{cases}$	$8.77 \begin{cases} 8.77 \\ 8.71 \\ 8.82 \end{cases}$
October November December	868 296	$12{\cdot}85 \begin{cases} 12{\cdot}85 \\ 12{\cdot}87 \\ 12{\cdot}83 \end{cases}$	$8.94 \begin{cases} 8.95 \\ 8.94 \\ 8.93 \end{cases}$	$8.91 \begin{cases} 8.90 \\ 8.93 \\ 8.90 \end{cases}$
Whole Year	8205	12.62	8.77	8.85

· Includes " appeal-to-cow " samples.

During the last 23 years the average fat content has varied between 3.55 per cent. in the years 1910 and 1911 and 3.84 per cent. in the year 1931, which is the highest figure which has yet been recorded. The figure for solids-not-fat has varied between 8.75 per cent. in the year 1910 to 9.03 per cent. in the years 1922 and 1923. Whilst a steady improvement was shown in the earlier years the figures since the war years have been remarkably constant, and do not indicate any material changes due to the introduction of new strains of milch cows. A table showing the various changes from year to year will be found in the table at the foot of this page.

In the Report for 1928 various tables were given showing the averages obtained in other districts, and a composite average was worked out on the results obtained from the analysis of about 180,000 milks. The final averages were 3.69 per cent. of fat and 8.86 per cent. of solids-not-fat, which are very similar to those obtained in the County laboratory. Although the average amount of fat in milk is thus well above the limit of 3.0 per cent. fixed

Although the average amount of fat in milk is thus well above the limit of 3.0 per cent. fixed by the Sale of Milk Regulations, it has been claimed on many occasions that the percentage of fat is seriously diminished during the season when the cows are first put out to grass, diminished so seriously, in fact, that a considerable number, if not the majority, of herds, will be giving milk containing less fat than 3.0 per cent.

In order to see how much such a statement is supported by the results of analysis, the whole of the samples taken during the years 1910–1932 in the County of Lancaster have been averaged according to the month in which they were taken, and the figures so obtained are arranged in the table below :---

Month.	Number of Samples.	Fat per cent.	Solids-not-fat per cent.	Total Solids per cent.
January	 4865	8-65	8.90	12.55
February	 5539	8-68	8.88	12.51
March	 5605	3-61	8.88	12.49
April	 4998	3.64	8.90	12.54
May	 5634	3.60	8.90	12.50
June	 5317	3.55	8.92	12.47
July	 5055	8.59	8.81	12.40
August	 3177	3.67	8.85	12.52
September	 5183	3.78	8.91	12.69
October	 6023	3.89	8.93	12.82
November	 5892	3.84	8.92	12.76
December	 5585	3.75	8.91	12.66
1910-1932	 62323	3-69	8.89	12.58

AVERAGE COMPOSITION OF MILKS FOR EACH MONTH, 1910-1982.

From the above table it will be seen that the fat varies from its lowest figure of 3-55 per cent. in June to its highest figure of 3-89 per cent. in October. Thus, although it is an undoubted fact that the fat content of milk does tend to be lower in the late spring and early summer months, the amount of such lowering has been greatly exaggerated. It is fairly obvious that the limits of the Sale of Milk Regulations are no hardship even in the months of May and June, and that, in fact, if they are in any way faulty, their fault lies in the direction of being too low.

	Year.	Number of Samples.	Fat per cent.	Solids-not-fat per cent.	Total Solids per cent.
191	0	 1220	8.55	8.75	12:30
191	1	 1639	3.55	8.76	12.31
191	2	 2094	3.63	8.83	12:46
191	3	 2585	3.67	8.81	12.48
191	4	 2540	3.59	8.80	12.39
191	5	 2707	3.62	8.86	12.48
191		 2767	8.66	8.88	12.54
191	7	 2869	8.71	8.81	12.52
191		 3396	3.67	8.84	12.51
191		 2991	3.65	8.91	12.56
195	05	 2889	3.68	8.96	12.64
195	21	 2451	8.65	8.94	12.59
195		 2774	3.69	9.03	12.72
195	28	 3011	3.68	9-03	12.71
192	24	 3142	3.71	8.99	12.70
195	25	 2958	8.62	8.92	12.54
195	26	 2795	3.66	8.92	12.58
195		 2467	3.76	8.94	12.70
195	28	 2838	3.74	8.90	12.64
192	09	 2843	3.71	8.90	12.61
193		 3052	3.78	8.90	12.68
198	1	 3090	3.84	8.81	12.65
198		 3205	8.77	8.85	12.62
191	0-1932	 62323	8-69	8.89	12.58

#### AVERAGE COMPOSITION OF MILKS, 1910-1932

The freezing point of milk.—The County Analyst in his report for 1932, and in previous reports, 1929–1931, includes an account of the work carried out in the County Laboratory relating to the application of the freezing point test to the examination of milk, and, on a careful consideration of all the results obtained, a definite conclusion is expressed that the freezing point test when applied to milk is one of outstanding usefulness and reliability for the detection of extraneous water. The report for 1932 contains a full statement of the results of this test.

SAMPLES OF FOOD OTHER THAN MILK.—During the year 2,127 samples other than milk have been examined. Of these, 17, or 0.8 per cent. have been returned as adulterated. This is the lowest figure ever recorded for the County of Lancaster.

Description of Samples.		amples. Number. Adul-		Number Adul- terated.	Description of Samples.	Total Number.	Number Adul- terated.	
Almonds, Ground			23	0	Marmalade	10		
Arrowroot			65	1	Meat Cooked	12 21	1	
Baking Powder			66	Ô	Meat Paste	21 27	0	
Barley			21	2	Milk Condensed	13	0	
Borax			12	õ	Mustard	29	0	
Butter			150	0	Oatmeal	13	0	
Cheese			84	0	Penner	115	0	
Cinnamon			18	0	Rice	41	0	
Cocoa			75	0	Rice Ground	36	0	
Coffee			146	0	Sauce	17	0	
Cornflower			29	0	Sausages	26	3	
Custard Powder			31	0	Sodium Bicarbonate	26	0	
Epsom Salts			51	0	Spice	21	0	
Fish, Canned			14	0	Suet	18	1	
Fish Paste			17	0	Sugar	48	õ	
Flour			17	0	Sulphur Tablets	10	0	
Flour, Self-raising			12	1	Sweets	55	0	
Ginger, Ground			83	0	Tapioca	22	0	
Glycerin			13	0	Tartar, Cream of	38	2	
Gravy Browning			12	0	Tea	66	0	
Gregory's Powder			10	0	Various other Articles (a)	186	8	
Jam			63	4		1000000000		
Jelly			26	0				
Lard			140	0				
Liquorice Powder			11	0	Total	2127	17	
Margarine			113	0				

(a) Almond Oil 3, Aspirin Tablets 1, Bismuth Mixture 3, Blane Mange Powder 3, Borie Acid 2, Cakes 2, Cakes, Cream 5, Castor Oil 6, Coconut 3, Cod Liver Oil 1, Coffee and Chicory 3, Coffee and Chicory Essence 1, Cough Medicine 5, Cream 6, Cream 6, Cream, Artificial 1, Dripping 6, Egg Substitute 4, Epsom Salts Tablets 2, Eucalyptus Oil 2, Fish, Potted 1, Flour, Cake 3, Friar's Balsam 1, Fruit, Canned 5, Fruit, Dried 1, Health Salts 5, Honey 3, Hypophosphites, Syrup of 1, Iodine, Tincture of, Weak 1, Lard Substitute 2, Lemonnde Powder 3, Lemon Cheese 8, Linseed 1, Magnesia 5, Magnesia, Citrate of 2, Magnesia, Fluid 1, Meat, Canned 5, Meat Pie 8, Milk Food 1, Mincemeat 3, Nutmeg, Ground 1, Olive Oil 8, Paraffin, Liquid 1, Permanganate of Potash 1, Pickles 4, Pudding 2, Quinine, Ammoniated Tincture of 1, Raspberry Vinegar 3, Rhubarb, Tincture of 1, Sago 9, Salt 3, Scidlitz Powder 1, Soup Powder 1, Syrup 6, Tartarie Acid 2, Treacle 8, Vegetables, Canned 6, Vegetables, Dried 1, Vinegar 3, Wine, Ginger, Essence 2, Yeast 2, Yeast Tablets 1. Total 186.

ADULTERATED SAMPLES.—The tables following give a list of adulterated samples in 1932— (a) Milk, (b) Samples other than Milk:—

(a) Adulterated Samples of Milk, 1932.

No. of Sample.	Nature of Adulteration.	Action taken.	Result of Prosecution.	Remarks.
14185 G.D	Deficient 2% solids-not-fat	Caution	***	
5529 W.D	Deficient 13% fat	Do	and the second se	
5405 S.D	Deficient 2% solids-not-fat	Do	and the second second	
4847 M.D	Deficient 1% solids-not-fat	Do		1
5424 S.D	Deficient 16% fat and 11% solids-not-fat	Do		
1445 Bn.D	Deficient 2% solids-not-fat	Do		
7411 By.D	Deficient 2% solids-not-fat	Do		
83229 Ws.D	Deficient 3% fat and 9% solids- not-fat	Prosecution	Fined £2 and £2 10s. 1d. costs	

ADULTERATED SAM	PLES OF M	IILK—continued	
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No. of Sample.	Nature of Adulteration.	Action taken.	Result of Prosecution.	Remarks.
812 Westhoughton	Deficient 13% fat and contained 3% added water	Further samples to be taken	144000 12000 1 mm 1 4	
7 Middleton	Deficient 1% solids-not-fat	Do		And all others
52602 R.D	Deficient 41% solids-not-fat	Further samples advised	in the landstore	
52609 R.D	Deficient 16% fat	Prosecution	Fined £2, in- cluding costs	
824 Westhoughton	Contained 3% added water	Further samples to be taken		· · · ·
81207 P.D	Deficient 41% solids-not-fat	Caution		
829 Westhoughton	Deficient 23% fat	Further samples to be taken		Same vendor as No 824 and 812
75429 S.D	Deficient 3% solids-not-fat	Caution		
47429 By.D	Deficient 1% solids-not-fat	Do		
47432 By.D	Deficient 1% solids-not-fat	Do		and the second second
79227 O.D	Deficient 23% fat	Prosecution	Fined £5, in- cluding costs	
79230 O.D	Deficient 13% fat	Caution		Cashwell Instead
16370 Km.D	Deficient $2\frac{1}{4}$ % solids-not-fat	Further samples advised		
16373 Km.D	Deficient 13% fat	Caution		
6378 Km.D	Deficient 61% fat	Further samples advised		La contra and
0234 N.L.D	Deficient 61% fat	Do		honing of the second
2632 R.D	Deficient 1% solids-not-fat	Do		
\$239 Ws.D	Deficient 10% fat	Caution		
75456 S.D	Deficient 61% fat	Further samples advised		
34921 M.D	Deficient 13% fat	Prosecution	Fined £2, and £2 3s. costs	
1223 P.D	Deficient 10% fat	Caution		
5497 L.D	Deficient 1% solids-not-fat	Further samples advised		1
14946 M.D	Deficient 61% fat	Do		
7454 By.D	Deficient 2% solids-not-fat	Do		- langer .t. and
5596 W.D	Deficient 2% solids-not-fat	Do		
5600 W.D	Deficient $6\frac{10}{2}$ % fat	Do		tine (a) mint (a)
5617 W.D	Deficient 1% solids-not-fat	Do		
5622 W.D	Deficient 2% solids-not-fat	Do		
	Deficient 30% fat	Prosecution	Fined 10s. and £4 18s. 8d. costs	10-10-10-10-10-10-10-10-10-10-10-10-10-1
0 Middleton	Deficient 1% solids-not-fat	None		(in the second
1244 P.D	Deficient 41% solids-not-fat	Caution	in the second	
5502 S.D	Deficient 10% fat	Do		Appeal-to-cow low
5504 S.D	Deficient 13% fat	Do		Do.
5512 S.D	Deficient 18% fat	Do		Do.
2253 S.L.D	Deficient 10% fat	Further samples advised		
2254 S.L.D )	Deficient 61% fat and 51% solids-not-fat	Caution		Appeal-to-cow low
471 By.D 1	Deficient 81% solids-not-fat	Further samples advised		

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## ADULTERATED SAMPLES OF MILK-continued.

33371 L.D.       Deficient 24% solids-not-fat       Do.            35222 L.D.       Deficient 24% solids-not-fat       Do.            35224 L.D.       Deficient 24% solids-not-fat       Do.            35224 L.D.       Deficient 34% solids-not-fat       Do.            35224 L.D.       Deficient 34% solids-not-fat       Do.            35244 L.D.       Deficient 1% solids-not-fat       Do.            35345 L.D.       Contained 3% added water        Do.           35345 L.D.       Contained 4% added water       Do.         On delivery to yea         35347 L.D.       Contained 4% added water       Do.         On delivery to yea         35465 A.D.       Deficient 2% solids-not-fat       Do.            35465 A.D.       Deficient 2% solids-not-fat       Do.            35467 A.D.       Deficient 1% fat       Do.             35467 A.D. <th>No of Sample.</th> <th>Nature of Adulteration.</th> <th>-</th> <th>Action taken.</th> <th>Result of Prosecution.</th> <th>Remarks.</th>	No of Sample.	Nature of Adulteration.	-	Action taken.	Result of Prosecution.	Remarks.
assist L.D.Deficient $3\frac{1}{2}$ % solids-not-fatDoassig L.D.Contained $3\frac{9}{6}$ added waterDoassig L.D.Contained $3\frac{9}{6}$ added waterDoassig L.D.Contained $4\frac{9}{6}$ added waterDoassig A.D.Deficient $2\frac{9}{6}$ fatDoassig A.D.Deficient $2\frac{9}{6}$ fatDoassig A.D.Deficient $2\frac{9}{6}$ fatDoassig A.D.Deficient $2\frac{9}{6}$ fatDoassig W.A.D.Deficient $1\frac{9}{6}$ fatDoassig W.A.D.Deficient $1\frac{9}{6}$ fat	17476 By.D	Deficient 2% solids-not-fat				***
5337 L.D.       Deficient 24% solids-not-fat       Do.           5322 L.D.       Deficient 24% solids-not-fat       Do.           5324 L.D.       Deficient 24% solids-not-fat       Do.           5324 L.D.       Deficient 34% solids-not-fat       Do.           5324 L.D.       Deficient 34% solids-not-fat       Do.           5324 L.D.       Deficient 34% solids-not-fat       Do.           5324 L.D.       Deficient 44% solids-not-fat       Do.           5344 L.D.       Contained 3% added water        Do.           5345 L.D.       Contained 4% added water       Do.         On delivery to vene of 35324 L.D.         5345 L.D.       Contained 4% added water       Do.         On delivery to vene of 35324 L.D.         5360 W.D.       Deficient 20% fat        Do.           5465 A.D.       Deficient 20% fat        Do.           5370 W.D.       Deficient 10% fat       Do.	35516 L.D	Deficient 21% solids-not-fat		None	***	1
3323 L.D.Deficient 31% solids-not-fatDo. $\dots$ 5224 L.D.Deficient 34% solids-not-fat $\dots$ $Do.$ $\dots$ 5325 L.D.Deficient 3% solids-not-fat $\dots$ $Do.$ $\dots$ 5326 L.D.Deficient 3% solids-not-fat $\dots$ $Do.$ $\dots$ 5326 L.D.Contained 3% added water $\dots$ $Do.$ $\dots$ 5344 L.D.Contained 3% added water $\dots$ $Do.$ $\dots$ 5344 L.D.Deficient 1% solids-not-fat $\dots$ $Do.$ $\dots$ 5347 L.D.Contained 4% added water $\dots$ $Do.$ $\dots$ 5357 L.D.Contained 4% added water $\dots$ $Do.$ $\dots$ 544 N.LD.Deficient 64% fat $\dots$ $Do.$ $\dots$ 545 A.D.Deficient 64% fat $\dots$ $Do.$ $\dots$ 546 W.D.Deficient 2% solids-not-fat $\dots$ $Prosecution$ $Fined 10s.$ and547 A.D.Deficient 1% solids-not-fat $\dots$ $Do.$ $\dots$ 546 W.D.Deficient 1% fat $\dots$ $Do.$ $\dots$ 547 M.D.Deficient 1% fat $\dots$ $Do.$ $\dots$ 548 A.D.Deficient 1% solids-not-fat $Do.$ $\dots$ $\dots$ 549 M.D.Deficient 1% solids-not-fat $Do.$ $\dots$ $\dots$ 540 M.D.Deficient 1% fat $\dots$ $Do.$ $\dots$ $\dots$ 541 M.D.Deficient 1% fat $\dots$ $Do.$ $\dots$ $\dots$ 542 M.D.Deficient 1% fat $\dots$ $Do.$ $\dots$ $\dots$ 543 M.D.Deficient 1% fat $\dots$ $Do.$ </td <td>5517 L.D</td> <td>Deficient 31% solids-not-fat</td> <td></td> <td>Do</td> <td></td> <td>See No. 35547 L.D.</td>	5517 L.D	Deficient 31% solids-not-fat		Do		See No. 35547 L.D.
3524 L.D.Deficient $3\frac{1}{2}$ solids-not-fatDoSee No. 35344 L.J.525 L.D.Deficient $5\frac{1}{4}$ solids-not-fatDo526 L.D.Deficient $5\frac{1}{4}$ solids-not-fatDo5345 L.D.Contained $3\frac{9}{2}$ added waterDo5345 L.D.Deficient $3\frac{9}{2}$ solids-not-fatDoOn delivery to vene of 35324 L.D.5345 L.D.Contained $4\frac{9}{2}$ added waterDoOn delivery to vene of 35324 L.D.5345 L.D.Contained $4\frac{9}{2}$ added waterDoOn delivery to vene of 35316 L.D.5345 A.D.Contained $4\frac{9}{2}$ added waterDo5445 A.D.Deficient $2\frac{9}{2}$ solids-not-fatDo5453 A.D.Deficient $2\frac{9}{2}$ solids-not-fatDo5463 A.D.Deficient $2\frac{9}{2}$ solids-not-fatDo5474 M.D.Deficient $13\frac{9}{2}$ fatDo5463 A.D.Deficient $13\frac{9}{2}$ fatDo5475 M.D.Deficient $13\frac{9}{2}$ solids-not-fatDo5476 M.D.Deficient $13\frac{9}{2}$ fatDo5476 M.D.Deficient $13\frac{9}{2}$ fatDo5476 M.D.Deficient $13\frac{9}{2}$ fatDo<	5522 L.D	Deficient 21% solids-not-fat		Do		AND A Strend Trail of
3324 L.D.Deficient $3\frac{1}{9}$ solids-not-fatDo5225 L.D.Deficient $3\frac{1}{9}$ solids-not-fatDo5326 L.D.Deficient $3\frac{1}{9}$ solids-not-fatDo5324 L.D.Contained $3\frac{1}{9}$ added waterDo5344 L.D.Contained $3\frac{1}{9}$ added waterDo5344 L.D.Deficient $1\frac{1}{9}$ solids-not-fatDo5347 L.D.Contained $3\frac{1}{9}$ added waterDo5357 L.D.Contained $3\frac{1}{9}$ added waterDo5357 L.D.Contained $4\frac{1}{9}$ added waterDo5661 W.D.Deficient $2\frac{1}{9}$ solids-not-fatProsecutionFined 10s, and5865 A.D.Deficient $2\frac{1}{9}$ solids-not-fatDo5948 A.D.Deficient $10\frac{9}{9}$ fatDo5910 M.D.Deficient $10\frac{9}{9}$ fatDo5912 M.D.Deficient $1\frac{9}{9}$ fatDo5912 M.D.Deficient $1\frac{9}{9}$ fatNone2913 R.D.Deficient $1\frac{9}{9}$ fatProsecutionFinel 10s, and2914 R.D.Deficient $1\frac{9}{9}$ fatProsecutionCosts, 51 18s, 9d.2914 R.D.Deficient $1\frac{9}{9}$ fatDo2914 R.D.Deficient $1\frac{9}{9}$ fatDo2914 R.D.Deficien	5523 L.D	Deficient 31% solids-not-fat		Do		1
3325 L.D.Deficient 1% solids-not-fatDo5266 L.D.Deficient 54% solids-not-fatDo5544 L.D.Contained 3% added waterFurther samples5545 L.D.Deficient 1% solids-not-fatDo5547 L.D.Contained 4% added waterDo5547 L.D.Contained 4% added waterDo5248 N.L.D.Contained 4% added waterDo5248 N.L.D.Deficient 64% fatDo5248 N.D.Deficient 2% solids-not-fatProsecutionFired 10s. and \$4 4s. 7d. costs5260 W.D.Deficient 2% solids-not-fatDo5267 W.D.Deficient 2% solids-not-fatDo5268 N.D.Deficient 12% solids-not-fatDo5267 W.D.Deficient 13% fatDo5267 W.D.Deficient 13% fatDo5267 W.D.Deficient 13% fatDo5277 W.D.Deficient 13% fatDo5287 W.D.Deficient 13% fatDo5297 W.D.Deficient 13% fatNone5297 W.D.Deficient 13% fatDo5297 W.D.Deficient 13% fatDo5297 W.B.D.Deficient 13% fatDo5298 B.D.Deficient 10% fatDo5298 B.D	5524 L.D	Deficient 31% solids-not-fat		De		See No. 35544 L.D.
5326 L.D.Deficient $34\%$ solids-not-fatDo.See No. $3545$ L.J.5544 L.D.Contained $3\%$ added waterFurther samples advisedOn delivery to ven of $35525$ L.D.5545 L.D.Deficient $1\%$ solids-not-fatDo.On delivery to ven of $35525$ L.D.5547 L.D.Contained $3\%$ added waterDo.On delivery to ven of $35525$ L.D.5547 L.D.Contained $4\%$ added waterDo.On delivery to ven of $35525$ L.D.5547 L.D.Contained $4\%$ added waterDo.On delivery to ven of $35525$ L.D.561 W.D.Deficient $2\%$ solids-not-fatDo.Fined 10s. and 	5525 L.D	Deficient 10' all a sea		De		The state of the
3344 L.D.       Contained 3% added water       Further samples advised       0n delivery to vene of 335224 L.D.         3545 L.D.       Deficient 1% solids-not-fat       Do.       0n delivery to vene of 335225 L.D.         3547 L.D.       Contained 3% added water       Do.       0n delivery to vene of 35525 L.D.         2208 S.L.D.       Contained 4% added water       Do.       0n delivery to vene of 35525 L.D.         2208 S.L.D.       Contained 4% added water       Do.       0n delivery to vene of 35516 L.D.         2601 W.D.       Deficient 20% fat       Do.       Fined 10s. and state 10s.         3601 W.D.       Deficient 20% fat       Prosecution       Fined 10s. and state 10s.         3465 A.D.       Deficient 20% fat       Do.       None       None         3206 Wa.D.       Deficient 10% fat       Do.       None       None         3201 W.D.       Deficient 10% fat       Do.       None       None         3201 W.D.       Deficient 10% fat       Do.       None       None         3201 W.D.       Deficient 10% fat       Prosecution       Finel 10s. and E3 146. Sd. costs         3201 W.D.       Deficient 10% fat       Prosecution       Finel 10s. and St. 46. costs         3217 B.D.       Deficient 10% fat       Do.       Costs, £3 18s. 9d. <td>5526 L.D</td> <td>Deficient 51% solids-not-fat</td> <td></td> <td></td> <td></td> <td>See No. 35545 L.D.</td>	5526 L.D	Deficient 51% solids-not-fat				See No. 35545 L.D.
5347 L.D.       Contained 3% added water       Do.       On delivery to vene of 35325 L.D.         2268 S.L.D.       Contained 4% added water       Do.        On delivery to vene of 35326 L.D.         2268 N.L.D.       Deficient 61% fat       Do.            2444 N.L.D.       Deficient 20% fat        Prosecution       Fined 10s. and the state of 35326 L.D.         2468 A.D.       Deficient 20% fat        Porsecution       Fined 10s. and the state of 35326 L.D.         2468 A.D.       Deficient 20% fat        Do.        Bottled milk         2560 W.D.       Deficient 20% fat        Do.           2504 W.D.       Deficient 2% solids-not-fat       Do.            2501 M.D.       Deficient 13% fat        Do.            2503 R.D.       Deficient 13% fat        None             2504 W.D.       Deficient 13% fat        Prosecution       Fined 10s. and the state of the state	5544 L.D			Further samples		On delivery to vendo of 35524 L.D.
2268 S.L.D.Contained 4% added waterDoorof 35516 L.D.9244 N.L.D.Deficient 64% fatDoDo9264 N.L.D.Deficient 20% fatProsecutionFinel 108. and 44 45. 7d. costs9465 A.D.Deficient 22% solids-not-fatPorsecutionFinel 108. and 44 45. 7d. costs9465 A.D.Deficient 20% fatDoBottled milk9470 A.D.Deficient 10% fatDo9266 Ws.D.Deficient 10% fatDo9270 W.D.Deficient 13% fatDo9207 Ws.D.Deficient 13% fatDo9218 R.D.Deficient 13% fatNone9208 R.D.Deficient 13% fatProsecutionFinel 10s. and g3 14s. 5d. costs9209 Wgu.D.Deficient 13% fatProsecutionCosts, £3 18s. 9d9214 R.D.Deficient 10% fatDo9214 R.D.Deficient 10% fatDo9219 Wgu.D.Deficient 10% fatDo9214 R.D.Deficient 10% fatDo9214 R.D.Deficient 10% fatDo9214 R.D.Deficient 10% fatDo </td <td>5545 L.D</td> <td>Deficient 1% solids-not-fat</td> <td>***</td> <td>Do</td> <td></td> <td>On delivery to vendo of 35525 L.D.</br></td>	5545 L.D	Deficient 1% solids-not-fat	***	Do		On delivery to vendo 
2244 N.L.D.       Deficient $0 \frac{1}{2} %_{0}^{0}$ fat       Do.       Image: constraint of the state state of the state of the state of the state of the s	5547 L.D	Contained 3% added water		Do		On delivery to vendo of 35516 L.D.
3601 W.D.       Deficient 20% fat        Prosecution       Fined 10s. and \$4.4s. 7d. costs          9405 A.D.       Deficient 20% solids-not-fat        Further samples advised           9405 A.D.       Deficient 20% fat        Do.        Bottled milk         9470 A.D.       Deficient 10% fat        Do.         Bottled milk         9470 A.D.       Deficient 12% solids-not-fat        Do.            9206 Ws.D.       Deficient 13% fat        Do.             9201 M.D.       Deficient 13% fat        Do.             9208 R.D.       Deficient 10% fat        Prosecution       Fined 10s. and \$3 14s. 5d. costs          9207 Wgn.D.       Deficient 10% fat        Prosecution       Costs, \$3 18s. 9d.          9214 R.D.       Deficient 23% fat        Prosecution       Costs, \$3 18s. 9d.          9214 R.D.       Deficient 61% fat        Do.            9214 R.D.	2268 S.L.D	Contained 4% added water		Do		
4465 A.D.       Deficient 2% solids-not-fat        Further samples advised           9465 A.D.       Deficient 2% solids-not-fat        Do.        Bottled milk         9465 A.D.       Deficient 2% solids-not-fat        Do.         Bottled milk         9470 A.D.       Deficient 44% solids-not-fat        Do.            910 M.D.       Deficient 13% fat        Do.            901 M.D.       Deficient 13% fat        Do.            901 M.D.       Deficient 13% fat        Do.            902 Mg.D.       Deficient 13% fat        None            903 Wg.D.       Deficient 10% fat        Prosecution       Costs, £3 18s. 9d.          2097 Wg.D.       Deficient 23% fat        Prosecution       Costs, £3 18s. 9d.          213 R.D.       Deficient 61% fat        Do.            20497 Wg.D.       Deficient 61% fat	)244 N.L.D	Deficient 61% fat		Do	***	
advised       advised       Bottled milk         9408 A.D.       Deficient 20% fat       Do.       D	5661 W.D	Deficient 20% fat		Prosecution		
9470 A.D.Deficient 10% fatDo.Image: constraint of the state of th	9465 A.D					
1296 Ws.D.       Deficient 4½% solids-not-fat       Do.           1297 Ws.D.       Deficient 2% solids-not-fat       Do.           1297 Ws.D.       Deficient 2% solids-not-fat       Do.           1297 Ws.D.       Deficient 13% fat        Do.           1297 M.D.       Deficient 1% solids-not-fat        Do.           1207 Ms.D.       Deficient 1% solids-not-fat        None           1208 R.D.       Deficient 1% solids-not-fat        None           1209 Wgn.D.       Deficient 13% fat        Prosecution       Fined 10s. and £3 14s. 5d. costs         1209 Wgn.D.       Deficient 23% fat        Further samples           1214 R.D.       Deficient 2% solids-not-fat       Do.       Costs, £3 18s. 9d.          1214 R.D.       Deficient 2% solids-not-fat       Do.            1244 R.D.       Deficient 10% fat        Do.            1244 R.D.       Deficient 10% fat        Do.	4468 A.D		•••	Do		Bottled milk
207 Ws.D.       Deficient 2% solids-not-fat        Do.	470 A.D	Deficient 10% fat	•••	Do		
9010 M.D.       Deficient 13% fat        Do.	266 Ws.D	Deficient 41% solids-not-fat		Do		
5012 M.D.Deficient $6\frac{1}{2}$ % fatDo.Do50 Lytham St. Anne'sDeficient $1\frac{9}{6}$ solids-not-fatNone2098 R.DDeficient $13\frac{9}{6}$ fatProsecutionFined 10s. and £3 14s. 5d. costs2097 Wgn.D.Deficient $10\frac{9}{6}$ fatFurther samples advised2713 R.D.Deficient $23\frac{9}{6}$ fatProsecutionCosts, £3 18s. 9d2714 R.D.Deficient $6\frac{1}{6}$ % fatProsecutionCosts, £3 18s. 9d2724 R.D.Deficient $6\frac{1}{6}$ % fatFurther samples advised273 N.D.Deficient $10\frac{9}{6}$ fatDo2633 C.D.Deficient $10\frac{9}{6}$ fatDo2634 C.D.Deficient $4\frac{1}{29}$ solids-not-fatProsecutionFined 10s. and £2 1s. costsSee No. 30331 C.D2634 C.D.Deficient $6\frac{1}{9}$ % fatProsecutionFined £5 and £2 1s. costsOn delivery re 2 	8267 Ws.D	Deficient 2% solids-not-fat		Do		
S0 Lytham St. Anne's       Deficient 1% solids-not-fat       None            2698 R.D.        Deficient 13% fat        Prosecution       Fined 10s. and £3 14s. 5d. costs          2697 Wgn.D.        Deficient 10% fat        Further samples advised           2715 R.D.        Deficient 23% fat        Prosecution       Costs, £3 18s. 9d.          2716 R.D.        Deficient 30% fat        Do.        Costs, £3 18s. 9d.          2724 R.D.        Deficient 61% fat        Do.            5049 M.D.        Deficient 10% fat        Do.            6436 Km.D.       Deficient 10% fat        Do.             0273 N.L.D.       Deficient 10% fat        Do.             03824 C.D.        Deficient 41% solids-not-fat       Prosecution       Fined 10s. and £2 1s. costs       See No. 30331 C.D.         0331 C.D.       Deficient 64% fat <td< td=""><td>5010 M.D</td><td>Deficient 13% fat</td><td></td><td>Do</td><td>***</td><td></td></td<>	5010 M.D	Deficient 13% fat		Do	***	
Anne's2698 R.DDeficient 13% fatProsecutionFined 108. and $x3 14s. 5d. costs$ 2697 Wgn.DDeficient 10% fatFurther samples advised2715 R.DDeficient 23% fatProsecutionCosts, £3 18s. 9d2716 R.DDeficient 30% fatDoCosts, £3 18s. 9d2714 R.DDeficient 61% fatProsecutionCosts, £3 18s. 9d2724 R.DDeficient 61% fatFurther samples advised2019 M.D.Deficient 61% fatDo20273 N.L.D.Deficient 10% fatDo20273 N.L.D.Deficient 41% solids-not-fatProsecutionFined 10s. and £2 1s. costsSee No. 30331 C.D2031 C.D.Deficient 41% solids-not-fatProsecutionFined £5 and £2 1s. costs20331 C.D.Deficient 41% solids-not-fatProsecutionFined £5 and £3 3s. costsOn delivery re 2 30324 C.D.1377 Bn.D.Deficient 12½% solids-not-fatProsecutionFined £5 and £3 3s. costs	5012 M.D	Deficient 61% fat		Do		and and and a
2897 Wgn.D.       Deficient 10% fat        Further samples advised            2715 R.D.       Deficient 23% fat        Prosecution       Costs, £3 18s. 9d.          2716 R.D.       Deficient 30% fat        Do.       Costs, £3 18s. 9d.          2714 R.D.       Deficient 64% fat        Further samples advised           2724 R.D.       Deficient 2% solids-not-fat        Do.        Costs, £3 18s. 9d.          2724 R.D.       Deficient 64% fat         Further samples advised           5049 M.D.       Deficient 10% fat        Do.            5554 S.D.       Deficient 64% fat        Do.            0273 N.L.D.       Deficient 10% fat        Prosecution       Fined 10s. and £2 1s. costs       See No. 30331 C.D.         5584 L.D.       Deficient 64% fat        Further samples advised           0331 C.D.       Deficient 64% fat        Prosecution       Fined 45 and \$2 1s. costs       30324 C.D.         1377 B		Deficient 1% solids-not-fat		None		
2715 R.D.       Deficient 23% fat        Prosecution       Costs, £3 18s. 9d.          2716 R.D.       Deficient 30% fat        Do.       Costs, £3 18s. 9d.          2724 R.D.       Deficient 61% fat        Further samples advised           5049 M.D.       Deficient 2% solids-not-fat        Do.            6436 Km.D.       Deficient 10% fat        Do.             5554 S.D.       Deficient 10% fat        Do.             0324 C.D.       Deficient 41% solids-not-fat        Prosecution       Fined 10s. and £2 1s. costs       See No. 300331 C.D         584 L.D.        Deficient 61% fat        Prosecution       Fined 10s. and £2 1s. costs       Sol24 C.D.         3731 C.D.       Deficient 61% fat        Prosecution       Fined £5 and £2 1s. costs           1377 Bn.D.       Deficient 12½% solids-not-fat        Prosecution       Fined £5 and £3 3s. costs	2698 R.D	Deficient 13% fat		Prosecution		996 Washing 199
2716 R.D.Deficient 30% fatDo.Costs, £3 18s. 9d2724 R.D.Deficient 61% fatFurther samples advised5049 M.D.Deficient 2% solids-not-fatDo6436 Km.D.Deficient 10% fatDo5534 S.D.Deficient 64% fatDo5534 S.D.Deficient 10% fatDo0273 N.L.D.Deficient 10% fatDo0324 C.D.Deficient 44% solids-not-fatProsecutionFined 10s. and £2 1s. costsSee No. 30331 C.D5584 L.D.Deficient 64% fatProsecutionFined £5 and £2 1s. costs0331 C.D.Deficient 64% fatProsecutionFined £5 and £3 3s. costs1377 Bn.D.Deficient 124% solids-not-fatProsecutionFined £5 and £3 ss. costs		Deficient 10% fat		Further samples advised		
2724 R.DDeficient $6\frac{1}{4}$ % fatFurther samples advised5049 M.DDeficient 2% solids-not-fatDo6436 Km.DDeficient 10% fatDo5554 S.DDeficient $6\frac{1}{2}$ % fatDo0273 N.L.DDeficient $10\%$ fatDo0324 C.DDeficient $4\frac{1}{4}$ % solids-not-fatProsecutionFined 10s. and g2 1s. costsSee No. 30331 C.D.5584 L.DDeficient $6\frac{1}{4}$ % fatProsecutionFined 10s. and g2 1s. costsSee No. 30331 C.D.0331 C.DDeficient $6\frac{1}{4}$ % fatProsecutionFined £5 and 	-	Call Charles Division and an and an		Prosecution	Costs, £3 18s. 9d.	
5049 M.D.        Deficient 2% solids-not-fat        Do            5436 Km.D.        Deficient 10% fat        Do            5554 S.D.        Deficient 6½% fat        Do            0273 N.L.D.       Deficient 10% fat        Do            0324 C.D.        Deficient 4½% solids-not-fat        Prosecution        Fined 10s. and £2 1s. costs       See No. 30331 C.D.         5584 L.D.        Deficient 6½% fat         Further samples advised           0331 C.D.       Deficient 6½% fat        Prosecution       Fined £5 and £1 and £2 1s. costs       S0324 C.D.         1577 Bn.D.       Deficient 6½% fat        Prosecution       Fined £5 and £3 as. costs	2716 R.D	Deficient 30% fat	***	Do	Costs, £3 18s. 9d.	end end for
6436 Km.D.       Deficient 10% fat        Do            5554 S.D.        Deficient 6½% fat        Do            5554 S.D.        Deficient 6½% fat        Do            0273 N.L.D.       Deficient 10% fat        Do            0324 C.D.        Deficient 4½% solids-not-fat        Prosecution        Fined 10s, and g2 1s. costs       See No. 30331 C.D.         5584 L.D.        Deficient 6½% fat        Further samples advised           0331 C.D.       Deficient 6½% fat        Prosecution       Fined £5 and g2 1s. costs       On delivery re 23 30324 C.D.         1577 Bn.D.       Deficient 12½% solids-not-fat       Prosecution       Fined £5 and g3 3s. costs					***	
5554 S.D.Deficient $6\frac{1}{2}$ % fatDoDoImage: Markow ma	5049 M.D	Deficient 2% solids-not-fat		Do		***
0273 N.L.D.Deficient 10% fatDo0324 C.DDeficient 41% solids-not-fatProsecutionFined 10s. and $\pounds 2$ 1s. costsSee No. 30331 C.D5584 L.DDeficient 61% fatFurther samples0331 C.DDeficient 41% solids-not-fatFurther samples0331 C.DDeficient 61% fatProsecutionFined $\pounds 5$ and $\pounds 2$ 1s. costsOn delivery re8 MiddletonDeficient 61% fatCautionSing 2 1 s. costsSing 2 4 C.D.1577 Bn.DDeficient 121% solids-not-fatProsecutionFined $\pounds 5$ and $\pounds 3$ 3s. costs	6436 Km.D	Deficient 10% fat		Do		
0324 C.D.        Deficient 41% solids-not-fat        Prosecution        Fined 10s. and £2 1s. costs       See No. 30331 C.D.         5584 L.D.        Deficient 61% fat        Further samples advised           0331 C.D.        Deficient 41% solids-not-fat        Prosecution       Fined £5 and £2 1s. costs          8 Middleton        Deficient 61% fat        Caution           1577 Bn.D.       Deficient 121% solids-not-fat       Prosecution       Fined £5 and £3 3s. costs	5554 S.D	Deficient 61% fat		Do		
5584 L.D.        Deficient 6½% fat        Further samples advised           0331 C.D.        Deficient 4½% solids-not-fat        Further samples advised           0331 C.D.        Deficient 4½% solids-not-fat        Prosecution        Fined £5 and \$2 1s. costs       On delivery re       30324 C.D.         8 Middleton        Deficient 6½% fat        Cantion        Solids-not-fat          1577 Bn.D.        Deficient 12½% solids-not-fat       Prosecution        Fined £5 and \$2 3s. costs	0273 N.L.D	Deficient 10% fat	***	Do		***
0331 C.D.       Deficient 41% solids-not-fat       Prosecution       Fined £5 and £2 1s. costs       On delivery re         8 Middleton       Deficient 61% fat       Caution        Fined £5 and £3 and £5 and £3 and £3 and £3 and £3 and £5 and £3 and £3 and £3 and £5 and £5 and £5 and £3 and £3 and £3 and £5 and	0824 C.D	Deficient 41% solids-not-fat		Prosecution		See No. 30331 C.D.
8 Middleton         Deficient 6½% fat          Caution          £2 1s. costs         30324 C.D.           1377 Bn.D.          Deficient 12½% solids-not-fat         Prosecution          Fined £5 and			***	advised		
1577 Bn.D Deficient 12 <sup>1</sup> / <sub>2</sub> % solids-not-fat Prosecution Fined £5 and £3 3s. costs						On delivery re No 30324 C.D.
£3 3s. costs						
5375 S.D Deficient 26% fat Caution Appeal to-cow lot				Prosecution		
	5575 S.D	Deficient 26% fat		Caution	***	Appeal to-cow low

### ADULTERATED SAMPLES OF MILK-continued.

No of Sample.	Nature of Adulteration.		Action taken.	Result of Prosecution.	Remarks.
8 Abram	Deficient 18% fat		Caution		
52756 R.D	Contained 5% added water		Further samples advised		
844 Westhoughton	Deficient 161% fat		Prosecution	Costs, £2 12s. 6d.	
262 Lytham St. Anne's	Deficient 1% solids-not-fat		Caution	and the "" at her	13-01
265 Lytham St. Anne's	Deficient 10% fat		Do		
83281 Ws.D	Deficient 30% fat		Prosecution	Costs, £4 10s. 5d.	
20423 L.B.D	Deficient 10% fat		Caution		
16453 Km.D	Deficient 61% fat		Further samples advised		
16455 Km.D	Deficient 26% fat		Caution		See No. 16467 Km.D.
16456 Km.D	Deficient 23% fat		Do		See No. 16464 Km.D.
10283 N.L.D	Deficient 61% fat		Further samples advised		
14181 G.D	Deficient 26% fat		Prosecution	Costs, £2 7s. 2d.	and a state and
16464 Km.D	Deficient 13% fat		Caution		On delivery re 16456 Km.D. Appeal-to-
24691 H.B.D	Deficient 23% fat		Descention		cow low
30342 C.D	Deficient 100/ 64		Prosecution	Dismissed	
16467 Km.D	Deficient page 6.4				
	Denesent 20 % lat		Do	and prof. here	On delivery re 16455 Km.D. Appeal-to- cow low
85593 L.D	Deficient 10% fat		Further samples advised		alar and and
269 Lytham St. Annc's	Contained 75 parts of Formald hyde per million	le-	Prosecution	Costs 4s.	1941
274 Lytham St. Anne's	Deficient 61% fat		Further samples advised	·····	and alternati
83291 Ws.D	Deficient 20% fat		Prosecution	Costs £3 9s. 2d.	
83292 Ws.D	Deficient 2% solids-not-fat		Further samples advised	741	
85705 W.D	Deficient 10% fat		Caution	tiet and the set	ext - anight this
24709 H.B.D	Deficient 61% fat		Further samples advised		
35607 L.D	Deficient 31% solids-not-fat		Do	and all the local	
35610 L.D	Deficient 31% solids-not-fat		Do	and production in	
16481 Km.D	Deficient 61% fat		Do		
20448 L.B.D	Deficient 6 <sup>1</sup> / <sub>2</sub> % fat		Do		
75640 S.D	Deficient 2% solids-not-fat		Do		
5644 S.D	Deficient 2% solids-not-fat		Do		
5646 S.D	Deficient 2% solids-not-fat		Caution		
	Deficient 10% fat		Do		See No. 81287 P.D.
1287 P.D	Deficient 161% fat and cor tained 5% added water	1-	Do		Appeal-to-cow low
	Deficient 101% solids-not-fat		Prosecution	Fined £5 and £3 4s. 2d. costs	······································
	Deficient 1% solids-not-fat		None	and a strength of the second	Same vendor as No. 83304 Ws.D.
2776 Wgn.D	Deficient 11% fat		Caution "		Appeal-to-cow low

# ADULTERATED SAMPLES OF MILK-continued.

No of Sample.	Nature of Adulteration.	Action taken.	Result of Prosecution.	Remarks.
1297 P.D	Deficient 33% fat	Prosecution	Fined 10s. and £2 6s. 10d. costs	
2818 R.D	Deficient 2% solids-not-fat	Further samples advised		reaction and the second
5672 S.D	Deficient 10% fat	Caution		
4195 G.D	Deficient 61% fat	Further samples advised		
9306 N.L.D	Deficient 3% fat and 31% solids- not-fat	Do		
2838 R.D	Contained 6% added water	Do		
7605 By.D	Contained 2% added water	Do		See No. 47612 By.1
5220 M.D	Contained 6% added water	Do		
96 Lytham St. Anne's	Deficient 13% fat	Caution		
72 Stretford (Informal)	Contained 21% added water	Formal sample advised		Formal sample genuine
5698 S.D	Deficient 41% solids-not-fat	Caution		
5705 S.D	Contained 4% added water	Further samples advised	***	
3330 Ws.D	Deficient 31 solids-not-fat	Prosecution	Fined £5 and	3 + +
3331 Ws.D	Deficient 121% solids-not-fat	Do	£3 5s. 10d. costs	Same vendor
7612 By.D	Contained 2% added water	Further samples advised		Taken on delivery to vendor of No. 47605 By.D.
7613 By.D	Contained 2% added water	Do		
84 Stretford (Informal)	Deficient 23% fat	Formal samples advised		Formal samples genuine
0377 C.D	Deficient 14% solids-not-fat	Prosecution	Fined £3 and £2 2s. 10d. costs	
0330 N.L.D	Deficient 14% solids-not-fat	Do.	Fined £5 and £4 4s. 5d. costs	
7634 By.D	Deficient 8% solids-not-fat	Do	Pay costs £15 1s. 4d.	
7635 By.D	Contained 4% added water	None		See No. 47645 By.I
5295 M.D	Contained 4% added water	Further samples advised		Sec No. 65320 M.D
7645 By.D	Deficient 11% solids-not-fat	Prosecution	Pay costs £10 10s.	Taken on delivery to vendor of No. 47635 By.D.
7647 By.D	Contained 5% added water	None		From same vendor as 47645 By.D.
5320 M.D	Contained 4% added water	Further samples advised		Taken on delivery to vendor of No. 65295 M.D.
15728 L.D	Deficient 10% fat	Do		
5863 W.D				1.
5864 W.D				Same vendor
24837 H.B.D				
55352 M.D		Further samples		

# (b) Adulterated Samples other than Milk, 1932.

No. of Sample.	Description.	Formal or Informal.	Nature of Adulteration.	Action taken.	Remarks.
24830 H.B.D.	Arrowroot	Informal	Consisted of valerian root	Caution	1221 1121
24513 H.B.D.	Barley	Do	Coated with 1-2% maize starch	None	
20481 L.B.D.	Barley	Do	Faced with $0.9\%$ maize stareh	None	
59521 A.D.	Cream, Artificial	Do	Margarine 23%, sucrose 21%, glucose syrup 14%	Formal sample advised	ALA MARK
54912 M.D	Flour, Self-raising	Do	Contained 0.3% calcium sul- phate	Formal sample advised	 
41453 Bn.D.	Jam, Damson	Do	Deficient $2\frac{1}{2}$ % soluble solids	Formal sample purchased	See No. 4146 Bn.D.
41466 Bn.D.	Do	Formal	Deficient $2\frac{1}{2}$ % soluble solids	Caution	Same vendor a 41453 Bn.D.
85538 W.D.	Jam, Strawberry	Informal	Deficient in strawberries	Further sample advised	o
85778 W.D.	Jam, Damson	Do	Deficient of 5% of the minim- mum amount of soluble solids	Formal sample advised	
16424 Km.D	Lemonade Powder	Do	Contained tartaric acid in place of citric acid	None	
-				( presented )	
75438 S.D	Marmalade	Do	Deficient 5% soluble solids	Further sample advised	all'a real
5418 S.D	Sausages	Do	Contained 140 parts of sulphur dioxide per million	Formal sample purchased	See No. 7544 S.D.
75448 S.D	Do	Formal	Contained 140 parts of sul- phur dioxide per million	Caution	Same vendor a 75428 S.D.
9218 O.D	Do	Informal	Contained 80 parts of sulphur dioxide per million	Formal sample purchased	Formal sample
9454 A.D	Suet, Shredded	Do	Contained 2% excess of rice flour	Further samples purchased	Subsequent samples genuine
4697 H.B.D.	Tartar, Cream of	Do	Contained 10% sodium bicar- bonate	Formal sample advised	See No. 24727 H.B.D.
4727 H.B.D.	Do	Formal	Contained 2.5% sodium bicar- bonate	Caution	
	1	-	5		
			- All per het annut the	The section of the	

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SAMPLES A	ANALYSED	UNDER	THE	FOOD	AND	DRUGS	(Adulteration)	ACT,	1928,
			DURIN	G THE	YEA	R 1932.			

And I		Миж.		Отн	ER ARTI	CLER.		TOTAL.	
POLICE DIVISION OR DISTRICT.	Samples.	Adult.	Per- centage of Adult.	Samples.	Adult.	Per- centage of Adult.	Samples.	Adult.	Per- centage of Adult.
Lonsdale North	88	6	6.8	55	0	0.0	143	6	4.2
Lonsdale South	83	8	3.6	58	0	0.0	141	8	2.1
Garstang	60	8	5.0	29	0	0.0	89	8	3.4
Kirkham	144	10	6.9	80	1	1.3	224	11	4-9
Blackburn Lower	101	2	$2 \cdot 0$	119	1	0.8	220	3	1.4
Blackburn Higher	205	8	1.5	136	4	2.9	341	7	2.1
Church	120	4	8-8	51	0	0.0	171	4	2.3
Rossendale	118	0	0.0	27	0	0.0	140	0	0.0
Leyland	154	16	10-4	144	0	0.0	298	16	5.4
Bolton	175	2	1.1	125	2	1.6	300	4	1.3
Bury	149	13	8.7	120	0	0.0	269	18	4.8
Rochdale	245	10	4.1	135	0	0.0	380	10	2.6
Ashton-under-Lyne	121	8	2.5	129	2	1.6	250	5	2.0
Manchester	271	10	3.7	278	1	0.4	549	11	2.0
Seaforth	222	17	7.7	190	4	2.1	412	21	5.1
Prescot	86	6	7.0	61	0	0.0	147	6	4-1
Widnes	81	11	18.6	59	0	0.0	140	11	7.9
Warrington	232	9	8.9	115	2	1.7	847	11	8.2
Wigan	181	2	1.1	182	0	0.0	868	2	0.6
Darwen Borough	22	0	0.0	0	0	0.0	22	0	0.0
Lytham St. Anne's Borough	78	6	8.2	0	0	0.0	78	6	8.2
Middleton Borough	60	4	6.7	34	0	0.0	94	4	4.8
Abram U.D.C	12	1	8.3	0	0	0.0	12	1	8.3
Horwich U.D.C	6	0	0-0	0	0	0.0	6	0	0.0
Irlam U.D.C	4	0	0.0	0	0	0.0	4	0	0.0
Litherland U.D.C	12	0	0.0	0	0	0.0	12	0	0.0
Stretford U.D.C	34	2	5.9	0	0	0.0	84	2	5.9
Westhoughton U.D.C	64	4	6.3	0	0	0.0	64	4	6.3
Contractor and the second		1997		-				-	
Total—County Police	2831	130	4.6	2093	17	0.8	4924	147	8.0
Total—Other Authorities	287	17	5.9	84	0	0.0	821	17	5.8
Total all sources	3118	147	4.7	2127	17	0.8	5245	164	3.1

Division.	Samples reported for Prosecution.	Number of Prosecutions.	Convicted or Ordered to Pay Costs.	Dismissals.	Fines ( Cost	
				Contraction of the	£ s.	d.
Lonsdale North	 1	1	1	0	9 4	5
Lonsdale South	 0	0	0	0		
Garstang	 1	1	1	0	2 7	2
Kirkham	 0	0	0	0		
Blackburn Lower	 1	0	0	0		
Blackburn Higher	 1	1	0	1		
Church	 3	8	8	0	14 14	10
Rossendale	 0	0	0	0		
Leyland	 0	0	0	0		
Bolton	 1	1	1	0	8 3	0
Bury	 4	2	2	0	25 11	4
Rochdale	 4	4	4	0	14 1	11
Ashton-under-Lyne	 1	0	0	0	cond.	
Manchester	 1	1	1	0	4 3	0
Scaforth	 2	1	8 1	0	5 0	0
Prescot	 2	1	1	0	2 16	10
Widnes	 7	6	6	0	28 19	8
Warrington	 1	1	1	0	4 14	7
Wigan	 0	0	0	0		
County Police	 30	23	22	1	119 16	9
Local Authorities	 3	3	3	0	8 5	2
Total	 33	26	25	1	128 1	11

#### PROSECUTIONS ARISING OUT OF SAMPLES PURCHASED DURING THE YEAR 1932.

WATER AND EFFLUENT ANALYSES.—Seventy-five samples of water and effluent have been submitted to the County Analyst during the year for examination. Of these, 53 have been examined as to their general suitability for drinking purposes, 12 have been tested for lead or in other special ways, whilst 10 have been effluents.

The 65 samples of water were received from the following Authorities :--

Boroughs.-Chorley 1, Darwen 5, Haslingden 2, Leigh 1, and Widnes 5.

Urban Districts.—Abram 2, Ashton-in-Makerfield 3, Fulwood 3, Horwich 2, Huyton-with-Roby 2, Ormskirk 6, Standish-with-Langtree 1, Upholland 1, Walton-le-Dale 3, and Waterloowith Seaforth 1.

Rural Districts.-Chorley 7, Fylde 1, Lancaster 3, Lunesdale 5, Preston 1, Warrington 4, and Whiston 1.

County Public Health Committee 4.

County Institution 1.

The results obtained on the 53 samples examined as to their general suitability for drinking purposes are set out in the following table :---

	Source.		Fit.	Doubtful.	Unfit.	Total.
Public S	Supply	 0	18	1	0	19
Stream		 	0	1	1	2
Deep We	ell	 	6	8	5	19
Pit Shat	ft	 	0	0	2	2
Spring		 	3	1 1	0	4
Upland :	Surface	 	5	0	0	5
Borehole		 	1	0	1	2
	Total	 	33	11	9	58

The 10 samples of effluent were received from the following :-

Huyton-with-Roby U.D.C. 1, Whiston R.D.C. 1, County Public Health Committee 5, County Institutions 2, and River Alt Catchment Board 1.

ACTION BY TOWN AND DISTRICT COUNCILS UNDER FOOD AND DRUGS ACTS.—Samples of food and drugs taken in 1932 by the five Boroughs in the Administrative County which are not within the area of the County Analyst were :—Accrington (B), 61 samples ; Ashton-under-Lyne (B), 104 samples ; Bacup (B), 53 samples ; Clitheroe (B), 33 samples ; and Lancaster (B), 144 samples. Other Local Authorities obtaining samples and forwarding them to the County Analyst are referred to in the table on page 137.

#### PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

Notifications of Infectious Diseases.—Removals to Hospitals, &c.—Table 6, pages 139 to 152, gives the number of cases of infectious disease notified in each urban and rural district in the Administrative County during the year 1932, under the Infectious Disease (Notification) Act, 1889, the Public Health (Tuberculosis) Regulations, and under various other Regulations and Orders. It also shows the number of cases removed to isolation hospitals, the number of deaths in hospital, etc.

TABLE 6, showing HOSPITAL ACCOMMODATION and DISINFECTING APPARATUS provided in or for each of the County Districts; also NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED, REMOVED TO HOSPITAL, &c., during the year 1932.

	Nature of Hospits	Nature of Hospital Accommodation.		Note.	Note(a)	Cases	notified.		(b) To	Total do	deaths.	(c) 1	feaths. (c) Removals	. 2	to host	hospital.	(p)	Deaths	he in	hospital.	ital.		Disinfection.	
DISTRICT.	For ordinary infectious discusss.	For Smallpox.	BEER BEER	.xodbars	Southet Fever. Diphtheria (Including Membranous Croup).	Harteric Fever (including Faratyphoid).	Acute Trimery Pneumonia   Acute Influenzal Fneumonia	Puerperal Ferrer and Pyrexia.	Cerebro-spinal Ferrer.	Acute Poliosmysilitie.	Acate Pollo-encephalitis. Encephalitis Lethargica.	Lethergica. Dysentery.	Ophthalmia Neonatorium.	Erysipelas.	§Pulmenary Tuberculosia.	Other forms of Tuberculosis.	batzantaso), analah Absords	Chicken-pox.	German Measies). German Measies).	Whooping Cough.	IMarthook (under 2 years).	Total.	Apparatus and where situated.	No. of houses or rooms disin- fected.
•Abram	8 beds	Iron building- 4 beds	3229	1111	00   00   ND   60	::::	81 : :	:==:						eo 1 1 1	410 : :	* ! ! !		::::	1 00 1 1			\$8° ;	Steam-Hospital	18
Accrington (B)	At Blackburn and Burnley C.B. Hospitals	Iron building- 24 beds	9999	et ::	00 ca 44 ca		55 I I	- ; ; ;			1 1 1 1 1	: 1 : : : : : : : : : : : : : : : : : :	••	21	88 : :	80011		191		\$2 °° ; ;		385 8 6 4 4	Steam-Corporation Depôt	10
Adlington			GEEE	1111	+ :+ :		t= 01 [ ]	00 07 08 08					***	**	01 00 : :	ND 08 [ ]					104 1 1	<sup>5 - 4</sup> 1 3	No proper apparatus	
Chorley (B)	Joint at Heath	5 heds at Finning-	3335	140 121 	0 11 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 1	01 01	18	- : : :		****	17 11			10.1	57 · · ·	89 9 1 1			1 <sup>eo</sup> 1 .	100 1 1	1°	282 61 141 8	Steam-Town's Yard	184
Leyland		ton ( prace out i)	9299	4 18 1	14 128 1 14 158 1		∞~ ; ;	os 1 i	: :						Фю I I	r-=				:- : :	101 1 1	826 ;	No proper apparatus	5
Chorley (R)			3298	64 1 H 1	8 :9 : e :e :	1111	8 : :	- : : :	1111		101 1 1	:#::		* : : :	₽° : :	2 <b>-</b> : :			::::	:- : :		2 % % ;	Steam-Hospital	4
*Ashton-in- Makerfield	36 beds (Bryn Road)	IN	322 <b>5</b>		87 13 11 12 13	1111	8511	*9 : : :			- 1111 /* 1111			ao : : :	2* i i	2:::		1111	:•• : :		: 00 : :	37	Steam—Hospital	88

Nork.- The information re haspital accommodation has been extracted mainly from the local health reports; in some instances the information has been revised as the result of the "Survey" made by the County Medical Staff.

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TABLE 6-continued.

				14	.0					
	No. of houses or rooms disin- fected.	<b>†</b> 17	\$	15	ŝ	122	28	146	80	55
Disinfection.	Apparatus and where situated.	Steam-Town's Yard	Steam—Ashton-under- Lyne (B)	Steam-Ashton-under- Lyne (B)	Steam-Hospital	Steam—Hospital	Steam-Portable	Steam — At Refuse Destructor	No proper apparatus	Steam-Hospital
1	Total	307 3113 98	48 17 6 1	51 16 1	99 e :	106 55 80 1	12 146	246 100 84 7	108 1 22 22 108	2350
ital.	Diarthosa (under 2 years).	14 11		1711		17 11			:- : :	: 01 : :
hospi	Whooping Cough.	1-11		1111	1111	14 11	1111	110 1 1	17 11	1111
(d) Deaths in hospital	Steanles (excloding German Measles).	1.0 1 1	:-::			12 : :	1711	181 1 1	101 1 1	101 1 1
Death	Chicken-pox.	1111		1111	1111	1111	1111	1111		
(9)	batzatracted (baords).	1111	1111		1111	1111	1111	++++	1111	1111
ital.		11 22	** = : :	∞ - : :	- 01 : :	04 ; ;		5 ° : :	6- : :	8= ::
hospital.	#Pulmonary Tuberculosie.	95 : :	k- 10 [ ]	∞ t- ; ;		8:::	40 [ ]	88 : :	22::	
is to	Eryalpelas.	S : : :	- : : :	** : : :	•• : : :	81 : ° :	*:::	3:00	9 :- :	**
Infectious Diseases. teaths. (c) Removals	Ophthalmia. Neosatorum.			01 I I I		* :- :	** : : :		***	
us Dis (c) Re	Dysentery.	1111	•• : : :		1111					:::*
etiou	Lethanstea.	:# : :	:# : :				::	- :	:	1111
	Acute Polio-mosphalitis.	1111						: :		
Total	Acute Pollomyelitis.	1111				eo : eo :				1111
(9) 3	Cerebro-spinal Fever.	es es → ;					:#::	1111	CR CR CR	** ! :
ied.	Puerperal Fever and Pyrexia.	4 :- :	- : : :	ei : : :	1111	*-00-	** : : :	10   00	03 103 1	
notified.	Acute Primary Pasumonia.	85 : :	9 * : :	일** : :	82::	38 : :	2 *	58 : :	52 : :	ge : :
ases	Enteric Fever (including	- : : :			- :- :			∞ :- :	- :- :	****
Note(a) Cases	Diphtheria (including Membranous Croup),	월 en 21 :	0-4-	- :	·* : 01 :	2:2:	eo : eo :	8.054	•-+ ;	12:12
ote.	Scatlet Fever.	161 8 1 161	= :•• :	2 : : :	۱ e i م	8 13 1	5 : ° :	5-81 :	8: 8:	9-9 :
N	Smillox.	1111			1111		1111			1111
	21 2133 24	GG BE	ଞ୍ଚିତ୍ତି	3699	3999B	COSE	20£9	3899	3299	329B
I Accommodation.	For Smallpox.		Joint at Harts- head-12 beds		Arrangement with Bury Joint			all purposes : Iron building, 30 heds, at Calderhurst Lane		
Nature of Hospital Accommodation.	For ordinary infectious diseases.	20 beds	2 beds, Hyde Bor- ough Hospital	Arrangement with Oldham C.B. for cases of diphtheria	At Wigan C.B. Hospital			Joint at Astley for all purposes : 64 beds 28 cots 20 heds, at 28 cots Calderhurst L	Anti- Contra	and arriter
Spine and man	DISTRICT.	Ashton-under- Lyne (B)	Audenshaw	Limehurst (R)	*Aspull in	Atherton	Golborne	Leigh (B)	Tyldesley-with- Shakerley	Leigh (R)

					141	ι					
		No. of houses or rooms disin- feeted.	111 1 sebool	5	۲	=	66	8	\$	81	8
Disinfection.		Apparatus and where situated.	Steam-Town's Yard	Steam-Nelson (B)	Steam—Billinge Hospital	Steam—Hospital	Steam—Hospital	Steam—Hospital	Steam-Nelson (B)	Steam-Burnley C.B.	Steam-Burnley C.B.
		LatoT	58 58 59 59 50 50 50 50 50 50 50 50 50 50 50 50 50		5 <sup>20</sup> 1 1	er 4 i	55 25 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	288-	\$88°°	118 21 39 1	588 ;
	vital.	Diarthora Vander 2 years).						:- : :		:- : :	17 11
	hospital.	Whooping Cough.				1111	5.01 : :	1*11	:- : :		:- : :
	hs in	German Measles). German Measles).					374				
	(d) Deaths	Chicken-pox.	8 : : :		1111		Si : : :			3 : : : :	1111
	(p)	Malaria (contracted abroad).									1111
	hospital.	Other forms of Tuberculosis	는 ** : :	*0 09 ; ;	** : : :		∞ + : :	****	∞- ; ;	∞ ∞ : :	• - : :
		Fulmonary Tuberculosis.	52 : :	****	****	₀₁ – ∶ ;	2* · · ·	¥∞ : :	ro : :	** ; ;	11 22
	ris to	Erysipelas.	* : : : :		- : : :		- : : :	2 : : :		•	•• : : :
Infectious Diseases	Removals	Ophthatmia Neonatorum.	NO 1 1 1					en : : :	* : : :		
s Dis	(c) R	Dysentery.									
ctiou		Encephalitis Lethargica.	::	:# : :	:** : :						:**::
Infe	deaths.	Acute Polio-encephalitis.			::::						
	Total	Acute Poliomyelitis.									- : : :
	(9)	Cerebro-spinal Fever.									- :- :
	led.	Postparal Ferer and Pyrexia.	- :- :					01 01		•• = ; ;	* :- :
	notified.	Acute Primary Pasmoonia	8 ° : :		[ <sup>01</sup> ] ]	21 여 : :	824:	29 : :	ao 10 🗄 🗄	8° : :	2:1:1
	Note(a) Cases	Enteric Fever (including Paratyphoid).				- : : :			::::		
	(a) C	Dipptheria (including Membranous Croup)	9 ; °° ;			•• :•• :	13 13 13	***	2 <b>4</b> 9 0	9 - 6 :	1 1 1
	ole	Scarlet Pever.	53 i en i	s 61 :	1111	ei 1 i	8 : 8 :	22 : 52 :	엽 : * :	4:8:	: 1: 3
	N	Smallpox.									
-			<u>.</u>	3399 1	3809	6605	8899	<u>8695</u>	3299	3899	ତ୍ତ୍ତ୍ତ
Accommodation.		For Smallpox.	Joint at Todmor- den-32 beds	Hospitals by	Old School-4 beds	IIN	Bury and District Joint Hospital	At Manchester C.B.		ey C.B. for all (Crown Point) 30 beds.	
Nature of Hospital Accommodation.		For ordinary infectious diseases.	Arrangement with Bury Joint Hos- pital Board	At Nelson Borough Hospitals by arrangement			Joint at Fall Birch, Horwich, 48 beds			Joint with Burnley C.B. for all purposes (Kibble Bank) (Crown Point) 112 beds	
			:	:	1	1	:	;	1	1	:
a second s		DISTRICT.	Bacup (B)	Barrowford	*Billinge and Winstanley	•Blackrod	*Horwich	•Westhoughton	Brierfield	Padiham	Burnley (R)

					14	2					
		No. of houses or rooms fiected.	50	105	88	62 and 110 rooms.	18	a	1	64	61
	Disinfection.	Apparatus and where situated.	No proper apparatus	Steam-Oldham C.B.	Steam — At Refuse Destructor	Steam-Hospital	Steam-Oswaldtwistle	Steam - Accrington (B)	Steam-Gas Works	Steam — At Refuse Destructor	Steam-Hospital
		JasoT	80.00-	173 59 50 1	256 25 8	198 39 18 5	SI 4	18 8 1	88 : :	149 34 17 17	°1
	vital.	Diarrhosa (under 2 years).	1111	:**	: es : :	:-::				: ** : :	:::
	(d) Deaths in hospital.	Whooping Cough	1111	101 1 1	:-::	; ** ; ;			::::	:- : :	
	hs in	Measles (excluding German Measles).	::::	:** : :	185	:** : :		::::	; ea ; ;		:::
	Deat	Chicken-pox.	::::		8 : : :	3 : : :			::::		
	(p)	Malaria (contracted (beords).	1111	::::							
	pital.	Other forms of Tuberculosis.	- : : :	8 : : :	4411	10 ei ; ;	ei : : :	<sup>10</sup>	***	2011	111
	to hospital.	#Pulmoniary Tuberculosis.		81 : :	99::	의의 : :	***0 : : :	09 09 ; ;	*0 00 : :	2 ° : :	- : :
		Erysipelas.	- : : :	2 : : :	* : : :	r= (= )		ei : : :	**	• : : :	
Infectious Discases	Removals	ophithatinia Securita.	::::	** : : :						01	:::
s Di	(c) R	Dysentery.	::::								:::
ctiou		Encephalitia. Lethargica.		:= : :		:= ::			::	:= ::	:::
Infe	Total deaths.	Acute Pollo-encephalitie.			::::	1111					111
	['otal	Acute Poliomyelitis.	1111						- : : :	- : : :	:::
	(9)	Cerebro-spinal Fever.									111
	fed.	Puerperal Feret		- : : :	•• : : :	eo ∶oi –			*	10 (m )	111
	notij	Acute Frimary Paramonia.	1411	32:::	≡ * : :	38 9 9 9 9 9 9	N= 01 ; ;	01 X0 1 1	*= : :	58 16	:::
	Note(a) Cases notified.	Enteric Fever (includiog Faratyphoid).							- : : :		111
	(a) (	Disphiheria (including Wembranous Croup).	18 18 18	∞ <b>1</b> .4 i	- :- :	*~~ :	* 100 1		* : : : :	200-	
	ote	Scarlet Pever.	- :- :	8 :\$ :	의 (바 )	8 :9 :	; ;	• : : :	S : : :	5-3:	- :-
	N	.xodgem3	1111				1111				
			GEEE	3595	GEEE	ଞ୍ଚିତ୍ତି	3335	<u> 2999</u>	8209	389 <b>9</b>	229E
Accommodation	"HORMONIA CONTRACTOR	For Smallpox.	Arrangement with Lancaster (B)		Joint at Racefield 	Arrangement with Ashton- under-Lyne, &c. joint.	Agreement with Oswaldtwistle 3 beds	Accrington (B.) Blackburn C.B.	Arrangement with Blackburn C.B. 3 beds	34 beds, Jerusalem Farm	Arrangement with Blackburn C.B. -2 beds
Nature of Hospital Accommodistion	endour in amount	For ordinary infectious discusses.	By arrangement cases sent to Kendal	At Oldham C.B. Hospital	Do.	Do.	Arranged with Blackburn C.B. as required	At Burnley, &c., Joint Hospital	Arranged with Blackburn C.B. "in cases of emergency."	12 heds, Jerusalem Farm, Also ar- rangement with Burnley C.B	Lanca- Rural al
		DISTRICT.	Camforth	Chadderton	Crompton	Royton	Church	Clayton-le-Moors	Clitheroe (B)	Colne (B) 1	Croston

					1	43					
		No. of houses or rooms disin- fected.	49	8	5	335	15	123	969	62	26
	Disinfection.	Apparatus and where situated.	No proper apparatus	No proper apparatus	No proper apparatus	Steam—Electricity Works	No proper apparatus	Steam — At Refuse Destructor	Steam — Sewage Dis- posal Works	Steam-Oldham C.B.	Steam-At Old Hos- pital.
		Total.	없 위 약 이	\$28-	35 2 5 5 4	121 47 75	147 355 7 1	130 50 1	1185 72 91	130 33 31 32 32 32 32 32 32 32 32 32 32 32 32 32	48 222
	in!	Diarrhoua (under 2 years).					:- : :		: ** : :	:•• : :	1411
	in homital	Whooping Cough.	:-::	:- : :	:- : :	:** : :		:-::	±00 ← :	[ 01 ] ]	: 00 : :
			::::	::::			:- : :		1 1 005 3	: ** : :	1411
	Deaths	Chicken-pox.									11112
	19		1111								19 11
	int	Other forms of Tuberculosis,	81 04 1 1	::	∞ <del>4</del> : :	00 ON : :	10 : :	8- 08 [ ]	2 e : :	2 ** : :	2
	hoenital	Pulmonary Teberculosis.	22	9 * : :	<b>8∞ : :</b>	== ::	≓° : :	8 : : : s 3	48 : :	10.56	10 m m
	le to	anteriora il	** : : :	** : : :	۱۱۱ <sup>م</sup>	∞ : ∞ :	9 : : : :	* : : :	2 : <del>4</del> -	o ;o ;	
Discourse	Remonde	Oppthalmela. Neonatorum.			- : : :	e# : : :	•• : : :	- : : :	•• : : :		12b 22 2 2 Case notified
	1.1						8 : : :				
Infordiane		L'etherwise.			60 60 60 60	::		:= ::		es es : : :	(e) 1; 1; (c)
Twee	deaths.	Acute Polio encephalitia.					::::				Pital.
	Total	Acute Poliomyellitia.		::::				::::	•• : : :		38a 1 7 11 7
	(9) 7					::::	::				 
		and Parents		- : : :	9-0-	r40 ;	os : os :	eo : es :	** : : :	01 01	
	notified.	Acute Primary Preumonia	1411	eo 11 eo 1	°⊒ ::	28 S 61 :	48 : :	12 12 12	88::	22 : :	70 14 13 13 13 13 13 13 13 13 13 13 13 13 13
	ases	Enteric Fever (including		- :- :	- :- :		::::		01	- : : :	10 10 11 11 14 14 14 14 14 2 cuses
	Note(a) Case	Diphtheria (including Membranous Croup).	35 1 35	= := :	r (r )	1: 1: 1: 1:	0	∞ ; œ ;	2040	8≈ ( 00 (	· · · · · · ·
	te	Scatlet Fever.	9 ;9 ;	10 [4]	8 :5 :	5 :2 :	8-4:	8 :4 :	5 : 1 :	\$5 : \$1 :	14 ::2 ::: :: :: ::
	Ne	.xoqlism2									C1360
		RARS BREED	ଟିଡିଡିଡି	<u>3999</u>	(20) (20)	<u>3999</u>	6666	335S	3695	6606	3 9 0 9 E
	Accommodation.	For Smallpox.		· Arrangement with Kendal (Woodside)		Agreement with Blackburn (C.B.)	2 beds, Hyde	1 bed, Hyde	At Clayton Vale Hospital, Manchester	Chadderton, &c., Joint Board- 2 beds	At Bury, &c., Joint Hospital (b) $\cdots$ 44 5 $\cdots$ (c) $\cdots$ 23 2 $\cdots$ 1 (d) $\cdots$ $\cdots$ $\cdots$ $\cdots$ $\cdots$ (a) (a) Includes 31 cases and (b) 12
	Nature of Hospital Accommodation.	For ordinary infections diseases.		Joint at High Carley-10 beds		36 beds	Hyde Borough Hospital	Agreement with Manchester C.B.	At Salford C.B. Hospital	At Oldham C.B. Hospital.	Arrangement with Salford C.B. and Leigh Joint Hospitals.
1			-	:	:	:	:	:	:	:	:
		DISTRICT.	Dalton-in-Furness	Ulverston	Ulverston (R)	Darwen (B)	Denton	Droyleden	Eccles (B)	Failsworth	Farnworth

1		y s s		-	er 2		10	-	64	-	
		No. of houses or rooms disin- fected.	99	12	282 Rooms	13	28	121	8	E	114
	Disinfection.	Apparatus and where situated.	Steam-Town's Yard	No proper apparatus	Steam—At Refuse Destructor	No proper apparatus	Steam-Council's Yard	No proper apparatus	Steam-Hospital	Steam-Hospital	No proper apparatus
		JateT	101	26 8 15 :	121 25 76 3	5000	22 II I	21 22 22 23 2 2 2 2 2 2 2 2 2 1 2 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 1 2 1 2 1 1 2 1 1 2 1	65 8 1 1	25 11 :	202 202 202
	tal.	Diambora (under 2 years).	: ** : :								: et ;
	hospital.	Wheeping Cough.	1 04 1 1				:- : :				:::
	in	German Measles). German Measles).									111
	Deaths	Chicken-pox.					<b>\$</b> : : :		36		211
	(g) 1	Malaria (contracted abroad).									111
	tal.	Other forms of Tubercolosis	51 °* i i	∞ - : :	8- 09 ; ;	: :	=-::	∞ ∻ : :	ei : : :	40 04 ; ;	9 ::
	kospital.	Palmonary Tuberculosis.	89:::	∞⊣ ; ;	32 : :	** 01 : : :	12:::	5 ° : :	ND 04 [ ]	; eo ; ;	80
+	10	Erysipelas.	4 : : : :	- : : :	⋴ : – :	•	- : : :	ei :⊷ ;	os : : :	- : : :	81 :::
Infectious Diseases	Removals	Ophthalmia. NonatoranooM	- : : :		•• : : :			••		•• : : :	
18 Di	(c) Re	Dysentery.								::::	111
ection		Encephalitie Lethargica.	- : : :							::::	
Inf	deaths.	Acute Polio-enorghalitis.		1111					::::	::::	::
	Total	Acute Poliomywlitis.					- : : :			::::	::
	(q)	Cerebro-spinal Perer.	::::		:#::				1111		::
		Puerperal Fever	r= 10 :	::::	*0			1111	5 : : : :		CN :
	notified.	Acute Primary Preumonia Acute Inflorest Preumonia	1111		ere : :	:= : :	8 5 : :		10 10 1 1	63.00 : :	14
	ses	Enteric Pever (including Paratyphoid).		1111	₀, : :		1113	- :- :	eo 1 es 1		61 ;
	Note(a) Ca	Diphtheria (Including Membranous Croup).	∞ = ∞ ;	os 1 os 1	87 <b>4</b> 81 00	60 [ 01 ]	os 1 os 1	9-9-	01	eo : eo :	00 m
	de	Scatlet Fever.	a	1 :2 :	3:3:	10 14 1	13: 13:	S ::5 ::	4:**:	∞ ;∞ ;	109 I an
	No	.xoqlism2									11
			(COS)	3299	3695	3595	3293	3299	3895	BEEE	325
Accommodation.		For Smallpox.				Joint at Elswick	<ul> <li>20 beds (includ- ing 14 beds provided by Preston Corpor- ation).</li> </ul>	(continued next page)	Test Strengt and		Constant of the
Nature of Hosnital Accommodation.		For ordinary infectious diseases.		in the second	Joint at Moss					<ul> <li>Joint at Fulwood</li> <li>45 beds</li> </ul>	
		DISTRICT.	Fleetwood	Kirkham	Lytham Saint Anne's (B)	Poulton-le-Fylde	Thornton Cleveleys	Fylde (R)	Fulwood	Longridge	Preston (R)

					145					
		No. of houses or rooms disin- fected.	10	3	25 and 5 Schools	12 rooms	119	12	41	15
	Disinfection.	Apparatus and where situated.	Steam-Blackpool C.B.	No proper apparatus	Steam Bootle C.B.	No proper apparatus	Dry Heat—Council's Yard	Steam-Acerington (B)	Steam — At Refuse Destructor	Steam-Hospital
-	1	.lsfoT	8 - + -	23 11 1	5 T 9	: :	202 42 45 4	81 ft et ;	21 65 co ;	5 I 6 I I
	ítal.	Diarthoea Diarthoea					[ e3 [ ]			:- : :
	hospital	Whooping Cough.					\$ : : :			1111
	the tim	Measles (excluding German Measles).	= : : :				10111			
	(d) Deaths in	Сайскиа-рож.								
	(g)	Malaria (contracted abroad).				1111				
	hospital.	Other forms of Tuberculosis.	•••••••••••••••••••••••••••••••••••••••	8 F : :	∞-::	1111	es 🛏 🗄 🗄	-* 01 [ ]	1 1 1	
	host	sisolaoraduT vatercalosis.	01 ⊷ ; ;	t= 00 ; ;	91- i i	- : : :	2 · · ·	۰÷ : :	22:	***
	als to	Erysipelas.			01 ; ; ; ;		10 1 - 1	ea : : : :	•• : : :	8:::
Infections Diseases.	Removals	Ophthalmia Neontariona	1111	1111	1111	1111	- : : :		* : : :	ea : : : :
s Dis	(c) R	Dysembury.		1111				1111		1111
ction	hs.	Encephalitis			- : : :	1111		여 라 : :		1111
Infe		Acute Pollo-encephalitis.				::::			::::	1 1 1 inward transfer
	Total	Acute Pollomyrelitte.	1111	1111				::::		
	(9)	Cerebro-spinal Fever.	1111	1111			03 03 03	::::		1 1 
	notified.	Puerperal Fever		01 [ ] ]				::::	ot : :	::::ī
	moti	Acute Influences Preumonia		101-11	8.0		12 00 00 01	16 11	£1 : :	5 °0 : :
	Cases	Enteric Fever (including Paratyphoid).			- :- :		•• ! ! !	• : : :		
	(a)	Diphtheria (including biembranous Croup).	ei	oi	co   co		12: 33	08 108 1	r- 1 oi 1	= := :
	Note(a)	Scatlet Perse.	10 :4-	1 : : : : : : : : : : : : : : : : : : :	×9 : :		2:12		= :- :	11:10
	×	.xodilan2	1111		::::	::::			1111	1111
		2238	5355	3533	3293	3333	6666	3335	0299	<u>6666</u>
	Accommodation.	For Smallpox.		Joint at Elswick (as proton pag).	pitals	ı Hospitals	lospitals	Agreement with Blackburn C.B. -2 beds	bury and District oard	Warrington Small- pox Hospital- 3 beds
includ.	Nature of Hospital Accommodation.	For ordinary infectious diseases.	At Blackpool C.B. Hospital	Moss Side. Arrangement with Fylde Joint Hospital	At Bootle C.B. Hospitals	At Kendal Borough Hospitals	At Liverpool C.B. Hospitals	At Blackburn C.B. Hospitals	Agreement with Bury Joint Hospital Board	10 beds at St. Helens C.B. Hospital
TART & CONTENS		DISTRICT.	Preesall	Garstang (R)	Formby	Grange-over-Sands	Great Crosby	Great Harwood	Haslingden (B)	Haydock

ĸ

					146				
		No. of houses or rooms disin- fected.	19	85	i	8	31 35 rooms	21	188
	Disinfection.	Apparatus and where situated.	Steam—Destructor Works	Steam-Gas Works	Steam-Hospital	Steam-Hospital	Steam—Council Offices	Steam—Farnworth	Steam—Hospital
		Total.	352 59 31	121 50 1	11 5	158 69 30 4	22 53 51 64 26 53 51 64	4 1 a :	87 87 171 4
	ital.	Diarrhoea (under 2 years).	104 1 1	: ** : :		:** : :	: ** : :		:*::
	hosp	Whooping Cough	:= : :	1 10 1 1		; es ; ;	:•• : :	1111	:** : :
	tri su	Meandes (excluding German Measles).	:• : :	:* : :		:** : :		:•• : :	:** : :
	(d) Deaths in hospital.	Chicken-pox.	00 : : :	::::					
	(p)	Malaria (contracted abroad).	::::	::::					
	ital.	Other forms of Tuberculosis.	81 <sup>co</sup> : :	1 1 1 1	** : : :	21 00 : : :	** ! ! !	*- : :	59 : :
	hospital.	#Pulmonary Tuberculosis.	32 18	13	4 01 : :	118	일~ : :	+** ! !	85 : :
	als to	Erysipelas.	2 : : :	* : : :	- : : :	° :- :	es : : :	• : : :	8 : 9 :
Infectious Diseases	Removals	Ophthalmia Weonstorem.	1111		::::	69 ; ; ;		- : : :	4 [ 64 ]
18 Di	(c) Re	Dysembery.	1111						1111
ection		Enceptalitis Lettargica.	:#::		- : : :				
Infe	deaths.	Acute Pollo-encephalitie.	1111		::::				1111
	Total	Acute Pollomyelitis.	1111	1111			1111		1111
	(9)	Cerebro-spinal Fever.	::				FO 09 FO 09		- :- :
	fed.	Poerperal Fever and Pyrexis.	on 1 1 1	- : : :		00 <u>1</u> 40 61	eo : ea :	- :- :	9:":
	notified.	EAcute Frimary Freemonia [Acute Teffuenzal Freemonia	88 : :	38	:•• : :	82::	89* :	2411	826 :
	Note(a) Cases	Enteric Ferver (including Farstyphoid).	::::		- : : :				ND 1 00 1
	(a) (	Diphtheria (including Membranous Croup).		:	•• : : :	11 11	• : : :	61 :⊷ :	8080 8
	ote	Scatlet Fever.	87 ( 88 )	∞ <u>:</u> ∞ :	09 : : :	9 :* :	a : : :	51 m b 1	22: 32
	N	.rogitam2	1111					1111	
			6606	3695	(C)	GEES	363£	3299	009D
Accommodation	Accounterance.	For Smallpox.	At Bury, etc., Joint Hospital	Use ordinary in- fectious diseases hospital	Whiston	10 heds	Arrangement with Manchester C.B.	At Bury, etc., Joint Hospital	11 beds, Littlefell
Nature of Hosnital Accommodation	underit to amout	For ordinary infectious diseases.	At Rochdale C.B. Hospital (Marland)	Sandy Lane, Hindley, 16 beds	Whiston	13 heds	At Salford C.B. Hospital (no contract)	Arrangement with Salford C.B. and Leigh Joint Hospitals	32 beds, Luneside
		DISTRICT.	Heywood (B)	•Hindley	Huyton-with-Roby	•Ince-in-Makerfield	Irlam	Kearsley	Lancaster (B)

				1	47					
	No. of houses or rooms disin- fected.	5	181	8	28 113 rooms.	8	80 rooms.	ø	220	ţ
Disinfection.	Apparatus and where situated.	No proper apparatus	Steam-Council's Depôt	Steam-Hospital	No proper apparatus	Steam-Hospital	Steam-Hospital	No proper apparatus	Steam-Sanitary Department	Steam-Refuse Disposal Works
	Total.	87 - 10	237 50 155 12	4820	351810	2.08-	81 0 s :	9 % T	459 65 150 8	166 31 56 38
tal.	Diarrhosa (under 2 years).	::::	101 1 1	:-::	1111			:- : :	: 61 : :	
(d) Deaths in hospital.	Whooping Cough.		1.0 1 1	:-::	::::		101 1 1	17 11	101 1 1	1111
in in	Meashes (excluding German Meashes).				101 1 1	1111	1411	17 11	101 1 1	17 11
Death	Chicken-pox.						1111		2 : : :	
(p)	Malaria (contracted abroad).	1111						1111		
ital.	Other forms of Tuberculosis	::::	∞ ∞ ÷ ;	•• : :	•• :: :	::			=	2.0 : :
hospital.	fPulmonsay Tuberculosis.		82 : :	** **	+ 01 ; ;		0 10 1 1	0 = ; ;	82	89 : :
10	Brywipelas.	•• : : :	0 j. 1- 01	et : : :	e1 : : :	01 : 01 :	- 1- 1	- :- :	6 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	8 · · · · ·
Removals	Ophthalmia Neonatorum.		** :- :			P	1111	- : : :	•	****
(c) Re	Dysentery.			1111		1111	1111		1111	1111
R 100	Encephalitis Lathargica.	1111	:=::		- 4 : :	1111	1211	1111	1111	
deaths.	Acute Polio-encephalitis.	1111				1111	1111	1111	1111	
Total .	Acute Pollomyellitis.		- :- :		1111	1111		1111	1111	
(p) T	Cerebro-spinal Feret.	1211				1111	1111		1111	
100	Puerperal Ferrer and Pyrexia.		oo ; eo ;		1111	÷ : : :			: :	0 :01 :
notified.	Acute Primary Preumonia	g*::	102 : :	400 ; ;	20:::	01 01 01 ;	1411	1411	887 :	3300
3	Enteric Perer (including			1111	1111			- : : :		***
-(a) Cas	Diphtheria (including Membranous Croup).	© = ∞ =	00 00 00 00 00 00 00 00	0-0-	201201	2-2-	01 : 01 :		5-80 	8 : 1 :
(e)	Scarlet Pever.	0 ; 01 ;	6-8-	9-9-	g :g :	0:0:	9 :* :	* : : :		8 : A :
Note.	.xodban2		1111		1111	1111	1111		1 101	
		GEEE	3295	3295	8208	8209	8208	8200	3223	3223
Nature of Hospital Accommodation.	For Smallpox.	Arrangement with Chadderton, etc., Joint Hospital	1		At Bury, etc., Joint Hospital		: :	1	At Chadderton, etc., Joint Hospital	Lancaster Borough () Hospital
Nature of Hospital Accommodation.	For ordinary infectious diseases.	At Oldham C.B. Hospital	At Bootle C.B. Hospitals		Joint at Smithy > Bridge-16 beds		At Leigh Joint Hospital	At Bury, etc., Joint Hospitals	At Rochdale C.B. Hospital	28 beds and 2 cots
		:	:	:	:	1	:	:	;	
Contraction of the	DISTRICT.	Lees	Litherland	Littleborough	Milnrow	Wardle	Little Hulton	Little Lever	Middleton (B)	Morecambe and Heysham (B)

					148	3					
	1	No. of houses or rooms disin- fected.	81	309	182	20	70	25 and 1 school.	8	38	119
Disinfection.	Direct Maria	Apparatus and where situated.	Steam-Corporation Depôt	Steam—at Refuse Destructor	Steam-Hospital	No proper apparatus	Steam—Hospital	No proper apparatus	Steam-Gas Works	Steam-Hospital	Steam—at Refuse Destructor
		Total	28.0 :	174 55 9	264 36 107 6	3.7 8 1	126 25 25 25	80 I 5 8	36 18 5	38 16 13 13	121
	al.	(mequa 5 years). Distribues	:- : :								171
	(d) Deaths in hospital.	Whooping Cough	: ** : :	:= : :		:- : :	:- : :				101
	in 1	Measles (excluding German Measles).			110 11	1111	1111				1 01 1
	Deaths	Chicken-pox.				10		::::			111
	(q) I	Malaria (contracted shroad).		::::							111
		Other forms of Tuberculosis.	70 <b>-</b> : :	읽다 : :	2여 : :	01 ← ; ;	© 01 ; ;	• : : :	01 01 1 1	= ** : :	<b>a</b> a :
	hospital.	fPulmenary Tuberculosis.	∞ ¢ ; ;	8 E : :	1 : 23	10 01 1 1	26 13	∞ ∞ : :	4 oo : :	••• : :	82
	2	Erysipelas.	• : : :	8- 1 1 1 1	13		* : : :	* : : :	- : : :		∞ ;e
Infectious Diseases	(c) Removals	Ophthalmia Neonatorum.	1111	oi : : : :					::::		3 
s Dis	c) Re	Dysembery.	1111				1111		1111		1
ctiou		Enceptablia Lettangica.	:= ::	:ei : :	:*::				:# : :		
Infe	Total deaths.	Acute Pollo-encephalitie.	1111	∞ : : :							1 I I
	"otal	Acute Poliomyellitis.	::::	::::						1111	: I 1
	(q) 1	Cerebro-spinal Fever.	::::	1111	1111			+ 01 + 01	1111	1111	11 2
		Pareperal Ferrer.	::::	÷= : :	9-0-		:	1111	::::	- : : :	00 II
	notif	Acute Frimary Passmonia.	6 9 I	28 : :	88 <b>21</b> : :	00 08 🗄 🗄	13	ФЮ ; ;	99 : :	16 11	10
	ases	Enter's Perst (including Paratyphold).	1111	::	00 - 01 -		01   01	::::	***		1 mar
	(a) (	Dipptheria (including Membranous Croup).	13	**** : :	8 a 9 a		8080	*****	∞ : <b>-</b> :	00 00	00 101
	Note(a) Cases notified.	Scalet Fever.	2 es : :	8 1 .	80 102 8 8 8 8	3 13 1	8 18 1	° : : :	r :- :	1 :0 ::	51 15
	N	.xoqfiam2	1111		::::	1111	1111	::::		::::	111
			3695	3335	3535	2692	3535	3535	6605	<u>eeee</u>	323
A success of a bias	ACCOMMONMENTOR.	For Smallpox.	At Ashton-under- Lyre Joint Hospital	32 beds (Catlow)	At Liverpool C.B. Hospital	Agreement with Bury Joint Hospital	Arrangement with Liverpool C.B. -5 beds	At Ince-in-Maker- field.	Converted farm house extended by sectional huts 62 beds	rium	At Manchester Smallpox Hospital
Nature of Beneficial Association	INTRÉSOLT TO ATTINK	For ordinary infectious diseases.		12 beds (Catlow)	20 beds and 6 cots	Arrangement with Rochdale C.B.	Green Lane-26 beds	Cases sent to Wigan C.B. in exceptional cir- cumstances.	Cases sent to Blackburn C.B. No agreement	At Whiston Sanatorium	Agreement with Bury and Disspirat bioaite
-		-	:	;		:	:	;	:	:	:
		DISTRICT.	Mossley (B)	Nelson (B)	Newton-in- Makerfield	Norden	Ormskirk	*Orrell	Oswaldtwistle	Prescot	Prestwich

					14	9					
		No. of houses or rooms disin- feeted.	109	25	1 school	22	<del>8</del>	04	129	19	19
Disinfection.		Apparatus and where situated.	Steam—Hospital	Steam-At Refuse Destructor	Steam—Hospital	Steam-Hospital	Steam-Hospital	Steam-St. Helens C.B.	Steam-Hospital	Steam-Accrington (B.)	Steam-Hospital
T		.fatoT	135 54 4	104 35	1 23 29	52 15 13	812	10.4	180 180 180	1: <sup>8</sup> : :	8 2 2 1 1
	ital.	Diarrhoea (under 2 years).	: es : :	:- : :		1711	:- : :	17 11		17 1 1	
	in hospital.	Whooping Cough.	:- : :					1111	1711	1111	1-11
	a fm	German Measles).	:- : :			:- : :		1111	1111	1111	
	Deaths	Chicken-pox.					a : : :		1111	1111	1111
	(F)	Malaria (contracted abroad).								1111	1111
	Ital.	Other forms of Tuberculosis,	2 × : :	** ; ;	- ; ; ;	•-::	•• '+++		9 : : :	: :	
	hospital.	Aleximon Tuberculosis.	1811	8 . : :	01 ; ;	** ! !	a ka 🕴		88 : :	1010 11	-# 01 ; ;
	20	Reysigehas.	∞ ; <del>.</del>	• ; ; ;	ND : 00 :	• ; ; ;	4 101 1		1+	01 1 1 1	1111
	Removals	Ophthalmia Neonatorum.		00 1 04 1		- ;- ;	- : : :		10		1111
		Dysentery.									
	(c) .	Enceptalitis Lethargica.	: :	:#::							
Infectious	deaths.	Acute Pollo-encephalitia.					1111				
Infe	Total	Acute Poliomyrelitis.							1#11		
	L (q)	Cerebro-spinul Fever.		1111		1111	- : : :				01 01
		Poerperal Ferrer Poerperal Ferrer	0 – 0 ;		01 : - :	1111	01 01 01 1		() () <del>(</del> ()		1111
	notified.	[Acute Primary Pneumonia [Acute Influenzal Pneumonia	11	:: 13	și oo	5* : :		4 01 ; ;	55::	∞ ; ;	0.00 ; ;
10	2	Farstyphoid).		1111	1111				1111	1111	
1	a) (a	Diphtheria (including Membrancus Croup).	2000	* [* ]	18	***	* [* ]	1111	5 1° 1	<sup>10</sup>	01 01
	Note(a) Cas	Scatlet Ferrar.	9 : 1 :	2 :8 :	eo ; ei ;	# :* :	18:18:	1111	15 1 <sup>eq</sup> 1		11 :8 :
	NO.	.southern?		01 1 01 1				1111			
-	-	12235 22355	9999	3235	8208	5050	3293	8298	333B	3335	8299
Accommodation.	and and the second seco	For Smallpox.	a tribution and the second	f the Bury and	40-45 beds		States States	Agreement with Liverpool C.B.	27 beds (The Ridge)	At Oswaldtwistle by agreement	Agreement with Liverpool C.B.
Nature of Hospital Accommodation.		For ordinary infectious diseases.	Aller Lowensert	Joint Hospitals of the Bury and	90 beds		and the second	Agreement with St. Helens C.B.	Arrangement made with Bury and District Joint Hospital Board	Can send to Blackburn C.B.	Arrangement with West Lanca- shire R.D.
			:	:	:	:	1	:		:	:
		DISTRICT.	Radcliffe	Ramsbottom	Tottington	Whitefield	Bury (R)	Rainford	Rawtenstall (B)	Rishton	Skelmersdale

	No. of No. of houses or rooms feeted.	5	161	463 rooms. 532 school- rooms.	17	-	67	æ	15	51
Disinfection.	Apparatus and where situated.	No proper apparatus	Steam-Sanitary Depôt	Steam—At Refuse Destructor	Steam-Hospital	Steam-Colne (B)	Steam-Hospital	Steam-Hindley	Steam-Salford C.B.	Steam-Hospital
	JaloT	137	518 107 180 12	284 62 90 10	83 15 13 13 13		10 11	83 ao i i	13 8 13 8 13	818°
1	Diarrhona (under 2 years).	1111	: ** : :	:- : :		::::				111
	Dentropation: Dentro	:- : :	:* : :						:	:::
	Cerman Measles).	1111	: °* : :				:- : :			:= :
	Chicken-pox.	8 : : :			= : : :					- : :
1	alasia (contracted E.									:::
100	di to surrot reduce aisoiuzraduT	<sup>10</sup>	8411	61 e i i	4 : : :	1111		œ : : : :	•	eo os :
	Pulmonary Tubercolosis.	юю ; ;	28 : :	18 28	10 km ( ) (		۰ <u>۰</u>	00 X0 : :	1 00 -1	
	subaser 2	۰ : : :	1 :4 -	8 i <sup>ei</sup> i	* : : :			- : : :	en 1- 1	•• : :
cases	Dysentery. (C) Memory (C) Memory (C) Memory (C) Memory (C) Memory (C)	::::	8- 1 01 1	°1 : : :			111,1		°" :≓ :	:::
S Dis	Dysentery.	e4 : : :	e# : : :	- : : :						:::
1.2	enumeration i		:4 : :	::			• : : :			:::
Infe	Acute Polio-encephalitis									: : :
Total									- :- :	- : :
(A) T			01 - 01 -	a- : :						111
	ment a new	- : : :	2 :* :	4   4 H	- :- :		- : : :		- :- :	es :
matthed	Acute Primary Preumonia Acute Infuenzal Freemonia	9 10 1 1	885 : :	25	00 k= ; ;	4411	** : :		2000	5 × 5
0.000	Enteric Fevre (including			*0 ; 00 ;	- :- :			- : : :		01 01 01 0
	"Manors spont tomate	04 I I I	10 10 12	88 - 45 89 - 45 8	t 01 ;	1111	2 : : : : :	* : : :	+ 1¢	: : : :
Nate (a)	Scathet Fever.	= : : :	146 1	E - 9 -	5 :0 :	ea : : : :	9:::	* : : :	8:*	8:8
No	.modilem2								1111	:::
		(C.S.S.	3995	EEEE	3295	2098	3005	6665	9999	1095
Accommodation.	For Smallpox.	Arrangement with Blackburn C.B.	Bury and District Joint Hospital Board	Joint at Linny-	20 beds	lospitals	2 beds (Bury, etc., Joint Hospital)	Tent for 24 beds erected when required	Bury and District Joint Hospital	8 beds (Bradkirk)
Nature of Hospital Accommodation.	For ordinary infectious diseases.	Cases are sent to Wigam C.B. Hospitals by arrangement	Salford C.B.	At Salford C.B. Hospital	At Leigh Joint Hospitals	At Colne Borough Hospitals	Arrangement with Darwen (B) and with Bury, etc., Joint Hospital Board	al C.B.	At Salford C.B. Hospitals	20 beds (School 1 Lane)
	1		:	-	1	:	:	:	:	:
	DISTRICT.	*Standish-with- Langtree	Stretford	Swinton and Pendlebury	Wotsley	Trawden	Turton	*Upholland	Urmston	Walton-le-Dale

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					151						
		No. of houses or rooms disin- fected.	350	81	204	10	76	34	3 1 sehool	5	œ
	Disinfection.	Apparatus and where situated.	Steam-Council's Yard	No proper apparatus	Steam—Hospital	No proper apparatus	Steam-Salford C.B.	Steam-Blackburn- special cases.	No proper apparatus	No proper apparatus	Steam-Public Assis- tance Institution
	1	JaroT	712 81 182 14	50,00	381 99 152 5	. <sup>50</sup> 00 10	30 36 36	31 18 18	130	36 14	5 % 4 :
	ital.	Distributa (under 2 years).	CN ; ; ;	:-::	: **		:- : :	104 1 1		:- : :	
	hosp	Whooping Cough.	:*::		1* : :	:- : :				1111	1111
	tis in	German Measles). German Measles).	410 17 17	1711			:-::				
	(d) Deaths in hospital.	Chicken-pox.	1111								
		Malaria (contracted abroad).	1111					::::			
	oital.	Other forms of Tubercelosis.	3	04 : : :	28 · · ·	•• : : :	9° : :	:- : :	∞ et : :	4 01 : :	os os : :
	to hospital.	I'vimonary Tuberculosis.	48 : :	3	83 <del>1</del> 1 1 1	- 00 : :	8 ° : :	101 1 1	g : : :	b= 00 : : :	4 01 1 1
ń		Erysipekas.	4:4-	01 : : :	81 : : :		ND 1- 1	∞ :	4 : : :	•	1111
Infectious Diseases	Removals	aimtadhôg0 Neonatanne.		- : : :	∞ :- :		68   04			CN : : :	1111
us D	(c) I	Dysentery.					::::	1111	8 : : :		
fectio	deaths.	Encephalitis Lethargica.	01 01 :					1711		::	
Ini		Acute Pollo-encephalitis.	1111				1111	1111		::::	1111
	Total	Acute Poliomyelitis.		1111		1111	1111				1111
	(9)	Cerebro-spinal Pever.	1111		1711	::::	1111	1111	::::		1111
	notified.	Puerperal Fever	- : : :	1111	10 01 10 01	1111	01 : 01 :			- :- :	17.11
		Acute Trimary Preumonia.	55 0 s	0 9 0 0	27	90 64 ; ;	422a	8 gi : : :	20011	οφ <u>;</u> ;	:•• : :
	Note (a) Cases	Enterio Fever (including Enterio Fever (including	ND 100 1	1111	0 H 00 :	1111	- :- :	1111	= : : :	00 100 1	
	(a)	Digötheria (including Membranous Croup).	F. 845 845 845	01 1 1	2030		12 13	10 10 1		e !e !	
	Vote	Scatlet Fever.	13.1.95	F= 108 1	80 :: 83	es ! es !	4 (2 )	1 1 1	* ! ! !	0 14 1	•0 : •0 :
	4	Smallpox.		1111	1111	1111	1111	1111	1111	1111	1111
-		19-2-2-21	3295	<u>.</u>	3333	9339	3233	9999 1	3335 3	<u> 3555</u>	339B
Accommentation		For Smallpox.	gh Hospitals	At Bury, &c., - Joint Hospital	8 beds (Barrow's Green, temporary building)	1 bed at Finning- ton (Blackburn)	Hyde (2 beds)	1 bed at Finning- ton (Blackburn)	Arrangement with Blackburn C.B. -5 beds	gh Hospitals	
furnerd. Nature of Homital Accommodation		For ordinary infectious diseases.	At Liverpool Borough Hospitals	Arrangement with Rochdale C.B.	36 beds (Crow Wood)	30 heds (Houpital not been used for many years) arran- gement with Black- burn C.B. and Chor- by Joint Board.	At Salford C.B. Hospitals (5 beds)	Blackburn C.B., and Chorley Joint Hospital	: : IN	At Lancaster Borough Hospitals	12 beds (Farleton)
CON		and a second	1	;	:	:		:	:	:	:
TABLE 6 continued Nati		DISTRICT.	Waterloo-with- Seaforth	Whitworth	Widnes (B)	Withnell	Barton-upon- Irwell (R)	Blackburn (R)	Clitheroe (R)	Lancaster (R)	Lunesdale (R)

Nature of Hospital Accommodation.         Mater = (1) Cases notified.         (1) Total (1) Tot	Infectious Diseases. teaths. (c) Removals to hospital. (d) Deaths in hospital. Disinfection.	Lethington. Dysentery. Dysentery. Dysentery. Stryalpelan. Stryalpelan. Stryalpelan. Stryalpelan. Stryalpelan. Meaales (excluding Meaales (excluding Meaales (contracted Meaales (contracted Meaales (contracted Meaales (contracted (under 2 years). Meaales (contracted (under 2 years). Meaales (contracted Meaales (contracted Meaales (contracted Meaales (contracted Meaales (contracted Meaales (contracted (under 2 years). Meaales (contracted (under 2 years). Meaales (contracted (contracte	1+          6         7         2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7	125 133 664 1578 905 3 1119 1640 537 2 14565 Tot	0          97.0         213         97         3152          Schools and school-           0          13         87          13         97         3152          Schools and school-           0          13         87          18         1          37.358         rooms         disinfected         541
Nature of Hospital Accommodation.           Note (a) Cases           For ordinary infectious diseases.         For Smallpox.         Note (a)         Cases           For ordinary diseases.         For Smallpox.         8 adds if ever (additionary diseases.         1         1           At Warrington diseases.         At Warrington (b)         At Warrington (c)         25         6            At Warrington S5 beds (Aughton)         At Warrington (c)         (a)          25         6            S5 beds (Aughton)         At Warrington (c)         (b)          25         6             S6 beds           (a)          25         10              S6 beds           (a)          25         10	(b) Total o	and Pyrezia. Conto Poliony-other Acute Poliony-other. Acute Poliony-other Acute Poliony Acute Poliony Acute Poliony Acute Poli	1111		1111 1 <sup>#</sup> 11		54 23 6	00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
For ordinary infectious diseases.     For Smallpox.       For ordinary infectious diseases.     At Warrington       At Warrington C.B. and S.beds –(Aughton)     At Warrington       35 beds –(Aughton)     At Warrington       35 beds –(Aughton)     At Warrington       35 beds –(Aughton)     At Warrington       36 beds …     20 beds …       36 beds …     20 beds …       160, Wign C.B.     An Properties of Coppor- tion.       17 beds …     20 beds …       18 beds …     20 beds …       19 beds …     20 beds …       10 Vign C.B.     10 motor	808	Scattet Ferer. Diphtheria (noibeiling Membranous Croup). Enteric Perer (including Paratyphoid). (Acute Primary Pneumonia (Acute Influenzal Pneumonia	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11111 11111 11111 11111	8 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 33491550 98	4 2071 1211 40 15 1501 4 2071 1211 40 1501
at C s > >	tal Accommodation.	For Smallpox.	1	Agreement with Liverpool Corpora- tion, and tent avail- able in case of emr- gency.	20 beds	: :	1	
	Nature of Hospit	For ordinary infectious disenses,	Warrington (R) At Warrington C.B. and Newton-in- Makerfield	35 beds(Aughtor		Cases may be sent to Wignn C.B. Hospital by arrangement	County, 1932 : Total cases notifie deaths	

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The following table, which is compiled from the information supplied by local Medical Officers of Health in their annual reports, shows the number of notifications (excluding tuberculosis) in the year 1932, classified in age periods, the number of cases admitted to hospital, and the total deaths from the notifiable diseases :---

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1932.

and the property						TOTAL	CASE	s Nor	IFIED.					RE- ITAL.	.s.
NOTIFIABLE DISEASES.	Total						,	(ears						ASES	DEATI
and and a second	Cases at all Ages.	Und'r 1	1-2	2-3	8-4	4-5	5-10	10-15	15-20	20-35	85-45	45-65	65 and over.	TOTAL CASES RE- MOVED TO HOSPITAL.	TOTAL DEATHS.
Smallpox	4						1			1	1	1		4	
Searlet Fever	3,349	21	78	161	252	832	1,501	581	184	186	42	10	1	2,071	22
Diphtheria, including Membranous Croup	1,550	14	38	51	80	97	581	334	113	167	49	23	3	1,211	115
Enteric Fever (includ- ing Paratyphoid)	98			2	1	2	17	15	12	25	11	12	1	49	14
Acute Primary Pneumonia Acute Influenzal Pneumonia	2,480	153	150	93	114	89	291	117	129	383	281	427	253	159	1303*
Puerperal Fever	. 56								3	39	13	1		1	
Puerperal Pyrexia	203								13	146	43	1		}104	36†
Cerebro-spinal Fever	54	7	3	8	-4	1	15	5	5	10	1			25	36
Acute Poliomyelitis	23	4	5		2	3	5	***	1	8				7	6
Acute Polio-encephalitis	6	1	1		1		1	1	1						2
Encephalitis Lethargica	36			2			4	1	2	5	4	15	3	9	59
Dysentery	125	1	1	4	3	10	26	25	9	19	9	15	3		
Ophthalmia Neonat'm	188	133												18	
Erysipclas	664	11	2	8	2	1	19	14	15	99	111	299	88	87	
Malaria (contracted abroad)	3									1	1	1			
Chicken-pox	1,119														
Measles (excluding German Measles)	1,640													18	136§
Whooping Cough	587													1	113§
Diarrhora (under 2 yrs.)	2														97 §

Deaths from pneumonia (all forms); † Deaths classified together as puerperal sepsis; ‡ In 1932 chicken-pox was notifiable in 18 districts, measles in 6 districts, whooping cough in 5 districts, diarrhœa in 1 district.
 § In whole county.

The tabular statement below compares the notifications in 1932 with the preceding year :--

						Year 193	1 1	ear 1932
Smallpox						1		4
Scarlet Fever						3,499		3,349
Diphtheria						1,576		1,550
Enteric Fever						97		98
Acute Primary Pne			Acute	Influe	enzal			
Pneumonia						3,086		2,480
Puerperal Fever						63		56
Puerperal Pyrexia						226		203
Cerebro-Spinal Feve						58		54
Acute Poliomyelitis						5		23
Acute Polio-Enceph						1		6
						37		36
Encephalitis Lethar	200 C 100 C					118		125
Dysentery						137		133
Ophthalmia Neonat						783		664
	····					6		3
Malaria (contracted	abroad	9				1,798		1.119
*Chicken-pox						852		1,640
*Measles						378	•••	537
*Whooping Cough						010		2
*Diarrhœa (under 2	years)					1		2
* See note (1) to Tal	ple above	C						

Death-rates from the Principal Infectious Diseases.—The table below gives the death-rates per 1,000 of the population from the principal infectious diseases for the year 1932, and the preceding thirty-seven years, showing the five years' averages.

# PRINCIPAL INFECTIOUS DISEASES.

Annual I	Death-rate	per 1.000	) of the	Population.
----------	------------	-----------	----------	-------------

1895 1896 1897 1898					0.000						
1897 1898	***			A10.0	0.009	0.23	0.10	0.23	0.50	0.38	0.95
1898					0.005	0.24	0-09	0.23	0-49	0.36	0-48
		***			Nil.	0.15	0.08	0.19	0-66	0.27	0-77
					0.0002	0-10	0.07	0.26	0-25	0.19	1-00
1899		***			0.0005	0-18	0.18	0-24	0-44	0.26	1-05
Averag	çe 5 yı	ears, 18	95-189	9	0-003	0.18	0.10	0.23	0-46	0-29	0-85
						in the second	-	10.4		025	0.92
900 901			***	***	0-0015	0.18	0-26	0.20	0-43	0.37	0-60
902			***		Nil.	0-18	0-34	0.20	0-18	0.20	0-95
	***				0.0119	0-20	0.30	0:16	0-35	0.19	0-28
908	410	***	***		0.0366	0-18	0.19	0.15	0.37	0-26	0-40
904		***			0.0116	0-18	0.15	0.12	0.43	0-35	0-66
verag	e 5 ye	ars, 19	00-1904	•	0-0123	0.18	0.24	0.16	0.35	0-27	0.57
905					0.0033	0.13	0-15	0.14	0-26	0.15	0.59
906		***			Nil.	0-11	0.16	0-14	0-36	0.13	0-52 0-79
907					0.0005	0-09	0.15	0-09	0.30	0-13	0-79
008					0.0005	0-10	0.16	0-12	0.18	0-28	
909					Nil.	0-12	0.15	0-10	0.35	0-24 0-14	0.54 0.18
VAFOR	a 5 va	are 10	05-1909		0-0008					- Harrison	
	10		00-1000		0 0008	0.11	0.15	0-11	0.30	0.18	0.45
010					Nil.	0.10	0-11	0.10	0-15	0-23	.0.29
11					Nil.	0-08	0.14	0.12	0.29	0.15	11-43
12					Nil.	0-0.5	0.12	0-08	0.30	0.24	0-30
13					Nil.	0.05	0.11	0.10	0.31	0.18	0.85
14				***	Nil.	0-09	0.13	0-07	0.28	0.18	0.48
verage	e 5 ye	ars, 191	10-1914		Nil.	0.07	0-12	0.09	0.26	0-18	0.67
15					Nil.	0-08	0-14	0-07	0.40	0.00	-
16					0.003	0-06	0.15		0-49	0.20	0-52
17					Nil.	0-03		0-05	0.17	0-14	\$0-27
18					Nil.	0-03	0.13	0-04	0.27	0.11	0.18
19					Nil.	0-04	0.15 0.13	0-05 0-02	0.20 0.07	0-31 0-05	0.19
							0.10	0.02	0.01	005	0.16
	e 5 yea	ars, 191	5-1919		0.0008	0-04	0.14	0.04	0.24	0-16	0-26
20 21	•••				0.0005	0.03	0-11	0-03	0-19	0-09	0-25
				***	Nil.	0-03	0.09	0-02	0.04	0.15	0-27
22	***			***	0.0005	0-05	0.08	0.02	0.20	0.12	0.13
23	***	***	111		Nil.	0-03	0.05	0.02	0.07	0.11	0.12
24		***	***	•••	Nil.	0-02	0.05	0-01	0.14	0-13	0.13
erage	5 yea	urs, 192	0-1924		0-0002	0.03	0.07	0.02	0.12	0-12	0-18
25					Nil	0.02	0.02	0.000		Sotal.	
26		***		***		0.03	0.06	0.000	0.10	0.13	0.13
27		***		***	0.0002	0.01	0.02	0.008	0.03	0.13	0.11
28	***	•••	***	***	0.0002	0.01	0.06	0-01	0.05	0.06	0.00
29					0.0027 0.0016	0.01	0.06	0.01 0.008	0.02	0.05 0.15	0.08
erage	5 year	rs, 1925	-1929		0.0010	0-01	0.02		Inentime	1	
30				3.4			Sec. 1	0.008	0.02	0.10	0.08
		***	***		Nil.	0-02	0-06	0.008	0.11	0-03	0-08
31	***				Nil.	0.01	0.05	0-007	0.03	0.05	0.06
					100 100 100 100 100 100 100 100 100 100		and a second	Statistics in the		June -	
32	listrativ	e Cours	dw.		MACK.	0.01	0.00				
32 Admin	Distri	re Coun			Nil.	0-01	0.06	0.007	0.07	0-06	0.05
32 Admin Urban	nistrativ Distri Distri	cts			Nil.	0-01	0.07	800-0	0.08	0-06	0.05
32 Admin Urban Rural	Distri	cts									

\* In 1899 Membranous Croup included.

Prior to 1911 the "Fever" death-rate included deaths from Typhus and Continued Fevers (if any).
 From 1911, Enteritis deaths included. Since 1916, the "Diarrhœa" death-rate includes deaths from Diarrhœa, &c., under two years of age only.

Smallpox.—During the year 1932, only 4 cases of smallpox were notified in the Administrative County area, viz., Middleton (B), 1 case, February; Ramsbottom, 1 case, February, and 1 case, March; and Rawtenstall (B), 1 case, June. In 1931 only 1 case was reported, 185 cases in 1930, 406 in 1929, and 563 in 1928.

The County medical staff were called into consultation in certain other districts in regard to suspicious cases of illness, but in none of these was smallpox diagnosed.

Vaccinations performed in 1932 by local Medical Officers of Health, as such, under the Public Health (Smallpox Prevention) Regulations, 1917, were :--Middleton (B), primary 12, re-vaccinations 9; Rishton, primary 19.

Scarlet Fever.—The incidence of scarlet fever in 1932 was slightly less than in the previous year, viz., 3,349 cases with 22 deaths against 3,499 cases 26 deaths. In 1930 there were 5,126 cases 38 deaths, and in 1929, 6,205 cases 34 deaths.

The notifications in 1932 were most numerous in Ashton-under-Lyne (B) 161 cases (1 death), Stretford 146 cases, Chorley (B) 140 cases (1 death), Preston (R) 109 cases (1 death), Middleton (B) 101 cases (2 deaths), Newton-in-Makerfield 105 cases (2 deaths), Waterloo-with-Seaforth 95 cases (1 death), Widnes (B) 83 cases, and Fylde (R) 81 cases.

The notifications of this and other infectious diseases are grouped in age periods on page 153.

The scarlet fever mortality rate in 1932 was 0.01 per 1,000 of the estimated population, exactly the same as in each of the last five years ; the case mortality rate was 0.65 per cent.

Scarlet fever cases removed to hospital represented 61.8 per cent. of the total notifications; in 10 districts 100 per cent. of the cases were isolated in hospital, and in 31 other districts the removals exceeded 80 per cent.

"Return " cases of scarlet fever were reported in 11 districts, and spread of the disease from " missed " cases occurred in a few districts.

DICK TEST.—It is reported that the Dick test was used in Carnforth, Formby, Middleton (B), Ormskirk, Skelmersdale, Swinton and Pendlebury, Waterloo-with-Seaforth, and West Laneashire (R).

In May, 1983, the Medical Research Council issued a report on the epidemiological study of scarlet fever in England and Wales since 1900. It is stated that "during the period studied no evidence has been found to prove that hospital isolation has been effective in reducing the prevalence or mortality from scarlet fever."

**Diphtheria.**—There was a slight decline in the prevalence of diphtheria in 1932, viz., 1,550 cases against 1,576 in the year 1931, but the mortality was slightly greater, 115 deaths against 108. The mortality rate was 0.06 per 1,000 of the population, and the case mortality 7.41 per cent.; in the year 1931 these averages were 0.05 per 1,000 and 6.8 per cent.

The greatest incidence was in Stretford 153 cases with 10 deaths, Litherland 83 cases 8 deaths, Waterloo-with-Seaforth 77 cases 3 deaths, Eccles (B) 76 cases 3 deaths, Middleton (B) 72 cases 7 deaths, Lancaster (B) 68 cases 6 deaths, Widnes (B) 64 cases 3 deaths, and Leigh (B) 52 cases 5 deaths.

Of the 1,550 notified cases, 1,195 were amongst children under the age of 15 years and the case mortality in this group equalled 8.6 per cent. Of cases over 15 years of age, 3.3 per cent. died.

Cases removed to hospital numbered 1,211, or 78-1 per cent of the total notifications, and the hospital case mortality was 7-59 per cent.; of the cases treated at home 6-78 per cent. succumbed.

From 99 districts 4,785 throat swabs were sent for examination. Diphtheria anti-toxin is stated to be readily available in 111 districts.

SCHICK TEST.—IMMUNISATION.—The Schiek test of susceptibility to diphtheria, it is stated, was used at Eccles (B), Formby, Great Crosby, Litherland, Middleton (B), Ormskirk, Skelmersdale, Stretford, Swinton and Pendlebury, Waterloo-with-Seaforth, West Lancashire (R), etc. Immunisation of susceptible children against diphtheria was carried out at Formby, Golborne, Great Crosby, Lancaster (B), Middleton (B), Swinton and Pendlebury, Waterloo-with-Seaforth, West Lancashire (R), etc. In view of the practical importance of immunisation in diphtheria and other diseases the Ministry of Health has approved of the appointment of a small Office Committee in the Medical Department, consisting of certain of its medical officers, to give special consideration both to the best methods to be recommended to local authorities and to any expert advice which may appropriately be offered for their consideration in application.

Memo 170/Med., issued by the Ministry of Health, November 1982, deals with "the production of artificial immunity against diphtheria."

In consequence of a suspicion that cases of diphtheria in one of the Lancashire towns might be due to the milk supply obtained from one of the County districts, special investigations were made by the County staff, but there were no signs of diphtheria and no history of any illness amongst the occupants of the farm or their employees.

Enteric Fever (including Paratyphoid).—Ninety-eight cases of enteric fever were notified in the year 1932, one more than in the preceding twelve months. The deaths numbered 14, a rate of 0-007 per 1,000 of the population. Seventy-one districts were entirely free from enteric fever during the year. The remarkable fall in the prevalence of this disease is shown by the fact that in the County area in the year 1898 there were 2,661 notified cases and 478 deaths.

The present immunity is probably largely due to the general improvement in hygienic matters, the provision of pure water supplies, the efficient disposal of sewage, and other public health improvements.

On a report from one of the Lancashire towns of enteric fever in houses supplied with milk from the County area, the County medical staff visited farms in two districts. As far as could be ascertained there had been no illness in the families nor amongst the farm servants.

In January, 1933, the Medical Research Council issued a report on "Chronic Enteric Carriers and their Treatment." The report contains valuable information on the discovery and identification of enteric carriers, and the treatment of such carriers.

Measles.—Deaths registered in 1932 as due to measles numbered 136, as compared with 61 in 1931, and 203 in 1930. This disease is compulsorily notifiable in 6 County districts and in these areas 1,640 cases were reported. School closure was considered necessary in 17 districts.

Whooping Cough.—The fatalities from this disease in 1932 were 113, nineteen more than in the previous year. It is notifiable in 5 districts and 537 cases were notified. School closure took place in 3 districts.

Chicken-pox was reported as notifiable in 18 districts, 1,119 cases being notified. Schools were closed in two districts.

Diarrhœa.—The following deaths were registered as due to diarrhœa :--at all ages, 172; under 2 years of age, 97, the latter corresponding to a rate of 4-0 per 1,000 registered births.

**Bacillary Dysentery.**—An outbreak of bacillary dysentery—41 cases—was reported in Denton. The County medical staff and the local Medical Officer of Health investigated the outbreak. The disease, of a mild type, probably spread through contact, occurred in twenty-seven separate families. No common cause for the outbreak was discovered.

Epidemic Jaundice.—Small outbreaks of epidemic jaundice were reported from Darwen (B), Golborne, and Leigh (R).

School Closures by the County School Medical Officer and by Sanitary Authorities.—On page 60 is given a list of the school closures in the year 1932 in the County Council Elementary Education area on account of the prevalence of infectious diseases. In this area, 19 schools were closed by the County School Medical Officer under Article 23 (b) of the Board of Education Code and 50 by Sanitary Authorities under Article 22.

The Medical Officers of Health of 8 districts, autonomous for elementary education, report school closures in 1932 owing to infectious outbreaks. persons attacked, as the deaths registered as due to this disease exceed the notifications.

	1.1	Acute polio- myelitis,	Acute polio- encephal- itis.	Encephal- itis lethargica,	Cerebro-spinal fever.		
Cases notified— 1931 <b>1932</b>		5 23	1 6	87 36	58 54		
Attack rate in 1932 per 1,000 of population		0.01	0.003	0-01	0.05		
Deaths registered— 1931 1932		3 6	8 2	88 <b>59</b>	38 36		
Distribution (1932)— Urban districts Rural districts		C. D. 22 5 1 1	C. D. 6 2 — —	C. D. 32 49 4 10	C. D. 46 32 8 4		
Seasonal incidence (1932)				-y and	Litanet and		
Cases—1st quarter 2nd " 8rd " 4th "	·		2 2 1	14 6 7 9	20 16 8		

In December 1932 the Ministry of Health issued Memo. 166/Med. and Circular 1298 on Acute Poliomyclitis. The memorandum describes the pathology, clinical character and after effects of the disease, and special stress is laid upon the importance of early diagnosis for the prevention of deformities. Special reference is also made as to the precautions to be taken against infection.

The action of the Medical Officer of Health on receipt of notifications or on learning of suspected cases of poliomyelitis, should, the Memo. states, proceed on the following lines :---

- (a) to aid in securing suitable accommodation, including isolation, for the patient in hospital or otherwise;
- (b) to ensure the precautions required in the light of the information that the disease is apparently capable of transmission by mild cases or by even the apparently healthy; and
- (c) to make investigation of the associated circumstances including a search for missed cases.

In epidemic periods local authorities are advised to inform the public by means of leaflets, posters, notices in the press, cinema films, etc., how infection may be guarded against and of the care to be observed in case of attack. Public information should also be circulated respecting the arrangements and facilities for treating patients.

**Reports under Sanitary Officers Order, 1926.**—"Special reports" under this Order received from local Medical Officers of Health by the County Council during the year 1932 numbered 113. Of these, 58 related to school closures, 27 to encephalitis lethargica, 4 to smallpox, and the remainder to other diseases.

Hospital Isolation.—Table 6, pages 139 to 152, shows the nature of the hospital accommodation provided in, or available for, each County sanitary district, and also gives for each district :—

- (a) the number of cases of infectious disease notified ;
- (b) the total deaths from such diseases;
- (c) the number of cases removed to hospital; and
- (d) the number of deaths in hospital.

Disinfection.—The following statement, showing the position of the County districts in regard to the provision of disinfecting apparatus, is prepared from information supplied by local Medical Officers of Health :—

Districts	provided with steam apparatus, or u apparatus at hospitals	sing st	cam	67
.,	using steam apparatus belonging to ot (mainly County or Municipal Boro		ricts	28
	provided with dry heat apparatus			1
,,	without proper appliances			25

Houses, or rooms, disinfected in 1932 numbered 9,359.

The position of each district in regard to disinfecting apparatus is shown in Table 6, pages 139 to 152.

Disinfestation.—In 23 districts, it is stated, facilities are available for the bathing of verminous persons; disinfestation was carried out in 160 instances.

Animal and Insect Pests.-Measures for the suppression of these pests are reported from 31 districts.

**Tuberculosis.**—NOTIFIED CASES AND DEATHS.—The following table gives particulars of the new cases of tuberculosis reported by local Medical Officers of Health in their Annual Reports as having been received by them from medical practitioners during the year 1932, and details of the deaths registered are also given :—

		New	CASES.		Darry	Di	EATHS.	DEATHS.				
Age—Periods.	Pul	monary.		lon- ionary.	Pulm	ionary.	Non- Pulmonary.					
	м.	F.	м.	F.	м.	F.	м.	F.				
Years.			10000		and the second	-	puor i					
0-1	2		10	8	2	-	10	8				
1-5	6	6	74	46	2	1	82	22				
5-10	19	17	80	94	3	2	9	10				
10-15	26	34	64	77	3	16	4	3				
15-20	77	104	46	57	33	64	14	11				
20-25	120	156	46	70.	62	57	11	13				
25-85	189	173	17	72	111	113	10	10				
85-45	143	100	23	29	99	98	11	13				
45-55	154	70	23	25	119	84	9	11				
55-65	109	39	15	13	90	35	11	5				
65 and upwards	23	11	9	7	16	15	5	6				
Fotal	868	710	407	498	540	485	126	112				
		1578	*0	05	0	75		238				

\*These case notifications which, as stated above, are those reported by local Medical Officers of Health in their annual reports for the year ended 31st December, 1932, differ in number from the notifications of new cases in the weekly returns under the Tuberculosis Regulations, the former exceeding the latter by—pulmonary, 61 cases ; non-pulmonary, 35 cases. The difference is mainly accounted for by the fact that all notifications reported on the weekly returns made under the Tuberculosis Regulations are carefully scrutinized in the County Public Health Department with the card index, and "duplicate" notifications are excluded before the County tuberculosis statistics given on pages 162 and 163 are prepared.

TUBERCULOSIS DEATHS AND DEATH-RATE.—PULMONARY.—The County death-rate from tuberculosis of the respiratory system (pulmonary) was again below the rate of any previous year; it was 0.54 per 1,000 of the estimated population, as compared with 0.56 in 1931, 0.57 in 1930, and 0.60 in 1929. The mortality per cent. from this cause to total deaths from all causes was the same as last year, viz. 4.39.

				ADMINISTRAT	TIVE COUNTY.		ENGLAND	AND WALES,
	Land		Urban Death Rate	Rural Death Rate.	County Death Rate.	Mortality per cent. of total deaths (County).	Death Rate.	Mortality per cent. of total deaths.
Avera	age 1895-	1899	 1.22	1.03	1.19	_	_	
	1900-	1904	 0.96	0.77	0.94	_		_
	1905-	1909	 0.89	0.74	0.88		_	
			 0.86	0-67	0.84	_		
	1915-	1919	 1.00	0.79	0.97	_		_
	1920-	1924	 0.74	0.59	0.72		_	
,,	1925-	1929	 0.64	0.48	0.62	4.9	0.78	6.4
Year	1925		 0.69	0.55	0.67	5.3	0.83	6.8
	1926		 0.67	0.49	0.64	5.8	0.77	6.6
	1927		 0.63	0.47	0.61	4.8	0.79	6-4
	1928		 0.61	0.45	0.58	4.9	0.75	6.5
	1929		 0.62	0.48	0.60	4.3	0.79	5.9
**	1930		 0-60	0.40	0.57	4.8	0.73	6.4
	1931		 0.29	0.38	0.26	4.3	0.74	6.0
	1932		 0.56	0.37	0.54	4.3	0.68	5.7

Below are given the County death-rates from pulmonary tuberculosis for the years 1925-1932, and the quinquennial averages for the years 1895-1929 :---

The following table shows the male and female deaths from this disease at various age periods during 1932 and the previous year :---

	At all Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 and under 75 years.	75 and up- wards,
Males — 1931 1932	613 540	1 2	3	2 2	11 6	99 95	126 111	120 99	142 119	80 90	25 15	4
Females — 1931 1932	408 <b>435</b>		1 1	1	10 18	129 121	95 113	75 98	49 34	31 35	12 12	5 3

The death-rate from pulmonary tuberculosis (classified by the Registrar-General as "tuberculosis of the respiratory system") for each urban and rural district in the County area in the year 1932, is given in Table 2 on pages 15 to 22, and the 1932 district death-rates are compared with the previous year and the mean of the five years 1927–1931 on pages 209 to 233.

The highest district death-rates from pulmonary tuberculosis in the year 1932 were :--Carnforth 1.21 per 1,000 of the population, Brierfield 1.16, Thornton Cleveleys 1.09, Dalton-in-Furness 1.06, Widnes (B) and Withnell each 1.02, Litherland 0.96, Heywood (B) and Radcliffe each 0.92, and Hindley and Upholland each 0.88.

Extending over a period of five years, 1928–1932, the following districts had the greatest pulmonary mortality :-Dalton-in-Furness 1.05, Haslingden (B) 1.02, Litherland 1.11, Carnforth 1.00, Adlington 0.97, Kirkham 0.96, Widnes (B) 0.92, and Waterloo-with-Seaforth 0.90.

NON-PULMONARY TUBERCULOSIS.—The table below analyses the deaths from non-pulmonary tuberculosis during 1932 and the previous year at various age periods :---

And gallinging	At all ages.	Under 1 year.	1 and under 2 years.	under 5	5 and under 15 years.	15 and under 25 years.		under 45	45 and under 55 years.	55 and under 65 years.		75 and up- wards.
1981	266	21	19	29	49	52	37	22	13	15	7	2
1932	126	10	12	20	13	25	10	11	9	11	4	1

THE PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.—NOTIFICATIONS.—Table 7, page 162, and table 8, page 163, analyse, both as regards the parts of the body affected and in age periods, the notifications of tuberculosis received *under the above Regulations* from district Medical Officers of Health on their Weekly Returns during the fifty-two weeks ended on the 31st December, 1932, corrected by the exclusion of duplicates.

Since February 1st, 1913, tuberculosis, both "pulmonary" and "other forms" has been compulsorily notifiable; previous to that date it was incompletely notifiable.

The table below shows that, with respect to pulmonary tuberculosis, the case notification rate for the Administrative County is 0.84 as compared with 0.82 in 1931 which was the lowest on record, whilst the non-pulmonary rate of 0.48 is the lowest recorded since 1919, when the figures were identical. For purposes of comparison the corresponding rates for England and Wales are given in the table :-

					Administrativ Lance		Constants of	England and Wales.§		
	Year	r.			nonary reulosis.		forms of reulosis.	Pulmonary Tuberculosis.	Other forms of Tuberculculs.	
				Cases notified.	Case rate per 1,000 of population.	Cases notified.	Case rate per 1,000 of population.	Case rate per 1,000 of population.	Case rate per 1,000 of population.	
1918 (11	months	)		2700	1.54	1592	0.90	2.20 (whole year)	. 0-99	
1914				2820	1.61	1140	0.65	2.05	0.63	
1915				2872	1.64	1128	0.64	1.93	0.68	
Average	3 years,				1.29		0.73	2.06	0.75	
1916				2689	1.52	1180	0.66	1.96	0.65	
1917				2875	1.85	1062	0.60	2.01	0.61	
1918				2584	1.47	885	0.51	2.10	0.55	
1919				2105	1.21	847	0.48	1.72	0.46	
1920				2084	1.20	968	0.55	1.55	0.41	
Average	5 years,		and the second s		1.35		0.26	1.86	0.23	
1921				2044	1.16	899	0.51	1.48	0.40	
1922				1877	1.06	968	0.54	1.40	0.41	
928				1970	1.11	1219	0.68	1.541	0.521	
924*				2029	1.13	1158	0.64	1.56	0.52	
1925				1929	1.07	1076	0.60	1.56	0.58	
	5 years,				1.10		0.29	1.20	0-47	
1926				1889	1-05	994	0.55	1.52	0.51	
927				1862	1.03	1096	0.60	1.48	0.50	
928				1728	0.95	1008	0.55	1.46	0.51	
929				1578	0.87	957	0.52	1.45	0-46	
930				1590	0.87	1037	0.57	1.36	0.46	
Average	5 years,	1926-			0.95		0.55	1-45	0.48	
1931*				1498	0.82	911	0.50	1.24	0.40	
1932				1517†	0.84	870	0.48	1.28	0-44	

The County totals given for 1932 exclude 255 duplicate notifications ; 1,462 notifications were received on Form I (admissions to Institutions), and 1,321 on Form II (discharges from Institutions).

53 weeks. § Figures extracted from Report of Chief Medical Officer, Ministry of Health. From 1923 onwards figures include "fresh cases " ascertained otherwise than by formal notification. Following on a suggestion made by the Chief Medical Officer of the Ministry of Health, any case notified as tuberculosis since the year 1925, and found, as the result of observation and examination by the Tuberculosis Officer, to have been wrongly notified, is removed from the Register and the notification cancelled, the consent of the notifying medical practitioner to the withdrawal of the notification having been previously obtained. Of the cases notified in 1932, 85 such withdrawals (40 pulmonary and 45 non-pulmonary) have so far (to 30th June, 1933), taken place. (See footnote on Table 7). The totals given above, and in Tables 7 and 8 are the gross notifications.

For reference, and for the information of the County Tuberculosis Department, a card index of every case notified, and also a record of the deaths from tuberculosis, are kept up to date in the County Public Health Department, and all notifications received by the County Medical

Officer of Health are forwarded each week to the County Tuberculosis Department. Cases on Local Registers.—From the returns supplied by the local Medical Officers of Health under the Tuberculosis Regulations, the number of cases of tuberculosis on the local registers on the 81st December, 1932, was as under :

	Males.	Females.	Total.
Pulmonary tuberculosis	3,810	 3,268	 7,078
Non-pulmonary tuberculosis	2,586	 2,867	 5,458
Total	6,396	 6,135	 *12,531

\*The above totals are, as stated, compiled from the records of local Medical Officers of Health. They include cases notified in mental hospitals, and many other public institutions, and doubtless in many districts also include a number of old cases which ought to be removed from the registers, such as deaths, removals, etc. The County Public Health Department, as opportunity offers, is comparing the local registers with the County records and informing local Medical Officers of Health of entries which should be deleted.

Notifications in 1932 in age groups .- The following tables give, in certain specified age groups, the male and female notified cases of pulmonary and non-pulmonary tuberculosis in the year 1932. For comparative purposes the figures for the preceding ten years are given :---

					PULMO:	NARY T	UBERCU	JLOSIS.					
ſ	0	1	5	10	15	20	25	35	45	55	65		1
Years {	to	to	to	to	to	to	to	to	to	to	and	Total	Tota
L	1	5	10	15	20	25	35	45	55	65	up		M.&F
922 M. {	3	16	38	48	84	122	228	191	149	99	27	1005	1
F. J	4	15	45	58	136	136	203	147	61	42	25	872	}1877
923 M. { F. {	2	10	43	44	83	133	238	211	149	96	13	1022	12
F. 1	1	14	47	63	115	151	256	152	84	49	16	948	}1970
924 M. { F. {	1	29	40	57	105	113	212	206	201	97	18	1079	1
F. J	4	14	31	59	144	142	226	175	94	49	12	950	2029
925 M. {		24	39	43	85	117	220	208	194	75	25	1030	12000
F. J	3	14	31	48	150	158	204	142	89	34	26	899	}1929
926 M. { F. {	1	11	35	45	92	113	215	205	159	114	24	1014	1.000
F. (	2	13	47	49	116	171	229	123	72	40	13	875	}1889
927 M. { F. {	1	14	50	44	117	112	204	194	192	86	20	1034	}1862
		15	-61	56	132	133	197	118	74	51	11	828	31562
928 M. { F. {	2	10	35	24	76	110	193	169	179	84	27	909	}1723
Р. (		7	34	34	129	148	202	131	62	-46	21	814	31123
929 M. {	4	8 11	34	22	83	100	164	184	173	78	23	873	}1578
r. (			19	26	113	134	200	100	54	28	20	705	51010
930 M. F.	1	6 6	19 17	27	68	107	193	182	161	84	23	871	}1590
		0	17	30	112	126	193	111	65	38	21	719	5.000
931 M. F.	2	8	18	19	75	120	156	163	165	91	25	842	}1498
and the second		8	10	27	100	122	156	113	60	39	21	656	51400
932 M. {	1	4	18	22	76	105	187	152	144	110	21	840 677	}*1517
r. (	***		19	34	98	148	165	94	60	41	14	677	1011

161

				No	N-PULM	ONARY	TUBER	ULOSIS					
()	0	1	5	10	15	20	25	35	45	55	65		1
Years {	to	and	Total.	Total									
	1	5	10	15	20	25	35	45	55	65	up		M.&F
1922 M. {	18	101	113	81	56	39	39	22	13	7	3	492	12
F. (	13	77	81	96	61	45	52	25	14	7	5	476	8 968
1923 M. {	18	116	139	107	79	35	46	23	15	15	7	600	1.000
F. ]	14	105	113	108	78	61	64	32	30	14	5	619	}1219
924 M. {	19	125	99	94	98	36	45	28	17	12	3	576	}1158
F. 1	6	104	88	99	84	56	72	31	18	11	13	582	31108
1925 M. {	18	114	113	77	60	38	54	27	16	12	5	534	}1076
E. U	10	94	90	95	82	43	60	23	18	11	6	542	51010
1926 M. {	11	93	103	77	79	31	36	33	17	7	3	490	} 994
F. (	. 19	85	103	54	68	58	54	85	17	6	5	504	5 000
927 M. {	13	110	138	90	68	41	41	19	13	5	9	547	\$1096
F. (	16	85	93	88	62	49	81	85	20	11	6	549	15.000
928 M. F.	17 13	94	120	69	68	43	40	16	16	10	7	500	}1008
r. (	13	73	105	73	58	67	52	80	23	8	6	508	1
929 M. F.	17 3	104 72	103 94	70 53	55 59	40 51	40 66	23 36	16 23	7 16	5 4	480 477	} 957
1000 1000	100	- 37	10.000	133	50	51		-50	20	10	*	477	P
930 M. F.	7	86 75	1111 106	75	69	28	47 78	19 36	14	13 14	7 3	476	}1037
			106	82	63	67	78	90	30		3	561	1
931 M. { F. {	13	71	82 82	68 65	63 72	36 60	43 60	18 39	21 17	11 12	7 6	433 478	} 911
100 M		BR.	82		72	00		-	100		0	478	1
932 M. F.	87	68 46	78 90	56 73	41 66	42 56	38 68	21 26	22 20	17 15	6	397 473	}*870

\* See footnote \* on Table 7 page 162.

PUBLIC HEALTH ACT, 1925.—As far as the district reports show, it was not necessary in 1932 to put into operation Section 62 for the compulsory removal of any case to hospital. Under Section 67 lectures on health subjects were given in about 20 districts. References to the lectures, film showings, etc., undertaken by the County Council public health staff, are made on pages 170 to 171.

COUNTY TUBERCULOSIS SCHEME.---The administration of the County Council's scheme for the diagnosis and treatment of tuberculosis is in the hands of the County Tuberculosis Committee, and full details of every section of the work are given in Dr. Cox's Annual Report.

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TABLE 7.—SUMMARY OF NOTIFICATIONS OF PULMONARY AND OTHER FORMS OF TUBERCULOSIS IN THE ADMINISTRATIVE COUNTY AREA; AND TABLE 8—ANALYSIS OF THE NOTIFICATIONS ON SCHEDULE A (EXCLUDING DUPLICATES) RECEIVED DURING THE FIFTY-TWO WEEKS ENDED 31st DECEMBER, 1932.

TARLE 7

Collated from the Weekly Returns of District Medical Officers of Health).

PULMONARY.     Nonrectination and state
1         1
abaada abaada

	-						
	Number of Cases	Porm II. Form II. (Discharges from Institutions).	118	213	205	212	1321
					-	-	2
			1			-	1. 1.
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The Public Health (Venereal Diseases) Regulations, 1916.—COUNTY COUNCIL SCHEME. The County Council scheme for the diagnosis and treatment of venereal diseases, which was put into operation in 1916, has been fully maintained during the year under report.

The details of the County scheme were set out in the report for 1925. A revised print is available.

LABORATORY FACILITIES .- The examinations of specimens from cases or suspected cases are carried out, by arrangement, at the following laboratories :-

MANCHESTER ... The University of Manchester, Public Health Laboratory, York Place, Oxford Road (Prof. Maitland, Director).

- ... The University of Liverpool, City Laboratories and School of Hygiene, LIVERPOOL Mount Pleasant (Prof. Beattie).
- ... County Borough of Burnley Public Health Laboratory, Victoria Hospital BURNLEY (Dr. A. H. Priestley).
- ASHTON-UNDER- The Ashton-under-Lyne and District Pathological Laboratory, Infirmary (Dr. A. W. Laing). LYNE

... The Pathological Laboratory of the Preston and County of Lancaster PRESTON Royal Infirmary (Dr. F. B. Smith).

The outfits supplied to medical practitioners during 1932 were as follow :----Detection of Wassermann Spirochæta Detection of Total.

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pallida. Gonococci. test. 193 2,667 2,451 23

TREATMENT CENTRES-The County Council have arrangements with the following 25 Institutions for the free treatment of patients residing in the County area :---Treatment Centre.

Days and Hours of Out-Patient Clinic.

HTON-UNDER-LYNE District Infirmary, Darnton Road Medical Officers : James R. Robertson Margaret Gorman	MALES. Wednesday, 3—4 p.m. Thursday, 6—7.80 p.m. Irrigat For Gonorrhœa cases, M 7.80	onday to Friday, 6.80-
RROW-IN-FURNESS North Lonsdale Hospital, School Street Medical Officers : J. Gray J. R. Turner	Wednesday, 10.30 a.m. Wednesday, 7.30 p.m. Saturday, 10.30 a.m. Irrigat Daily 6—7 p.m. Apprehensive cases p Clinics.	Tuesday, 7.30 p.m. Friday, 10.30 a.m. ion :— Daily, by arrangement. resent themselves at the
ACKBURN and East Lancashire Royal Infirmary Medical Officers :— W. Cran Duthie Dorothea I. Baird	Tuesday, 5 p.m. Friday, 7.30 p.m. N.B.—New patients s 15 minutes before above b	Monday, 5.30 p.m. Thursday, 6 p.m. should present themselves hours.
ACKPOOL Victoria Hospital, Whitegate Drive Medical Officers :— G. W. Murray I. Milne	Monday and Thursday, 4.45-6.30 p.m. Wednesday and Satur- day, 11 a.m12.30 p.m.	Tuesday, 4.45—6.30 p.m. Friday, 11 a.m.—12.30 p.m.
DLTON Public Health Department Clinic, Howell Croft North Medical Officers : R. M. Galloway D. A. Woodeson Mary F. Boullen J. Litt	Monday, Wednesday, and Friday, 6 p.m. Irrigat Monday, Wednesday and Friday, 10 a.m. and 6 p.m. Tuesday, 7 p.m. Thursday, 10 a.m. Cases unable to attend a any morning between 9 a	Saturday, 10 a.m. ion : Monday, 2.30 p.m. Tuesday, 11 a.m. Wednesday, 2.30 p.m. Friday, 2.30 p.m. at above times can be seen
OTLE General Hospital, Derby Road Medical Officer : W. L. Webb Ruth Nicholson	Monday, 5 p.m. Tuesday, 6.30 p.m. Wednesday, 6.30 p.m. Friday, 6.30 p.m.	Wednesday, 12 noon. Thursday, 5 p.m.
RNLEY Victoria Hospital Medical Officer : Arthur Henry Priestley	Monday, 10-11 a.m. and 5.30-6.30 p.m. Thursday, 5.30-6.30 p.m.	Friday, 11 a.m.—12 noon and 5.30—6.30 p.m.

New cases seen any day at 10 a.m.

#### Treatment Centre.

BURY Dispensary, The Wylde Medical Officer :---John Holker

Days and Hours of Out-Patient Clinic. MALES. Friday, 6.30 p.m. Tuesday, 6.30 p.m. Irrigation : Monday to Friday, 6.30 p.m., except Tuesday, 8.30 p.m.

(except Sunday).

LIVERPOOL Royal Infirmary, Pembroke Place Medical Officer :--A. O. Ross

LIVERPOOL David Lewis Northern Hospital (entrance in Leeds Street) Medical Officers Arthur A. Fitch William L. Webb Eric T. Baker Bates

LIVERPOOL Royal Southern Hospital, Caryl Street Medical Officers :--Arthur A. Fitch G. Vincent Hall Constance M. Tinkler

LIVERPOOL Stanley Hospital, Stanley Road, Kirkdale Medical Officers R. M. B. MacKenna B. M. Bennett Ruth Nicholson H. Duval

MANCHESTER Royal Infirmary, Nelson Street, Oxford Road Medical Officers :--P. B. Mumford G. Whitehead

MANCHESTER St. Luke's Hospital, Duke Street, Liverpool Road Medical Officers :---W. J. S. Reid Eliz. C. Byrd E. D'Arcy McCrea L. Maddocks A. R. Somerford

MANCHESTER AND SALFORD Hospital for Skin Diseases, Quay Street, Deansgate (Syphilis and Skin Diseases only treated at this Hospital) Medical Officers :-L. Savatard W. Dyson R. Gibson Marianne Peach P. B. Mumford A. R. Somerford

MANCHESTER St. Mary's Hospitals, (Whitworth Street West Branch) Oxford Street 

New Patients :-Monday, 5.30-6 30 p.m. | Tuesday, 6-7 p.m. Tuesday, 12 noon to 1 p.m. Thursday, 12 noon to Wed., 5.30-6.30 p.m. 1 p.m. Friday, 7-8 p.m. Continuation Treatment :--Daily by arrangement | Daily 10 to 11.15 a.m.

New Patients :---Monday and Friday, Wednesday, 4.30-5.30 5-6 p.m. p.m. Continuation Treatment :--

Daily, 7-8 p.m. (except Sunday).

New Patients :---Tuesday, 4.30 p.m. Friday, 5 p.m. Thursday, 4.30 p.m. Saturday, 1 p.m. Continuation Treatment :---Daily, 5 p.m. (except Friday and Sunday). Saturday, 1 p.m. Daily, 5 p.m. (except Sunday). Saturday, 1 p.m.

New Patients :---Monday and Thursday, Tuesday, 5-6 p.m. 5-6 p.m. Saturday, 12 noon. Continuation Treatment :--Daily, 8-9 a.m. 6-7 p.m. Daily, 11 a.m. (except (except Tuesday, and Sunday). Sunday).

Syphilis :--Thursday, 6-7.30 p.m. Thursday, 11 a.m. (also for children).

Diseases of the Genito-Urinary Organs :-Wednesday, 6-7.30 p.m. | Wednesday, 11 a.m. (also for children).

Syphilis and Diseases of the Genito-Urinary Organs :---Monday, 6 p.m.

> Monday, Tuesday, Thursday, Friday,

5-7 p.m.

Wednesday, 5-7 p.m. Friday, 11 a.m.-1 p.m.

Sunday).

Irrigation and Intermediate Treatment : Daily by arrangement with Matron (except Daily (Saturday and Sunday excepted), 9 a.m.—7 p.m. Sats. 9 a.m.—1 p.m. Sun. 10 a.m.—12 noon.

Daily (Sunday excepted). 9-11 a.m.

> Monday, Wednesday, Thursday, and Friday, 9-10.30 a.m. Thursday, 5-7 p.m. Tuesday, 7-8 p.m.

(except Sunday).

FEMALES.

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Days and Hours of Out-Patient Clinic, FEMALES.

MANCHESTER Ancoats Hospital, Mill Street, Ancoats

Treatment Centre.

Medical Officers :---W. J. S. Reid A. R. Somerford I. Anderson Wilson Gordon Whitehead S. E. Critchley

MALES. Wednesday, 5.30-7 p.m. | Wednesday, 11.30 a.m. Saturday, 5.30-7 p.m. -1 p.m.

Medical Officers :

R. I. Poston J. G Stewart J. Tehan

Monday, 7.30 p.m. Tuesday, Wednesday, Thursday, Friday and Gonorrhœa :--Wednesday, 7.30 p.m. Saturday, 6 p.m. Irrigation :-Monday to Friday 9.30 a.m.-8.30 p.m. Saturday, 9.30 a.m.-12.30 p.m. Sunday, 10-12 noon.

PRESTON Royal Infirmary, Deepdale Wednesday, Road Medical Officer :--W. H. Pimblett

Tuesday, 4.30-7 p.m. 4.30-7.30 p.m. Thursday, 4.30-6.30 p.m. Friday, 4.30-7 p.m. Intermediate Treatment :-Saturday, 2-4 p.m. and Daily (except Sunday) 8.30-9.30 a.m. and by arrangement. 5-7 p.m. Tuesday and Thursday, at clinic hours.

**ROCHDALE** Infirmary, Redeross Street Medical Officers :--A. H. Heyworth E. Williams

Medical :--

Monday, 5.30-7.30 p.m. Tuesday, 9.30—11.30 a.m. Wednesday, 5.30—7.30 Tuesday, 3-5 p.m. Thursday, 5-7 p.m. p.m.

Irrigation :---Monday, 9-10 a.m. and 6-7 p.m. Tuesday, 8—9 a.m. and 3.45—7 p.m. Wednesday, 11-12 a.m. Thursday, 9-10 a.m. and 5-7 p.m. Friday, 9-10 a.m. and 6—7 p.m. Saturday, 9-10 a.m. and 5-6 p.m.

SALFORD Municipal Clinic, 158-155, Regent Road Medical Officers :--E. T. Burke R. Marinkovitch

W. E. Orehard F. M. Blades

Medical Officer :-H. Bardsley

ST. HELENS Dispensary, 18, Claugh- Monday, 5.30-7 p.m. ton Street Medical Officers :-Frank Hauxwell Stuart F. Allison Enid M. Hughes

WARRINGTON Infirmary and Dispensary, Kendrick Street. Outpatient Friday, 6 p.m. Clinic-Beamont Street entrance Medical Officer-E. Pigott

WIGAN Royal Albert Edward Infirmary, Wigan Lane Medical Officer-H. Bardsley

Sunday, 9.30 a.m.-12.30 p.m., 3.30-6.30 p.m. Monday to Friday, 8.30 a.m.-8.30 p.m. Saturday, 8.30 a.m.-12.30 p.m., 7-8.30 p.m.

SOUTHPORT Infirmary, Pilkington Road Monday and Thursday, | Tuesday, 2-5 p.m.

Monday, Tuesday, Wed-nesday, Thursday and Friday, 2 p.m. Monday, Tuesday, Wed-nesday, Thursday and Friday, 8-9.30 a.m. and 6-7.30 p.m. Saturday, 6-7.30 p.m. Saturday, 10 a.m.-12 noon.

Disinfection and Irrigation :--Monday to Friday, 9.80 a.m.-5 p.m. Saturday, 9.30 a.m.-12 noon.

Tuesday, 4 p.m.

Tuesday, 5 p.m. Friday, 5 p.m.

Tuesday, 4-6 p.m. Wednesday, 2.30-4.30 p.m. Friday, 4-6 p.m.

Wednesday, 5.30-7 p.m. (also for children).

5-8 p.m. Daily Treatment :-- WORK CARRIED OUT AT THE TREATMENT CENTRES DURING THE YEAR 1932.—The following table giving the attendances during the year 1932 is compiled from the Annual Returns, Form V.D.(R), of the Medical Officers of Treatment Centres. The table also gives the number of attendances at the Centres for the five years 1927–1931.

	attending	g for the	ounty Res first time, ring from	and found	Total Number of Attend- ances of	Aggregate	Number of
Send Strateging and a strateging of the	Syphilis.	Soft Chancre	Gonorr- hœa.	Conditions other than Venereal.	County Residents at Out- patient Clinic.	Number of In-patient days.	Arseno- benzene Com- pounds.
Year 1927	474	17	786	486	85461	965	6702
Year 1928	594	20	1000	596	50843	1659	7593
Year 1929	595	26	1025	651	65484	1395	9226
Year 1930	523	16	1005	704	66068	2037	9511
Year 1931	519	14	909	902	81296	1164	10448
Year 1932 :							
Ashton-under-Lyne District In- firmary	84	1	49	21	3716	A THE A	659
Barrow-in-Furness North Lonsdale					0.10		000
Hospital	4	-	4	2	296	2	63
Blackburn and East Lancashire Royal Infirmary	46	_	140	190	8013	437	1273
Blackpool Victoria Hospital	27		56	29	2125	101	143
Bolton Public Health Department				and and a second			
Clinie	24		139	246	9938		1135
Bootle General Hospital	17	2	45	5	6265	407	225
Burnley Victoria Hospital	14	-	62	9	1428	21	234
Bury Tuberculosis Dispensary Clinic	55	1	69	28	8111	_	328
Liverpool Royal Infirmary	16	1	20	19	1532	-	264
Liverpool David Lewis Northern				1000000			
Hospital	3	1	3	1	258	-	131
Liverpool Royal Southern Hos-			10	3	292	472	102
pital Liverpool Stanley Hospital	8 9	_	10 12	4	1296		19
Mansharten Anante Hamital	3		24	38	1087	_	172
Manchester Royal Infirmary	30		25	19	1506		256
Manchester St. Luke's Hospital	17	2	46	17	1691	113	232
Manchester and Salford Hospital	The second second						
for Skin Diseases	38		8	16	1288	66	355
Manchester St. Mary's Hospitals	5	-	24	33	952	-	144
Oldham Royal Infirmary	15	-	19	8	961	199	858
Preston Royal Infirmary	67	-	140	38	9495	- 9	3373 480
Rochdale Infirmary	28	-	19	81 171	3312 16013	.8 441	1296
Salford Municipal Clinic St. Helens Corporation Hospital	54	_	118	3	92		1200
Southport Royal Infirmary	1	-	20	5	161	15	9
Warrington Infirmary	12		23	2	1878	4	117
Wigan Royal Albert Edward In- firmary	30	1	64	47	5856	54	502
Other Institutions treating County residents	1		4	-	129	_	3
Total for year 1932	554	9	1141	985	82691	2340	11883

The number of new cases treated in 1932 exceed those of the previous year by 345, and there is an increase in the total number of attendances.

Railway Vouchers.—During the year, 2,982 railway vouchers were provided by the County Public Health Department to 104 necessitous persons to enable them to attend treatment centres. The expenditure on this item during 1932 was £203 17s. 0d.

ARSENOBENZENE COMPOUNDS.—Under the arrangement for the supply of arsenobenzene compounds to medical practitioners "approved " for this purpose, the following were supplied during 1932 :—

Total No. of medical			Ar	senoben	to, of do zene Cor al practi	npounds	suppli in 1932	ed L		
practitioners " approved " for supply of these preparations.	Novarsenobillon.	Kharsulphan.	Neokharsivan.	Sulphostab.	Sulfarsenol.	Stabilarsan.	Neo-Salvarsan.	Myosalvarsan.	Silver-Salvarsan.	Total
207	318	277	283	82	223	97	84	20	18	1,402

EDUCATIONAL AND PROPAGANDA WORK.—The statement below shows the approximate number of persons who attended the lectures, film showings, &c., arranged in 1932 by the County Public Health Department. Many of these lectures were solely on venereal diseases subjects; others were on general hygiene and various aspects of public health. Further details of the lectures are given on pages 170 and 171.

		Unillustr	ated Le	ctures to-	Illustra				
ent 111	Child Welfare Centres.	Youths.	Men.	Women and Girls.	Mixed.	Children.	School Children and Teachers.	Adults.	Total.
Public Health Education	590	40		690	340	60	7,795	2,910	12,425
Social Hygicne	30		400	1,850	1,559			8,600	6,939
Total	620	40	400	*2,040	1,899	60	7,795	6,510	19,364

\*Includes 1 lecture to 20 midwives.

Public Health and Social Hygiene Education.—During the year under report the County Public Health Department has continued its educational and propaganda work on lines somewhat similar to previous years; special attention has been paid to townships and villages in rural areas. A series of talks has been given to the junior unemployed in various districts in the County, and lantern lectures were given to the adult unemployed. Talks were given to certified midwives on the signs and symptoms of venereal diseases. One of the County medical staff gave lectures and film showings on venereal diseases and subjects allied thereto are given in detail on pages 170 and 171.

The organisations addressed included : women's guilds, women's institutes, co-operative guilds, special talks to women, girls and boys, mixed audiences, institutes and clubs, Sunday school teachers and adult classes, girls' friendly societies, etc.

Assistance was again rendered to many districts in the Local Health Week programmes, and the County staff co-operated with some of the non-County Boroughs at health exhibitions.

A comprehensive list of the public health and general hygiene films is available together with details of literature, posters, etc. All the local authorities in the Administrative County area have been supplied with a copy, which has proved useful in arranging health lectures, etc.

Health Exhibitions.—Reference to the list of lectures given during the year shows that in 11 districts—including 6 rural areas—" health exhibitions " were held, at most of which film and lantern lectures were given.

The scheme under which these exhibitions are organised, mainly in the smaller urban districts and in rural parishes, originated with the Lancashire Federation of Women's Institutes, a body well known for its excellent work in various directions embracing many educational and social activities, which in recent years, have added greatly to the amenities of village life.

These exhibitions—organised by the Institute working in close co-operation with the Public Health Department and the Education Department of the Lancashire County Council—have created considerable interest in matters of health and hygicne amongst the inhabitants of rural areas.

The various sections are designed to illustrate the value of dental care, clean milk, proper elothing, nourishing food, and cleanliness and general health matters in the person and in the home.

The dental exhibits are intended to stimulate interest in the hygiene of the mouth and teeth, particularly amongst the school children, and the simple talks, given by an experienced lecturer, afford the knowledge that is necessary for the proper care of the teeth. A feature of the exhibitions is that special arrangements are made for the school children of the neighbourhood to attend, hear the instructive talks and see the special films.

The clean milk exhibit is intended to be a means of disseminating knowledge of the value of milk in the diet of children and in their proper development, and it is essential that the milk must be clean milk.

The Education Department of the County Council renders assistance in the showing of suitable food exhibits and in the preparation of model clothing for babies and young children.

The section of the exhibition devoted to foods, combined with the simple talks on food values, is particularly appropriate under the economic conditions prevailing at the present time. For the nourishment of the body there must, of course, be food, and a sufficiency thereof, but that is not all, the suitability of the food is more vital. A well-balanced diet, containing the proper proportions of nutrients, proteins, fats, carbohydrates, vitamins and mineral constituents is essential for the health and complete nutrition of the children and the family. Mothers should therefore have the knowledge necessary to enable them to buy the right kinds of food and thus get the greatest nutritive return for their money.

Cine-motor tours.—The cine-motor outfit and film equipment of the British Social Hygiene Council was engaged in February and toured five County districts.

The County Public Health Department has certain material available, as set out on page 170, and this is at the disposal of local authorities for their health weeks, etc. The services of the Organising Lecturer attached to the Public Health Department are also, as far as practicable, available.

- (A) LANTERN SLIDES—Sets of slides dealing with the production of a clean milk supply, orthopædic treatment and hospitals in the County area, smallpox, venereal diseases and social hygicne; small selected sets on child welfare centres, school clinics, air and ventilation, flies, &c.
- (B) CINEMATOGRAPH FILMS—A detailed list of films available and suitable for lectures dealing with maternity and child welfare, dental hygiene, the value of a clean milk supply, hospital treatment of children, flies, and others on general hygiene, safety first, venercal diseases and social hygiene, &c.
- (c) POSTERS—Suitable for exhibition illustrating the care of the teeth and general cleanliness, &c., and the dangers of venereal diseases.
- (D) LITERATURE—Supplies of literature are available on clean milk production and the value of milk as a food, dental hygiene, venereal diseases and social hygiene.
- (E) LECTURERS—The Department, in case of any local difficulty, will endeavour to provide a suitable lecturer.

In connection with the educational work by means of film showings, exhibits, etc., opportunity is taken to express the thanks of the Public Health Committee for assistance rendered by loans of films, supplies of literature, etc., by many bodies, such as the British Social Hygiene Council, the Central Council for Health Education, the Dental Board of the United Kingdom, the Health and Cleanliness Council, the Baby Week Council, the British Red Cross Society, and others.

Details of the lectures, etc., given in 1932 are set out in the two following statements :---

On Venereal Diseases and Social Hygiene :---

District.	Date.	Type of audience.	Approx. No. present.	District.	Date.	Type of audience.
Accrington (B)	1932 Sept. 27	Co-op. Guild	65	Orrell	1932 June 22	Mothers' Union
Do. (Huncoat)	Oct. 3	Women	30	Oswaldtwistle	Dec. 6	Co-op: Guild
Audenshaw	June 6	Child Welfare Centre	30	Padiham	Jan 20	Social Hour
Carnforth	Nov. 15	Co-op. Guild	40	Do	Oct. 19	Co-op. Guild
Chadderton	Sept. 28	Do.	70	Radeliffe	Oct. 4	Do.
Chorley (B)	April 5	Women's Guild	30	Ramsbottom	June 8	Mothers' Union
Church	Jan. 13	Social Guild	65	Rawtenstall (B)	Oct. 12	Guild
Crompton (Shaw)	Feb. 2	Unemployed	400†	Rishton	Oct. 20	Mothers' Union
Do	Nov. 22	Do. (Adult)	150	Swinton and		attent level duette
Darwen (B)	Nov. 17	Co-op. Guild	100	Pendlebury	April 13	Co-op. Guild
Do	Nov. 24	Mothers' Club	100	Walton-le-Dale (Lostock Hall)	Nov. 8	Mothers' Union
Great Harwood	Nov. 30	Co-op. Guild	100	Widnes (B)	June 21	Midwives
Horwich	July 8	Townswomen's Guild	200	Blackburn R)	May 4	Women's Guild
Irlam	Feb. 5	Mixed adult	700*	Burnley (R)	Oct. 18	Mothers' Guild
Kirkham	Dec. 15	Guild	50	Wigan (R) (Haigh)	Dec. 14	Mothers
Lancaster (B)	Feb. 11	Women's Section	30	Manchester University	April 10	Students Final Year
Do	April 10	Adults	950*			
Lees	Nov. 9	Co-op, Guild	30			Partition of The
Leigh (B)	Feb. 1	Men only	400			The sugar high work of
Do	Feb. 3	Women only	450	CINE-MOTOR TOUR :		CONTRACTOR PARA
Little Hulton	Nov. 29	Co-op. Guild	40	Aspull (New Springs)	Feb. 26	Adults
diddleton (B)	Oct. 9	Adults (Health week)	1000*	Great Crosby	Feb. 24	Do.
Do	Dec. 13	Mothers	30	Seaforth	Feb. 22	Do.
vewton-in-Makerfield	Oct. 6	Mothers' meeting	40	Waterloo	Feb. 23	Women only
Norden	April 14	Parents	29	· Do	Feb. 23	Adults
Ormskirk (Lathom)	Jan. 6	Mothers' Union	40	Westhoughton	Feb. 25	Women only
Do	July 6	Women's Institute	50	Do	Feb. 25	Adults

\* Film Lecture. † Lante

† Lantern Lecture.

# On General Public Health and Hygienic subjects :----

District.	Date	Type of audience.	Approx. No. present.	District.	Date	Type of audience.	Appro No. presen
ram	1932 April 26	Child Welfare Centre	3.5	Blackburn (R)	1932		
rington (B) .	Feb. 9	Junior unemployed	40	(Hoghton)	May 12	Women's Institute	3
Do. (Baxender	a) April 12	Women's Guild	30	Burnley (R) (Newchurch)	Jan 12	Mothers' Union	2)
Do	April 12	Unemployed Youths	30†	Do. (Read)	Oct. 4	Ambulance Class	4
Do	April 14	Do.	30†	Do. (Sabden)	Oct. 11	Mothers	3
ington	June 8	Child Welfare Centre	60	Chorley (R) (Coppull)	April 27	School Children	50
ull	Feb. 25	School Children,	300*			(Special films)	
		(Special films) Cine-Motor Tour		Do	July 6	Do.	13
Do		Do.	500*	Do	July 6	Adults	15
	Mar. 16	Adults	30	Fylde (R) (Singleton)	Sept. 21	Child Welfare Centre	3
and and and a	June 22	Child Welfare Centre	20	Lancaster (R) (Abbeystead)	April 24	Women's Institute	4
erfield	June 17	School Children (Special films)	700*	Limehurst (R)		and and all had been	
urch	June 23	Child Welfare Centre	70	(Waterloo)	June 9	Child Welfare Centre	2
yton-le-Moors	July 16	Do.	70	West Lanes. (R) (Aughton)	April 19	Women's Institute	6
mpton (Shaw)	Feb. 19	Unemployed	4001				
Do	July 12	Child Welfare Centre	40	marken when a		The Constant Robert	
nton	July 5	Children (Special films)	450*	the probable of Arms		" many independent of sould	
Do	July 5	Adults	300*	HEALTH EXHIBITION :		a series and a series of	
nworth	Feb. 8	Women's Citizen	50	Colne (B)	Nov. 10	Women	3
	in lo redu	Association	70	Crompton	Nov. 8	Unemployed	40
sworth	Mar. 2	Co-op. Guild	450*	Do	Nov. 16	Co-op. Guild	(
at Crosby	Feb. 24	School Children (Special films) Cine-Motor Tour	400*	Little Lever	Oct. 20	Children and Teachers	20
at Harwood	June 7	Child Welfare Centre	35	D	Oct. 20	Women	13
	Oct. 13	Adults	60	Do	Oct. 20	Women Children and Teachers	6
(Helmshore)	0.1	C.L. J.C. I.L. and	600	Ormskirk (Lathom)	Oct. 26		10
rwich	Oct. 4	School Children and Teachers	000	Do	Oct. 26	Adults	
Do	Oct. 7	Do.	550	Rainford	Oct. 24	Children and Teachers	3.5
m	Feb. 5	School Children	800*	Do	Oct. 24	Adults	25
-		(Special films)		Standish-with- Langtree	Nov. 23	Mixed	15
	Feb. 5	Do.	850*	Blackburn (R)			
	Feb. 12	Do.	40*	(Balderstone)	Nov. 1	Children and Teachers	8
	., Feb. 12	Do.	850*	Do	Nov. 1	Adults	7
tle Lever	May 12	Child Welfare Centre	30	Chorley (R) (Euxton)	Oct. 28	Do.	13
Do	Oct. 19	Adults	500*	Do	Oct. 28	Children and Teachers	12
nskirk	June 13	Child Welfare Centre	20	Clitheroe (R) :		of a 16 according to 19	
liham	July 26	Do.	30	Chipping	Nov. 2	Do.	e
scot	July 30	Do.	40	Do	Nov. 2	Adults	12
vtenstall (B)	Oct. 12	Co-op. Guild	70	Pendleton	Nov 3	Do.	5
angtree	July 12	Child Welfare Centre	30	Do	Nov. 3	Children and Teachers	3
ton (Edgworth).		Mixed	120*	Downham	Nov. 4	Do.	4
and an		Charles Strengthered	65	Do	Nov. 4	Adults	0
then to the t	Feb. 3	Mothers' Union		West Lanes. (R)	0.4.05	Children and Teachers	
D	Feb. 4	Do.	55	(Aughton)	Oct. 25	attent Served Ph	0
	July 14	Do.	40	Do	Oct. 25	Adults	0
itefield	June 28	Do.	40	Wigan (R) (Parbold)	Oct. 27	Children and Teachers	10
(Walkden)	Feb. 18			And Market Street St		Concerned Street	

\* Film Lecture.

† Lantern Lecture.

# MATERNITY AND CHILD WELFARE.

## MIDWIVES ACTS, 1902-1926.

The County Council is the "Local Supervising Authority" responsible for the administration of the Midwives Acts in the Administrative County area, except in four districts to the Councils of which the powers and duties under these Acts have been delegated under Section 62 of the Local Government Act, 1929.

The four districts referred to are the Boroughs of Darwen, Eccles and Leigh, and the Urban District of Stretford. The statistics, etc., given in this section exclude these districts.

ROLL OF MIDWIVES.—The number of certified midwives on the County Register on the 31st December, 1932, was 735; at the end of the year 1931 the number was 712.

During the year under report, 86 newly-certified midwives gave notice of their intention to practise in the area in which the County Council is the Local Supervising Authority, and 23 who had previously ceased re-commenced to act. Eighty-six midwives had their names removed from the County Register for the following reasons :—6 died, 24 left the area, and 55 ceased to practise, and one name removed from Roll.

"Trained "midwives now number 682, or 92.8 per cent. of the total on the County register; the "bonâ-fides" or "untrained" number 53 or 7.2 per cent. Twenty-six years ago the untrained midwives represented 83 per cent. of the whole.

RECORDS FROM MIDWIVES.—The following statement shows the number of copy medical help records received by the County Public Health Department from certified midwives during 1932 :—

## MEDICAL HELP RECORDS.

(1) Cases in which a woman during pregnancy, labour, or lying-in, appeared to be dying or is dead ... -

#### (2) Pregnancy-

(3

(4

	Deformity or stunted	d grou	wth											-
	Loss of blood													188
	Abortion or threater	ed at	ortion											
	Excessive sickness													194
	Puffiness of hands or							***		***	***	***		49
	Fits or convulsions													11
	Dangerous varieose		***			***	***		***	***			***	7
	Purulent discharge												***	37
		•••				***								18
	Sores of the genitals	***	***			***						1000		
	Other abnormalities	or co	mplicati	ons	***		•••			***				333
1	Labour-													
	Fits or convulsions													
	Purulent discharge													
	Sores of the genitals												***	-
	A malpresentation													
	Presentation other th			milion	stad by	and on h	and the second	***	***		***			325
	Where no presentation	0.0.001	a he ma	de out	neu n								J	
	Where there is exces	ciwe h	dooding.					***		***	***		***	22
	Where two hours of	ar the	a bieth	e in	and in	41								90
	Where two hours aft	f the	e birth c	of the	enna	the play	centa h	ad not	been o	omplete	ly exp	elled		112
	In cases of rupture of	a the	permea	Dody	v or o	I other i	injunes	of the	soft pa	irts		***		1168
	Other complications,	, inclu	iding ob	struct	ted lal	bour, ut	erine ir	iertia, (	or requ	iring ins	strum	ental a	ssist-	
	ance			***			***			***				1547
L	.ying-in-													
	Fits or convulsions		***											
	Abdominal swelling a			8		*							1000	5
	Offensive lochia if pe	rsister	nt											-
	Rigor with raised ten	npera	ture										***	6
	Rise of temperature	to 100	0-4° F. f	or 24	hours	or its p	ecurren	ce with	in that	period				74
	Unusual swelling of t	he br	easts wi	th loc	al ten	derness	or pain	and and a second						13
	Secondary post-partu	m he	morrha	U.C.					***	***	***	***	***	
	White leg						***							18
	Unsatisfactory progre	ess or	complie											
	Constructory progra	000	compare	acron			***				***			85

The Child-					
Injuries received during birth					-
Any malformation or deformity endangering the child's life					2
Dangerous feebleness in a premature or full-term child			***		225
Inflammation of, or discharge from, the eyes, however slight Serious skin eruptions, especially those marked by the formation of watery				***	174
Inflammation about, or hæmorrhage from, the navel	Disters				11
Other complications					217
	Total	***		••••	4943

As shown above, the copy medical help records received from midwives in the year 1932 numbered 4,943 against 5,170 in 1931, and 5,422 in 1930. For purposes of the Midwives Acts the County area was reduced in April 1930 by three districts, and in April 1931 by a fourth district.

The total number of live births in the County midwives area in 1932 was 21,855, and certified midwives, as such, attended 10,460, or 47.8 per cent. of the total births; in addition midwives were present at 5,520 births in the capacity of nurse.

The copy medical help records detailed above include a number of cases to which a medical practitioner was called *before* the confinement, and a number where medical help was called a second or even a third time to the same patient. Based on the total medical help records and the number of births attended solely by certified midwives, the percentage of cases in which medical aid was called corresponds to 47.2, but this percentage, to be accurate, must be reduced by the number of records in respect of cases at which a doctor was subsequently present at the confinement, a figure which is not available. In 1931, on the above basis, the percentage was 46.2, 43.2 per cent. in 1930, and 40.9 per cent. in 1929. In the year 1907 the percentage was only 4.

"Trained "midwives in 1932 attended 9,788 births and called in medical assistance, calculated as above indicated, in 47.7 per cent. of their cases; "untrained" midwives attended 672 cases and medical aid was sought in 39.8 per cent. of these cases.

PAYMENT OF DOCTORS' FEES.—EMERGENCY CASES.—Under the Midwives Act, 1918, the number of accounts received in 1932 from medical practitioners called in by certified midwives in "cases of emergency" as defined by the Central Midwives Board's Rules was 2,939, the amount involved being £4,489 10s. 0d. The total number of occasions on which midwives summoned doctors was 4,943. In the year 1931 doctors' accounts numbered 2,886 out of 5,170 calls, and the amount involved was £4,454 18s. 0d.

No recovery in Eye Cases.—As suggested by the Ministry of Health in Circular 617a, the County Council, on the recommendation of the Midwives Act Committee, passed a resolution authorising the Public Health Department to refrain from exercising the power of recovery of the fees paid by the County Council to medical practitioners called in by certified midwives in cases of inflammation of, or discharge from, the eyes of infants. The amount involved in 1932 in respect of 87 cases was £124.

STILLBIRTHS-The following statement compares the stillbirths reported by midwives in 1932 with the preceding two years, giving the percentage to the total births attended by them :--

Year.	No. of Births attended by Certified Midwives.	No. of Stillbirths reported by Certified Midwives.	Percentage of Stillbirths reported by Midwives to total births attended by them.	
1930	12,522	805	2.43	
1931	11,176	293	2.62	
1932	10,460	279	2.66	

(5)

SUMMARY OF RECORDS FROM MIDWIVES.-The following table gives the number of Records, &c., received from certified midwives during the year 1932, and the preceding two years :--

tan menerality A beneries alight at by the fortextion of vortexy bilineas.	1930.	1931.	1932.
Records of sending for medical help	5422	5170	4943
Stillbirths Males Females	$^{157}_{148}$ } 305	$\left\{ \begin{smallmatrix} 160 \\ 133 \end{smallmatrix} \right\}$ 293	151 128 } 279
Deaths of Mother or Child Mother Child	${}^{32}_{259}$ } 291	$\left  \begin{smallmatrix} 31\\ 268 \end{smallmatrix} \right\}$ 299	21 267 } 288
Substitution of artificial for breast feeding	132	132	123
Liability to be a source of infection	173	141	150
Laying-out the dead	69	64	55

NUMBER OF CONFINEMENTS ATTENDED BY CERTIFIED MIDWIVES.—The following table shows the number of births attended by midwives during the year 1932, and the percentage to total births, compared with 1930 and 1931 :—

Year.	Total Live Births (Midwives area)	*No. of Births attended by Certified Midwives.	Percentage of Births attended by Midwives to total Births.
1930	25,342	12,522	49-4
1931	23,205	11,176	48.1
1932	21,855	10,460	47.8

\*Exclusive of cases attended by certified midwives in the capacity of maternity nurse.

†In the yea

ar 1932, 7	midwives	atten	ded	over	100	CI	ases.	
10		,,	betw	veen	75	Se	100	cases.
38		**		,,	50	80	74	
90		,,		,,	25	80	49	
215		,,		,,	5	80	24	
185			le	ss th	an 5	ca	ses.	

†Midwives on the County Register as "practising" but who did not actually attend any cases during the year are excluded, and the figures also exclude the births attended by midwives residing in County Boroughs who take only an occasional case in the County area.

PUERPERAL FEVER AND PUERPERAL PYREXIA.—The Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926.—These Regulations came into operation on the 1st October, 1926.

Puerperal pyrexia is defined as "any febrile condition (other than a condition which is required to be notified as puerperal fever under the Infectious Disease (Notification) Acts), occurring in a woman within 21 days after childbirth or miscarriage in which a temperature of 100.4°F or more has been sustained during a period of 24 hours, or has recurred during that period."

Under the Infectious Disease (Notification) Act a medical practitioner is required to notify to the local Medical Officer of Health, on a form of Certificate contained in Part I of the schedule to the Regulations, any case of puerperal fever occurring in any person upon whom he is in attendance, and under the Regulations above mentioned he is required to notify on the form in the second schedule to these Regulations any case when he first becomes aware that any woman upon whom he is in attendance is suffering from puerperal pyrexia.

The District Medical Officer of Health is required to forward a copy of every notification (both puerperal fever and puerperal pyrexia) received by him to the Medical Officer of Health of the County within 24 hours. During the year 1932 the following notifications were received :---puerperal fever 46, puerperal pyrexia 182.

The notifications received during 1932 are analysed below and for comparison the 1931 totals are given :---

	Notified as :—	Cases.	Deaths.	Mortality rate per cent.
Cases attended at childbirth solely by certified mid- wives.	F.F. P.P.	9 53		
marca.	1	62	6	9-6
Cases in which certified midwives acted as nurses	∫ P.F. P.P.	18 45	$\frac{4}{2}$	1.10
under the supervision of medical practitioners.		63	6	9.5
Cases in which certified midwives were not in	∫ P.F. P.P.	19 84	3 *5	and market in
attendance.	l	103	*8	7.6
Total 1932	∫ P.F. P.P.	$\begin{array}{c} 46\\182\end{array}$	7 *13	
	l	228	*20	8.6
Total 1981	∫ P.F. P.P.	57 205	13 13	and and the
the activities of observing committeened and methods	all had be	262	26	9-8

\* Includes death of one case notified in December Quarter, 1931 ; also death of one case not notified.

The deaths from puerperal fever and puerperal pyrexia reported in connection with the work under the Midwives Acts, do not correspond with the deaths classified by the Registrar-General in his annual statistics under the heading "puerperal sepsis," the discrepancy probably being due to the inclusion under the latter head of deaths from certain conditions of the puerperal state which have not been reported under the Notification Act, &c., together with the fact that during the year, on the Registrar-General's "inward transfer" slips there were 9 deaths of County residents registered as due to puerperal septicæmia of cases which had not been notified to the County Public Health Department.

SPECIAL ASSISTANCE UNDER THE PUERPERAL FEVER, &C., REGULATIONS.—Maternity and Child Welfare Authorities, i.e., the County Council and the Local Authorities carrying out Child Welfare work are empowered, with the sanction of the Minister, to make provision for (1) the special treatment of women suffering from puerperal pyrexia, (2) for consultation with an obstetric specialist, (3) for skilled nursing, and (4) for institutional treatment.

As regards the area covered by the County Council's child welfare scheme—77 districts the County Public Health Department has made arrangements under which the services of the following specialists are available for consultations in that area :—

Dr. J. W. Burns, 75, Rodney Street, Liverpool. (Tel. Liverpool Royal 4272).
Dr. A. A. Gemmell, 55, Rodney Street, Liverpool. (Tel. Liverpool Royal 2270; after 6 p.m. Wavertree 507)
Dr. T. N. A. Jeffcoate, 38, Rodney Street, Liverpool. (Tel. Liverpool Royal 2090).
Dr. A. Leyland Robinson, 57, Rodney Street, Liverpool. (Tel. Liverpool Royal 61).
Dr. J. St. George Wilson, 13, Rodney Street, Liverpool. (Tel. Liverpool Royal 2168).

Dr. W. R. Addis, 2, St. John Street, Manchester. (Tel. Manchester City 5247, 5248; Residence : Rusholme (T	Dr. W. Fletcher Shaw, 20, St. John Street, Manchester. el. Manchester City 0727 ; Residence : Rusholme 4644).
1997). Dr. K. Vernon Bailey, 2, St. John Street, Manchester.	Dr. F. W. Collinson, 32, Winckley Square, Preston
(Tel. Manchester City 8416 ; Residence : Rusholme 4399). Dr. Eric Gerrard, 26, St. John Street, Manchester. (Tel. Manchester Blackfriars 0079 ; Residence : Swinton	(Tel. Preston 4705). Dr. W. Hirst Bateman, Daisy Bank, Rochdale. (Tel. Rochdale 2456).
1850). Dr. C. Philip Brentnall, 18, St. John Street, Manchester.	Dr. A. S. Garden, 33, Queen's Road, Southport.
<ul> <li>(Tel. Manchester City 5630 ; Residence : Didsbury 3762).</li> <li>Dr. D. Dougal, 11, St. John Street, Manchester.</li> <li>(Tel. Manchester City 7377 ; Residence : Didsbury 1434).</li> </ul>	(Tel. Southport 5213). Dr. W. A. Mackay, 46, Hoghton Street, Southport.
Dr. Gordon Fitzgerald, Northern Assurance Buildings, Albert Square, Manchester.	(Tel. Southport 4234). Dr. E. J. Boyd, Lightburne House, Ulverston. (Tel. Ulverston 51).
<ul> <li>(Tel. Manchester City 7580; Residence : Didsbury 3350).</li> <li>Dr. F. H. Lacey,</li> <li>16, St. John Street,</li> <li>Manchester.</li> </ul>	Dr. Graham W. Christie, Princes Street,
(Tel. Manchester Central 1500 ; Residence : Didsbury 92).	Ulverston. (Tel. Ulverston 159).

(The arrangements by local authorities for the services of obstetric consultants and medical advisers are referred to on page 193.)

For bacteriological examinations of lochia and blood, facilities are available at the Public Health Laboratories of the Liverpool and Manchester Universities.

Arrangements have been made by the County Council with certain hospitals in the County for the admission of cases of pucperal fever and pucperal pyrexia, and also with District Nursing Associations and Nursing Homes for the provision of trained nurses.

In areas where the local Health Authorities are responsible for the provision of facilities under these and the Ophthalmia Regulations complete arrangements have been made in 32 districts; in 6 limited facilities are available and in 1 district (Upholland) no scheme is in operation.

The statement below shows the special assistance rendered during 1932 by the County Council, and by the Local Authorities which are Child Welfare Authorities :---

- In districts where the County Council is P.F.—Removal to hospital, 11 cases ; second opinion, the "Local Authority." 3 cases ; trained nurse provided, 1 case ; examination of lochia and blood, nil.
  - P.P.—Removal to hospital, 35 cases ; second opinion, 11 cases ; trained nurse provided, 1 case ; examination of lochia and blood, 2 cases.
- In districts where the Town or District P.F.—Removal to hospital, 15 cases ; second opinion, Council is the "Local Authority." 1 case ; examination of lochia and blood, 1 case,
  - P.P.—Removal to hospital, 31 cases ; second opinion, 6 cases ; trained nurse provided, 3 cases ; examination of lochia and blood, 1 case.

OPHTHALMIA NEONATORUM.—The Public Health (Ophthalmia Neonatorum) Regulations, 1926. By notifications under these Regulations, and by medical help records received from certified midwives, 238 cases of inflammation of, or discharge from, the eyes came under notice; of these, 120 were notified as ophthalmia neonatorum. In the previous year these figures were 272 and 120 respectively. Of the 120 ophthalmia neonatorum cases in 1932, 58 were doctors' cases, that is, no certified midwife was in attendance, or, if present, only in the capacity of nurse.

SPECIAL ASSISTANCE UNDER THE OPHTHALMIA. NEONATORUM REGULATIONS.—Below is a statement showing the special assistance rendered by the County Council and by the Local Child Welfare Authorities :—

In districts where the County Council is Removal to hospital, 11 cases; the "Local Authority." trained nurse provided, 7 cases

In districts where the Town or District

Council is the "Local Authority."

Removal to hospital, 11 cases; trained nurse provided, 7 cases. Removal to hospital, 17 cases; trained nurse provided, 12 cases.

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In the area under the charge of the County Council for child welfare purposes, it is a standing instruction to the County nursing staff, who visit the homes in all notified cases of ophthalmia neonatorum, etc., that in virulent cases where no other expert nursing is available, the nurse may put aside all other work until the eyesight of the child is beyond danger or past cure.

Scheme for immediate notification of cases of Ophthalmia Neonatorum.—In 1933 a scheme was put into operation by the County Public Health Department for the purpose of obtaining *immediate* information of cases of ophthalmia neonatorum occurring in the practice of certified midwives. Midwives have been requested in all cases in which they have had occasion to call in medical assistance on account of inflammation of, or discharge from the eyes, however slight, to notify immediately the cases to the County Medical Officer by telegram or telephone. The department will then take immediate steps to see that the children are receiving proper treatment. The midwives will be refunded the amount expended on the telegram or telephone. As regards the districts which are not in the County Council Child Welfare area arrangements have been made to notify promptly the local Medical Officer of Health.

The table below is collated from information supplied by the local Medical Officers of Health in their Annual Reports :---

Ophthalmia Cases.			Vision	T DOUDTA	Total	promo e b
Number notified.	Treated at home.	Treated at hospital.	unim- paired.	impaired.	blindness.	Deaths.
*133	90	48	129	8	-	1

\* In whole County-includes the four districts granted the powers of a local supervising authority.

PEMPHIGUS NEONATORUM.—Two cases of this disease were notified by certified midwives; prompt measures were taken to prevent further spread.

DISCIPLINARY MEASURES.—The disciplinary action taken during 1932 is shown in the following table. The number of charges of negligence or misconduct against the certified midwives was 7, compared with 5 in the preceding year, and 16 in 1930. A number of minor breaches of the Rules were also dealt with.

			Result	of action tai	ken.	
	Total No. of charges.	Struck off the Roll.	Midwife ceased practice.	Ap- peared before Mid- wives Act Com- mittee and severely censured.	Cau- tioned by letter.	Cen- sured by County Medical Officer.
Puerperal fever and puerperal pyrexia cases	2	-		-	2	-
Ophthalmia neonatorum cases	4				4	-
Other offences	1	1		-	-	-

SUPERVISION OF MIDWIVES.—The routine work of inspection is carried out by the County Inspector of Midwives. The continued absence of serious charges of negligence against certified midwives is very pleasing. Midwives have been urged to pay greater attention to ante-natal work and to exercise more care in the keeping of ante-natal records. The educational facilities now available are brought to the notice of midwives and, through the kindness of the Medical Officers of Health of two or three County Boroughs the midwives residing in adjacent districts have been allowed to attend lectures in those towns. The County Council in a few instances paid the fees of midwives attending a post-graduate course at the Liverpool Maternity Hospital.

GRANTS, &c.—DISTRICT NURSING ASSOCIATIONS.—TRAINING, SUBSIDIES, COMPENSATION, &c., TO MIDWIVES.—The grants, in 1932, under Section 101 of the Local Government Act, 1929, to District Nursing Associations providing maternity and child welfare services in or for the benefit of the County amounted to £272, and in addition £182 was contributed out of County funds to certain other Nursing Associations. Towards general nursing expenditure the County Council also contributed in 1932 to the Lancashire County Nursing Association £100, and to 144 District Nursing Associations £900. The number of visits paid to midwifery cases by the nurses of the County Association are given on page 75.

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Subsidies.—In four districts the County Council provide means of conveyance and give a small special fee to midwives for attending cases in outlying areas.

Compensation.—A sum of £63 8s. 7d. was paid by the County Council to midwives as compensation for loss of practice whilst under suspension on account of contact with infectious diseases.

At the end of 1932 a scheme was put into operation, both by the County Council as the Local Supervising Authority under the Midwives Acts, and by the Town and District Councils which are Local Authorities under the Maternity and Child Welfare Act, for the payment of compensation to certified midwives who lose midwifery cases for which they have been engaged, by reason of their patients, on medical advice, entering a hospital or maternity home for confinement.

UNCERTIFIED WOMEN ACTING AS MIDWIVES.—Complaints were received during the year 1932 from several districts that women not certified under the Midwives Acts were attending women in childbirth otherwise than under the direction of a medical practitioner. Enquiries were made in each instance, and appropriate action taken. Legal proceedings were instituted against one person and a conviction obtained.

Maternal Mortality.—The deaths in the Administrative County in 1932 assigned to puerperal sepsis numbered 36, and 78 to other puerperal causes, a total of 114. In 1931 the figures were 40 and 81, a total of 121.

Prior to the year 1929 the mortality rates were based on the number of *live* births only, but as reliable statistics of *stillbirths* are now available, and as the total births, *i.e.*, live and stillbirths, provide a closer approximation to the number of women exposed to the risk of dying from puerperal conditions than live births alone, the maternal mortality rates are now and will be in future calculated on both bases, and will continue to be published on the two bases for a sufficient period to enable statistical continuity to be assured.

The table below gives particulars of the mortality of women in or associated with child-birth per thousand children born alive, and per thousand total births (live born and still born). The County rates are contrasted with the rates for England and Wales :—

				ADMINISTRATIVE COUNTY,							*ENGLAND AND WALES.						
YEAR.	No. or Live	No	of Deat	hs.	Morta	dity per	1,000	Morta	dity per tal birth	1,000	Morti	dity per ive births	1,000	Mortality per 1,00		1,000	
	BISTUS.		Puer- peral Sepais.	Other Puer- peral causes.	Total.	Puer- peral Sepsis.	Other Puer- peral causes.	Total Puer- peral Mor- tality.	Paer- peral Sepsis-	Other Puer- peral causes.	Total Puer- peral Mor- tality.	Puer- peral Sepsis.	Other Puer- peral causes.	Total Puer- peral Mor- tality.	Puer- peral Sepsis.	Other Puer- peral causes.	Total Puer- peral Mor- tality.
1923		30,672	42	94	136	1.37	3-06	4-43				1.30	2.52	3-82	1.000		
1924		29,519	46	103	149	1.56	3-49	5.05				1.39	2.51	3-90	Concession of the		
925		34,713	41	108	149	1.44	3-80	5.24	-			1.56	2.52	4-08	1.		
926		27,944	70	117	187	2.51	4-19	6.70				1.60	2.52	4-12	1 to a		
927		26,263	40	90	130	1.52	8-43	4.95				1.57	2.54	4.11	Inter		
928		26,390	56	104	160	2.12	3.94	6-06				1.79	2.63	4-42	1.72	2.52	4.25
929		25,558	41	84	125	1-60	8.29	4-89	1.52	3.13	4-65	1.80	2.53	4-33	1.73	2-43	4.16
930		25,342	50	107	157	1.97	4.22	6-19	1.87	4-00	5-87	1.92	2.48	4-40	1.84	2-38	4.22
931		25,014	40	81	121	1.60	3.23	4-83	1.51	3-07	4-58	1-66	2-45	4-11	1-59	2.35	3-95
932		24,239	36	78	114	1-48	3.22	4.70	1.40	3-05	4-45	1-61	2.60	4-21	1-55	2-49	4.04

\* Rates extracted from the Annual Reports of the Registrar-General.

The County maternal mortality rate in 1932 is 0.13 per 1,000 live births below the rate for the preceding year and is the lowest recorded since the year 1923.

Every maternal death in the County area is investigated by a competent and experienced medical officer and in 87 County districts these investigations are undertaken by the Assistant County Medical Officers of Health. In the remaining 29 districts the investigations are carried out by the local Medical Officers of Health who are whole-time officials. A confidential report prepared on the facts and circumstances of each fatality is forwarded to the Ministry of Health. During the year 1932 the investigations numbered 62, and 15 deaths were referred for local enquiry. The following table compares the maternal mortality rate (covering a period of five years 1928–1932) of groups of manufacturing, mining, agricultural and residential areas of the Administrative County —

		5 Y	cars, 1928-	-1932.	Mortality	per 1,000 live	births.	
	No. of		No. of	Deaths.	ann an no b	Constanting and		
	Districts in the Groups.	No. of Births.	Puer- peral Sepsis.	Other Puerperal Causes.	Puer- peral Sepsis.	Other Puerperal Causes.	Total.	
Manufacturing areas	21	25,050	43	98	1.71	3.91	5.62	
Mining areas	16	13,893	25	41	1.79	2.96	4-75	
Agricultural areas	19	18,201	46	55	2.52	3.02	5.54	
Residential areas	9	4,818	8	17	1.66	8.52	5.18	

In July, 1932, the Ministry of Health issued a report (Public Health and Medical Subjects, No. 68) on the high maternal mortality in certain areas in which special reference is made to Lancashire. Referring to the Geographical County as a whole, the Report states the heavy loss of maternal life in connection with child-bearing which has been experienced in Lancashire over a series of years presents a problem which is hard of solution. The continued high rates in certain districts show clearly that there are local factors in the situation . . . On the whole the authorities who are the custodians of the public health in the County have shown their appreciation of their responsibilities by the establishment and constant extension of services for maternal welfare. . . . Many of the well-considered schemes now in operation fail in their full effect because they are insufficiently utilised.

The Final Report of the Departmental Committee on maternal mortality and morbidity was issued in August, 1932. The Report contains the results of an examination of 5,800 inquiries into maternal deaths, and the conclusions and recommendations of the Committee are based to a large extent on a careful consideration of this investigation.

The Committee in its conclusions and recommendations states that the causes of maternal deaths are of a varied nature—clinical and social, administrative and economie—and are closely related one to the other. Thus, clinical errors are contributed to by economic conditions, and administrative measures are rendered nugatory by reason of ingrained social customs. The Committee is convinced that the primary essential for a reduction of a high maternal mortality is sound midwifery, before, during, and after childbirth, and this does not chiefly depend upon administrative arrangements or the expenditure of public money. The Committee expresses the opinion that at least half of the deaths which they have reviewed could have been prevented had due forethought been exercised by the expectant mother and her attendant, a reasonable degree of skill been brought to bear upon the management of the case, and adequate facilities for treatment been provided and utilised.

The Nursing Homes Registration Act, 1927.—REGISTRATION OF NURSING AND MATERNITY HOMES.—Under this Act the County Council has delegated its powers and duties to the Town or District Councils in 16 Municipal Boroughs and 2 Urban Districts, viz. :—

Municipal Boroughs : Accrington Ashton-under-Lyne Bacup Chorley Clitheroe Colne	Darwen Eccles Heywood Lancaster Leigh	Lytham Saint Anne's Middleton Morecambe and Heysham Nelson Rawtenstall.
Urban Districts :	Swinton and Pendlebury.	

From the area under the jurisdiction of the County Council, 145 applications for registration were received (to April, 1933), and dealt with as follows :---

Certificate of registration is (41 subsequently cance	sued	 oy requ	 est)		1	120	
Applications withdrawn (Unable to comply wit	 h sta	ndard l	aid dov	 m)		21	
Applications refused (Unsuitable premises)						3	
Under investigation						1	

One Exemption Certificate was granted by the Ministry of Health, July, 1931, to a Christian Science Nursing Home.

The Assistant County Medical Officers of Health have undertaken, since the issue of the last report, the inspection or re-inspection of 41 Maternity Homes.

The statement below shows the districts in the area under the jurisdiction of the County Council where registered nursing homes are situated :---

Adlington	 	1	Ramsbottom	1
Barrowford	 	1	Thornton Cleveleys	4
Clayton-le-Moors	 	1	Tottington	8
Crompton	 	2	Turton	1
Farnworth	 	2	Ulverston	8
Fleetwood	 	3	Upholland	1
Formby	 	5	Urmston	1
Fulwood	 	3	Walton-le-Dale	1
Great Crosby	 	8	Waterloo-with-Scaforth	10
Horwich	 	1	Widnes (B)	1
Kearsley	 	1	Worsley	2
Kirkham	 	1	Blackburn (R)	2
Leyland	 	3	Burnley (R)	1
Litherland	 	1	Chorley (R)	1
Longridge	 	2	Lunesdale (R)	1
Ormskirk	 	1	Preston (R)	4
Precsall	 	1	West Lancashire (R)	2
Prestwich	 	3	Whiston (R)	1
Radcliffe	 	1	Wigan (R)	1

### MATERNITY AND CHILD WELFARE IN THE COUNTY.

County Council Child Welfare Scheme.—The County Council's Child Welfare area at the end of 1932, comprised 77 districts.\* From these districts copy notifications of births received in 1932 by the County Medical Officer of Health under the provisions of the 1915 Act numbered 9,908. The actual number of births registered in these districts was 10,842.

In the remaining 39 County districts, the Local Sanitary Authorities are responsible for Maternity and Child Welfare work.

\*Little Crosby amalgamated with Great Crosby, 1st April, 1932. Sefton Rural District amalgamated with West Lancashire Rural District, 1st April, 1932. Prestwich included in County scheme, 1st October, 1932.

Child Welfare work is therefore divided as follows :---

Act, 1922, or Experient armore our Nonemon Lean Harris, anneal mas delegated die provins and duties to the Town outse, and 2° Tellan Districts, visch	Estimated population.	No. of births registered in 1932.
Undertaken by the County Council—in 77 districts (1 borough, 58 urban, and 18 rural districts)	806,433	10,842
By Local Sanitary Authorities—in 39 districts (18 boroughs and 21 urban districts)	996,267	13,897
	1,802,700	24,239

CO-ORDINATION OF THE WORK OF THE SCHOOL MEDICAL SERVICE WITH THAT OF OTHER HEALTH SERVICES .- The County Medical Officer of Health is School Medical Officer and Chief Medical Officer to the Public Assistance Committee. There are two Senior Assistants under him whose departmental duties are those of :--

- 1. (a) School Medical and Child Welfare Services.
  - (b) Blind Persons Act.
- 2. (a) General Public Health.
  - (b) Public Assistance.
  - (c) Midwives Acts.

One woman Assistant Medical Officer is fully employed in the inspection of secondary school girls. The remaining Medical Officers are normally 18 in number, and in their dual capacity of Assistant Medical Officers of Health and Assistant School Medical Officers deal with all the problems of Public Health and School Medical Inspection, except those relating to Tuberculosis. Co-ordination in this latter branch is, however, maintained both at the Central Office and in the "field" by referring to the Tuberculosis Officer or notifying any cases of doubtful or evident disease respectively.

The School Nurses are also Health Visitors and Inspectors of boarded-out children under Part I of the Children Act, 1908, and it is unnecessary to add to the account of their duties any more than was contained in the Annual Report of 1930.

Work of County Health Visitors—The following table shows the work done by the Nurses as Health Visitors during the year 1932 :—

HOME	VISITS-								
(1)	nfants under one ye	ear)-							
and and	No. of 1st visits								10,924
	No. of re-visits								40,183
(C)	hildren 1—5 years	of age)	_						
	No. of visits								32,585
ANTE-N	NATAL WORK-								
(E	xpectant Mothers)-	-							
	No. of 1st visits								2,242
	No. of re-visits								2,587
OTHER	VISITS-								
SI	pecial visits to old	der chil	ldren,	intervi	iews wi	ith Me	dical C	officers	
dada W mill .	of Health, &c.								754
V	isits to cases of op	hthalmi	ia neor	natoru	n and	other 1	matters		. 241
V	isits to cases of pue	erperal i	fever a	nd pu	rperal	pyrexi	a		43
V	isits to cases under	Childr	en Act	, 1908	(Part ]	(.]			282

County Child Welfare Centres.—During the year two Child Welfare Centres have been taken over by the County Council, one from a Voluntary Committee, and the other from an Authority whose Maternity and Child Welfare work has been transferred to the County Council, and the list of those which have been established to date is as follows :—

Abram	Clayton-le-Moors	Lathom and	Prescot
Adlington	Clifton*	Burscough	Prestwich
Aspull	Coppull	Leyland (2)	Rishton
Atherton	Crompton	Litherland	Sabden
Audenshaw	Dalton-in-Furness	Littleborough	Skelmersdale
Bamber Bridge	Davyhulme	Little Lever	Standish
Barrowford	Droylsden	Longridge	Thornton Cleveleys
Barton	Failsworth†	Milnrow	Tottington
Billinge	Feniscowles	Morecambe	Trawden
Blackrod	Fleetwood (2)	Norden	Ulverston
Briercliffe	Flixton	Ormskirk	Urmston
Bromley Cross	Formby	Orrell	Walkden
Burtonwood	Haydock	Oswaldtwistle (2)	Waterloo
Carnforth	Irlam (2)	Padiham	Whalley
Catforth	Kearsley	Penketh	Whitefield
Chipping	Kirkham	Poulton-le-Fylde	Whitworth
Church	-+-2.00	Preesall	

Transferred to Swinton and Pendlebury, 1st April, 1933.
 † Transferred to County Council, 1st April, 1933.

With the exception of Morecambe (B) the County Council is also the Education Authority in the districts where these Centres have been established. The Assistant County Medical Officers are, as a rule, in charge of these Centres, but in a few cases the local Medical Officers of Health have remained in charge of the Centres. In the following districts the Child Welfare and Maternity work is done by the local district Sanitary Authority :---

Newton
Ramsbo
Royton
Tyldesle
Upholla
Westho

Newton-in-Makerfield Ramsbottom Royton Tyldesley Upholland Westhoughton

Instruction in mothercraft continues at certain of the Centres on the lines described in previous reports.

The following is a list of the Child Welfare Centres established by the County Council :---

	Address of			
District.	Child Welfare Centre.	Day and Time Open.	Medical Officer.	Nurse.
Abram	Near Council Offices, Abram	Alternate Wed., 2.30- 4.30 and for sale of food on other Wed.	Dr. Erskine	Miss Unsworth
Adlington	Wesleyan Sunday School, Market Street	from 10.30 to noon Wednesday, 2-4	Dr. Johnstone	Miss Kennedy
Aspull (New Springs)	Ind. Methodist Sunday	Wednesday, 2-4	Dr. Eldridge	Miss Evans
Atherton	School, New Springs Alder House	Wednesday, 2.15-3.30	Dr. Leigh	Miss Dudley and
Audenshaw	"Westernlea,"	Monday, 2-4	Dr. Asheroft	Miss Smith Miss Dickinson
Barrowford	Denton Road Congl. Sunday School, Hill Top	Thursday, 2-4	Dr. Corbett	Miss Wright
Bamber Bridge (Walton-le-Dale)	Conservative Club, Cranborne Road	Thursday, 2—4	Dr. Johnstone	Miss Canton
Barton (Preston R.)	Village Hall	First Wednesday each month, 2-4	Dr. Wray	Miss Rigby
Billinge	Conservative Club	Wednesday, 10-12	Dr. Wright	Miss Webster
Blackrod	Church House Institute	Tuesday, 2-4	Dr. Brothwood	Miss Evans
Briercliffe (Burnley R.)	Tennyson Street Mission Hall	Alternate Wednesdays, 2.30-4	Dr. Corbett	Miss Mares
Bromley Cross (Turton)	Birtenshaw Wes. Sunday School, Darwen Road	Monday, 2.30-4.30	Dr. Jagger	Miss Lynch
Burtonwood (Warrington R.)	Church Hall	Thursday, 10-12	Dr. Crawford	Mrs. Birchall
Carnforth	21, Market Street	Friday, 2-4	Dr. Tomb	Miss Walker
Catforth (Preston R.)	Village Hall	Every fourth	Dr. Brothwood	Miss Canton
Chipping (Clitheroe $\mathbf{R}$ )	Oddfellows Institute	Monday, 2-4 Second and fourth Wednesdays, 2-4	Dr. Brothwood	Miss Rigby
Church	Baptist Sunday School, Ernest Street	Thursday, 2-4		Miss Hanes
Clayton-le-Moors	Town Hall	Thursday, 2—4		Mrs. Gray
*Clifton (Barton-upon- Irwell R.)	Parish Rooms, Rake Lane	Wednesday, 2.30-4.30	Dr. Davidson	Miss McLean
Coppull (Chorley R.)	Wesleyan Sunday School, Chapel Street	Thursday, 2-4	Dr. Johnstone	Miss Beach
Crompton	East Crompton, Church Institute	Tuesday, 24	Dr. Porter	Miss MacDonald
Dalton-in-Furness	Carnegie Library	Thursday, 2—4	Dr. Tomb	Miss Tomkinson
Davyhulme (Barton- upon-Irwell R.)	"Moorlands," Cornhill Rd.	Monday, 2.30-4	Dr. Davidson	Miss Lawley
	n (C) steppetities	Wednesday, 2-4	Dr. Stocks	Miss Lawley
Droylsden	"Morningside," Fairfield Avenue	Tuesday and Thursday, 2-4	Dr. Asheroft	Mrs. Hutchinson
†Failsworth	Free Library	Wednesday, 2-4	Dr. Webb	Mrs. Stringer and Mrs. Anderton
Feniscowles (Blackburn R.)	Mission Hall, Preston Old Road	Tuesday, 2—4		Mrs. Beckett
Fleetwood	(1) Orient Buildings, Station Road	Tuesday, 2 - 4	Dr. Batty	Mrs. Dewhurst
	(2)	Wednesday, 2-4	Dr. Batty	Miss Fawcett
Flixton (Barton-upon- Irwell R.)	The Institute, Flixton Road	Tuesday, 2.30-4	Dr. Davidson	Mrs. Chambers

\*Transferred to Swinton and Pendlebury Urban District, 1st April, 1933. †Taken over from Failsworth Urban District, 1st April, 1933.

LIST OF COUNTY CHILD WELFARE CENTRES.	-continued.
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LIST OF COUNTY CHILI	D WELFARE CENTREScon	tinued.	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
District.	Address of Child Welfare Centre.	Day and Time Open.	Medical Officer.	Nurse.
*Formby	25, Chapel Lane	Wednesday, 2-4	Dr. Barker	Miss Hughes
Haydock Irlam	Wesley Sunday School, Clipsley Lane Longfield Lodge,	Wednesday, 2-4	Dr. Crawford	Miss Hodgson
	Cadishead Irlam Hall,	Alternate Wednesdays, 2-4	Dr. Roberts	Mrs. Smith
Kearsley	Irlam New Jerusalem School, Greenwood Street	Thursday, 2-4	Dr. Jagger	Miss McLean
Kirkham	Ambulance Rooms,	Thursday, 2-4	Dr. Brothwood	Miss Smith
Lathom and Burscough	Mellor Road Old Council Offices	Friday, 2-4	Dr. Wray	Miss Dickinson
Leyland	(1) Bradshaw Street Mission Room	Alternate Wednesdays, 2-4	Dr. Wray	Miss Hughes
	(2) Congl. Schools, Quin Street	Thursday, 2.30-4	Dr. Wray	Miss Hughes
Litherland	32, Linacre Road	Tuesday, 2—4	Dr. Barker	Miss Robinson Miss Shaw
Little Lever	Church House Institute	Thursday, 2.30-4	Dr. Hutchinson	Miss Wellard
Littleborough	Rockley House	Thursday, 2-4	Dr. Wilson	Miss Sizer
Longridge	Drill Hall	Tuesday, 2-4	Dr. Wray	Miss Rigby
Milorow	1, Wesley Street	Tuesday, 2—4	Dr. Wilson	Miss Sizer
Morecambe and Heysham (B)	West End Wesleyan Sunday School	Monday, 2-4	Dr. Tomb	Miss Menzies
Norden	Liberal Club	Wednesday, 2—4	Dr. Wilson	Miss Cubbin
Ormskirk	Church House, Church Street	Monday, 2-4	Dr. Barker	Miss Dickinson
Orrell	299-301, Orrell Road	Last Monday, 2-3 (Milk) Thursday, 2-4.30 C.W.C.	Dr. Gawne	Miss Singleton
Oswaldtwistle	Barnfield House	Tuesday, 2-4	Dr. Conway	Miss Townend
	Conservative Club, Belthorn	Quarterly	Dr. Conway	Miss Townend
Padiham	West Bank House	Tuesday, 2.30-4	Dr. Corbett	Mrs. Read
†Penketh	Methodist Sunday School	Tuesday, 2—4	Dr. Crawford	Mrs. Birehall.
Poulton-le-Fylde	St. Chad's Church Hall	Alternate Tuesdays, 2-4	Dr. Brothwood	Miss Procter
Preesall	Parochial Hall	Alternate Thursdays, 2-4	Dr. Batty	Mrs. Dewhurst
Prescot	Old Grammar School, High Street	Monday and Thursday, 2-4	Dr. Wright	Miss Walters Miss Heseltine
‡Prestwich	Wesleyan School, Chapel Street	Thursday, 2-4.30	Dr. Hutchinson	Miss Dobson
Rishton	108, High St	Tuesday, 2-4		Miss Hanes
Sabden	Wesleyan School	Alternate Thursdays,	Dr. Corbett	Miss Mares
Skelmersdale	Congregational Schools, Witham Street	Wednesday, 10-12.30	Dr. Brothwood	Miss Fry
Standish-with-	Wesleyan Sunday School	Wednesday, 2-4	Dr. Johnstone	Miss Irving
Langtree Thornton Cleveleys	Primitive Meth. Sunday	Thursday, 2—4	Dr. Batty	Miss Procter
Tottington	School, Fleetwood Rd. Council Offices	Wednesday, 2.30-4	Dr. Hutchinson	Mrs. Tregarthen
Trawden	Wesleyan School	Wednesday, 2—4	Dr. Corbett	Miss Wright
Ulverston	" The Rookery "	Wednesday, 2-4	Dr. Tomb	Miss Holmes
Walkden (Worsley)	51, Park Road	Thursday, 2.30-4	Dr. Stocks	Miss Murphy
Waterioo	United Methodist	Alternate Thursdays, 2-4	Dr. Porter	Mrs. Stringer
(Limehurst R.) Whalley (Clitheroe R.)	Sunday School Wesleyan School	Monday, 2-4	Dr. Brothwood	Miss Rigby
			and the second	2.4 (P)
Whitefield	" Uplands "	Tuesday, 2.30-4	Dr. Hutchinson	Mrs. Tregarthen

\*Formerly a "voluntary" organisation ; came into County scheme, 1st July, 1932. †Opened in January, 1933. ‡Taken over from Prestwich Urban District, 1st October, 1932.

COUNTY BRANCH CENTRE FOR SUPPLY OF DRIED MILK.

District.	Address of Centre.	Day and Time Open.	Nurse.	
Great Crosby	57, York Avenue	Wednesday, 2-4	Mrs. Palin	

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184 The following table gives a statistical summary of the work done in the Centres during the year ended 31st December, 1932 :---

			IS.	Noti- ie 12		of indi Iren att	ividual ending.		of atter y child	idances ren.	atter by ex	o, of dances spectant thers.	atten by	o. of dance other men.
Name of Child Centre			No. of Sessions.	No. of Births N fied during the months.	Under 1 year old.	From 1-2 years old	er 2 years old.	Under 1 year old.	From 1-2 years old	er 2 years old.	of individual cetant mothers	tual s.	No. of individual women attending.	No. of actual attendances.
				-	-		Over			Over		No	No	No
Abram		•••	10	117	133	62		1067	332	395	27	79	9	25
Adlington Aspull (New	Sprin	ne'	- 48 49	54	66 116	63 49	84	846 942	677	1275	18 38	154 156	21	286
Atherton	oping	80)	17	268	256	164	92	2279	585	234	41	194	10	20
Audenshaw			10	86	123	93	83	1600	1014	594	16	70	11	35
Bamber Bri				76	139	98	83	1290	652	487	30	157	94	390
Barrowford Barton			2.00	38	87	67	57	795	266	283	24	5	18	24
Billinge			10	62	60	36	38	404	249	208	8	41	3	7
Blackrod			10	42	59	35	17	714	378	94	10	43	14	36
Briereliffe				13	36	34	40	336	168	306	1	2	5	6
Bromley Cro Burtonwood			10	9	104 47	80 28	87 25	882	290 306	274	23	111 37	10	
Carnforth			10	49	78	57	54	580	396	321	6 9	37	10	24
Catforth			. 13	5	25	19	18	98	47	41	5	15	10	30
Chipping				5	11	17	20	68	112	97	8	6	12	67
Church Clayton-le-M	Inore	••	10	51 96	127 96	83	64	1850	754	518	7	66	10	178
Clifton	100rs		10	40	96 68	49 32	47	1315	600 382	435	13	145	36	484
Coppull			1 10	64	107	62	111	1278	775	944	28	133	10	410
Crompton				129	169	104	72	1976	1000	637	13	78		
Dalton Davyhulme	No 1			156	218	138	204	1574	965	1287	90	401		
Davyhulme				62 123	74	50	43 69	539 1518	417 690	191 451	8	26	19 85	24
Droylsden			00	179	278	117	75	3656	961	384	22	61	11	71
Feniscowles			. 49	7	39	27	17	328	222	122	2	4	9	48
Fleetwood (			10	423	211	101	132	2162	673	672	10	49	1	1
Fleetwood () Flixton	No. 2)	••	1 11	116	277	144	144	2684	1097	1001	12	39		
a) Formby			00	58	35	23	34	1730	844	852 197	16	127	20	231
Haydock			. 50	197	150	58	81	1818	459	178	29	116	5	19
Irlam (Long		lge)	1	212	155	91	13	1325	730	104	11	33	20	313
Irlam (Irlam Kearsley			10	107	155	65	8	1098	415	26	9	30	30	401
Kirkham			10	127 58	215 157	140 126	91 75	3048 1603	842 953	176	42	172	21	45
Lathom and	Bursco	ugł		115	72	48	46	601	175	197	6	20	7	184
Leyland (Br				149	11	10	15	77	63	112	1	8	20	255
Leyland (Qu Litherland	m St.)		10	238	191 263	121 105	115	1869	790	1052	11	78	9	290
Littleboroug	h			137	203	105	161 102	$2558 \\ 2637$	696 832	928 506	14 6	40	2	6
Little Lever			10	53	92	49	26	1217	472	223	26	127	27	306
Longridge				61	123	99	101	1044	489	437	9	44	11	403
Milnrow Morecambe			10	96	103	60	52	1409	435	426	5	14	6	20
Norden			10	280	218	113	79 49	2062 1115	1149 495	590 551	30	116 37		28
Ormskirk			100	123	139	68	75	1451	548	537	8 21	67	19	28
Orrell				106	124	65	71	1357	664	713	16	95	9	27
Oswaldtwist Oswaldtwist				216	137	53	23	1526	633	747	22	52	54	585
(Belthor			4		9	5	10	16	11	14	2	8	9	14
Padiham			48	158	111	72	57	1332	715	402	5	13	28	50
Poulton-le-F			25	35	58	31	77	478	205	577	12	25	20	34
Pressall Preseot			00	19	61	49	71	487	322	647	8	17	15	232
) Prestwich			10	183 59	362 62	226 15	182	2462 301	606 49	491 12	89	263	18	91
Rishton			10	80	54	32	40	668	261	262		34		142
Sabden				15	25	21	27	157	129	202	4	8	10	20
Skelmersdale Standish			10	95	97	63	55	1235	478	286	4	18	80	155
Thornton			100	111 104	146	91 81	88.	1604 865	755	803	24	78	42	127
Tottington			10	54	86	45	63	805 995	600 385	861 516	19 13	148 86	77	21 105
Trawden			49	23	39	35	57	422	155	212	2	2	19	26
Ulverston Walkden			40	116	186	112	160	1869	1160	1338	65	375		
Walkden Waterloo			0.0	158 23	151 66	62 40	35	1466	316	122	7	18	47	199
Whalley			10	12	60	40 52	51 41	578 629	331 451	246 235	11 7	22 34	29 14	36 241
Whitefield			44	139	237	97		2112	754	455	18	84	14	241
The Party stream in			49	130	118	51	41	1900		and the second se				
Whitworth			20	100	110	51	41	1826	599	409	17	75	17	32

 (a) Fermby Child Welfare Centre taken over from the local Voluntary Committee, 1st July, 1932.
 (b) Frestwich Child Welfare Centre taken over from the Prestwich Urban District Council, 1st October, 1932.

Supply of Milk and other Foodstuffs.—There is still very much unemployment in this part of the country, and, consequently, there is a large quantity of milk or milk products supplied free, at, or through, the Welfare Centres to necessitous nursing mothers, women in the last few months of pregnancy, and infants and young children : during the year £10,500 was so spent. This is a slight increase on the previous year's expenditure. The conditions under which a free supply is given are those of medical necessity coupled with the inability to purchase the necessary foodstuffs.

During the year 1932, 875,615 pints of fresh milk were supplied directly to the recipients by milk purveyors, and the following tabular statement shows the amount of dried milks, cod liver oil, virol, etc., supplied at the Centres :--

No.	Units.	Article of Foodstuff.	Cost.
and the objects	and an the Glim	ar lesting his include	£ s. d.
41,169	1 lb. packets	Cow and Gate (F.C.)	2,783 12 10
19,884	1 lb. packets	C.L.O. and Malt	600 2 1
10,630	8 oz. tins	Virol	532 11 0
9,977	1 lb. tins	Ostermilk	761 18 4
4,468	1 lb. bottles	Horlick's Malted Milk	563 3 4
2,950	8 oz. tins	Ovaltine	183 7 5
2,530	1 lb. packets	Cow and Gate (H.C.)	171 8 2
2,813	4 and 8 oz. bottles	Aberdeen Emulsion	89 2 5
2,295	1 lb. packets	Ambrosia	171 15 0
2,154	4 oz. bottles	Cod Liver Oil	47 4 4
1,878	1 lb. packets	Glaxo	142 14 0
1,865	1 lb. packets	Trufood (Humanised)	188 6 8
1,616	8 oz. and 1 lb. bottles	C. L. Oil Emulsion	91 2 10
1,602	1 lb. packets	Lactogen	120 16 0
1,571	7 oz. tins	Virolax	79 5 10
872	1 lb. packets	Trufood (F.C.)	66 13 4
846	1 lb. packets	Chocolate Milk	63 17 0
784	1 lb. packets	Hemolac	64 12 4
597	8 oz. tins	Maltoline	17 3 0
348	1 lb, bottles	Mellin's Food	88 3 8
333	4 oz. tins	Lactogol	20 5 9
300	1 lb. jars	Vitamalt	20 11 0
54	1 lb, tins	Almata	5 11 10
32	1 lb. tins	New Zealand Cream	4 0 0
24	1 lb. tins	Colact	1 18 0
24	8 oz. and 1 lb.	Woodland Milk	1 2 4
1000	tins		
14	8 oz. tins	Virol and Milk	0 15 2
Arrent Sectores 12	1 lb. tins	Vitasac	1 7 0
10	1 lb. tins	Jecomalt	0 17 6
	farmer the state of	manent grane in ane mier	£6,833 8 2

In this statement most of the foods mentioned are sold at cost price. In necessitous cases the food is supplied either free of cost or at half-price. The total loss on the foods supplied amounted to  $\pounds1,469$  5s. 3d., as compared with a total loss in the previous year of  $\pounds1,222$  17s. 11d.

ANTE-NATAL CARE.—The County Council has only one Specialist Ante-Natal Clinic, which is held at the Litherland Child Welfare Centre, but there are arrangements with the following Local Authorities whereby persons resident in the adjacent portions of the County area may attend at the Ante-Natal Clinics established by these Authorities :—Chorley, Eccles, Rochdale and Widnes. There is also a separate Ante-Natal session in connection with the Formby Child Welfare Centre which is attended by the Assistant County Medical Officer in the district. During the year 597 attendances were made at these Ante-Natal Clinics by 205 individual expectant mothers. In the rest of the County, expectant mothers may be seen by the Assistant County Medical Officers at the Child Welfare Centres. Expectant mothers who book beds in Maternity Homes generally attend the Maternity Home for examination some time before admission for the confinement, and in some cases in-patient ante-natal treatment is provided.

A considerable amount of useful work is done by the County Health Visitors. In a scattered country district it is not practicable for expectant mothers to make long journeys to Clinics, but it would be a mistake to draw the inference that such women receive no attention. In addition to the private doctor and the local District Nurse, the County Health Visitor is now well known in the district and is soon in touch with anyone who wishes to see her, this being rendered possible by the increasing use of the motor ear as a means of transport. As a result much good advice can be given and administrative action taken without the intervention of the *ad hoc* Clinic. Dr. L. E. H. R. Barker reports on the work done at the Litherland Clinic during the past six years, and Dr. J. R. Jagger on the work done at the Kearsley and Bromley Cross Child Welfare Centres during the year 1932.

#### LITHERLAND ANTE-NATAL CENTRE.

The Litherland Ante-Natal Centre was opened in December, 1926. The sessions are held fortnightly. It is a "Specialist Clinic," in that a Liverpool Obstetric Surgeon (Dr. Burns) attends once a month, the alternate sessions being taken by the Assistant County Medical Officer.

Before its inception in 1926, the local medical practitioners were interviewed; the County's ideas and aims were explained to them and they were asked to give their views and suggestions. They expressed their approval of the County's scheme.

The local midwives were circularised and invited to come to the Clinic, where the objects of the Lancashire County Council in opening an Ante-Natal Centre were explained to them, and they were invited to co-operate by telling their patients of the advantages of attending.

The Centre was intended to help expectant women whose circumstances were such that they could not afford to pay a fee to a medical practitioner.

The objects of the Ante-Natal Centre may be briefly summarised as follows :--

1.-To provide for the general medical survey and examination of expectant women.

2.—To keep a general supervision over the expectant mother's health during her pregnancy.

3.—To carry out pelvic measurements in all primigravidae and in multigravidae when there is any reason to suspect the presence of pelvic abnormality.

4.-To provide minor medical treatment for disabilities of pregnancy.

5.—To arrange, in conjunction with the County Dental Surgeon, for the treatment or removal of carious teeth.

6.—To take, when necessary, steps to bring the expectant mother's health up to a good standard by extra food, tonics or admission to a Rest Home.

7.—To pass on to midwives or general practitioners advice from the Specialist regarding any abnormality or other condition likely to influence labour.

8.—To arrange for admission of patients to the Liverpool Maternity Hospital on the advice and authority of the Specialist.

9.—To watch the progress of pregnancy so as to take steps to prevent any abnormal difficulty by appropriate measures.

10.—To do all that obstetric knowledge and foresight can devise to assure for the expectant mother a safe labour and a living, healthy child.

At the sessions every effort is made to afford all necessary privacy. Clean dressing gowns are provided and the examinations take place in a warm room with a comfortably furnished couch. In the case of young women who come in the early months of pregnancy efforts are made to remedy any defects in bodily health and necessary dental treatment is carried out. Care is taken not to deter them from continuing their attendances by excessive attention on their first visit. Later on, at a suitable time, pelvie measurements are taken. Any cases requiring special examination of blood or other body fluid (e.g., Wasserman test) are referred to the Liverpool Maternity Hospital.

During the six years, 1927–1932, 410 women attended the Ante-Natal Centre. Of these 127 were primigravidae, and 273 were multigravidae. Ten were found to be not pregnant.

For the first two years there was considerable difficulty in persuading expectant women to attend. The need for ante-natal care was a new idea to most of the people in the district, and time was required to educate them to the necessity for supervision. It was only by constant and strenuous efforts on the part of the Health Visitors that attendances were maintained. As time went on numbers gradually increased. Midwives found that the Clinic helped them, took greater interest in it and brought up more cases. Old patients benefited by the advice and treatment and returned for supervision during their next pregnancy.

Altogether 181 women were brought by local midwives who attended with them and received any necessary medical advice about their cases. Eleven were sent for Specialist's opinion by medical practitioners. The remaining 218 patients either came of their own accord or were persuaded by friends who had themselves attended.

It was often found that a patient's first visit was due to some bodily disability ; many of the multigravidae came up because they had had difficult " times " before and hoped that something could be done to give them an easier " time " in their next confinement. The pathological conditions found ranged from minor skin diseases to severe heart disease.

The following is a list of the more common :--

- (1) Eczema.
- (2) Varicose veins.
- (3) Indigestion.
- (4) Dental disease.
- (5) Nephritis and Albuminuria.
- (6) Chorea.
- (7) Tuberculosis.
- (8) Heart Disease.
- (9) Contracted Pelvis.

Appropriate measures were taken to deal with these conditions; simple medicines were prescribed for indigestion, constipation, etc.; dental disease was dealt with by the Dental Surgeon, who carried out conservative treatment, and also did necessary extractions under general anæsthesia. Of the 81 cases of severe dental caries, 54 were treated. Cases of heart disease, albuminuria and chorea were taken into Rest Homes on the advice of the Specialist. Tubercular patients were referred to the Tuberculosis Department of the County Council for expert advice. Eighteen cases of contracted pelvis were found, three of these being of excessive degree. They were carefully supervised throughout their pregnancy and admitted to Hospital if and when necessary.

Of those admitted to Hospital-

- 4 were delivered by induction.
- 4 by Cæsarean operation.
- 3 by instruments.

The remaining 7 with minor degrees of contraction were delivered normally. One patient underwent Cæsarean section, under spinal anæsthesia, owing to severe heart disease.

Altogether 85 patients were admitted to Liverpool Hospitals during the six years.

- 25 to Liverpool Maternity Hospital.
- 43 to Walton Public Assistance Hospital.
- 4 to other Institutions.

The remaining 13 were taken in for rest or for treatment of some disability of pregnancy, but did not remain in for their confinements.

The Liverpool Maternity Hospital is primarily intended to deal with abnormal cases of labour. It is bad policy to fill up the beds with normal cases. This is not generally understood, and women often apply for admission simply for their convenience, and not because they anticipate any unusual difficulty in their confinement. It has become necessary, therefore, to make it a rule that all women from the Clinic districts who so apply should be referred back to the Clinic, where they are examined by the Specialist, who decides whether they are suitable for admission or not.

Of those admitted to Walton Public Assistance Hospital, many were recommended because their home circumstances proved unsuitable for confinement. Others were admitted under the Id. in £ scheme, which contributes a sum of money towards the Public Assistance Hospitals. It should be noted that the privilege of admission to hospital under the rules of this scheme is intended to apply only in cases where, in the opinion of a medical man, the labour is likely to be abnormal. It is desirable that this rule should be observed, as otherwise the local midwives are unfairly deprived of much of their normal practice.

Attendance at the Ante-Natal Centre is gradually becoming a more usual procedure among expectant women. In the early days many of the women would only put in one or two attendances ; this was unsatisfactory to the medical attendant and of little use to the patient. Now they attend throughout five or six months of the pregnancy so that there is time to correct defects in the patient's general health, and it is possible to keep watch over the particular state of the pregnancy and take steps necessary to ensure a safe delivery. The following is a summary of the work of the Litherland Ante-Natal Centre from 1926 to 1932 :---

Total No. of Patients						11 10 18	1.1.1	410
Primigravidae			127					
Multigravidae			273					
Not pregnant			10					
No. who came of their own :			ught by	v frien	ds			218
No. brought by Midwives				3				181
No. sent by Medical Practiti	innere							
								11
No. of cases of normal pregn	ancy							225
No. of cases with pathologic	al cond	fitions						175
No. with severe dental disea								81
No. treated by Dental Surge	eon							54
No. admitted to Hospitals								83
Record of Confinements-								
Normal						327		
Instrumental						30		
Difficult						9		
By Induction						í.		
By Cæsarean Sec						5		
Miscarriage	-ion							
						8		
Twins						9		
Still-born						12		
No record						17		
a nation t diad in Harnital of (	Manhata	no chool						

One patient died in Hospital of Obstetric shock.

#### KEARSLEY CENTRE.

Since the year 1925 a time has been reserved at the Kearsley Centre, on Thursday afternoons, for the purpose of examination of pregnant women. The service is a popular one and has grown numerically. Of late years its popularity has increased to such an extent that admission has had to be refused to the Centre of all cases except those which reside in the area which the Clinic nominally serves. In this connection the interest and co-operative effort of the local midwives and doctors must be acknowledged.

During the year 1932 forty-two expectant mothers were examined and treated at the Kearsley Centre. Of these 42 cases, thirty-three reside in the township of Kearsley and nine others came from the adjacent rural area of Outwood and Ringley. Seventeen of them were primiparae and twenty-five multiparae. Altogether 172 attendances were made by these expectant mothers and at each visit a sample of urine was examined, the process of gestation determined, and advice on any observed abnormal condition given.

The following table shows the abnormal conditions found :---

Vaginal Sepsis						the second			13
Dashasha									10
			Nr			 			9
Breasts (Mastitis	o, ne	tracted	Nippi	cs 1)		 			4
		***				 			1
Abnormal Blood	Pressi	ire				 			4
Abnormal Urine-	-Albu	min		4					
	Mue			6					
		illuria		2		 A.4.4	· · · ·		12
Abnormal Pelvic	Measu	iremen	ts		***	 			8
Carious Teeth						 			11
Pyorrhœa .									
Recurrent Sore T	hroat					 			1
37		0				 ***	*** TIN	***	2
		***	***			 			10
Swelling of feet .						 		8	17
						 			3
Enlarged Thyroid	I Glan	d	See 1						
Vomiting (severe	1					 			3
Chaming (severe						 			2
Chronic Constipa	tion			***		 			7
Hæmorrhoids .						 			3
Furunculosis .						 	12 11 12	Stimp	1
							1		-

Where it has been found necessary, hospital treatment has been found for appropriate cases, while some of the minor conditions have been treated at the Nursing Homes in the district and at the Centre.

There have been no maternal deaths amongst these cases, nor, in fact, in the districts served. There has not been any chronic maternal invalidism resulting in any of the 42 cases, and, so far as it has been practicable, post-natal supervision has been given to these mothers for three months after confinement. There has been one infantile death only, which occurred in a child of  $4\frac{1}{2}$  lbs. weight suffering from congenital heart disease. It is interesting to note that this child's mother was one of the two cases who suffered from frequent recurrent sore throat and suggests the possibility of sore throat in the mother being the causative agent of a rheumatic carditis in the focus.

Reviewing the items in the table, it is evident that septic conditions are predominant, and were found to be present in 28 of the 42 cases. The problem of attacking the general high maternal mortality rate appears to lie in the ante-natal control of this group of conditions.

#### BROMLEY CROSS (TURTON) CENTRE.

Similar work as at Kearsley is carried out on Monday afternoon of each week at the Bromley Cross Centre. During the year 1932, twenty-three individual expectant mothers were examined and 111 attendances were made. This Centre serves a large rural area outside the urban portion of Bromley Cross and distances and difficulty of transport are factors to be contended with. The 23 cases came from the following districts :--

Bromley Cr	oss	 	 	 	 	11
Egerton		 	 	 	 	6
Edgworth		 	 	 	 	2
Bradshaw		 	 	 	 	3
Belmont		 	 	 	 	1

The following abnormal conditions were found in these cases :---

Vaginal Sepsis			 	 		 10
Backache			 	 		 3
Mastitis			 	 		 Nil
Retracted Nipples			 	 		 1
Heart Disease			 	 		 1
Abnormal Urine-	Albumi	n 2				
	Mucin	3				
and the second second	Bacillu	ria 1	 	 	***	 6
Carious Teeth			 1.1.1	 		 5
Recurrent Sore Th	roat		 	 		 1
Varicose Veins			 	 		 3
Swelling of Feet			 	 		 4
Anæmia			 	 		 5
Enlarged Thyroid			 	 		 3
Chronic Constipati	on		 	 		 6
Hæmorrhoids			 	 		 1
Purulent Otitis Me	dia		 	 		 1
Gingivitis			 	 		 1

OPHTHALMIA NEONATORUM.—All cases of Ophthalmia Neonatorum are under observation and care from the onset, and of late years there has been a welcome reduction in the number of those cases which become blind ultimately.

	Year.		Total number of eye eases reported to the Local Supervising Authority under the Midwives Acts.	Total number of eases notified as Ophthalmia Neonatorum.		
1924			328	154		
1925			299	147		
1926			844	172		
1927			381	211		
1928			366	191		
1929			854	164		
1930			312	169		
1931			272	120		
1982			238	120		

The duty of midwives to report "eye cases" remains unaltered, the Midwives Act Committee of the County Council being the Local Supervising Authority for this purpose.

Inspection of Registered Nursing Homes.—The Assistant County Medical Officers undertook during the year 67 inspections of Nursing Homes, the results being reported to the Public Health Department of the County Council. Provision for Maternity Cases.—The service for the actual confinement of women has not continued to expand. During the past year the amount paid in doctors' fees in cases where the midwives summoned help was  $\pounds4,489$  10s. 0d., of which  $\pounds440$  12s. 4d. is estimated to be recoverable from the patients. Arrangements are in force for receiving pregnant women, in cases where there is any difficulty, present or anticipated, or where the surroundings at home are not suitable for a confinement, at the following institutions :—

Ashton-under-Lyne Infirmary. Ashton-under-Lyne Lake Hospital. Blackburn Corporation (Springfield) Maternity Home. Blackpool Corporation Maternity Home. Bolton Corporation (Haslam) Maternity Home. Bolton Union Townley's Hospital. Bootle Corporation Maternity Home. Burnley Corporation (Bank Hall) Maternity Home. Chorley Hospital. Chorley Public Assistance Hospital. Colne Hospital (Corporation). Davyhulme Park Hospital. Fulwood Sharoe Green Union Maternity Home. Leigh Corporation (The Firs) Maternity Home. Liverpool Maternity Hospital. Liverpool St. Hilda's Diocesan Maternity Home. Lytham Hospital. Nelson Corporation (Fern Lea). Oldham Corporation (Greenacres). Preston Royal Infirmary Radeliffe Corporation (Bealey). Rochdale Union, Birch Hill. St. Annes-on-Sca War Memorial Hospital. Southport Corporation (Christiana Hartley). Stretford Memorial Hospital. Warrington Corporation (Borough General-Whitecross). Warrington Corporation (Latchford). Whiston Infirmary. Widnes Ethel Gossage Maternity Home.

During the past year the total number of women admitted was 181. This compares with 198, 175, 145, 56, and 51 for the previous five years. In each case an enquiry is made by the Health Visitor into the economic and sanitary circumstances of the homes. During the year the payment for these patients amounted to £1,484 5s. 5d., of which £492 15s. 5d. was recovered from the patients.

The Care of Debilitated Children under School Age.—There has been no change in the method of earing for these children since the last report was issued. Facilities exist for their inspection and treatment at Child Welfare Centres, School Clinics, Orthopædic Clinics, Ophthalmic Clinics, Dental Clinics, and at hospitals for the operative treatment of tonsils and adenoids. They are usually seen by the School Nurses and Health Visitors in the course of home visits, and in the mining and manufacturing districts many of them are to be found in school from the age of three onwards. There are now thirty Nursery Classes in the Infant Schools.

During 1932 the School Nurses visited 14,643 separate homes and as Health Visitors made 89,851 visits to homes, etc., and during this year 4,366 children between two and five years of age made 28,713 attendances at the Child Welfare Centres.

Children under the age of three years, and, in exceptional circumstances, from three to five years, can be provided under the County Council Maternity and Child Welfare scheme with fresh or dried milk, cod liver oil, or Virol, at cost price, less than cost price, or free, when they are certified by the Medical Officers in charge of the Child Welfare Centres to require extra nourishment.

In districts where the County Council is the Authority responsible for Maternity and Child Welfare, no difference is made in practice in the facilities provided for the care and treatment of school children and for those under school age.

Dental treatment is available for expectant and nursing mothers and for children under school age.

District.	Address of Child Welfare Centre.	Day and Time Open.	Health Visitor Appointed.
Accrington (B)	Ambulance Drill Hall, Bull Bridge	Daily, 9-11, Thursday,	One Senior Health Visitor; three
	Municipal Maternity Home, Rough Lee	Ante-natal Clinic Friday, 10—12	Health Visitors who also act as School Nurses
shton-in-Makerfield	Congregational Sunday School, Gerard Street Enville House, Scotland Street	Thursday, 2—4 Tuesday & Wednesday,	Whole time Whole time (3).
Canton-under-Dyne (D)	Ante-astal Line, Ma	2-4.	whose time (a).
	Richmond House, Richmond Street	Monday, 10-12 Thursday, 2-4 Wednesday, 2	
	Ormonde Street School, Hurst	Wednesday, 2-4 Ante-natal Clinic held each Friday altern-	a const truck and the
Bacup (B)	Rochdale Road	ately at Enville and Richmond centres, Daily, 9-5.30	Two Health Visitor
a ha ania adar to	Town Hall Annexe	Tuesday, 3-5.30	who also act a School Nurses. Whole time
Srierfield	the standard of the standard backs	Wednesday, 2.30-5.30 Thursday, 3-5	the time
	amplet enterning	Friday, 3-6.30 Ante-natal Meetings, alternate Thursdays.	(II) rosta
hadderton	Washbrook Primitive Methodist School	Monday, 2-5	Whole time (2)
	Town Hall, Middleton Road	Tuesday and Thursday, 2-5	
(B)	Eaves Lane Congregational School St. George's Street School Public Health Department	Wednesday, 2.30—4 Thursday, 2.30—4 Ante-natal Clinic, first Wednesday in each month, 10—12	Whole time (2)
litheroe (B)	The Castle	Fortnightly	Health Visitor also acts as School Nurs
Colne (B)	Bank House, Albert Road	Wednesday and Thursday, 9—1 and 2—5 Ante-natal Clinic at Maternity Home, Wednesday and Fri-	Whole time (1) ; par time (1).
Darwen (B)	43, Bolton Road	day, 3-7. Daily, 9-10, 4.30-5.30 Tuesday and Thursday 2.30-5	Whole time (2)
	Greenfield Institute	Ante-natal Clinic daily at Bolton Rd., 9-10 Wednesday, 2.30-5	
Denton	Peel Street	Monday, 2-5	Whole time
Secles (B)	Green Lane, Patricroft	Monday, Tuesday, Wed- nesday and Thursday, 2-4.30 Ante-natal Meetings, alternate Fridays, 2.30-5.	One Senior Healt Visitor; fou Health Visitor who also act a School Nurses
Failsworth	Carnegie Library, Oldham Road	Wednesday, 2-4.45	Whole time
Farnworth	Wesley School, Market Street	Monday, Wednesday and Friday, 2.30-4.30 Ante-natal Clinic held at	Whole time (2)
	Methodist School, High Street	Greenbank Nursery School fortnightly. Alternate Thursdays,	Whole time
Great Harwood	Methodist School, High Street Mereer Hall	2.30-4.30 Wednesday, 2.30-4.30	Part time
Haslingden (B)	Old Wesleyan School, Manchester Road	Alternate Thursdays, 2.30-4.30	Health Visitor als acts as School Nurs
Heywood (B)	Hornby Street School	Thursday, 2—5 Ante-natal Clinic held weekly.	Three Health Visitor who also act a School Nurses
Hindley	White House, Liverpool Road	Daily, 2-5 Ante-natal Clinic, Wed-	Whole time
Horwich	Public Hall	nesday, 2—3 Daily, 9—10; Wednes- day and Thursday,	Whole time (2)
	A REAL PROPERTY OF THE PARTY OF THE PARTY.	3-5	And the second se

\*Included in the County Council Maternity and Child Welfare scheme from 1st April, 1933.

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LIST OF LOCAL CHILD WELFARE CENTRES	continued.
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District.	Address of Child Welfare Centre.	Day and Time Open.	Health Visitor Appointed.
Ince-in-Makerfield	Council Offices	Tuesday and Thursday,	Whole time (2)
Lancaster (B)	Thurnham House, Thurnham Street	Wednesday and Thurs- day, 2-4 Ante-natal Clinic, Fri- day, 2-4	Four Health Visitors who also act as School Nurses
	Ryelands, Skerton	Monday, 2-4	Matter Astronomical
Leigh (B)	Stone House, St. Helens Road	Monday, 2-4 Ante-natal Clinie, Mon- day, 2-4 Wednesday, 2, 4	Six Health Visitors, who also act as School Nurses
	Nangreaves Street              Coal Pit Lane	Wednesday, 2-4 Wednesday, 2-4	
Lytham Saint Anne's (B)	Public Baths, Lytham Public Offices, South Drive, St. Anne's	Thursday, 2.30—5 Tuesday, 2.30—5	Two Health Visitors, who also act as School Nurses
Middleton (B)	Health Department, Durnford Street Reading Room, Middleton Junction	Thursday, 2-5; alter- nate Wednesdays 2-5 Alternate Wednesdays,	Three Health Visitors, who also act as School Nurses
Mossley (B)	Wesleyan School, Stamford Road	2-5 Wednesday, 2-4	Whole time
Nelson (B)	9, Carr Road	Wednesday, 2.30-5	Whole time (2) ; part
Newton-in-Makerfield	Town Hall, Earlestown Town Hall, Newton-le-Willows	Tuesday, 2.30-4.30 Monday, 2.30-4	time (1) Whole time
†Prestwich	Wesleyan School, Chapel Street	Wednesday, 2.30-5	County Nurse attends
Radeliffe	Close Park	Tuesday and Thursday, 1.30-4 Ante-natal Clinic, Thurs-	Whole time (1); part time (1)
Ramsbottom	Technical School, Stubbins Lane Hill Street, Summerseat	day, 10—12 Tuesday, 2.30 Alternate Wednesdays, 2.30	Whole time
Rawtenstall (B)	Council School, Cloughfold	1st and 3rd Tuesday, 2.30-4	Two Health Visitors, who also act as
	Council School, Goodshaw	2nd and 4th Tuesday, 2.30-4	School Nurses
	Council School, Whitewell Bottom	2nd and 4th Tuesday, 2.30-4	
Royton	Free Library, Rochdale Road	Wednesday, 2-5	Whole time
Stretford	38/40, Talbot Road, Old Trafford	Monday and Thursday 2-4,30	Whole time (1); part
	Sixth Street, Trafford Park Public Hall	Tuesday, 2.30-4 Wednesday, 2.30-4 Ante-natal Clinic, monthly	time (3)
Swinton and Pendlebury	Council Offices, Swinton	Wednesday and Thurs- day 1.30-5 Ante-natal Clinic, first	Whole time (2)
AND	Beechfield House, Folly Lane,	three Mondays in each month, 3—5 Tuesday, 1.30—5	
Tyldesley-with-Shakerley	Swinton Technical School	Thursday, 2-4.30	Whole time
Upholland	Nil	dent bene cant	District Nurse acts as
Waterloo-with-Seaforth	The Clinic, Prince Street, Waterloo	Monday, 2.30-4.30 Wednesday, 10.30-12.30 and 2.30-4.30	Health Visitor Whole time (2)
Westhoughton	Sunnybank, Market Street	Ante-natal Clinic, Wed- nesday, 10.30-12.30 Tuesday and Thursday, 2.30-4.30	Whole time (2)
Widnes (B)	Town Hall Cooper Hall	Consultations. Treat- Mon., 1.30 ment Tues., 1.30 Daily	Seven Health Visitors, who also act as
	Mill Brow Halebank	Thurs., 1.30 9-5 Wed., 9-12 Wed., 9-12	School Nurses
A REAL PROPERTY AND A REAL	Town Hall	Ante-natal Clinic, Wednesday 1.30-3.30	

† Included in the County Council Maternity and Child Welfare scheme from 1st October, 1932.

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ANTE-NATAL WORK BY LOCAL AUTHORITIES.—In 28 of the 39 districts where the local Health Authorities are responsible for child welfare, ante-natal work, it is stated in the local reports, is carried out to a greater or lesser degree. Medical Officers of Health of the following districts state that ante-natal clinics are held or ante-natal advice is given :—Accrington (B), Ashton-under-Lyne (B), Brierfield, Chadderton, Chorley (B), Colne (B), Darwen (B), Eccles (B), Farnworth, Golborne, Heywood (B), Hindley, Horwich, Lancaster (B), Leigh (B), Lytham St. Anne's (B), Mossley (B), Nelson (B), Newton-in-Makerfield, Radeliffe, Rawtenstall (B), Royton, Stretford, Swinton and Pendlebury, Tyldesley-with-Shakerley, Waterloo-with-Seaforth, Westhoughton, and Widnes (B). At Denton an ante-natal clinic will shortly be established, and at Middleton (B) a scheme has been prepared but is held over on financial grounds. Sterilized maternity outfits are provided by the local authority at Colne (B), Farnworth, Horwich, Leigh (B), Mossley (B), Radeliffe, Stretford, Swinton and Pendlebury, Tyldesley-with-Shakerley, and Waterloo-with-Seaforth.

**OBSTETRIC CONSULTANTS.**—In the following districts arrangements have been made by the local authorities for the services of obstetric consultants :—Accrington (B), Ashton-in-Makerfield, Ashton-under-Lyne (B), Bacup (B), Brierfield, Chorley (B), Colne (B), Darwen (B), Denton, Eccles (B), Farnworth, Golborne, Great Harwood, Hindley, Horwich, Lancaster (B), Middleton (B), Nelson (B), Radeliffe, Royton, Stretford, Swinton and Pendlebury, Waterloo-with-Seaforth, and Widnes (B). (The County Council arrangements are set out on pages 175 and 176).

SUPPLY OF MILK AND FOODSTUFFS.—In practically all the districts doing Child Welfare work, arrangements have been made by which a supply of food and milk for expectant and nursing mothers, and of milk for young children is available in necessitous cases.

MATERNITY HOMES.—Maternity homes have been established by or with the aid of Local Authorities in the following districts :—Accrington (B), 8 beds; Colne (B), 8 beds; Leigh (B), 18 beds; Nelson (B), 10 beds; and Radeliffe, 10 beds. At Lytham Saint Anne's (B) 15 beds are available at the hospitals; at Stretford 8 beds are reserved at the Memorial Hospital, and at Widnes (B), 10 beds, under the control of the District Nursing Association. In 26 other districts, it is stated, accommodation for maternity cases is available, if required, at local hospitals, infirmaries and other institutions in neighbouring large towns, or in maternity homes in adjoining districts. In other areas the public assistance hospital is the only public provision available.

For information regarding private maternity homes, registered under the Nursing Homes Registration Act, 1927, see page 180.

Orthopædic Treatment.—COUNTY SCHEME.—CRIPPLING DEFECTS AND ORTHOPÆDICS.—The arrangements for dealing with crippled children were fully described in the Annual Report for 1927. The following is a list of Autonomous Authorities who have joined the County scheme :—

County Boroughs— Blackpool Burnley Bury

Municipal Boroughs-

Accrington Ashton-under-Lyne Bacup Colne Darwen Eccles Haslingden

Urban District Council— Chadderton \*Denton (M. & C. W.) Farnworth \*Golborne (M. & C. W.) Hindley \*Horwich (M. & C. W.) Ince-in-Makerfield Oldham (beds only). Preston Wigan

Heywood Lancaster Leigh Lytham St. Anne's Morecambe Nelson Rawtenstall

\*Newton-in-Makerfield (M. & C. W.) Radeliffe
\*Royton (M. & C. W.) Stretford (beds only).
\*Tyldesley (M. & C. W.) Waterloo-with-Seaforth
\*Westhoughton (M. & C. W.)

Oldham and Stretford have their own After-Care scheme, but send cases to the Biddulph Orthopædic Hospital.

\*Autonomous Authorities for Maternity and Child Welfare purposes.-The Lancashire Education Committee are responsible for the school children in these districts.

N

The following table shows the number of children treated during 1932 :---

# AFTER-CARE CENTRES.

The following is a summary of the work done during the year in the After-Care	Centres :
No. of individual children who attended	3,444
Total No. of attendances made	15,745
No. of children referred to Consultant Orthopædic Surgeon at Hospitals (And	coats
	279
No. of children recommended for operative treatment by Orthopædic Surgeon	
Centre or Hospital	885
No. of Plasters made at Centres	268
No. of surgical appliances, e.g., boots, irons, &c., supplied through Centres	1,141
No. of children given remedial exercises	1,085
No. of children for whom treatment has been refused by parents or guardians	105

The following table shows the defects from which the children seen in the After-Care Centres were suffering :---

				D.C. W. M. Star	
Paralysis-				Deformities, Traumatie-	~ .
(a) Infantile—Facial			3		94
Upper limb			38	Subluxations	2
Lower limb			266	Dislocations	2
Upper and	lower 1	imbs	12	Displaced Epiphysis	5
(b) Spastic-Monoplegia			9	Contusions	7
Diplegia			18	Tendons	7
Paraplegia		•••	101	Ammutations	4
Hemiplegia			135		18
Tetraplegia			1	- Provide the second se	5
(c) Birth Palsy			76	Intra Uterine Amputation of Hand	9
				Intra Uterine Amputation of Hand	
Deformities, Congenital-			-	and Foot	4
Hydrocephalus			7	Coxa Vara	10
Cleft Palate			2	Nerve Injuries	10
Scoliosis		•••	26	Other Deformities	22
Sprengel's Shoulder			10		
Rudimentary and Malford	med Li	mbs	25		
Talipes Equino Varus			132	Evening and a second	
Talipes Equino Valgus			24	Deformities, Other-	
Pes Calcaneus			53		29
Torticollis			96	Des Comus	42
Torticollis, Spasmodic			12	Des Verme	9
Spina Bifida			28	D DI	-
Spina Bifida with Club Fo	ot		10	Comp Decompositions	205
Achondroplasia		***	4		100
Metatarsus Varus			41		14
Absence of Bones			4	B	17
Club Hand			2	Scoliosis 1	75
Dislocation of Hip			67	Kyphosis 10	06
Subluxation of Hip			7	Lordosis	24
Contractions			14	Concertanta Da Rosa and The	1
Syndactylism			3	Press de Constaire	34
Wedged Vertebrae			5	II. man on These	1000
Adduction Fifth Toe			12		15
Supernumerary Digits			2	Birth Fractures	2
Other Deformities			24	Miscellancous	75

Rickets- Genu Varum			341	Tumours-	
Genu Valgum			402	Exostosis-Multiple	8
Genu Valgum and Co	oxa Vara		1	Lower Limb	11
Genu Varum and Co	xa Vara		6	Naevus	1
Generalised			87	Ganglion	5
Acute			21	Fibroma	2
Renal			4	Lipoma	4
				Cyst	13
Inflammations-			16	and age of the	
Arthritis					
Arthritis, Suppurativ	ve		11		
Arthritis, Infective	***		21		
Periostitis and Ostei	tis	••••	5		
Synovitis		***	82		
Bursitis '			13	Nervous Diseases-	
Epiphysitis			6	Calmatized and an inclusion of the state	
Pyaemia			3	Mental Deficiency	16
Schlatter's Disease			6	Encephalitis Lethargica	2
Osteomyelitis			18	Polio Encephalitis	5
Dactylitis			7	Other Medical Neuroses	7
Other '			9	Progressive Muscular Atrophy	2
Tuberculosis-				riegressive subscular morehay	
A C Vara			13	Connection Come Come Commission	
TEn			6	a second s	
Elbow			0	Companying and and a standard	
Os Calcis			0	dament	
0.1				Paraticipana P	
Dactylitis				Miscellaneous-	
4 11				Miscellancous	
There			0	Köhler's Disease	1
Old Vaca			10	Constant Marcala Handarda	
			10	TT	
Spine			1.0		
Hip				Empyema Unclassified	96
Elbow				Unclassified	
Ankle			1	Total	
Shoulder	(****(**))		1	10tai	
Others			2	A COMPACT A	

The following table shows concisely the work done during the year in the Hospitals with which the County Council has arrangements :---

Defect.	No. of Cases treated.	Cured.	Im- proved.	Im- proving.	Refused Treat- ment.	Station- ary.	Died.
Infantile Paralysis	36	2	28	5		1	
Spastic Paralysis	18	del	15	2		1	
Birth Palsy	5	1	8			1	
Deformities-							
Congenital	78	20	41	7		5	
Traumatic	4	2	1	1			
Other	38	4	29	8		1	1
Rickets	75	38	31	5	<sup>3544</sup>	Dot faile	
Inflammations-							
Arthritis	12		6	8		1	2
Osteomyelitis	5	1	3	1			
Abseess	2	2					
Bursa	1	1					
Synovitis	1	1					
Tumours-							
Nævus	1		1				
Exostosis	1	1					
Т.В. Нір	2		1			1	
T.B. Knee	1					1	
Old T.B. Hip	5		2			3	
Total	280	73	161	27		16	8

C. C. Developie	Stabilisation	of Fee						Operatio	-
Infantile Paralysis	 Wrench							23	
	Arthrodesis o		ulder					4	
	Tendon Trans							24	
	rendon frans	pianta	ation						
Inastia Paralusis	Obturator No	uroto	my					-	-
spastic Paralysis	 Elongation of							3	
	Pes Cavus	reno	io Acia					4	
	I es cavus							1	
Birth Palsy	Division of Ir	terna	Rotat	0.80				The state	
sirin Faisy	 Division of It	terma	rnotai	015					
Congenital Torticollis	 Open Correct	ion							
ongennan 1 onneonns	 open contex	ion				.4.			1
Congenital Dislocation	 Manipulation							7	
of Hip	 Reduction							7	
og nop	Trans-trocha	terio	Octent					2	
	A lans-trotina	neme	Ostcot	omy				_	
Rickets	Osteotomies							26	
	 Osteoclasis							20	
	Osteoclasis							0	
ongenital Claw Feet	 Open Correct	ion						1000	
ongentiat Catto Feet	 open correct	ion							
ongenital Club Foot	 Stabilisation							15	
ongentiai Ciao Pooi	 Wrench						***	15	
	Tenotomy of	Tonde	Achil	lin				7	
	renotomy or	renue	o Acim	us				2	
ubercular Arthritis	Trans-trochar	stania	Ortest	ome				-	-
uoercuiar Ariarais	 Trans-trocha	nerie	Osteor	omy					
a Casting Authoritie	Arthrodesis								
nfective Arthritis	 Arthrouesis								
steomyelitis	Sequestrecton								
steomyelilis	 sequestrecton	iy							
liscellaneous *	 Plastic Opera					***		2	
	Plastic Opera		with S	kin Gr	aft			6	
	Hammer Toe							2	
	Hallux Valgu							1	
	Removal of E				· · · · · · · · · · · · · · · · · · ·			2	
	Removal of M							1	
	Open Reducti							1	
	Manipulation	Conge	enital I	Deform	ities			2	
									1
								The state	

During the year 201 children were admitted to Biddulph Hospital and the following table gives particulars of the defects from which these children were suffering :—

Bone Diseases	 Rickets			 		38	
	Achondroplasia			 		1	
	Osteomyelitis			 		3	
	Neoplasm			 		1	
	E					in-	43
Bone Injuries	 Fractures			 		1	
	Slipped Epiphysis			 		1 2	
						-	3
Joint Deformities	 Congenital Dislocat	ion of	Hip	 			13
Joint Diseases	 Tuberculosis			 	1 1000	2	
	Infective Arthritis			 		10	
	Pseudo-coxalgia			 		3	
	Infective Synovitis			 		1	
							16
Joint Injuries	Dislocations					No.	
Joint Infunes	 Subluxations			 		1	
	Subruxations			 		-	2
Tendon Diseases	 Ganglion					11 11	ĩ
I Chuon Discuses	 Ganguon			 		12001	13
Skin and Subcutaneous	Sear Contraction			 		3	
Tissue	 Pre-patellar Bursa			 		1	
	A REAL PROPERTY OF A REAL PROPER					1	4

(1) Central	 Spastic Para Infantile Hen	olegia	 a	 	 	3 3	
	Anterior Poli	omyeli	tis	 	 	30	
(2) Peripheral	 Birth Palsy			 	 	7	
Other Deformities :							
(1) Congenital	 Torticollis			 	 	20	
and supervised association	Collis Brevis			 	 	1	
	Scoliosis			 	 	7	
	Spina Bifida			 	 	2	
	Coxa Vara	***		 	 	1	
	Contractures			 	 	2	
	Pes Cavus		••••	 	 	11	
	Talipes Equir			 	 	10	
	Macrodactyly			 	 	2	
						-	
(2) Acquired	 Genu Varum			 	 	2	
Land and the second	Genu Valgum	1		 	 	5	
	Hammer Toe			 	 	2	
	Hallux Valgu	IS		 	 	1	
	Scoliosis			 	 	1	
	Postural			 	 	3	
	Torticollis			 	 	3	
	Hydrocephalt	15	·	 	 	2	
	Kyphosis		••••	 	 •••	1	
	era strenderender					18533	

The number of plasters applied during the course of treatment of the patients for the year was 462. The number of treatments given in the Massage Department was 5,462.

Massage only	 	 	 1,016
Electrical	 	 	 513
Radiant heat	 	 	 560
Exercises	 	 	 3,373

Artificial sunlight was again carried out regularly during the winter months for all cases in which it was considered necessary.

During 1932 there were a few cases of Measles and German Measles.

The immunisation of staff and patients who show positive reaction to the test for susceptibility to Scarlet Fever is still continued.

During the year there were two deaths from post-operative shock following a major operation on the hip.

LOCAL ORTHOP.EDIC SCHEMES.—Among the Town and District Councils which are local authorities for child welfare purposes which have made arrangements for orthopædic treatment are Chorley (B), Swinton and Pendlebury, and Widnes (B). Other districts have facilities for treatment at institutions or clinics outside their area. On page 193 is a list of Autonomous Authorities who participate in the County Council scheme.

# BLIND PERSONS ACT, 1920.

Blind Persons Act, 1920.—This Act empowers County Councils and County Borough Councils, whether in combination with any other Council or Councils or otherwise, to make arrangements for promoting the welfare of blind persons ordinarily resident within their area, and such Councils may, for this purpose, provide and maintain or contribute towards the provision and maintenance of workshops, hostels, homes, or other places for the reception of blind persons.

The Public Health and Housing Committee of the County Council, acting through the Maternity and Child Welfare Sub-Committee, is responsible for the administration of the Act.

The expenses incurred by the County Council under the Blind Persons Act are defrayed out of the County Fund as expenses for general purposes.

The Education Committee, acting through the School Medical Sub-Committee, is charged with the duty of educating and training the blind, and the Public Health and Housing Committee is charged largely with the duty of providing employment for the employable blind and providing financial assistance for the unemployable blind, together with a number of varied activities which may be summed up under the general heading of "Social Work." It would, perhaps, appear that this division of duties causes a certain lack of co-ordination in dealing with the blind, but as the officials of the Public Health Committee and the School Medical Sub-Committee are the same, there is unity of purpose and complete co-ordination in execution.

In compliance with the Blind Persons Act, 1920, a scheme was prepared and approved by the Ministry of Health in September, 1921. In July, 1930, the Public Health and Housing Committee agreed to take over from the Public Assistance Committee the administration of domiciliary assistance to blind persons. This necessitated the giving of financial assistance to blind persons by the Public Health and Housing Committee outside the scope of the powers conferred by the County Council's original scheme under the Blind Persons Act, 1920. Consequently a revised scheme was prepared and approved by the Ministry of Health.

#### GENERAL AIMS OF THE SCHEME.

1. THE PREVENTION OF BLINDNESS. As it is only possible, in a scheme under the Blind Persons Act, 1920, to make provision for the welfare of persons already blind, it must be understood that the provisions made for the prevention of blindness do not actually form a part of the Council's scheme under the Blind Persons Act, 1920. It is considered advisable, however, to state for information that the methods adopted by the Lancashire County Council for the prevention of blindness are as follows :-

- (a) By using the medical and nursing staff in the prevention or treatment of ophthalmia neonatorum.
- (b) By providing facilities under the Venereal Diseases Regulations for the prevention or cure of venereal diseases.
- (c) By providing treatment, either at hospital or otherwise, for persons, where there is danger of permanent blindness if efficient treatment is not promptly undertaken.
- (d) By such other means employed by the medical and nursing staffs of the combined department as may tend to the prevention of blindness caused by other diseases.
- (e) By general educational methods through the staff of the department.

2. CARE OF THE BLIND. The main effort of the County Council is directed towards :-

- (a) The education and training of children and adults.
- (b) The provision of employment for those who are employable.
- (c) The provision of financial and other assistance to unemployable and other destitute blind persons.
- (d) The provision of financial and other assistance to the sighted dependent wife and/or children, under 16 years of age, of blind persons. (e) The provision of home teaching and the social welfare of the blind.

#### GENERAL METHOD.

The scheme is worked through existing blind institutions and workshops and other voluntary agencies and, as far as possible, co-operation is arranged with other Local Authorities under the Act.

3. REGISTRATION. There are two statutory definitions of blindness. In Section 69 of the Education Act, 1921, a blind child is defined as being "too blind to be able to read the ordinary school books used by children."

When a child, who has been classified as blind within the meaning of the Education Act, 1921, attains the age of 16 years, he has to be re-examined with a view to determining if he is blind within the meaning of the Blind Persons Act, 1920. Section 1 of the Blind Persons Act, 1920, defines a blind person as one who is "so blind as to be unable to perform any work for which eyesight is essential.'

It will be seen that these definitions include many persons other than those who are totally blind, and that the educational definition, which is largely preventive in its purpose, is much wider than the other.

The County Council maintain such a system of registration of blind persons as gives them all the necessary information for the full administration of these Acts. No person's name is included on the Register of Blind Persons unless he is certified by one of the Assistant County Medical Officers to be blind within the meaning of the Education Act, 1921, or of the Blind Persons Act, 1920, as interpreted in Circulars 681 and 780 of the Minister of Health. If a person is considered to be a border-line case, he is examined by one of the Ophthalmic Surgeons with whom the Lancashire County Council have made special arrangements, and his name is not included on the register unless he is certified by the examining Ophthalmic Surgeon to be blind within the meaning of the Act.

The following table shows the number of blind persons in the Administrative County area, distributed according to age periods :----

Under	5	years of age	 	 	 	 5
From	5-16	,,	 	 	 	 91
.,	16-21		 	 	 	 94
	21-50	.,	 	 	 	 616
	50-70	.,	 	 	 	 1,124
Over	70		 	 	 	 928
						2,858
						2,000

The Lancashire County Council provides for :--

1. CHILDREN UNDER SCHOOL AGE.—Provision is made for the welfare of blind children under school age through the Home Teachers, acting in co-operation with the Health Visitors. Where the home conditions are unsatisfactory, provision is made, when considered desirable, for accommodation in one of the Sunshine Homes of the National Institute for the Blind, or similar Institution, or when the child is between two and five years of age, the case is referred to the Local Education Committee to make suitable provision in a Nursery School recognised by the Board of Education.

2. THE EDUCATION AND TRAINING OF CHILDREN, YOUNG PERSONS AND ADULTS. (a) The number of children of elementary school age who were maintained during the year 1932 at the following Institutions was 39 boys and 31 girls, viz. :--

	Boys.	Girls.	1	Cotal.	
Burnley Blind School	 1	 1		2	
Catholic Blind Asylum, Liverpool	 1	 5		6	
Homes for the Blind, Fulwood	 10	 7		17	
Liverpool School for the Blind	 3	 7		10	
Oldham Blind School	 3	 5		8	
Thomasson Memorial School, Bolton	 7	 1		8	
Henshaw's Institution, Manchester	 13	 4		17	
Sunshine Home, Southport	 1	 -		1	
Chorley Wood Cottage, Watford	 11-11	 1		1	
all winder of whitespine in 7 aut as white					
	39	 31		70	
		1000			

(b) The number of blind persons over 16 years of age who were maintained during the year 1982 at Special Institutions for the Blind was as follows :---

	Males.	F	emales.	Total.
Blackburn Workshops for the Blind	3		2	 5
Bolton Workshops for the Blind	7		5	 12
Burnley Workshops for the Blind	4		2	 6
Fulwood (Preston) Workshops for the Blind	12		4	 16
Liverpool (Hardman St.) School for the Blind	4		7	 11
Liverpool, Catholic Blind Asylum	2		8	 5
Liverpool, Cornwallis Street Workshops for the Blind	2		( <u>1</u>	 2
London, Royal Normal College	1		1	 2
Manchester (Henshaw's) Institution for the Blind	26		16	 42
	61		40	 101

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The blind persons over 16 years of age referred to in the previous table are being trained in one of the following occupations :---

Boot repairing. Brush making. Chair seating. French polishing. Furniture making. Hand loom weaving. Machine knitting. Mat making. Mat making. Music teaching. Piano tuning and repairing. Rug making. Skip making and basketry.

Before selecting the occupation in which a blind person should be trained, the capability of the individual is considered, and also the prospect of employment being found for him in that occupation in the locality in which he lives. The future employing agency is notified from time to time of the progress each blind person is making, and in the last few months of training definite arrangements are made for the blind person to report at the workshop or Society for the blind, nearest to his home, for employment, as a workshop employee or home worker.

EMPLOYMENT IN WORKSHOPS. When a blind person completes his training and there is a workshop for the blind within reasonable distance from his home, arrangements are made for his employment there. The occupations carried on at the workshops for the blind are as stated above.

The regulations of the Ministry of Health provide that weekly pay should be "at the trade union or other standard rate customary in the particular class of work in which the blind person is employed."

The handicap of blindness, however, prevents most blind persons from earning a livelihood if they are paid only what they earn on a strictly commercial basis. Consequently it is necessary to augment their earnings, and the Lancashire County Council pay grant at the rate of £40 per annum in respect of each County workshop employee. This augmentation is paid over to the individual workshop employees in amounts varying according to their weekly earnings.

In a few instances it was found that owing to the general trade depression the earnings and augmentation of a few workshop employees did not amount to 25/- a week, and consequently they were not as well off as an unemployable blind person. These cases are assisted by the Lancashire County Council in as much as the Council, after ignoring the first 5/- of their earnings and augmentation, grant them such financial assistance as may be necessary to ensure that they have a weekly income of 25/- (including the assessed weekly value of "home circumstances").

The following table shows the workshops for the blind and the number of county workshop employees employed there :---

Blackburn ar	id Distr	ict Wor	kshops fo	r the I	Blind	 		10
Blackpool ,	, ,,		,,		,,	 		1
Bolton ,	, ,,		,,		,,	 		22
Burnley ,	, ,,		"	.,		 		6
Liverpool (H	ardman	Street)	,,	,,		 	1077	1
Liverpool (Co	ornwalli	s Street	),,	,,		 		8
Manchester, J	Henshav	v's Insti	itution			 		38
Oldham Worl	kshops f	for the l	Blind			 		6
Oldham Blind	l Wome	n's Ind	ustries			 		4
Preston (Fulv	wood) W	orkshop	os for the	Blind		 		10
St. Helens W		1				 		2
Warrington						 		4
Wigan						 		18
								120

HOME WORKERS. Where a blind person returns home after his training is completed, and no workshop is within reach he can carry on his trade at home under a "Home Workers" scheme, which is supervised by the Local Voluntary Agency for the blind. The Lancashire County Council pay half the initial expenditure incurred by a Voluntary Agency for the blind in providing tools and equipment for home workers in all cases where the expenditure has, in the first instance, been approved by the Lancashire County Council. A home worker should support himself out of earnings assisted by augmentation in the same manner as a workshop employee. For each home worker approved by the Lancashire County Council a grant at the rate of £40 per annum, on the basis of average weekly earnings, is paid to the Supervising Voluntary Agency for the blind.

The home workers are encouraged to find their own markets for their goods, but where they are unable to do so every assistance is given by the workshops for the blind in disposing of their goods.

In some instances, however, it has been found that some of the home workers have had difficulty in obtaining sufficient orders to keep them fully occupied, with a consequent reduction in their average weekly earnings. These cases are assisted by the Lancashire County Council in as much as the Council, after ignoring the first 5/- of their earnings and augmentation, grant them such financial assistance as may be necessary to ensure that they have a weekly income of 25/- (including the assessed weekly value of "home circumstances").

The following table shows the Workshops and Societies for the Blind and the number of county home workers supervised by them :---

Accrington and District Society for the Blind	1			 14
Blackburn Workshops for the Blind				 2
Blackpool and Fylde Society for the Blind				 1
Bolton Workshops for the Blind				 4
Burnley Society for the Blind				 9
Homes for the Blind, Fulwood, Preston				 15
Liverpool Workshops for the Blind (Cornwal	lis S	t.)		 9
Henshaw's Institution for the Blind, Manche	ster			 5
Oldham Workshops for the Blind				 1
Rochdale and District Society for the Blind				 3
Rossendale Society for the Blind				 7
St. Helens and District Society for the Blind				 2
Warrington, Widnes and District Society for	the	Blind		 1
Wigan and District Workshops for the Blind				 6
National Library for the Blind (Northern Bra	anch	) Manch	ester	 7*
I and a set and a set and and				86
				50

\* These home workers are employed as copyists, and the Lancashire County Council pays grant at the rate of £40 per annum in respect of each copyist provided they work the agreed number of hours weekly.

HOSTELS. Hostel accommodation is provided for those blind persons who have no homes and are employed in approved workshops for the blind. The Lancashire County Council pays grant at the rate of £10 per annum in respect of "hostel" cases.

The following shows the hostels and the number of County cases resident ther	e :—
Woodlands Home and Hostel for Blind Women, Bolton	1
Hayesleigh Home and Hostel, Henshaw's Institution, Manchester	1
	2

HOMES. Accommodation is provided in homes for the blind for suitable adult blind persons who are aged or infirm or incapable of work and are in need of such accommodation. The Lancashire County Council pays grant at the rate of £26 per annum in respect of "home" cases. HOME TEACHERS. The home teachers visit the blind persons in their own homes and teach them Braille or Moon and pastime occupations. They devote a good deal of their time to social work among the blind, and make arrangements to obtain Moon or Braille literature for them from the National Library for the Blind, in addition to reading aloud to the blind other books and newspapers found in their homes. The home teachers keep in touch with the financial circumstances of each individual blind person and report cases to the Supervising Voluntary Agency for the blind. The Lancashire County Council pays grant at the rate of £156 per annum in respect of each home teacher employed wholly in visiting County cases. All home teachers in respect of whom grant is paid must be approved by the Lancashire County Council, and it is a condition of approval in the case of all appointed since the 1st April, 1923, that they should obtain the Home Teaching Certificate of the College of Teachers of the Blind within two years of appointment.

The following table shows the Voluntary Agencies for the blind and the number of County home teachers in respect of whom the Lancashire County Council pays grant :----

Accrington and District Society for the Blind			2
Ashton-under-Lyne and District Society for the Blind			2
Barrow, Furness and Westmorland Society for the Blind			1
Blackburn and Darwen Society for the Blind			2
Blackpool and Fylde Society for the Blind			2
Bolton Workshops and Homes for the Blind			8
Burnley and District Society for the Blind			3
Fulwood Workshops and Homes for the Blind, Preston			3
County area adjacent to Liverpool			1
Henshaw's Institution for the Blind, Manchester			1
Manchester and Salford Blind Aid Society			2
Oldham Blind Persons Act Sub-Committee			1
Rochdale and District Society for the Blind		legal gas	1
Rossendale Society for the Blind	1000	CL Diesos	the first
St. Helens and District Society for the Blind			î
Warrington, Widnes and District Society for the Blind			2
Wigen and District Workshops for the Dlind			2
wigan and District workshops for the Blind			-
			30

UNEMPLOYABLE BLIND PERSONS AND THEIR SIGHTED DEPENDANTS.—The Lancashire County Council has made a declaration that all assistance to necessitous blind persons shall be provided exclusively by virtue of the Blind Persons Act, 1920, and not by way of poor relief.

Furthermore, the functions of the Public Assistance Committee in so far as they relate to the domiciliary relief of the sighted dependent wife and/or children under 16 years of age, of blind persons, are discharged on behalf of, and subject to, the general direction and control of the Public Assistance Committee by the Public Health and Housing Committee of the Council, acting through the Committee of the Council responsible for the administration of the Blind Persons Act, 1920.

The schemes for granting financial assistance to unemployable or destitute blind persons and their sighted dependants were described in detail on pages 192 to 195 of the Annual Report for 1930.

GRANTS TO VOLUNTARY AGENCIES FOR THE BLIND.—The following table shows the amounts paid by the Lancashire County Council to the various Voluntary Agencies for the Blind for the financial year 1982-83 :—

										203											
TOTAL	£ s. d. 3072 10 6	3080 15 6	1211 15 10	568 9 3	3965 17 11	2308 3 6	7054 13 1	2278 0 10	587 16 7	1224 12 10	4457 12 8	289 17 6	895 10 6	441 0 2	39 18 7	2531 17 7	4394 15 1	2675 17 10	826 19 3	13 0 0	340 0-0
Retief of Sighted Dependants of Blind Persons.	£ s. d. 35 14 0	48 16 0	:	:	:	17 10 0	237 18 4	83 7 0		7 12 0	58 13 0		8 16 0	:	:	94 10 0	102 0 0	50 8 0			:
Block Grants to Societies	£ s. d. 100 0 0	150 0 0	75 0 0	100 0 0	160 0 0	110 0 0	200 0 0	80 0 0	10 0 0	30 0 0	200 0 0	8 15 0	· · · · · · · · · · · · · · · · · · ·		1	:	175 0 0	100 0 0	555 0 0		340 0 0
Relief of Uteranslovable Bilind Persons.	g s. d. 2247 17 6	2658 19 6	1018 2 6		3473 17 11	1835 16 6	5106 0 2	1766 19 6		1167 0 10	3003 9 1	281 2 6	886 14 6	35 10 3	1	2210 17 0	3641 1 9	369 16 6			:
Travelling Expenses of Home Teachers.	£ s. d.	5 0 0	:	:	20 0 0	. 5 0 0	30 0 0	10 0 0		:	30 0 0		-	:	:	70 10 7	20 0 0			:	:
Tools and Equipment for Home Workers.	£ s. d. 				:									4 18 8	:	:			3 10 0		
" Hostel " Cases af £10 per annum.	£ s. d. 						10 0 0				:		:					3 4 9			
" Home " Cases at £26 per annum.	<b>£</b> s. d. 					52 0 0	52 0 0				:		:		:	:	144 13 4	518 13 11		13 0 0	
Home Teachers at £1166 per annum.	£ s. d. 234 0 0	218 0 0	118 13 4		312 0 0	234 0 0	468 0 0	387 14 4			436 19 11					156 0 0	312 0 0	29 9 8			:
Home Workers at £40 per accoun.	£ 5. d. 454 19 0		:	88 9 3		13 17 0	153 16 11		358 13 3	:	428 3 10	1 1 10	-	313 3 0	1	:		177 1 4	268 9 3		:
Workshop Employees at £40 per annun.	£ s. d.			380 0 0	:	40 0 0	796 17 8		219 3 4	:	300 6 10			87 8 3	39 18 7			1427 3 8			
Name of Workshop or Society for the Blind.	Accrimeton Workshots	siety			Blackburn and Darwen Society	Blackpool and Fylde Society		Burnley Society	ops	Colne Society	Fulwood (Preston)	Heywood Society	Heywood Brunch (Rochdale Society)	Liverpool, Cornwallis Street Workshops	Liverpool, Hardman Street Workshops	Liverpool, Administrative County Area adjacent to	Manchester and Salford Society	Manchester, Henshaw's Institution	National Library for the Blind	Norwich Institution	Northern Counties Association

Name of Workshop or Society for the Blind.	Workshop Employres at £40 per annum.	Home Workers at £40 per annum.	Home Teachers at £1166 per annum.	" Home" Cases at £25 per annum.	" Hostel " Cases at £10 per ansum.	Tools and Equipment for None Workers.	Travelling Expenses of Home Teachers.	Relief of Unemployable Blind Persons.	Block Grants to Societies.	Relief of Sighted Dependants of Blind Persons.	TOTAL.	
National Institute	s. d. 	£ s. d. 	£ s. d. 	k s. d.	s. d.	& s. d.	k s. d. 	£ s. d.	£ s. d. 309 0 0	. b. з. 	\$ s. d. 309 0 0	1
Oldham, Men's Workshops	221 17 8	36 13 8			:			9 63 63			260 13 10	
Oldham, Women's Workshops	115 6 6										115 6 6	
Oldham Blind Persons' Act Sub- Committee		i	156 0 0	:	:	:	:	1554 14 0	:	4 0 0	14	
Rochdale Society		107 10 6	156 0 0	:			10 0 0	1009 13 11	95 0 0	:	-	
Rossendale Society		243 16 3	156 0 0		:	:		942 14 6	70 0 0	13 10 0	1426 0 9	
St. Helens Workshops	77 7 10	80 0 0	75 17 8	:	:	:	10 0 0	799 7 6	110 0 0	41 15 0	1194 8 0	
Warrington Workshops	106 14 4	20 15 1	312 0 0		:	10 1 0	20 0 0	2587 12 1	220 0 0	115 18 8	3393 1 2	
Wigan Workshops	493 1 4	194 4 8	312 0 0	1	1	:	20 0 0	4403 2 5	380 0 0	283 8 0	0085 16 5	
Total	4305 6 0	2939 13 0	4074 14 11	780 7 3	13 4 9	18 9 8	250 10 7	41002 12 11	3507 15 0	1153 16 0	58136 10 1	1
and an address of the second	340 111 1	122 18 11	0 0 000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 0 0	Recover	ed from the Pul	Recovered from the Public Assistance Committee			1153 16 0	

£360982 14 1

A blind person (not being resident in a public or charitable institution or a school) who produces to the Postmaster-General a certificate issued by or under the authority of the Council of the County, or of the County Borough, in which he is ordinarily resident, that he is registered as a blind person in the area of the County or of the County Borough, may receive a Wireless Licence without the payment of any fee.

All applications for certificates of blindness for blind persons resident in the Administrative County area are forwarded to the County Council. If the applicant is certified by one of the Assistant County Medical Officers to be blind within the meaning of the Blind Persons Act, 1920, the required certificate is issued.

During the year 1982, 450 certificates were issued.

### SHOPS ACTS.

The Shops Acts, 1912-1930.—The County Council is the "local authority" for the purpose of enforcing the Shops Acts in the County area except in municipal boroughs and in the urban districts with a population at the last census of twenty thousand or upwards. The powers of making certain Orders under these Acts have been delegated by the County Council to the Councils of twenty-eight urban districts, but the County Council retained, in these districts, the powers of supervision, prosecutions, etc.

To the end of 1932 the County Council had made 151 Orders of various kinds, and some 73 Orders had been made by local Councils under the powers delegated to them.

During the year under report the following Orders were made :---

By the County Council :---

Districts.	Trade or Business.	Nature of Order made.
Newton-in-Makerfield.	All trades.	Suspension of the general closing hour on Thursday before Good Friday.
Whitworth 1	Exhibition.	Certificate of Exemption.
Revocation of Order :		

Golborne ... Fried fish and chipped potato dealers. Revocation of weekly halfholiday Order.

In addition, an application for an Order was made by the tobacconists, etc. of the township of Maghull in the West Lancashire Rural District, but as the statutory majority was not obtained the application was not acceded to.

By the District Council :---

Distri	icts.		Trade or Business.	Nature of Order made.
Padiham			All trades.	Suspension of the general closing hour on Thursday before Good Friday.
Lees			Butchers.	Order fixing late day.
Lees			All trades.	Suspension of general closing hours during Annual Wakes.
Ramsbott	om (pa	art)	All trades except Newsagents and exempted trades.	Order fixing late day.
Leyland			Exhibition.	Certificate of Exemption.
Littleboro	ugh		All trades.	Suspension of general closing hours from 31st October to 5th November.
Irlam			All trades.	Suspension of general closing hours on New Year's Eve.

OFFENCES.—No legal proceedings were instituted in 1932; a few minor offences were met with cautions. **District Health Reports for 1932.**—The Ministry of Health Circular 1269 to local Medical Officers of Health respecting their annual reports for the year 1932 has been referred to on page 7. From every County district the Summary Form prepared in the County Public Health Department has been received, and from the details given therein much of the information in this report has been prepared. In a few instances the Form was not supplied until the month of July, and at the time of writing (August, 1933) the annual reports of the Medical Officers of Health of fourteen districts have not been received, viz., 6 municipal boroughs, 7 urban districts and 1 rural district.

In concluding my report for the year 1932 I gratefully acknowledge the willing help of district Medical Officers of Health and the local Public Health Staffs, and express my indebtedness to them for their willing co-operation in carrying out the public health work of the Administrative County. I also thank them for supplying on many occasions returns and statistics outside their statutory obligations.

## I have the honour to be, Ladies and Gentlemen,

#### Yours obediently,

#### J. J. BUTTERWORTH,

## County Medical Officer of Health.

Public Health Department,

#### County Offices, Preston,

#### August, 1988.

Surgerston of the point elevents bears on Thara before Great Friday.

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Beyoestion of Onler:

in Revocation of meals in

is middliften, an application for an Order was made by the tubacchools size of the homeshap of Maginali in the West Lanceshire Roral District, but as the statuleer majority was not obtained the application was not acceded to.

THOUSE WAL ..... IN MUNICIPALITY

Les ... m Butcher-

Loss of an All trades

Ramabottom (part)..... All trades except Severagent) and exquilited trades.

iduizi ... healyst

Littlebornugh .... All trades

· All trudes ;.

Cartificate of Exemptions,

bairs from 31st thirder to 5th November

Magnetion of general device

Orresters - No legal proceedings were instituted in 1922, a few manual allences were uni-

# ADMINISTRATIVE COUNTY OF LANCASTER.

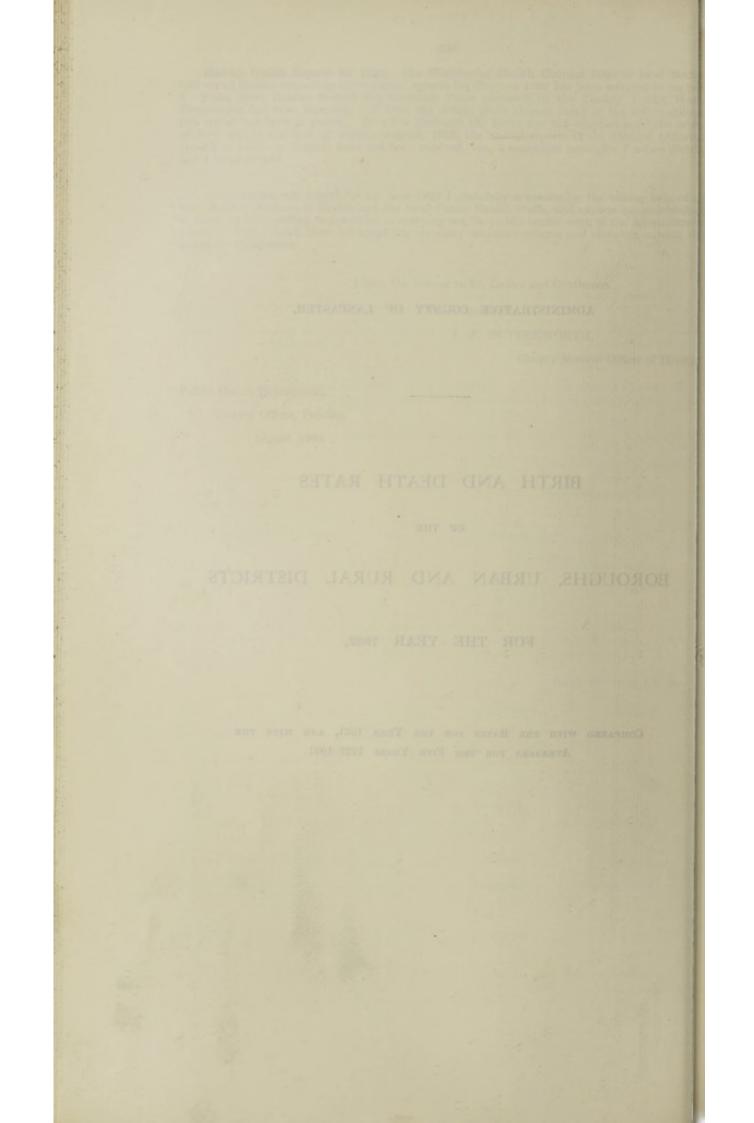
# BIRTH AND DEATH RATES

OF THE

# BOROUGHS, URBAN AND RURAL DISTRICTS

FOR THE YEAR 1982,

COMPARED WITH THE RATES FOR THE YEAR 1931, AND WITH THE AVERAGES FOR THE FIVE YEARS 1927-1931.



# BOROUGHS AND URBAN DISTRICTS.

The district populations are the Registrar-General's estimate for year 1932. For Stillbirth-rate and number of Legitimate and Illegitimate Births see Table 2, pages 15 to 22.

weather that Windows.		Pa	a 1.000 or Es	TINATED POPULA		Matages		- itoga
		Live		Death-rate	Death-rate	Per 1,000	Mortality Rate Per 1,000	Rate of Deaths
		Birth-rate	Death-rate	from Tuberculosis of Respiratory System	from	Line Births	Total (Live and Still)	One Year per 1,000 Live Births
Abram				oystem			Births	
Population, 6,826.								
Mean of 5 years, 1927–1931		16.0	11.7	0.58	0.78	7.28		67
Year-		10.0	11.5	0.50		1000		
1931 1932		16-2 17-2	11-5 10-9	0·59 0·73	1·18 0·58	nil 8·47	nil 7-93	63 50
Increase or decrease in 1932 or	<b></b>							
5 years' average, 1927-1931		+1.2	-0.8	+0.12	-0.50	+1.19	-	-17
Previous year		+1.0	-0.6	+0.14	-0.60	+8.47	+7.93	-13
Accrington (Borough)								
Population, 42,520.								
Mean of 5 years, 1927-1931		12.2	13.9	0.61	1.64	8.65		00
Year-			10.0	0.01	1.04	9.03	_	62
1931		10.6	14.1	0.57	1.84	2.15	2.04	56
1932		9.7	13-3	0.61	1-69	2.42	2.26	72
Increase or decrease in 1932 on								
5 years' average, 1927–1931 Previous year		-2.5 -0.9	-0.6 -0.8	nil +0.04	+0.05 -0.15	-1.23	10.00	+10
Previous year		-0.5	-0.9	+0.04	-0.12	+0.27	+0.22	+16
Adlington								
Population, 4,212.								
Mean of 5 years, 1927-1931		12.9	11.5	0.92	1.43	14.14	-	93
Year		9.9	14-1	0.94	2.12	nil	nil	142
1932		11-3	11-6	0.71	0.71	41.66	37.73	83
Increase or decrease in 1932 on	_							
5 years' average, 1927-1931		-1.6	+0.1	-0.21	-0.72	+27.52	-	-10
Previous year		+1.4	-2.5	-0.53	-1.41	+41.66	+37.73	-59
Ashton-in-Makerfield								
Population, 20,450.								
Mean of 5 years, 1927-1931		15.7	11.5	0.44	1.00	5.65	_	83
Year-								
1931		17-5	13.3	0.57	1.15	2.74	2.64	87
1932		16-2	12-3	0.34	1.02	6.00	5.76	69
Increase or decrease in 1932 on-								
5 years' average, 1927-1931		+0.5	+0.8	-0.10	+0.02	+0.85		-14
Previous year		-1.3	-1.0	-0.53	-0.13	+3.26	+3.12	-18
Ashton-under-Lyne (Borough)								
Population, 51,040.								
Mean of 5 years, 1927-1931		14.3	13.9	0.79	1.55	6.48	_	78
Year-								
1931 1932		14-7 13-5	13-7 13-6	0.75 0.60	2.00 1.62	2.61 4.34	2·47 4·06	69 <b>84</b>
Increase or decrease in 1932 on-					1000			
5 years' average, 1927-1931		-0.8	-0.3	-0.19	+0.07	-2.14		+6
Previous year		-0.8 -1.2	-0.3	-0.19	-0.38	+1.73	+1.59	+15
0		a second second						and the second

				2	Live		Death-rat	LATION Death-rate		Fer 1,000	, Deat
					Birth-rate	Death-rate	e from Tuberculosis Respirator	of Cancer	Live Births	(Live and Still)	One Y per L/ Live Bi
Aspull.— Populati	ion. 7.0	026.					System			Births	
Mean of 5			-1931		18.9	12.9	0.50	1.28	nil	-	9
Year					15-9 <b>17-0</b>	12·5 11·1	0·13 0·56		nil 8-33	nil 8-06	75
Increase or	decrea	ise in	1932 or	<i>i</i> —							
5 years' Previous		e, 192 	27–1931 		$^{-1.9}_{+1.1}$	-1.8 0-1.4	+0.06 + 0.43		$^{+8.33}_{+8.33}$	+8.06	$-3 \\ -1$
Atherton											
Populati											
Mean of 5 Year—	years,	1927-	-1931		15.6	11.2	0.53	1.09	5.57	-	7
1981 1932		····			16·2 15·4	11·6 12·6	0-84 0-54	1·24 1·32	6-09 <b>3-18</b>	5-88 3-01	8 10
Increase or											
5 years' o Previous		e, 192 			$-0.2 \\ -0.8$	$^{+1\cdot4}_{+1\cdot0}$	$^{+0.01}_{+0.20}$	$^{+0.23}_{+0.08}$	$-2.39 \\ -2.91$	-2.82	$^{+3}_{+2}$
										in denouse	
Audenshaw Populati		ne									
Mean of 5			-1931		13.7	12.0	0.50	1.75	5.00	-	6
Year					12.9	13·2 11·3	0.70	2.45	nil	nil	2
Increase or	····				11-1	11-3	0.56	1.81	nil	nil	1
5 years' o	werage			11	-2.6	-0.7	+0.06	+0.06	-5.00		-5
Previous	year				-1.8	-1.9	-0.14	-0.64	nil	nil	-1
Bacup (Borou Populatio											
Mean of 5 g			1931		15.0	16.0	0.54	1.87	5.70	4.00 itte	84
Year					14·4 14·7	15-9 13-6	0.57 0.58	1.24	nil 3-31	nil 3:12	76 52
Increase or	decrea	se in	1932 on	10				16.2			1000
5 years' a Previous		, <i>192</i> :	7–1931 		$^{-0\cdot3}_{+0\cdot3}$	$-2 \cdot 4 \\ -2 \cdot 3$	$^{+0.04}_{+0.01}$	$-0.50 \\ -0.37$	$^{-2\cdot 39}_{+3\cdot 31}$	+3.12	-32 -24
Barrowford.— Populatic		40.									
Mean of 5 y			1931		11.4	18.0	0.32	1.42	8-44	S raines 1	72
4000					12·0 9·9	14-5 12-2	0-18 0-38	1·50 1·52	nil nil	nil nil	109
Increase or	decreas	e in .	1932 on	_					an Star air	annenh an	-
		1	-1931		-1.5	-0.8	+0.06	+0.10	-8.44		

Interaction         I				21)					
Interge and Winstanley         Jorna         Jorna         Jorna           Population, 5,094.         Man of 5 years, 1927–1931         11.8         11.8         0.76         0.84         5.92	And	-	Live	- Constanting	Death-rate from Tuberculosis o Respiratory	Death-rate from	Per 1,000	Per 1,000 Total (Live and	Deaths under One Year per 1,000
Mean of 5 pears, 1927–1931        11-8       11-8       0.76       0.84       5.92        102         Vext- 1951         10-6       15-8       1.16       1.74       nill       nill       145         1952         13-3       11-7       0.39       117       1470       13-51       44         Increase or decrease in 1932 on 5 years' average, 1927–1931        +1-5       -0-1       -0.47       +0.63       +8.78        -53         Previous year         +2.7       -4.1       -0.77       -0.67       +14.70       +13-51       -101         skerd         +2.7       -4.1       -0.77       -0.67       +14.70       +13-51       -101         skerd         14.5       11-2       0.97       1.00       3.27       -       57         Year         14.5       11-2       0.97       1.00       3.27       -       57         Year         160       8.0       0.27       1.01       nil       nil       111         System <td>A CONTRACTOR OF A CONTRACTOR OF</td> <td></td> <td></td> <td></td> <td>System</td> <td></td> <td></td> <td>Births</td> <td>Choring (</td>	A CONTRACTOR OF				System			Births	Choring (
1831         133       117       0.39       1.17       14.70       13.51       44         Increase or decrease in 1932 on	Mean of 5 years, 1927-1931		11.8	11.8	0.76	0.84	5.92	1	102
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1931								
Previous year $\pm 2.7$ $-4.1$ $-0.77$ $-0.57$ $\pm 14.70$ $\pm 13.51$ $-101$ ackrod       Population, 3,608.         Mean of 5 years, 1927-1931 $15.1$ $12.2$ $0.37$ $100$ $3.27$ $ 57$ Year       1931 $14.5$ $11.2$ $0.54$ $0.82$ nil       nil $37$ Jinardow $0.927$ $1.10$ nil       nil $31$ $51$ Increase or decrease in 1932 on $5year's average, 1927-1931$ $$ $+0.9$ $-4.2$ $-0.10$ $+0.10$ $-8.27$ $-1.6$ Previous year $$ $$ $+1.5$ $-3.2$ $-0.27$ $+0.28$ nil       nil $+114$ Increase or decrease in 1932 on $5year's average, 1927-1931$ $10.5$ $12.0$ $0.56$ $1.84$ $7.51$ $ 49$ Year $10.5$ $12.0$ $0.56$ $1.84$ $7.51$ $ 49$ Year $10.5$ $12.0$ $0.56$	Increase or decrease in 1932 on	_							
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Mean of 5 years, 1927–1931       15-1       12-2       0.37       1.00       3.27       -       57         Year-       1391         16.0       8.0       0.27       1.10       nil       nil       s7         1392         16.0       8.0       0.27       1.10       nil       nil       s7         1391         16.0       8.0       0.27       1.10       nil       nil       s7         1392         16.0       8.0       0.27       1.05       3.27         -6         Trevious year         +1.5       -8.2       -0.27       +0.28       nil       nil       +14         Herious year         +1.5       -8.2       -0.27       +0.28       nil       nil       +14         Herious year         10.5       12.0       0.56       1.84       7.51       -       49         Year        10.7       12.1       1.16       1.42       nil       nil       16         1331	and the second se								
1931         16.0       8.0       0.27       1.10       nil       nil       nil       51         Increase or decrease in 1932 on       5       9 cars' average, 1927-1931 $+0.9$ $-4.2$ $-0.10$ $+0.10$ $-8.27$ $$	Mean of 5 years, 1927-1931	1	15.1	12.2	0.87	1.00	8.27	-	57
Increase or decrease in 1932 on- $\frac{5}{y}ears^{2}$ average, 1927-1931 $+0.9$ $-4.2$ $-0.10$ $+0.10$ $-8.27$ $-3.27$ $-6$ Previous year $\frac{1927-1931}{1}$ $\frac{19.5}{1}$ $\frac{19.5}{1}$ $\frac{19.0}{1}$ $\frac{19.5}{1}$ $\frac{19.0}{1}$ $\frac{19.5}{1}$ $\frac{19.2}{1}$ $\frac{19.5}{1}$ $\frac{19.5}{1$	1981								
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					0.21	1.10	nıı	nii	51
Previous year $\pm 1.5$ $-3.2$ $-0.27$ $\pm 0.28$ nil       nil $\pm 14$ <b>lierfield</b> Population, 7.743.       Mean of 5 years, 1927–1931 $10.5$ $12.0$ $0.56$ $1.84$ $7.51$ $ 49$ Year-       1931 $10.9$ $11.9$ $0.12$ $2.70$ nil       nil $47$ 1932 $10.7$ $12.1$ $11.6$ $14.42$ nil       nil $60$ Increase or decrease in 1932 on $5$ years' average, 1927–1931 $\pm 0.2$ $\pm 0.1$ $\pm 0.60$ $-0.42$ $-7.51$ $=$ $\pm 11$ Previous year $$ $-0.2$ $\pm 0.2$ $\pm 1.04$ $-1.28$ $nil$ $nil$ $111$ Previous year $$ $10.7$ $14.0$ $0.94$ $1.33$ $nil$ $-71$ Year- $1301$ $$ $10.7$ $14.0$ $0.94$ $1.33$ $nil$ $-71$ Year- $1332$ $$ $10.7$ $14.0$ $0.94$ $1.33$ <t< td=""><td></td><td></td><td>10.0</td><td>-4.9</td><td>0.10</td><td>10.10</td><td>0.0*</td><td></td><td>and a state of the</td></t<>			10.0	-4.9	0.10	10.10	0.0*		and a state of the
Population, 7,743. Mean of 5 years, 1927–1931 10-5 12-0 0-56 1-84 7-51 49 Year- 1931 10-7 12-1 1-16 1-42 nil nil 47 1932 10-7 12-1 1-16 1-42 nil nil 60 Increase or decrease in 1932 on- 5 years' average, 1927–1931 +0-2 +0-1 +0-60 -0-42 -7.51 +11 Previous year0-2 +0-2 +1-04 -1-28 nil nil +13 raforth Population, 3,280. Mean of 5 years, 1927–1931 +0-7 14-0 0-94 1-83 nil 71 Year- 1931 115-4 18-2 0-31 0-62 nil nil 102 1932 16-7 14-9 1-21 0-60 nil nil 75 Increase or decrease in 1932 on 5 years' average, 1927–19310-6 +0-9 +0-27 -0-73 nil +4 Previous year +0-7 -8-3 +0-90 -0-02 nil nil -27 Kadderton Population, 27,670. Mean of 5 years, 1927–1931 12-9 13-6 0-66 1-46 3-63 - 88 Year- 1931 12-3 13-2 0-57 1-44 nil nil 78 1932 12-3 13-5 0-61 2-02 2-89 2-75 60 Increase or decrease in 1932 on 5 years' average, 1927–19310-4 -0-1 -0-05 +0-56 -0-74 28						a for the second se		nil	
Mean of 5 years, 1927–1931 10.5 12.0 0.56 1.84 7.51 — 49 Year— 1931 10.7 12.1 1.16 1.42 nil nil 47 1932 10.7 12.1 1.16 1.42 nil nil 60 Increase or decrease in 1932 on— 5 years' average, 1927–1931 $+0.2$ $+0.1$ $+0.60$ $-0.42$ $-7.51$ $ +111$ Previous year $-0.2$ $+0.2$ $+1.04$ $-1.28$ nil nil $+13$ (ratorth.— Population, 3,280. Mean of 5 years, 1927–1931 $16.7$ 14.0 0.94 1.83 nil — 71 Year— 1931 $ 15.4$ 18.2 0.81 0.62 nil nil 102 1932 $ 16.1$ 14.9 1.21 0.60 nil nil 75 Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.6$ $+0.9$ $+0.27$ $-0.73$ nil — $+4$ Previous year $+0.7$ $-8.3$ $+0.90$ $-0.02$ nil nil 2.27 (adderton.— Population, 27,670. Mean of 5 years, 1927–1931 $12.9$ 13.6 0.66 1.46 3.63 — 88 Year— 1931 $  12.5$ 13.5 0.61 2.02 2.89 2.75 60 Increase or decrease in 1932 on— 5 years' average, 1927–1931 $12.9$ 13.6 0.61 1.44 nil nil 78 1932 $ -28$	fierfield								
Year- 1981 107 11.9 0.12 2.70 nil nil 47 1932 11 107 12.1 1.16 1.42 nil nil 60 Increase or decrease in 1932 on- 5 years' average, 1927-1931 $+0.2$ $+0.1$ $+0.60$ $-0.42$ $-7.51$ $+11Previous year -0.2 +0.2 +1.04 -1.28 nil nil +13(ratorthPopulation, 3,280.Mean of 5 years, 1927-1931 16.7 14.0 0.94 1.83 nil - 71Year-1931 15.4 18.2 0.31 0.62 nil nil 1021932 16.7 14.9 1.21 0.60 nil nil 75Increase or decrease in 1932 on-5$ years' average, 1927-1931 $-0.6$ $+0.9$ $+0.27$ $-0.73$ nil - $+4Previous year 1927-1931 -0.6 +0.9 +0.27 -0.73 nil - +4Previous year 12.3 13.2 0.57 1.44 nil nil 78Year-1932 12.5 13.5 0.61 2.02 2.89 2.75 60Increase or decrease in 1932 on-5$ years' average, 1927-1931 $12.9$ 13.6 0.66 1.46 3.63 - 88 Year- 1931 $12.5$ 13.5 0.61 2.02 2.89 2.75 60	and the second se								
1932         10.7       12.1       1.16       1.42       nii       nii       60         Increase or decrease in 1932 on       5 years' average, 1927-1931 $+0.2$ $+0.1$ $+0.60$ $-0.42$ $-7.51$ $+11$ Previous year $-0.2$ $+0.2$ $+1.04$ $-1.28$ nil       nil $+13$ (ntorth       Population, 3,280. $-0.2$ $+0.2$ $+1.04$ $-1.28$ nil       nil $+13$ Year-       1931 $16.7$ $14.0$ $0.94$ $1.33$ nil $-71$ Year-       1931 $16.7$ $14.0$ $0.94$ $1.33$ nil $-71$ Year-       1931 $16.7$ $14.9$ $0.42$ nil       nil $102$ 1932 $15.4$ $18.2$ $0.81$ $0.62$ nil       nil $102$ Increase or decrease in 1932 on $5$ years' average, 1927-1931 $-0.6$ $+0.97$ $-0.73$ nil			10.5	12.0	0.56	1.84	7.51		49
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1000								
Previous year $-0.2$ $+0.2$ $+1.04$ $-1.28$ nil       nil $+1.3$ Image: constraint of the system of the sys	Increase or decrease in 1932 on-	-							
Population, 3,280.         Mean of 5 years, $1927-1931$ 16.7       14.0       0.94       1.83       nil        71         Year       1931         15.4       18.2       0.31       0.62       nil       nil       nil       102         1932          16.1       14.9       1.21       0.60       nil       nil       nil       75         Increase or decrease in 1932 on       5       years' average, 1927-1931        -0.6       +0.9       +0.27       -0.73       nil        +44         Previous year         +0.7       -8.3       +0.90       -0.02       nil       nil          Adderton       Number of 5 years, 1927-1931        +0.7       -8.3       +0.90       -0.02       nil       nil          Mean of 5 years, 1927-1931        12.9       13.6       0.66       1.46       3.63       -       88         Vear       1931         12.5       13.5       0.61       2.02       2.89       2.75       60         Increase or	5 years' average, 1927–1931 Previous year							nil	
Population, 3,280.         Mean of 5 years, $1927-1931$ 16.7       14.0       0.94       1.83       nil        71         Year       1931         15.4       18.2       0.31       0.62       nil       nil       nil       102         1932          16.1       14.9       1.21       0.60       nil       nil       nil       75         Increase or decrease in 1932 on       5       years' average, 1927-1931        -0.6       +0.9       +0.27       -0.73       nil        +44         Previous year         +0.7       -3.3       +0.90       -0.02       nil       nil          Adderton       Number of 5 years, 1927-1931        +0.7       -3.3       +0.90       -0.02       nil       nil          Mean of 5 years, 1927-1931        12.9       13.6       0.66       1.46       3.63       -       88         Vear       1931         12.5       13.5       0.61       2.02       2.89       2.75       60         Increase or									
Mean of 5 years, $1927-1931$ 16.7       14.0       0.94       1.83       nil        71         Year       1931         15.4       18.2       0.31       0.62       nil       nil       102         1932          16.1       14.9       1.21       0.60       nil       nil       102         Increase or decrease in 1932 on       5       years' average, 1927-1931        -0.6 $+0.9$ $+0.27$ $-0.73$ nil $+4$ Previous year $+0.7$ $-3.3$ $+0.60$ $-0.02$ nil       nil $-27$ Odderton $+0.7$ $-3.3$ $+0.60$ $-0.02$ nil       nil $-27$ Adderton $+0.7$ $-3.3$ $+0.60$ $-0.02$ nil       nil $-27$ Mean of 5 years, 1927-1931        12.9       13.6 $0.66$ $1.46$ $3.63$ $-$ 88         Year       1931         12.5	Contraction of the Contraction o								
1931         15.4       18.2       0.31       0.62       nil       nil       nil       102         1932          16.1       14.9       1.21       0.60       nil       nil       nil       75         Increase or decrease in 1932 on—       5       5       years' average, 1927–1931        -0.6 $+0.9$ $+0.27$ $-0.73$ nil $+4$ Previous year $+0.7$ $-3.3$ $+0.90$ $-0.02$ nil       nil $-27$ adderton.—       Previous year $+0.7$ $-3.3$ $+0.90$ $-0.02$ nil       nil $-27$ adderton.—       Previous year $+0.7$ $-3.3$ $+0.90$ $-0.02$ nil       nil $-27$ adderton.—       Population, 27,670.       Previous years, 1927–1931 $12.9$ $13.6$ $0.66$ $1.46$ $3.63$ $ 88$ Year—       1931 $12.5$ $13.5$ $0.61$ $2.02$ $2.89$ <td></td> <td>12. 1</td> <td>16.7</td> <td>14.0</td> <td>0.94</td> <td>1.88</td> <td>nil</td> <td>_</td> <td>71</td>		12. 1	16.7	14.0	0.94	1.88	nil	_	71
Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.6$ $+0.9$ $+0.27$ $-0.73$ nil — $+4$ Previous year $$ $+0.7$ $-3.3$ $+0.90$ $-0.02$ nil nil $-27$ Cadderton.— Population, 27,670. Mean of 5 years, 1927–1931 12.9 13.6 0.66 1.46 3.63 — 88 Year— 1931 $$ $12.3$ 13.2 0.57 1.44 nil nil 78 1932 $$ $12.5$ 13.5 0.61 2.02 2.89 2.75 60 Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.4$ $-0.1$ $-0.05$ $+0.56$ $-0.74$ $-28$	1931					and the second se			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	and the second s					0.00			15
Previous year $+0.7$ $-3.3$ $+0.90$ $-0.02$ nil nil $-27$ Cadderton.—         Population, 27,670.         Mean of 5 years, 1927–1931 12.9 13.6 0.66 1.46 3.63 — 88         Year—         1931 12.3 13.2 0.57 1.44 nil nil 78         1932 12.5 13.5 0.61 2.02 2.89 2.75 60         Increase or decrease in 1932 on— $5$ years' average, 1927–1931 $-0.4$ $-0.1$ $-0.05$ $+0.56$ $-0.74$ $-$			-0.6	+0.9	+0.97	-0.72	nil		
Population, 27,670.         Mean of 5 years, 1927–1931        12·9       13·6       0·66       1·46       3·63       —       88         Vear       1931        12·3       13·2       0·57       1·44       nil       nil       78         1932         12·5       13·5       0·61       2·02       2·89       2·75       60         Increase or decrease in 1932 on $5$ years' average, 1927–1931        -0·4       -0·1       -0·05       +0·56       -0·74       -       -28								nil	
Population, 27,670.         Mean of 5 years, 1927–1931        12·9       13·6       0·66       1·46       3·63       —       88         Vear       1931        12·3       13·2       0·57       1·44       nil       nil       78         1932         12·5       13·5       0·61       2·02       2·89       2·75       60         Increase or decrease in 1932 on $5$ years' average, 1927–1931        -0·4       -0·1       -0·05       +0·56       -0·74       -       -28									
Mean of 5 years, 1927-1931 $12 \cdot 9$ $13 \cdot 6$ $0 \cdot 66$ $1 \cdot 46$ $3 \cdot 63$ $ 88$ Vear       1931 $12 \cdot 3$ $13 \cdot 2$ $0 \cdot 57$ $1 \cdot 44$ nil       nil $78$ 1932 $12 \cdot 5$ $13 \cdot 5$ $0 \cdot 61$ $2 \cdot 02$ $2 \cdot 89$ $2 \cdot 75$ $60$ Increase or decrease in 1932 on $5$ years' average, 1927-1931 $-0 \cdot 4$ $-0 \cdot 1$ $-0 \cdot 05$ $+0 \cdot 56$ $-0 \cdot 74$ $-28$	Cadderton								
1981         12.3       13.2       0.57       1.44       nil       nil       78         1932         12.5       13.5       0.61       2.02       2.89       2.75       60         Increase or decrease in 1932 on—         -0.4       -0.1       -0.05       +0.56       -0.74       -       -28	Mean of 5 years, 1927-1931	119-1 1	12.9	13.6	0.66	1.46	8-63	_	88
Increase or decrease in 1932 on- 5 years' average, 1927-19310.4 -0.1 -0.05 +0.56 -0.7428	1931								
5 years' average, 1927-19310.4 -0.1 -0.05 +0.56 -0.7428							- 127.M.S		A CONTRACT
	5 years' average, 1927-1931							+2.75	

			212					
		PER 1	,000 or Est	IMATED POPE	ULATION	Matern	al Mortality Rate	Rate
		Live Birth-rate	Death-rate	Death-ra from Tuberculosi Respirato	is of Canoer	Per 1,00 Lice Birthe	(Live and Still)	Deatl unde One Y per LC Live Bi
Chorley (Borough)				System	Г.,		Births	
Population, 30,720.			10.0	0.10		0.04		-
Mean of 5 years, 1927–1931		15.0	13.0	0.48	1.44	6.84	Collectory, 195	7
Year		14·5 14·2	13·7 13·2	0-85 0-45		6-59 <b>4-57</b>	6-09 <b>4-22</b>	71
Increase or decrease in 1932 on								
5 years' average, 1927–1931 Previous year		$-0.8 \\ -0.3$	$^{+0.2}_{-0.5}$	-0.03 +0.10		$-2.27 \\ -2.02$	-1.87	11
Church.—								
Population, 6,136.								
Mean of 5 years, 1927–1931 Year—		12.2	13.8	0.45	1.81	12.84	to genera, 19;	7
1931 1932		11-3 9-4	18-9 <b>11-8</b>	nil 0-81	1.76 1.79	14-08 nil	18-88 nil	86
Increase or decrease in 1932 on-								
5 years' average, 1927–1931 Previous year		$^{-2\cdot 8}_{-1\cdot 9}$	$^{-2\cdot 0}_{-2\cdot 1}$	$^{+0.36}_{+0.81}$	$^{-0.02}_{+0.03}$	$-12.84 \\ -14.08$	-18.83	-1 -1
Clayton-le-Moors.—								
Population, 7,729.		10.1	10.7	0.50	1.10	0.07		
Mean of 5 years, 1927-1931		13.1	12.7	0.50	1.12	8.71	and the second	9
Year		18-7 13-4	9·7 14·7	0.62 0.25	1·12 2·19	18·18 nil	16-66 nil	7: 10
Increase or decrease in 1932 on-	_							
5 years' average, 1927-1931		+0.3	+2.0	-0.25	+1.07	-8.71	-	+1
Previous year		-0.3	+5.0	-0.37	+1.07	-18.18	-16.66	+8
litheroe (Borough)								
Population, 11,980.								
Mean of 5 years, 1927-1931		12.2	18.2	0.52	1.47	5.81	5 games, 270	4
Year- 1931		11.7	14-0	0.41	1.57	nil	nil	5
1932		11-6	13-1	0.66	1.33	7-14	6.89	7
Increase or decrease in 1932 on-	-							
5 years' average, 1927–1931 Previous year		$-0.6 \\ -0.1$	$-0.1 \\ -0.9$	$^{+0.14}_{+0.25}$	$-0.14 \\ -0.24$	$^{+1.83}_{+7.14}$	+6.89	+2. +1.
Colne (Borough) Population, 23,630.								
Mean of 5 years, 1927-1931	•••	12.4	18.8	0.71	1.39	6.50	5 starts 182	9
Year 1931 <b>1932</b>		12-4 12-8	14·2 13·7	0-83 0-38	1-33 2-03	8-84 6-60	8·16 6·21	110
Increase or decrease in 1932 on-							and the second second	
5 years' average, 1927–1931 Previous year	- 	+0.4 +0.4	$-0.1 \\ -0.5$	$-0.83 \\ -0.45$	$^{+0.64}_{+0.70}$	$^{+0.10}_{+8.26}$	+3.05	-17 -35

i.			21:	3				
	Married Low Married		PER 1,000 OF Es:	IDNATED POPULATE	004	Maternal	Mortality Rate	Rate of
	A LAND AND AND A LAND AND A LAND AND A LAND AND AND AND AND AND AND AND AND A LAND AND AND AND AND AND AND AND AND AND	Live Birth-rate	Carlor Description	Death-rate from Tuberculosis of Respiratory System	Death-rate from Cancer	Per 1,000 Lios Births	Per 1,000 Total (Live and Still)	Deaths under One Year per 1,000 Live Births
40	(ompton			oystan			Births	
Þ.	Population, 14,700.	200 1 4 4 4						
	Mean of 5 years, 1927–1931	18.3	13.3	0.51	1.56	6.72		67
	Year- 1931 1932	13·5 12·4	12·5 12·5	0·53 <b>0·68</b>	1.67 1.36	9·85 5·46	9·09 5·18	49 76
	Increase or decrease in 1932 of	n						
	5 years' average, 1927-1931		-0.8	+0.17	-0.20	-1.26		+9
	Previous year	1·1	nil		-0.31	-4.39	-3.91	+27
	and the second s							
1	Ciston.—							
	Population, 1,903.	1000	120.00					
	Mean of 5 years, 1927-1931	12.1	13.2	0.20	1.40	18.88	1. 1. <u>1. 1. 1.</u> 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	108
	Year- 1931 1932	···· 10·7 ··· 11·0	12·7 11·5	nil nil	1.58 1.05	nil nil	nil nil	142 nil
2	Increase or decrease in 1932 or	4						
	5 years' average, 1927-1931	1.1	-1.7	-0.20	-0.35	-13-33		-108
	Previous year	+0.8	-1.2	nil	-0.48	nil	nil	-142
l	Beneral There							
1	iton-in-Furness.—							
	Population, 10,330.							
	Mean of 5 years, 1927–1931	16.7	14.5	1.14	1.58	4-65	1 11-101	72
	(car- 1931	15-1	16-8	1.16	1.64	6-36	0.00	
	1932	15.2	15.0	1.06	1.93	nil	6-06 nil	70 75
	increase or decrease in 1932 on	-						
	5 years' average, 1927-1931	1.5	+0.5	-0.08	+0.85	-4.65		+3
	Previous year	+0.1	-1.8	-0.10	+0.29	-6.36	-6.06	+5
	Benetics Cont.							
	wen (Borough)							
	Population, 35,580. Mean of 5 years, 1927-1931	11.0		0.00		-		and the second
	lear-	11.9	14-1	0-88	1.74	7.92		74
	1931	11.3	15.5	0.35	1.83	7.26	6.97	82
	1932	11-1	14.8	0.36	2.44	15.07	13.95	47
	ncrease or decrease in 1932 on	-						
	5 years' average, 1927-1931	0.8	+0.7		+0.70	+7.15		-27
	Previous year	0.2	-0.7	+0-01 -	+0.61	+7.81	+6.98	-35
	iton							
	Population, 17,620.							
	Mean of 5 years, 1927-1931	12.1	13.0	0.56	1.81	6.54	The Second State	71
	car-							-1-1
	1931	11.5	12.5	0.56	1.59	9.85	9.17	68
	1932	10.9	13-8	0-51	2.21	nil	nil	72
	ncrease or decrease in 1932 on	-						
	5 years' average, 1927–1931 Previous year	$\dots -1.2$ $\dots -0.6$	+0.8		+0·40 +0·62	-6.54 -9.85	-9.17	+1
	Previous year	0.6	+1.3	-0.05 4	-0.02	-0.99	-9-17	+4

	21+	
	PER 1,000 OF ESTIMATED FOPULATION Maternal Mortality	Rate Rate of
	Birth-rate Death-rate from from Line To Tuberculosis of Cancer Births (Live Respiratory S	L,000 Under and One-Yea and per 1,60 till) Live Bart
Droylsden.—	System B	irths
Population, 14,320.		
Mean of 5 years, 1927-1931	$\dots$ 15.2 12.4 0.77 1.67 5.83 -	64
Year	15.2 12.0 0.89 1.79 14.70 14.0	8 63
1932	12.0 10.6 0.55 1.04 nil n	
Increase or decrease in 1932 on-		
5 years' average, 1927–1931 Previous year	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$18 \\ -17 \\ -17$
Eccles (Borough).—		
Population, 43,830.	100.000 101 0.00	and helingest
Mean of 5 years, 1927–1931 Year—	14.9 12.1 0.71 1.51 3.21	- 68
1931 1932	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Increase or decrease in 1932 on-	-	
5 years' average, 1927–1931 Previous year	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- 7 -13
I rections gener		
ailsworth.—		
Population, 15,830. Mean of 5 years, 1927–1931	13.4 11.8 0.58 1.43 7.24 -	- 74
Year-		
1931 1932	13·7 11·6 0·69 1·38 nil n 13·3 10·0 0·63 1·26 4·71 4·5	il 63 i <b>2 84</b>
Increase or decrease in 1932 on-	- as Stat at some	
5 years' average, 1927–1931 Previous year	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- +10 +21 +21
arnworth.—		
Population, 28,180.		
Mean of 5 years, 1927–1931 Year	14.1 12.5 0.68 1.38 3.95 -	- 80
1981 1932	12·3         12·6         0·55         1·49         2·82         2·6            14·2         11·3         0·35         1·31         2·49         2·3	
Increase or decrease in 1932 on-	_	
5 years' average, 1927-1931	+0.1 -1.2 -0.33 -0.07 -1.46 -	- +9
Previous year	$\dots$ +1.9 -1.3 -0.20 -0.18 -0.33 -0.2	8 +5
leetwood.—		
Population, 23,020.		
Mean of 5 years, 1927-1931	20.0 11.3 0.61 1.13 5.70 -	- 78
Year-	10.9 10.0 0.00 0.00 0.00	
<b>1931</b> <b>1932</b>	19·3 10·6 0·64 1·15 nil n 20·0 9·0 0·43 0·99 4·32 4·1	il 44 9 67
Increase or decrease in 1932 on-	-	
5 years' average, 1927–1931 Previous year	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11 + 23
	and the second se	

				21	15				
Marrie .			and a state of the	Par 1,000 or Es:	TIMATED POPUL	ATION	Maternal	Mortality Rate	Rate of
			Live Birth-rate	Death-rate	Death-rate from Tuberculosis Respiratory	Death-rate from Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still)	Deaths under One Year per 1,000
rmby	-				System			Births	Live Births
Popu	ulation, 8,243.								
Mean o	of 5 years, 1927-1931		13.5	10.8	0.46	1.60	8-49		52
Year-							0.10		02
1931 1932			18-5 11-6	11-3 12-4	0-63 0-84	2·01 1·33	9-34 20-83	9·09 20·20	56 31
Increase	e or decrease in 1932 d							20 20	
and the second s	rs' average, 1927–193.		1.0	10.7					
	ous year	I	$-1.9 \\ -1.9$	$+2\cdot1$ $+1\cdot1$	$^{+0.38}_{+0.21}$	$-0.27 \\ -0.68$	$+17.84 \\ +11.49$	+11.11	$-21 \\ -25$
Flwood									
and a state of the	lation, 7,156.								
	f 5 years, 1927-1931		9.2	12.6	0.00	7.40			
Year-	, o genro, 1021 1001		0.2	12.0	0.23	1.47	nil		71
1931			9.8	14-6	nil	1.46			
1932			11.0	12.5	0.27	1.81	nil nil	nil	82 25
nerease	or decrease in 1932 o	57							20
10000000000	s' average, 1927–1931		+1.8	0.1	10.04	10.01			
Previo	ous year		+1.2	-0.1 -2.1	+0.04 + 0.27	+0.84 + 0.85	nil	nil	-46
and the second			0 0 0		19-10-10	1		mi	-57
G borne									
	ation, 7,503.								
100000	5 years, 1927-1931		17.7	11.0	0 50				
10000	o geurs, 1027-1001		11.1	11.2	0.50	0.85	4.64		76
ear			23.2	10.9	0.58	0.26			
1932			17.0	10-1	0.79	0.20	5-81 nil	5-64 nil	87 78
manager	or decrease in 1932 of	10							
and the second s	s' average, 1927–1931		0.7	0 01	10.00	-			
Previo	nus year		-0.7 -6.2	-1·1 -0·8	+0.29 +0.26	-0.32 + 0.27	-4.64 -5.81	-5.64	+2
- Alexandre	- 603-			101 0.1	1020	1021	-0.01	-0.04	-9
0	Condo								
	er-Sands.—								
and the second second second second	ation, 2,385. 5 years, 1927–1931								
Contract of the local division of the local	5 years, 1927-1931		6.7	15.4	0.69	2.37	nil	Langer and	89
car- 1931			6-4	18.0	0.46	0.04			COLOR OF STREET
1932			6.7	13.4	nil	8·24 2·93	nil nil	nil nil	71 nil
Detterne	or decrease in 1932 or								
10000000000000000000000000000000000000	s' average, 1927–1931				0.00	10.50			
	us year		nil +0.3	$-2.0 \\ -4.6$	-0.69 -0.46	$+0.56 \\ -0.31$	nil nil	nil	89 71
									-11
that Cro									
Popula									
	ation, 20,810.		10.0	10.0					
	5 years, 1927–1931		12.2	10.2	0.42	1.40	1.83	-	48
ear			11-4	10.0	0.40	0.01	1.00		
and the second sec	Extended Area)		11.4	10.6 8.7	0-46	2-01 1-16	4·50 8·47	4-29 7-93	45 50
anne	and the second se		eite	0. 1. 1.	1 1000			1 33	00
	or decrease in 1932 on			1.00	1.				
Previo	s' average, 1927–1931 us year		-0.8 nil	$-1.5 \\ -1.9$	$+0.01 \\ -0.03$		+6.64 +9.07	1.9.64	+2
	01 8	32		-0-1-0	-0.00	-0.85	+3.97	+3.64	+5

\* On the 1st April, 1932, the Urban District of Little Crosby was amalgamated with the Urban District of Great Crosby. Testatistics include the births and deaths occurring in the added area from that date. A small area was transferred to Waterloo-Seaforth, and a small area from Waterloo-with-Seaforth added to Great Crosby. The birth and death rates for 1932 are calculated on an estimated population supplied by the Registrar-General. † Rates relating to the Great Crosby and Little Crosby Urban areas combined.

			21	6				
		1	Pan 1,000 or E	STIMATED POPU	LATION	Maternal	Mortality Rate	Rate of Deaths
	-	Live Birth-rate	Death-rate	Death-rate from Tuberculosis Respirator System	of Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still) Births	One Year per 1,000 Live Birth
Great Harwood				System			Datas	
Population, 12,620.			10.0					100
Mean of 5 years, 1927–1931	***	12.6	12.2	0-44	1.83	5.98	11 1	72
Year		12·2 9·2	12·0 13·7	0·46 0·55	1·16 1·74	12-65 8-54	11-49 <b>7-46</b>	63 85
Increase or decrease in 1932 on	-							
5 years' average, 1927–1931 Previous year		-3.4 -3.0	+1.5 + 1.7	$^{+0.11}_{+0.09}$	$^{+0.41}_{+0.58}$	$^{+2.56}_{-4.11}$	-4.03	$^{+13}_{+22}$
Haslingden (Borough)								
Population, 16,560.								
Mean of 5 years, 1927-1931		11.0	14.1	0.93	1.54	7.42	-	87
Year-			Tree	0.11				
1931 1932		11·2 10·6	14-6 15-0	0-65 0-72	1-96 1-57	15-87 5-68	14-92 5-20	95 45
Increase or decrease in 1932 on	-							
5 years' average, 1927–1931 Previous year		$-0.4 \\ -0.6$	+0.9 + 0.4	-0.21 + 0.07	$+0.03 \\ -0.39$	-1.74 - 10.19	-9.72	$-42 \\ -50$
Haydock.—								
Population, 10,330.		19.5	11-8	0.46	0.64	4.93		-
Mean of 5 years, 1927–1931	•••	19.5	11.9	0.40	0.04	4.99	-	94
Year 1931 <b>1932</b>		20·1 20·0	12·0 9·0	0-95 <b>0-67</b>	0·57 0·48	4.76 nil	4-69 nil	90 62
Increase or decrease in 1932 on	-							
5 years' average, 1927-1931		+0.5	-2.3	+0.21	-0.16	-4.93	-	-32
Previous year		-0.1	-3.0	-0.28	-0.09	-4.76	-4-69	-28
Heywood (Borough)								
Population, 25,910.								
Mean of 5 years, 1927–1931 Year—		14.6	14.7	0.63	1.64	5.23	-	75
1931 1932		18-7 12-3	15·7 15·2	0.87 0.92	1-86 1-58	5·55 12·50	5-26 11-97	69 56
Increase or decrease in 1932 or								
5 years' average, 1927–1931 Previous year		$-2.3 \\ -1.4$	$^{+0.5}_{-0.5}$	$^{+0.29}_{+0.05}$	-0.06 -0.28	+7.27 + 6.95		$-19 \\ -13$
A rectous gear		-14	-0.5	+0.02	-0.29	+0.93	+6.71	-13
Hindley.— Population, 21,460.								
Mean of 5 years, 1927–1931		15.1	12.8	0.70	1.29	7.89	ALLOW THE ALL	89
Year 1931 1932		16-2 15-0	15·1 13·9	0.59 0.88	1-69	8·47 3·10	8-04 2-94	115 96
					1.00	feld and action	Librar and a	12-19-1
Increase or decrease in 1932 or 5 years' average, 1927–1931		-0.1		10.20	10.07	The Date of Street		
Previous yea		-1.2	$^{+1\cdot 1}_{-1\cdot 2}$	$^{+0.18}_{+0.29}$	$+0.01 \\ -0.39$	$-4.79 \\ -5.37$	-5.10	+7 -19

			217	0				
Manager Andrews Parks			Pas 1,000 or Est	IMATED POPULA	TION	Maternal	Mortality Rate	Rate of
The state of the	-	Live Birth-rate	A COLOR	Death-rate from Tuberculosis o	Death-rate from	Per 1,000 Liter Births	Per 1,000 Total (Live and	Deaths under One Year
andah				Respiratory System			Still) Births	per 1,000 Live Births
orwich.— Population, 15,580.								
Mean of 5 years, 1927-1931		13.3	11.7	0.60	1.48	6.84	_	71
Year-		22.2		10000				
1931 1932		11.7 12.0	11-3 12-2	0-25 0-44	1.64 1.92	nil 5-34	nil 5·26	48 <b>48</b>
Increase or decrease in 1932 on-	_							
5 years' average, 1927–1931 Previous year		$^{-1\cdot 3}_{+0\cdot 3}$	$^{+0.5}_{+0.9}$	$^{-0.16}_{+0.19}$	$^{+0.49}_{+0.28}$	$^{-1\cdot 00}_{+5\cdot 34}$	+5.26	-23 nil
uyton-with-Roby.—								
Population, 5,478.								
Mean of 5 years, 1927–1931 Year—		10.8	11-3	0.60	1.30	7.04		92
1931 1932		8·5 12·0	9-6 10-5	0·55 <b>0·36</b>	0·18 1·27	nil nil	nil nil	65 nil
Increase or decrease in 1932 on-	_							
5 years' average, 1927-1931		+1.2	-0.8	-0.54	-0.03	-7.04	-	-92
Previous year		+3.5	+0.9	-0.19	+1.09	nil	nil	-65
ce-in-Makerfield								
Population, 21,890.			10.0	EL R	11			
Mean of 5 years, 1927–1931 Year—		20.1	18.3	0.83	0.86	4.72	-	110
1981 1932		22-6 19-5	18-9 12-0	0.95	0.72 0.73	6-01 nil	5-64 nil	102 84
Increase or decrease in 1932 on-						and the second		and the last
5 years' average, 1927-1931	Color-1	-0.6	-1.3	-0.10	-0.13	-4.72		0.0
Previous year		-3.1	-1.9	-0.52	+0.01	-6.01	-5.64	$-26 \\ -18$
a market								
lam.—								
Population, 13,010.	82.)			11 m an 11				
Mean of 5 years, 1927–1931 Year—	•••	17.1	9.8	0.64	1.00	7-40	—	66
1981		16.2	9.8	0.58	1.45	4.71	4-48	47
1932		18.0	10.9	0.53	1.15	4.25	4-06	63
Increase or decrease in 1932 on-	-							
5 years' average, 1927–1931 Previous year		+0.9	+1.6	-0.11	+0.15	-8.15	-	-3
Previous year		+1.8	+1.6	nil	-0.30	-0.46	-0.42	+16
earsley								
Population, 9,763.								
Mean of 5 years, 1927-1931	•••	13.4	11.5	0.79	0.95	1.42	-	61
Year- 1931		18.9	11-0	0.40	1.11	nil	nil	51
1932		15-1	11.4	0.30	1.63	nil	nil	33
Increase or decrease in 1932 on-	_							
5 years' average, 1927-1931		+1.7	-0.1	-0.49	+0.68	-1.42	-	-28
Previous year		+1.5	+0.4	-0.10	+0.52	nil	nil	-18

		210				
	Live	ER 1,000 OF EST	Detherte Population	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	I Mortality Rate	Ri De
	Birth-rate	Death-rate	Death-rate Death-ra from from Tuberculosis of Cancer Respiratory	Live	Total (Live and	One
(irkham.—			System		Still) Births	Live
Population, 4,092.						
Mean of 5 years, 1927–1931	16.5	13.6	1.11 1.11	3.22	1.9-1.192	1
Year-						
1931 1932	20·8 14·4	13-8 12-9	0-72 0-97 0-24 0-24	nil nil	nil nil	110
Increase or decrease in 1932 on	-					
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} \dots & -2\cdot 1 \\ \dots & -6\cdot 4 \end{array}$	$-0.7 \\ -0.9$	$\begin{array}{ccc} -0.87 & -0.87 \\ -0.48 & -0.73 \end{array}$	-3·22 nil	nil	11
ancaster (Borough).—						
Population, 43,700.						
Mean of 5 years, 1927–1931 Year—	15.5	12.9	0.65 1.59	4.61	at wind a	10.00
1981	14-8	12.1	0.55 1.53	6.14	5.86	
1932	13-9	12.3	0.61 1.37	3.28	3-11	13
Increase or decrease in 1932 on						
5 years' average, 1927–1931 Previous year	$\dots -1.6 \\ \dots -0.9$	-0.6 + 0.2	-0.04 -0.22	-1.33	-	+
Previous year	0.9	+0.2	+0.06 -0.16	-2.86	-2.75	+
es.—						
Population, 4,703.						
Mean of 5 years, 1927-1931	12.8	15.0	0.53 1.67	9.86	08.11 <u></u>	D-PA
Year	10.5	10	NI 11012	- 1081-19		
1932	12.5	15-0 14-8	0.62 2.29 0.21 2.33	nil 16-94	nil 16-12	THE R
Increase or decrease in 1932 on			2.61		-	112
5 years' average, 1927–1931						
Previous year	0·3 nil	$-0.2 \\ -0.2$	$ \begin{array}{rrrr} -0.32 & +0.66 \\ -0.41 & +0.04 \end{array} $	+7.08 + 16.94	+16.12	
igh (Borough).—						
Population, 45,460.						
Mean of 5 years, 1927–1931	15.0	12.7	0.68 1.28	5.89	CI and the	5
Year						
<b>1931</b>	15.7	11-9 13-0	0.48 1.13 0.39 1.69	1.38	1·31 5·60	
	20.1 22.22	0 80		0.00		20.21
Increase or decrease in 1932 on- 5 years' average, 1927–1931		100	0.00	Su stat of		
Previous year	$\dots -0.2 \\ \dots -0.9$	$^{+0.3}_{+1.1}$	$ \begin{array}{rrrr} -0.29 & +0.41 \\ -0.09 & +0.56 \end{array} $	$+0.54 \\ +4.55$	+4.29	-1
					1	
yland						
Population, 10,790.						
Mean of 5 years, 1927–1931	14.7	12-4	0.82 1.19	6.28	ST. C. Longitude	6
Year-						
1931 1932	··· 15·1 ··· 15·1	10·2 11·3	·0·28 1·12 0·46 1·76	12-34 6-09	11-90 5-55	1
Increase or decrease in 1932 on-						
5 years' average, 1927-1931	+0.4	-1.1	+0.14 +0.57	-0.19	a se deserve	+2
Previous year	nil	+1.1	+0.18 +0.64	-6.25	-6.85	+24
D		$^{-1\cdot1}_{+1\cdot1}$	$ \begin{array}{r} +0.14 \\ +0.18 \\ +0.64 \end{array} $	$-0.19 \\ -6.25$	-6·35	

		21	19				
and increased and		PER 1,000 or Es	TIMATED POPULA	TION	Maternal J	fortality Rate	Rate of
	Live Birth-rat	e Death-rate	Death-rate from Tuberculosis o Respiratory System	Death-rate from f Cancer	Per 1,000 Line Births	Per 1,000 Total (Live and Still) Births	Deaths under One Year per 1,000 Live Birth
Population, 16,510.							
Mean of 5 years, 1927-1931	18.7	11.7	1.14				Papril
	10.1	11.4	1.14	1.18	7.50	a states in	83
Year- 1931 1932	20·0 <b>18·5</b>	12·9 11·0	1·24 0·96	1·36 1·57	6·19 nil	5-88 nil	65 58
Increase or decrease in 1932 or	-						
5 years' average, 1927-1931	0.2	-0.7	-0.18	+0.39	-7.50	_	-25
Previous year	1.5	-1.9	-0.58	+0.21	-6.19	-5.88	-7
tleborough							
Population, 12,010.							
Mean of 5 years, 1927–1931	15.0	14.6	0.33	1.65	4-44	1	71
Year-							
1931 1932	13.4	14·9 13·4	0·16 0·24	1.56	nil	nil	108
and a state of the		13.4	0.24	1.99	nil	nil	47
Increase or decrease in 1932 on	ST						
5 years' average, 1927–1931 Previous year	2.8 1.2	-1.2	-0.09	-0.32	-4-44		-24
Previous year	1-2	-1.5	+0.08	-0.53	nil	nil	-56
ttle Crosby.—							
Mean of 5 years, 1927–1931	11.0	8.6	0.48	0.50	nil		64
Year	11.1	10.2	0.92	0.92	nil	nil	83
1932	25.0	3.5	nil	nil	nil	nil	nil
<ul> <li>On the 1st April, 1932, the Great Crosby.</li> <li>The birth and death rates for population supplied by the quarter only.</li> </ul>	1932 are ca	lculated per	1,000 of the	population	Der annum	on an estim	hated
tle Hulton							
Population, 7,701.							
Mean of 5 years, 1927–1931 Year—	18.4	11.2	0.49	1.19	12.71	A second as	77
1931 1932	··· 12·5 ··· 11·8	12·0 13·1	0·50 <b>0·64</b>	1.88 1.03	20.00 10.98	19·04 10·41	50 76
ncrease or decrease in 1932 on							
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} \dots & -1 \cdot 6 \\ \dots & -0 \cdot 7 \end{array}$	$^{+1.9}_{+1.1}$	$^{+0.15}_{+0.14}$	-0.16 - 0.85	-1.73 - 9.02	-8.63	$^{-1}_{+26}$
lle Lever							
Population, 4,984.							
Mean of 5 years, 1927-1931	12.9	12.6	0.50	1.89	8.17		00
lear-	12.9	12.0	0.50	1.99	0.17	a second as a	80
1931	10.5	11.5	0.79	0.59	nil	nil	132
1932	12.2	13.4	0.20	1.20	16-39	15-62	49
nerease or decrease in 1932 on							
5 years' average, 1927-1931	0.7	+0.8	-0.30	-0.19	+13.22		
Previous year	+1.7	+1.9	-0.59			15.62	-81 -88

		220				
		PER 1,000 OF Est	IMATED POPULATION	Maternal	Mortality Rate	Rate
	Live Birth-rat	e Death-rate	Death-rate Death-rat from from Tuberculosis of Cancer Respiratory	Per 1,000 Live Births	Per 1,000 Total (Live and Still)	Deat unde One Y per 1,0 Live B
Longridge.—			System		Births	.bunit
Population, 4,140. Mean of 5 years, 1927–1931	15-8	14-4	0.47 1.42	11.62	Sales and a state of the	7
Year-						
1931 1932	14.5	16-2 18-1	0-47 2-14 0-72 1-44	32·78 62·50	31-25 59-70	8 3
Increase or decrease in 1932 on						
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} \dots & -0.4 \\ \dots & +0.9 \end{array}$	$^{+3.7}_{+1.9}$	$\begin{array}{ccc} +0.25 & +0.02 \\ +0.25 & -0.70 \end{array}$	$^{+50\cdot 88}_{+29\cdot 72}$	+28.45	-4 -5
ytham Saint Anne's (Borough)	.—					
Population, 25,110. Mean of 5 years, 1927–1931	8.9	13-4	0.43 1.90	1		
Year-	8.9	10.4	0.49 1.90	7.74		4
1931 1932	··· 8·4 ··· 8·6	14·4 13·4	0.16 2.09 0.47 1.39	4-78 9-17	4-48 8-88	5 1
Increase or decrease in 1932 on	-					
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} \dots & -0.3 \\ \dots & +0.2 \end{array}$	nil -1.0	$\begin{array}{rrr} +0.04 & -0.51 \\ +0.31 & -0.70 \end{array}$	$^{+1\cdot43}_{+4\cdot39}$	+4.40	-8 -8
liddleton (Borough).— Population, 29,210.						
Mean of 5 years, 1927-1931	14-1	18.5	0.57 1.45	5.84	_	7
Year	13-2	14-8	0.54 1.69	10.23	9.63	9
		12.9	0.51 1.47	7.33	7.00	8
Increase or decrease in 1932 on 5 years' average, 1927–1931		0.0	0.02 10.00	1.7.00		-
Previous year	+0.8	$-0.6 \\ -1.9$	$\begin{array}{rrr} -0.06 & +0.02 \\ -0.03 & -0.22 \end{array}$	$^{+1\cdot 99}_{-2\cdot 90}$	-2.63	+-1
lilnrow.—						
Population, 8,545.						
Mean of 5 years, 1927–1931 Year—	11.8	18-3	0.56 1.28	5.89	-	4
1931 1932	12·9 11·3	13·2 15·5	0·11 1·48 0·23 1·75	nil nil	nil nil	4
Increase or decrease in 1932 on-	_					
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} \dots & -0.5 \\ \dots & -1.6 \end{array}$	$^{+2\cdot 2}_{+2\cdot 3}$	${}^{+0\cdot33}_{+0\cdot12} \;\;{}^{+0\cdot47}_{+0\cdot27}$	-5.89 nil	nil	$^{+1}_{+1}$
orecambe and Heysham (Boron Population, 24,820,	ugh).—					
Mean of 5 years, 1927-1931	10.6	15-2	0.60 1.67	8.90	-	5
Year- 1931 1932	11.4	15-1	0.54 1.94	7.85	6.82	5
	11-1	15-6	0.48 1.61	7-24	6.96	5
Increase or decrease in 1932 on-		1				
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} & +0.5 \\ & -0.3 \end{array}$	$^{+0.4}_{+0.5}$	$\begin{array}{rrr} -0.12 & -0.06 \\ -0.06 & -0.33 \end{array}$	$^{+3\cdot 34}_{-0\cdot 11}$	+0.14	11

Intrins         Case of Sector         Intrins         Classes         Intrins				221					
Burk and Totals         Data form         Data form <thdata form<="" th=""></thdata>			the second s	1,000 or Est			-		Rate of
Amount of Supers, 1927–1931       12.7       14.3       0.37       1.61       7.63          Year-       1031         12.7       14.3       0.37       1.61       7.63          Year-       1031         12.7       15.8       0.49       1.64       nil       nil         1032         12.7       15.8       0.75       2.67       nil       nil       nil         Systeri average, 1927-1931        nil       +1.5       +0.98       +1.06       -7.63          Previous year         +0.9       +4.0       +0.26       +1.03       nil       nil         Atten of Systers, 1927-1931        11.1       12.9       0.49       1.48       5.81          Year-       1031        10.9       12.8       0.54       1.38       4.76       4.56         Increase or decrease in 1932 com       5       5.80       -0.2       -0.1       +0.05       -0.10       -1.03         2.33       4       5.6       1.68       1.06       1.03         2.43			Live Birth-rate	Death-rate	from Tuberculosi Respirato	is of Cancer ry	Lune	(Live and Still)	Under One Ver per 1,00 Live Birt
Mean of 5 years, 1927–1931       12-7       14-3       0.37       1-61       7-63          Year- 1931       1331        11-8       11-8       0-49       1-64       nil       nil         B332        12.7       15.8       0-75       2.67       nil       nil       nil         B322         12.7       15.8       0-75       2.67       nil       nil         Previous year         12.7       15.8       0-75       2.67       nil       nil         Previous year         11.1       12.9       0.49       1.48       5.81          Previous year        10.5       13.0       0.38       1.70       2.46       2.33         Issa       0.54       1.38       0.54       1.38       4.76       4.56         Increase or decrease in 1932 on        10.9       12.8       0.54       1.33       4.76       4.56         Issa                   Spears       1927-1931 </td <td></td> <td></td> <td></td> <td></td> <td>System</td> <td></td> <td></td> <td>Births</td> <td></td>					System			Births	
Year- 1931       11-8       11-8       11-8       0.49       1-64       nil       nill         Impression of the energy									
1931         11.8       11.8       0.49       1.64       nil       nil         1932         12.7       15.8       0.75       2.67       nil       nil         Spears' average, 1927-1931        nil       +1.5       +0.38       +1.06       -7.63       nil       nil         Population, 38,230.       Man of spears, 1927-1931        11.1       12.9       0.49       1.48       5.81       -         Year-       10.5       13.0       0.28       1.70       2.46       2.33       1932        10.9       12.8       0.54       1.38       4.76       4.56         Increase or decrease in 1932 on       5 years' average, 1927-1931       -0.2       -0.1       +0.05       -0.10       -1.05       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       1.0       5       -0.10       -1.05       -       -       -       -       -       -       -       1.0       5       -       -       -       1.45       1.0       1.0			12.7	14-3	0.37	1.61	7.63	1	64
Increase or decrease in 1932 on	1931								55 65
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Increase or decrease in 1932 on								
Previous year $+0.9$ $+4.0$ $+0.26$ $+1.03$ $nil$ $nil$ $nil$ Ham of 5 pears, 1927–1931        11.1       12.9       0.49       1.48       5.81          Vear- 1981 $10.5$ 13.0       0.88 $1.70$ 2.46       2.33         1982 $10.9$ 12.8       0.54       13.3       4.76       4.56         Increase or decrease in 1932 on- 5 years (norma, 1927–1931 $-0.2$ $-0.1$ $+0.05$ $-0.10$ $-1.65$ $-2.30$ $+2.23$ $+2.930$ $+$			nil	+1.5	+0.88	+1.06	7.89		
Population, 38,230.         Mean of 5 years, 1927–1931       11-1       12-9       0-49       1-48       5-81          Year	Previous year		+0.9					nil	$^{+1}_{+10}$
Population, 38,280.         Mean of 5 years, 1927–1931       11-1       12-9       0-49       1-48       5-81          Year       1091       12.8       0-54       138       4.76       4.56         Increase or decrease in 1932 on       5       13-0       0-38       1.70       2.46       2.33         922         109       12.8       0-54       138       4.76       4.56         Increase or decrease in 1932 on       5 years' average, 1927-1931        -0-2       -0-1       +0.05       -0-10       -1.05          Previous year         +0.4       -0.2       +0.16       -0.32       +2.30       +2.23       +         wton-in-Makerfield       Population, 20,070.       Mean of 5 years, 1927-1931       17.5       11-1       0.86       1.09       3.31       -         Year       1932         14.7       10.8       0.49       1.24       3.37       3.20         Increase or decrease in 1932 on       5       years' average, 1927-1931       -2.8       -0.3       -0.37       +0.15       +0.06       -       +       - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Mean of 5 years, 1927-1931 11-1 12-9 0-49 1-48 5-81 Year- 1931 10-5 13-0 0-38 1-70 2-46 2-33 1932 109 128 0-54 1.38 4.76 4.56 Increase or decrease in 1932 on 5 years' average, 1927-19310-2 -0-1 +0-05 -0-10 -1.05 Previous year +0-4 -0-2 +0-16 -0-32 +2-30 +2-23 + wton-in-Makerfield Population, 20,070. Mean of 5 years, 1927-1931 17-5 11-1 0-86 1-09 3-31 Year- 1931 18-5 11-8 0-98 1-08 10-61 10-02 1932 14-7 10-8 0-49 1-24 3-37 3-20 Increase or decrease in 1932 on 5 years' average, 1927-1931 12-4 18-5 0-54 1-14 11-00 Previous year3-8 -10 0-49 +0-16 -7-24 -6-82 + 1931 12-7 13-7 0-45 1-59 nil nil Increase or decrease in 1932 on 5 years' average, 1927-1931 12-4 18-5 0-54 1-14 11-00 Year- 1931 12-7 13-7 0-45 1-59 nil nil Increase or decrease in 1932 on 5 years' average, 1927-1931 12-4 18-5 0-54 1-14 11-00 Year- 1931 12-7 13-7 0-45 1-59 nil nil Increase or decrease in 1932 on 5 years' average, 1927-1931 12-4 18-5 0-54 1-14 11-00 Year- 1931 12-8 15-3 nil 1-62 18-18 16-66 1932 12-7 13-7 0-45 1-59 nil nil Increase or decrease in 1932 on 5 years' average, 1927-1931 +0-3 +0-2 -0-09 +0-45 -11-00 Previous year0-1 -1-6 +0-45 -0-03 -18-18 -18-66 + Mean of 5 years, 1927-1931 +0-3 +0-2 -0-09 +0-45 -11-00 Previous year									
Year- 1931       10.       10.5       13.0       0.38       1.70       2.46       2.33         1932       10.9       12.8       0.54       1.33       4.76       4.56         Increase or decrease in 1932 on- Spears' average, 1927-1931 $-0.2$ $-0.1$ $+0.05$ $-0.10$ $-1.05$ $+2.23$ $+$ wton-in-Makerfield Previous year       Previous year       10.5       11.1 $0.86$ $1.09$ $3.31$ $-$ Wear- 1931 $18.5$ $11.4$ $0.98$ $1.06$ $10.61$ $10.02$ Issa $18.5$ $11.8$ $0.98$ $1.08$ $10.61$ $10.02$ 1931 $14.7$ $10.8$ $0.49$ $12.4$ $3.37$ $3.20$ Increase or decrease in 1932 on 5 years' average, 1927-1931 $-2.8$ $-0.3$ $-0.87$ $+0.15$ $+0.06$ $-7.24$ $-6.82$ If the ansistic formation of 5 years, 1927-1931 $-2.8$ $-0.3$ $-0.37$ $+0.15$ $+0.16$ $-7.24$ $-6.82$ If the ansistic formation of 5 years, 1927-1931 $12.4$ $18.5$ <				-					
<b>1932 1009 128 0.54 1.38 4.76 4.56</b> Increase or decrease in 1932 on $\frac{5}{2}$ years' average, 1927-1931 $-0.2$ $-0.1$ $\pm 0.05$ $-0.10$ $-1.05$ $$ Previous year $\pm 0.4$ $-0.2$ $\pm 0.16$ $-0.32$ $\pm 2.30$ $\pm 2.23$ $\pm$ <b>wton-in-Makerfield</b> Population, 20,070. Mean of 5 years, 1927-1931 17.5 11.1 $0.86$ $1.09$ $3.81$ Year 1931 $18.5$ $11.8$ $0.98$ $1.08$ $10.61$ $10.021932 14.7 10.8 0.49 1.24 3.37 3.20Increase or decrease in 1932 on5 years' average, 1927-1931 -2.8 -0.3 -0.37 \pm 0.15 \pm 0.06 6.82 \pmPrevious year 3.8 \pm 1.0 -0.49 \pm 0.16 -7.24 -6.82 \pmrdenPopulation, 4,876.Wean of 5 years, 1927-1931 12.4 18.5 0.54 1.14 11.00Year1931 3.8 \pm 1.0 -0.49 \pm 0.16 -7.24 -6.82 \pmrdenPopulation, 4,876.Wean of 5 years, 1927-1931 12.4 18.5 0.54 1.14 11.00Year-1932$ $$			11-1	12.9	0.49	1.48	5.81	al 20- 21	58
<b>1932 10.9 12.8 0.54 1.38 4.76 4.56</b> Increase or decrease in 1932 on— <i>5 years' average, 1927–1931</i> $-0.2$ $-0.1$ $\pm 0.05$ $-0.10$ $-1.05$ $-$ <i>Previous year</i> $\pm 0.4$ $-0.2$ $\pm 0.16$ $-0.32$ $\pm 2.30$ $\pm 2.23$ $+$ <b>wton-in-Makerfield.</b> — Population, 20,070. Mean of 5 years, 1927–1931 17.5 11.1 0.86 1.09 3.31 — <b>1931</b> 18.5 11.8 0.98 1.08 10.61 10.02 <b>1932 14.7 10.8 0.49 1.24 3.37 3.20</b> Increase or decrease in 1932 on— 5 years' average, 1927–19312.8 $-0.3$ $-0.37$ $\pm 0.15$ $\pm 0.06$ $-$ <i>Previous year</i> $-3.8$ $-1.0$ $-0.49$ $\pm 0.16$ $-7.24$ $-6.82$ $\pm$ <b>rea</b> . <b>1931 12.7 13.7 0.45 1.59 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 12.4 18.5 0.54 1.14 11.00 — <b>fear</b>. <b>1931 12.7 13.7 0.45 1.59 nil nil increase or decrease in 1932 on— 5 years' average, 1927–1931 12.4 18.5 0.54 1.14 11.00 — <b>fear</b>. <b>1931 12.7 13.7 0.45 1.59 nil nil</b> <b>ni ni</b> <b>nerease or decrease in 1932 on—</b> 5 years' average, 1927–1931 12.4 18.5 0.54 1.14 11.00 — <b>fear</b>. <b>1931 12.7 13.7 0.45 1.59 nil nil</b> <b>ni ni</b> <b>nerease or decrease in 1932 on—</b> 5 years' average, 1927–1931 <math>\pm 0.3</math> <math>\pm 0.2</math> <math>-0.09</math> <math>\pm 0.45</math> <math>-11.00</math> <math>-</math> <b>Previous year</b> <math>-0.1</math> <math>-1.6</math> <math>\pm 0.45</math> <math>-0.03</math> <math>-18.18</math> <math>-16.66</math> <math>\pm</math> <b>fear</b>. <b>1931 12.8</b> 12.8 0.51 1.60 6.25 — <b>1931 12.8</b> 12.2 0.40 1.29 5.23 4.95</b></b>	1931					1.70	2.46	2.33	44
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1932	200	10.9	12.8	0.54	1.38			54
Previous year $+0.4$ $-0.2$ $+0.16$ $-0.32$ $+2.30$ $+2.23$ $+4$ Population, 20,070. $17.5$ $11.1$ $0.86$ $1.09$ $3.31$ $-$ Isan of 5 years, 1927-1931 $17.5$ $11.4$ $0.98$ $1.08$ $10.61$ $10.02$ 1932 $14.7$ $10.8$ $0.49$ $1.24$ $3.37$ $3.20$ nerease or decrease in 1932 on       5       years' average, 1927-1931 $-2.8$ $-0.37$ $+0.15$ $+0.06$ $-7.24$ $-6.82$ $+6.82$ den       Population, 4,876. $-3.8$ $-1.0$ $-0.49$ $+0.16$ $-7.24$ $-6.82$ $+6.82$ den       Population, 4,876. $12.7$ $13.7$ $0.45$ $1.59$ $nil$	ncrease or decrease in 1932 on								
vton-in-Makerfield.—         Population, 20,070.         Idean of 5 years, 1927-1931        17-5       11-1       0-86       1-09       3-31          isin         18-5       11-8       0-98       1-08       10-61       10-02         1932         14-7       10-8       0-49       1-24       3-37       3-20         merease or decrease in 1932 on—       5       years' average, 1927-1931        -2-8       -0-3       -0-37       +0-15       +0-06        +         Previous year         -3-8       -1-0       -0-49       +0-16       -7-24       -6-82       +         den.—       Previous year         -3-7       -4-5       1-59       nil       nil         1931         12-7       13-7       0-45       1-59       nil       nil         searaf         12-7       13-7       0-45       1-59       nil       nil         fear-          12-7       13-7       0-45       1-59       nil       nil <tr< td=""><td>5 years' average, 1927-1931</td><td></td><td>-0.2</td><td>-0.1</td><td>+0.05</td><td>-0.10</td><td>-1.05</td><td></td><td>-4</td></tr<>	5 years' average, 1927-1931		-0.2	-0.1	+0.05	-0.10	-1.05		-4
Population, 20,070. dean of 5 years, 1927–1931 17.5 11.1 0.86 1.09 3.31	Previous year		+0-4	-0.5	+0.16	-0.32	+2.30	+2.23	+10
Population, 20,070. Mean of 5 years, 1927–1931 17.5 11.1 0.86 1.09 3.31									
dean of 5 years, 1927–1931        17.5       11.1       0.86       1.09       3.31	nton-in-Makerfield.—								
1931         18.5       11.8       0.98       1.08       10.61       10.02         1932          14.7       10.8       0.49       1.24       3.37       3.20         nerease or decrease in 1932 on       5 years' average, 1927-1931        -2.8       -0.3       -0.37       +0.15       +0.06        +         Previous year         -3.8       -1.0       -0.49       +0.16       -7.24       -6.82       +         den       Population, 4,876.          12.4       18.5       0.54       1.14       11.00          'ear       1981          12.7       13.7       0.45       1.59       nil       nil         nerease or decrease in 1932 on       5 years' average, 1927-1931        12.7       13.7       0.45       1.59       nil       nil         nerease or decrease in 1932 on       5       years' average, 1927-1931        +0.3       +0.2       -0.09       +0.45       -11.00       -         Previous year         -0.1       -1.6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
1931         18.5       11.8       0.98       1.08       10.61       10.02         1932         14.7       10.8       0.49       1.24       3.37       3.20         increase or decrease in 1932 on       5 years' average, 1927-1931        -2.8       -0.3       -0.87       +0.15       +0.06        +         Previous year         -3.8       -1.0       -0.49       +0.16       -7.24       -6.82       +         den       Population, 4,376.          12.4       18.5       0.54       1.14       11.00          'ear       1931         12.7       13.7       0.45       1.59       nil       nil         ipsiz         12.7       13.7       0.45       1.59       nil       nil       nil         nerease or decrease in 1932 on       5       years' average, 1927-1931        +0.3       +0.2       -0.09       +0.45       -11.00        +         Previous year         -0.1       -1.6       +0.45       -0.03       -18.18 </td <td></td> <td></td> <td>17.5</td> <td>11.1</td> <td>0.86</td> <td>1.09</td> <td>3.31</td> <td>13 A Y</td> <td>68</td>			17.5	11.1	0.86	1.09	3.31	13 A Y	68
<b>1932 14.7 10.8 0.49 1.24 3.37 3.20</b> <i>increase or decrease in 1932 on</i> — 5 years' average, 1927–19312.8 $-0.3$ $-0.37$ $+0.15$ $+0.06$	1931		18.5	11.8	0.98	1.08	10.61	10.02	79
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2021		14.7	10.8	0-49	1.24	3-37		81
Previous year $-3\cdot8$ $-1\cdot0$ $-0\cdot49$ $+0\cdot16$ $-7\cdot24$ $-6\cdot82$ 7 Population, 4,376. lean of 5 years, 1927-1931 12\cdot4 18\cdot5 0.54 1.14 11\cdot00 1931 12:8 15\cdot3 nil 1.62 18.18 16.66 1932 12:7 13.7 0.45 1.59 nil nil ncrease or decrease in 1932 on- 5 years' average, 1927-1931 $+0\cdot3$ $+0\cdot2$ $-0\cdot09$ $+0\cdot45$ $-11\cdot00$ $-$ Previous year $-0\cdot1$ $-1\cdot6$ $+0\cdot45$ $-0\cdot03$ $-18\cdot18$ $-16\cdot66$ $+$ nskirk Population, 17,240. lean of 5 years, 1927-1931 $14\cdot5$ 12.8 0.51 1.60 6.25 - 'ear- 1931 $12\cdot8$ $12\cdot2$ $0\cdot40$ 1.29 5.23 $4\cdot95$		-							
den       Population, 4,376.         Jean of 5 years, 1927-1931        12.4       18.5       0.54       1.14       11.00       -         Mean of 5 years, 1927-1931        12.8       15.3       nil       1.62       18.18       16.66         1931         12.7       13.7       0.45       1.59       nil       nil         increase or decrease in 1932 on       5 years' average, 1927-1931 $+0.3$ $+0.2$ $-0.09$ $+0.45$ $-11.00$ -       -         syster $-0.1$ $-1.6$ $+0.45$ $-0.03$ $-18.18$ $-16.66$ $+$ nskirk       Population, 17,240.       Image: Participart in the image: Participart	Duminus man								+18
Population, 4,376.         lean of 5 years, 1927–1931        12·4       18·5       0·54       1·14       11·00          1931         12·8       15·3       nil       1·62       18·18       16·66         1932         12·7       13·7       0·45       1·59       nil       nil         necrease or decrease in 1932 on—         5 years' average, 1927–1931        +0·3       +0·2       -0·09       +0·45       -11·00       -       -         Previous year         -0·1       -1·6       +0·45       -0·03       -18·18       -16·66       +         Askirk.—         Population, 17,240.         Iean of 5 years, 1927–1931        14·5       12·8       0·51       1·60       6·25       -         Isa1       ···· ··· ·· ··       12·8       12·2       0·40       1·29       5·23       4·95			-00	-1.0	-0.49	+0.10	-7.24	-6.82	+2
Population, 4,376.         Mean of 5 years, 1927–1931 $12\cdot4$ $18\cdot5$ $0\cdot54$ $1\cdot14$ $11\cdot00$ 1931 $12\cdot8$ $15\cdot8$ nil $1\cdot62$ $18\cdot18$ $16\cdot66$ 1932 $12\cdot7$ $13\cdot7$ $0\cdot45$ $1\cdot59$ nil       nil         Increase or decrease in 1932 on—       5       years' average, 1927–1931 $+0\cdot3$ $+0\cdot2$ $-0\cdot09$ $+0\cdot45$ $-11\cdot00$									
lean of 5 years, $1927-1931$ $12\cdot4$ $18\cdot5$ $0\cdot54$ $1\cdot14$ $11\cdot00$ 1931 $12\cdot8$ $15\cdot3$ nil $1\cdot62$ $18\cdot18$ $16\cdot66$ 1932 $12\cdot7$ $13\cdot7$ $0\cdot45$ $1\cdot59$ nil       nil         ncrease or decrease in 1932 on—       5       years' average, 1927-1931 $+0\cdot3$ $+0\cdot2$ $-0\cdot09$ $+0\cdot45$ $-11\cdot00$ -       -         Previous year $-0\cdot1$ $-1\cdot6$ $+0\cdot45$ $-0\cdot03$ $-18\cdot18$ $-16\cdot66$ +         nskirk.—       Population, $17,240$ . $14\cdot5$ $12\cdot8$ $0\cdot51$ $1\cdot60$ $6\cdot25$ -         'ear       1931 $14\cdot5$ $12\cdot8$ $0\cdot51$ $1\cdot60$ $6\cdot25$ -         'fear       1932 $12\cdot8$ $12\cdot2$ $0\cdot40$ $1\cdot29$ $5\cdot23$ $4\cdot95$	Part of the second s								
Vear- 1931       12.8       15.8       nil       1.62       18.18       16.66         1932       1       1       12.7       13.7       0.45       1.59       nil       nil         ncrease or decrease in 1932 on- 5 years' average, 1927-1931 $0.45$ $0.45$ $1.59$ nil       nil         Previous year $0.2$ $-0.09$ $+0.45$ $-11.00$ $-1.6$ $-1.6.66$ $+1.100$ $-1.6$ Skirk       Population, 17,240.       Ican of 5 years, 1927-1931 $14.5$ $12.8$ $0.51$ $1.60$ $6.25$ $-1.6.66$ 1931 $0.1$ $0.12$ $0.45$ $1.29$ $5.23$ $4.95$			12-4	18.5	0.54	1.14	11.00		101
<b>1932 12.6 13.6 11 1.62 13.18 16.66</b> <b>1932 12.7 13.7 0.45 1.59 nil nil</b> ncrease or decrease in 1932 on— 5 years' average, 1927–1931 $+0.3 + 0.2 - 0.09 + 0.45 - 11.00$ <i>Previous year</i> $-0.1 - 1.6 + 0.45 - 0.03 - 18.18 - 16.66 +$ <b>198kirk.</b> — Population, 17,240. <i>Iean of 5 years, 1927–1931</i> 14.5 12.8 0.51 1.60 6.25 - 'ear— 1931 12.8 12.2 0.40 1.29 5.23 4.95				10.0	0.04	1.14	11.00	1) ( ( <del>199</del> ) ( 1)	75
<b>1932 12.7 13.7 0.45 1.59 nil nil</b> <b>n</b> il <b>nil</b> <b>n</b> crease or decrease in 1932 on— 5 years' average, 1927–1931 $+0.3$ $+0.2$ $-0.09$ $+0.45$ $-11.00$ — — <b>P</b> revious year <b></b> $-0.1$ $-1.6$ $+0.45$ $-0.03$ $-18.18$ $-16.66$ $+$ <b>nskirk.</b> — <b>Population, 17,240.</b> <i>Iean of 5 years, 1927–1931</i> 14.5 12.8 0.51 1.60 6.25 — <b>tear</b> — <b>1931 12.8</b> 12.2 0.40 1.29 5.23 4.95	1981		12.8	15-3	nil	1.62	18-18	16-66	86
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1932		12.7	13.7					53
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ncrease or decrease in 1932 on-	_							
Previous year $-0.1 - 1.6 + 0.45 - 0.03 - 18.18 - 16.66 +$ uskirk.— Population, 17,240. lean of 5 years, 1927-1931 14.5 12.8 0.51 1.60 6.25 — ear— 1931 12.8 12.2 0.40 1.29 5.23 4.95	5 years' average, 1927-1931		+0.3	+0.2	-0.09	+0.45	-11.00		-22
Population, 17,240.         lean of 5 years, 1927-1931         ear-         1931         1932	Previous year			and the second s				-16.66	+17
Population, 17,240.         lean of 5 years, 1927-1931          14·5       12·8       0·51       1·60       6·25       —         car        1931        12·8       12·2       0·40       1·29       5·23       4·95									
Itean of 5 years, 1927-1931         14.5         12.8         0.51         1.60         6.25            fear         1931          12.8         12.2         0.40         1.29         5.23         4.95	nskirk.—								
rear- 1931 12.8 12.2 0.40 1.29 5.23 4.95									
1931 12.8 12.2 0.40 1.29 5.23 4.95			14.5	12.8	0.51	1.60	6-25	5 m- 230	48
1920	1021		12.8	12.9	0.10	1.90	5.00	4.05	
	1020								81 67
ncrease or decrease in 1932 on-	ncrease or decrease in 1932 on-								
5 years' average, 1927-1931 nil -1.7 +0.94 +0.14 +5.70	5 years' average, 1927-1931		nil	-1.7	+0.24	+0.14	+5.70	ALIAN DE LA SAL	1.10
Pretione upon	Previous year							+6.45	+19 + 36

	222				
	PER 1,000 OF ESTIMATED	POPULATION	Maternal Mo	stality Rate	Ratec
	Birth-rate Death-rate Tuber Res	ath-rate Death-rate from from crulosis of Canoer piratory ystem	Per 1,000 Lior Births	Per 1,000 Tetal (Live and Still) Births	Death under One Ye per 1,00 Live Bir
Orrell.—					1 and 1
Population, 7,055.					
Mean of 5 years, 1927–1931	14.3 11.7 (	0.28 1.17	7.67	and a fe	95
Year-					
1931 1932		0-57 1-56 0-42 1-27	nil nil	nil nil	42 61
Increase or decrease in 1932 on	-				
5 years' average, 1927–1931 Previous year	the second se	$\begin{array}{ccc} 0.14 & +0.10 \\ 0.15 & -0.29 \end{array}$	-7-67 nil	nil	-34 + 19
Oswaldtwistle.—					
Population, 14,020.					
Mean of 5 years, 1927–1931 Year—	12.8 13.4 0	0.56 1.68	9-10	runne o h	80
1931 1932		0.76 1.38 0.57 1.92	nil nil	nil nil	36 32
Increase or decrease in 1932 on	<u></u>				
5 years' average, 1927–1931 Previous year		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	-9·10 nil	nil	-48 -4
Padiham					
Population, 11,580.			0.00		
Mean of 5 years, 1927–1931	13.5 14.0 0	0.60 1.34	6.38		79
Year 1931 <b>1932</b>		0.68 1.27 0.51 1.20	6·28 13·69	6·06 12·82	69 54
Increase or decrease in 1932 on					
5 years' average, 1927–1931 Previous year	0.9 -0.7 -0	0.09 - 0.14 0.17 - 0.07	+7.31 +7.41 +	-6.76	$-25 \\ -15$
Poulton-le-Fylde					
Population, 3,254.					
Mean of 5 years, 1927–1931 Year—	13-5 14-8 0	0.31 2.84	17-04	1	85
1931 1932	10-9 14-2 11-6 14-4 0	nil 2.73 1.61 2.45	E CARLE	27-02 25-00	111 78
Increase or decrease in 1932 on					
5 years' average, 1927–1931 Previous year		+30 + 0.11 +61 - 0.28	+9.27 -1.46 -	-2.02	-7 -33
Preesall.					
Population, 2,110.					
Mean of 5 years, 1927–1931	14-6 12-0 0	-39 2.29	nil	Same and	29
Year- 1931	19.8 10.9 0	-49 2.98	nil	nil	25
1932		47 4 26	nil	nil	nil
Increase or decrease in 1932 on-	-				
5 years' average, 1927-1931	5.2 -0.7 +0		nil	and the second second	-29
Previous year	$\dots -10.4 + 0.4 = -0$	-02 + 1.28	nil	nil	-25

		22	:3				
		a 1,000 or Es	TIMATED POPULA			Mortality Rate	Rate of Deaths
and the second	Live Birth-rate	Death-rate	Death-rate from Tuberculosis Respiratory System	Death-rate from of Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still) Births	Under Oue Year per 1,000 Live Birth
rescot							
Population, 11,450. Mean of 5 years, 1927–1931	16-8	12.2	0.68	1.62	8.56		and an all
Year-		1	0.09	1.02	9.90	_	64
1931 1932 (Extended Area)	16·1 17·9	13·3 9·9	0·83 0·27	1·99 1·00	nil nil	nil nil	58 61
Increase or decrease in 1932 on	-						
5 years' average, 1927–1931 Previous year	$\begin{array}{ccc} & +1\cdot 1 \\ & +1\cdot 8 \end{array}$	$-2.3 \\ -3.4$	$-0.41 \\ -0.56$	$-0.62 \\ -0.99$	-3.56nil	nil	$-3 \\ +3$
* On the 1st April, 1932, parts of nated with the Urban District of Pi t date.	rescore and sta	austres meru	de the birti	as and deat	hs occurring	ural District in the adde	) were am d area fro
The birth and death rates for 19	932 are calculate	ed on an est	imated popu	ulation supp	lied by the Re	gistrar-Gene	ral.
stwich							
Population, 24,940.							
Mean of 5 years, 1927-1931	12.0	10.3	0.54	1.26	1.48		
lear-			141 1		1 40		66
1931	12.0	12.1	0.70	1.54	nil	nil	86
1932	11.0	9.9	0.48	1.16	nil	nil	65
Increase or decrease in 1932 on	_08-0-1 8						
5 years' average, 1927-1931	1.0	-0.4	-0.06	-0.10	-1.48		-1
Previous year	1.0	-2.2	-0.22	-0.88	nil	nil	-21
4.1100-							
Population, 24,890.							
Iean of 5 years, 1927–1931	12.8	18.3	0.58	1.59	4.27		70
lear- 100 100	10.0	1.0	5 13	15			
1932	13·3 13·5	12·8 13·2	0.44	1.68	nil 2-95	nil 2.81	80 53
nerease or decrease in 1932 on-					1041 1941		
5 years' average, 1927-1931	+0.7	-0.1	+0.34	-0.11	-1.32		
Previous year	+0.2	+0.4	+0.34 +0.48	-0.11 -0.20	-1.32 + 2.95	+2.81	$-17 \\ -27$
nford.—							
Population, 3,491.							
lean of 5 years, 1927–1931	15.8	9.8	0.48	0.97	8.27		49
lear	16-2	10.2	0.85	0.57			
1932	16-6	7.7	nil	1.71	nil nil	nil nil	52 51
ncrease or decrease in 1932 on-	210-04						
5 years' average, 1927-1931	+1.3	-2.1	-0.48	+0.74	-3.27	Street Serie	+2
Previous year	+0.4	-2.5	-0.85	+1.14	nil	nil	-1
nsbottom							
Population, 14,900. lean of 5 years, 1927–1931	13-0	18.5	0.67	1.60	6.23	A REAL PROPERTY.	70
car—							Trace
<b>1931</b>	11.6 9.7	13-9 13-4	0-53 <b>0-53</b>	1.82 2.34	5-68 6-84	5·87 6·21	96 <b>82</b>
ncrease or decrease in 1932 on-	-						
5 years' average, 1927-1931	8.8	-0.1	-0.14	+0.74	+0.61	100 000 V 100	+12
Previous year	1.9	-0.5	nil	+1.02	+1.16	+0.84	-14

Reveneration       (Boreugh)       Joint       Joint       Joint         Population, 28,500.       Mean of 5 years, 1927-1931       13-0       13-9       0-47       1-63       8-17       -         Year-       1932         12-7       13-4       0.58       1-60       5-44       5-14         1932         110       13-2       0.35       1-57       9-49       8-90         Increase or decrease in 1932 on-       5       year's warearge, 1927-1931        -2-0       -0-7       -0-12       -0-06       +1.32          Finhton       Previous year        -1.7       -0.2       -0.23       -0.12       +4.05       +3.76         Pistaria       Mean of 5 years, 1927-1931        11-5       13-0       0.72       1.50       12.90          Year-       1931         113       110       0.76       2.14       nil       nil         Increase or decrease in 1932 on-       5       -2.0       +0.04       +0.64       -12.90          Previous year        11-3       14-3       0.71       14-3       nil							22	•				
Barkers         Datk ers         Townstand         Comp         Law         Townstand           Reviewshill         (Borough)         Population, 285,00.         13-9         0.47         1.63         8.17         -           Year-         1301           110         13-2         0.35         1.60         5.44         5.14           1932           110         13-2         0.35         1.57         9.49         8.90           Increase or decrease in 1932 on-         5 years' wares, 1927-1931          -0.20         -0.07         -0.12         -0.06         +1.32         +           System years, 1927-1931          11-5         13-0         0.72         1.50         12.90         -           Year-         1031          11-3         110         0.76         2.14         nil         nil           Increase or decrease in 13032 on-         5 years' warearge, 1927-1931         12-9         +1-1         -2.7         -0.58         +0.60         -12-9.0         -           Previous year          11-3         14-3         0.71         14-3         nil         nil           Interase or dec							PER 1,000 or H	STIMATED POP		-	I Mortality Rate	Rate
Revisestall (Borough)       June       June       June         Population, 28,500.       Mean of System, 1927–1931       13-0       13-9       0.47       1-63       8.17       -         Year       1391         110       13-2       0.55       1-57       9.49       8.900         Increase or decrease in 1932 on-       5       5       9.67       9.405       1.32           System coverage, 1927–1931        -1.7       -0.2       -0.23       -0.12       +4.05       +3.76         Ristion       Previous gear         11-5       13-0       0.72       1.50       12-90       -         Yeas          10-2       13-7       1.54       1.34       14-49       13-51         1982         11-3       110       0.76       2.14       nil       nil         Increase or decrease in 1932 on-       5       -2-0       +0.04       +0.64       -12-90       -         System coverage, 1927-1931        12-9       14-1       0.71       12-8       6-62       -         Yean       Mean of Systens, 192							e Death-rat	e from Tuberculosi	a of Cancer	Live	Total	Under One Ye per 1,0 Live Bir
Population, 25,000.         Mean of 5 years, 1927–1931        13-0       13-9       0-47       1-63       8-17          1931         12-7       13-4       0-58       1-60       5-44       5-14         1932         12-7       13-4       0-58       1-60       5-44       5-14         1932         12-7       13-2       0-35       157       949       890         Increase or decrease in 1932 on         5 years' average, 1927-1931        -0.7       -0.12       -0.06       +1.32          1931         10-2       13-7       1-34       1-34       14-49       13-51         Previous year         10-2       13-7       1-34       1-34       14-49       13-51         Previous year                              .								Respirator	ry	_	Still)	Live Bir
Mean of 5 years, 1927–1931       13-0       13-9       0-47       1-63       8-17          Year- 1931         11-0       13-2       0-58       1-60       5-44       5-14         1932         11-0       13-2       0-58       1-60       5-44       5-14         1932         -0-7       -0-12       -0-06       +1.32          6 years average, 1927-1931        -1-7       -0-2       -0-23       -0-10       +1.32          Reshon												
Year- 1931         12.7       12.4       0.58       1.60       5.44       5.14         1932         11.0       13.2       0.58       1.60       5.44       5.14         1932         11.0       13.2       0.55       1.60       5.44       5.14         Mean of barrs, 1927-1931        -2.0       -0.7       -0.12       -0.06       +1.32       +3.76         Ribton       Previous year         11.5       13.0       0.72       1.50       12.90          Vear-       1931        10.2       1.37       1.34       14.40       13.51         Previous year       1922 on       5       1.13       11.0       0.72       1.50       12.90          Year-       1931        10.2       0.71       1.34       14.49       13.51         Ropin-       Previous year         12.9       14.1       0.71       1.26       6.62          Year-       1931        15.5       13.9       0.71       14.3       nil       nil       nil </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>18-0</td> <td>18.9</td> <td>0.47</td> <td>1.69</td> <td>8.17</td> <td></td> <td>Lorent</td>						18-0	18.9	0.47	1.69	8.17		Lorent
1931        11-0       13.2       0.35       1-69       5-44       5-14         1932        11-0       13.2       0.35       1-57       9.49       5.90         Increase or decrease in 1932 on       5 years' accarge, 1927-1931        -2.0       -0.72       -0.06       +1.32          Previous year         -1.7       -0.2       -0.23       -0.12       +4.05       +3.76         Rishon       Population, 6.514.       Mean of 5 years, 1927-1931       11-5       13-0       0.72       1.50       12.90          Year       1931         10-2       13-7       1.34       13.41       13-49       13-51         1932         11-3       11-0       0.76       2.14       nil       nil       nil         1932         11-3       11-4       0.71       1.26       6.62          Years         11-3       14-3       0.71       0.63       15.70       14-92         1932         11-3       14-3       0.71       0.64       12.9		years,	1021	-1501		10.0	10.0	0.11	1.00	0.11	2 years, 192	71
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1931											49 63
Previous year $-1.7$ $-0.2$ $-0.12$ $+4.05$ $+3.76$ Richton,       Population, 6,514.         Mean of 5 years, 1927-1931 $11.5$ $13.0$ $0.72$ $1.50$ $12.90$ Year-       1931 $10.2$ $13.7$ $1.34$ $13.41$ $14.49$ $113.51$ Ibita       Into $0.76$ $2.14$ nii       nii       nii         Increase or decrease in 1932 on $5$ years' average, 1927-1931 $-0.2$ $-2.0$ $+0.04$ $+0.64$ $-12.90$ $-13.51$ Rean of syears, 1927-1931 $-0.2$ $-2.0$ $+0.04$ $+0.64$ $-12.90$ $-13.51$ Rean of syears, 1927-1931 $12.9$ $14.1$ $0.71$ $1.43$ $16.92$ $-13.51$ Increase or decrease in 1932 on $5$ years' average, 1927-1931 $+2.6$ $-0.2$ $11.1$ $+0.17$ $-6.62$ $-$ Year- $1331$ $15.3$ $11.8$ $0.56$ $1.11$ $4.00$ $-$ Year- $1932$ $$	Increase o	r decrea	ase in	1932 01	ı—							
Population, 6,514. Maan of 5 years, 1927–1931 11-5 13-0 0.72 1.50 12-90 — Year— 1931 10-2 13-7 1.34 1.34 14-49 13-51 1932 113 11-0 0.76 2.14 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.2$ $-2.0$ $+0.04$ $+0.64$ $-12.90$ $-13.51$ Previous year $11-3$ 12-9 14-1 0.71 1.26 6.62 — Year— 1931 11-3 14-3 0.71 0.65 15-70 14-92 1932 15-5 13-9 0.71 0.65 15-70 14-92 1932 15-5 13-9 0.71 1-43 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 12-9 14-1 0.71 1.26 6.62 — Year— 1931 11-3 14-3 0.71 0.65 15-70 14-92 1932 15-5 13-9 0.71 1-43 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 12-6 -0.2 nil $+0.17$ $-6.62$ — Year— 1931 15-8 10-9 0.64 1.12 nil nil 1932 15-0 12.3 0.32 1.62 nil nil 1931 15-8 10-9 0.64 1.12 nil nil 1932 15-0 12.3 0.32 1.62 nil nil 1932 15-0 12.3 0.32 1.62 nil nil 1933 15-0 12.3 0.32 1.62 nil nil 1934 15-8 10-9 0.64 1.12 nil nil 1935 15-0 12.3 0.32 1.62 nil nil 1932 15-0 12.3 0.32 1.62 nil nil 1933 15-0 12.3 0.32 1.62 nil nil 1934 15-0 12.3 0.32 1.62 nil nil 1935 15-0 12.3 0.32 1.62 nil nil 1931 15-0 12.3 0.32 1.62 nil nil 1932 15-0 12.3 0.32 1.62 nil nil 1933 15-0 12.3 0.32 1.62 nil nil 1934 15-7 11-7 11-6 0.53 1.22 nil nil 1935 10-0.3 1.0-5 -0.24 1.0-51 -0.400 2 years' average, 1927-1931 13-6 11-9 0.39 1.001 1.88 Year— 1931 13-7 11-6 0.68 1.22 nil nil 1932 13-7 11-6 0.68 1.22 nil nil 1931 13-7 11-6 0.68 1.22 nil nil 1931 14-5 14-3 0.40 1.49 nil nil 1932 1932 on— 5 years' average, 1932 on— 5 years' average, 1932 on—				27–1931							+8.76	-8 + 14
Population, 6,514. Mean of 5 years, 1927–1931 11·5 13·0 0.72 1.50 12·90 — Year— 1931 10·2 13·7 1.34 1.34 14·49 13·51 1932 11·3 11·0 0.76 2.14 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.2$ $-2.0$ $+0.04$ $+0.64$ $-12.90$ $-13.51$ Royton.— Population, 16,750. Mean of 5 years, 1927–1931 $12·9$ 14·1 0·71 1.26 6·62 $-$ Year— 1932 11·3 14·3 0·71 0·65 15·70 14·92 1932 15·5 13·9 0·71 1.43 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 $+2·6$ $-0·2$ nil $+0.17$ $-6·62$ $-$ Previous year $+4·2$ $-0·4$ nil $+0.17$ $-6·62$ $-$ Previous year $-15·5$ 15·8 10·9 0·64 1.12 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 $+2·6$ $-0·2$ nil $+0.17$ $-6·62$ $-$ Previous year $-15·6$ 12·3 0·32 162 nil nil 1932 $-0.3$ $+0·5$ $-0·24$ $+0·51$ $-4·00$ $-$ Year— 1931 $-0.3$ $+0·5$ $-0·24$ $+0·51$ $-4·00$ $-$ Year— 1931 $-0.8$ $+1·4$ $-0·32$ $+0·50$ nil nil 10.52 nil nil 10.53 $-0·24$ $+0·51$ $-4·00$ $-$ Year— 1931 $15·6$ 11·9 0·39 1·01 1.88 $-$ Year— 1931 $13·6$ 11·9 0·39 1·01 1.88 $-$ Year— 1931 $13·7$ 11·6 0·68 1·22 nil nil 101 102 1032 $13·7$ 11·6 0·68 1·22 nil nil 101 1032 $13·7$ 11·6 0·68 1·22 nil nil 101 102 102 1031 $13·7$ 11·6 0·68 1·22 nil nil 101 102 1031 $13·7$ 11·6 0·68 1·22 nil nil 101 102 1031 $13·7$ 11·6 0·68 1·22 nil nil 101 102 1032 $50·21$ 10.2 nil nil 1032 $50·21$ 10.2 nil nil 1031 $50·21$ 10.2 nil nil 1032 $50·21$ 10.2 nil nil 1031 $50·21$ 10·9 $-0·39$ 1·01 1.88 Year— 1031 $13·7$ 11·6 0·68 1·22 nil nil 101 102 $50·21$ 10·1 $-0·3$ $+0·29$ $+0·21$ $-1·88$												
Mean of 5 years, 1927–1931        11-5       13-0       0-72       1.50       12-90          Year		ion. 6.	514.									
Year- 1931         10·2       13·7       1·34       1·34       14·49       13·51         Increase or decrease in 1932 on- 5 years' average, 1927-1931        0·2       -2·0       +0·04       +0·64       -12·90          Previous year         +1·1       -2·7       -0·58       +0·80       -14·49       -13·51         Royton       Population, 16.750.       Mean of 5 years, 1927-1931        -0·2       -2·0       +0·04       +0·64       -12·90          1931         +1·1       -2·7       -0·58       +0·80       -14·49       -13·51         Research       Mean of 5 years, 1927-1931       12·9       14·1       0·71       1·26       6·62          1932         11·3       14·3       0·71       0·65       15·70       14·92         1932         +1·2       0·1       11·3       10·17       -6·62          Previous year       1927-1931       15·8       10·9       0·64       1·12       nil       nil         1931         15·6       10·9       0·64 <td></td> <td></td> <td></td> <td>-1931</td> <td></td> <td>11.5</td> <td>18-0</td> <td>0.72</td> <td>1.50</td> <td>12.90</td> <td></td> <td>89</td>				-1931		11.5	18-0	0.72	1.50	12.90		89
1931         10-2       13-7       1-34       1-44       18-51         1932          11-3       11-0       0.76       2-14       nil       nil         Increase or decrease in 1932 on       5       2-14       nil       nil       nil         Previous year         -0-2       -2-0       +0-04       +0-64       -12-90          Previous year         +1-1       -2-7       -0-58       +0.64       -12-90          Previous year         +1-1       -2-7       -0-58       +0.64       -12-90          Notice         +1-1       -2-7       -0-58       +0.64       -12-90									100	12 00	11-1-1 T (mailes	0.0
Increase or decrease in 1932 on- 5 years' average, 1927-1931 $-0.2$ $-2.0$ $+0.04$ $+0.64$ $-12.90$ $-1$ Previous year $$ $+1.1$ $-2.7$ $-0.58$ $+0.80$ $-14.49$ $-13.51$ <b>Soyon</b> Population, 16,750. Mean of 5 years, 1927-1931 $12.9$ $14.1$ $0.71$ $1.26$ $6.62$ Year- 1931 $$ $11.3$ $14.3$ $0.71$ $0.65$ $15.70$ $14.92$ 1932 $$ $1155$ $13.9$ $0.71$ $1.43$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $+2.6$ $-0.2$ nil $+0.17$ $-6.62$ Previous year $$ $$ $+4.2$ $-0.4$ nil $+0.78$ $-15.70$ $-14.92$ <b>keimersdale</b> Population, 6,172. Mean of 5 years, 1927-1931 $+2.6$ $12.3$ $0.32$ $1.62$ nil nil 1932 $$ $15.8$ $10.9$ $0.64$ $1.12$ nil nil 1932 $$ $15.9$ $12.3$ $0.32$ $1.62$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $-0.8$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ Previous year $$ $-0.8$ $+1.4$ $-0.32$ $+0.50$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.6$ $11.9$ $0.39$ $1.01$ $1.88$ Year- 1931 $$ $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.7$ $11.6$ $0.68$ $1.22$ nil nil 1932 $$ $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.7$ $11.6$ $0.68$ $1.22$ nil nil 1932 $$ $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1927-1931 $13.7$ $11.6$ $0.68$ $1.22$ nil nil Increase or decrease in 1932 on- 5 years' average, 1937-1931 $10.7$ $1.9$ $-0.3$ $+0.29$ $+0.21$ $-1.88$	1931			A				1.34	1.84	14-49	18.51	72
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1932					11.3	11-0	0.76	2.14	nil	nil	54
Previous year $+1\cdot 1$ $-2\cdot 7$ $-0\cdot 58$ $+0\cdot 80$ $-14\cdot 49$ $-18\cdot 51$ Population, 16,750. Mean of 5 years, 1927–1931 12·9 14·1 0·71 1·26 6·62 Year- 1931 11·3 14·3 0·71 0·65 15·70 14·92 1932 11·55 13·9 0·71 1·43 nil nil Increase or decrease in 1932 on- 5 years' average, 1927–1931 +2·6 $-0\cdot 2$ nil $+0\cdot 17$ $-6\cdot 62$ Previous year $+4\cdot 2$ $-0\cdot 4$ nil $+0\cdot 78$ $-15\cdot 70$ $-14\cdot 92$ kelmersdale Population, 6,172. Mean of 5 years, 1927–1931 15·3 11·8 0·56 1·11 4·00 Year- 1931 15·8 10·9 0·64 1·12 nil nil 1932 15·8 10·9 0·64 1·12 nil nil 1932 15·0 12·3 0·32 1·62 nil nil Increase or decrease in 1932 on- 5 years' average, 1927–19310·3 $+0\cdot 5$ $-0\cdot 24$ $+0\cdot 51$ $-4\cdot 00$ Previous year 14·5 14·3 0·40 1·49 nil nil 1932 13·7 11·6 0·68 1·22 nil nil 1932 13·7 11·6 0·68 1·22 nil nil Increase or decrease in 1932 on- 5 years' average, 1927–1931 13·7 11·6 0·68 1·22 nil nil 1932 13·7 11·6 0·68 1·22 nil nil 1932 13·7 11·6 0·68 1·22 nil nil 1932 13·7 11·6 0·68 1·22 nil nil 1000	Increase on	decrea	ise in	1932 on	-							
toyton         Population, 16,750.         Mean of 5 years, 1927-1931       12.9       14.1       0.71       1.26       6.62       -         Year-       1931       11.3       14.3       0.71       0.65       15.70       14.92         Increase or decrease in 1932 on       5 years' average, 1927-1931 $+2.6$ $-0.2$ nil $+0.17$ $-6.62$ $-$ Previous year $+4.2$ $-0.4$ nil $+0.78$ $-15.70$ $-14.92$ kelmersdale       Population, 6,172.         Mean of 5 years, 1927-1931       15.8       10.9       0.64       1.12       nil       nil         1932        15.0       12.3       0.32       162       nil       nil         Year-       1933        15.0       12.3       0.32       162       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927-1931 $-0.8$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-$ Increase or decrease in 1932 on       5 $+0.4$ $-0.32$ $+0.50$ nil       nil         1931	5 years'	average	e, 192	27-1931		-0.5	-2.0	+0.04	+0.64	-12.90	-	-35
Population, 16,750. Mean of 5 years, 1927–1931 12-9 14-1 0-71 1-26 6-62						+1.1	-2.7		+0.80	-14-49	-13.51	-18
Population, 16,750. Mean of 5 years, 1927–1931 12-9 14-1 0-71 1-26 6-62 Year												
Population, 16,750.         Mean of 5 years, 1927–1931       12-9       14-1       0-71       1-26       6-62          Year       1931         11-3       14-3       0-71       0-65       15-70       14-92         1932         15-5       13-9       0-71       1-43       nil       nil         Increase or decrease in 1932 on       5       5       years' average, 1927-1931        +2-6       -0-2       nil       +0-17       -6-62          Previous year         +4+2       -0-4       nil       +0-17       -6-62          Previous year         +4+2       -0-4       nil       +0-17       -6-62          Previous year         +4+2       -0-4       nil       +0.78       -15-70       -14-92         kelmersdale       Population, 6,172.       Mean of 5 years, 1927-1931        15-8       10-9       0-64       1-12       nil       nil         1932         15-0       12-3       0-32       1-65       nil       nil       nil												
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Year- 1931       11.3       14.3       0.71       0.65       15.70       14.92         1932         15.5       13.9       0.71       1.43       nil       nil         Increase or decrease in 1932 on- $\delta$ years' average, 1927-1931        +2.6 $-0.2$ nil $+0.17$ $-6.62$ $-$ Kelmersdale       Previous year $+4.2$ $-0.4$ nil $+0.78$ $-15.70$ $-14.92$ kelmersdale       Population, 6,172.       Mean of 5 years, 1927-1931 $15.3$ $11.8$ $0.56$ $1.11$ $4.00$ $-$ Year       1931 $15.0$ $12.3$ $0.32$ $1.62$ nil       nil         Increase or decrease in 1932 on       5       years' average, 1927-1931 $-0.3$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-$ mathin       nil       nil       nil       nil       nil       nil         Increase or decrease in 1932 on       5 $-0.8$ $+1.4$ $-0.32$ $+0.50$ nil       nil         tandish-with-Langtree <t< td=""><td>Populati</td><td>ion, 16</td><td>,750.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Populati	ion, 16	,750.									
1931         11-3       14-3       0-71       0-65       15-70       14-92         1932          15-5       13-9       0-71       1-43       nil       nil         Increase or decrease in 1932 on $5$ years' average, 1927-1931 $+2\cdot6$ $-0\cdot2$ nil $+0\cdot17$ $-6\cdot62$ $14\cdot92$ kelmersdale       Population, 6,172. $-0\cdot4$ nil $+0\cdot78$ $-15\cdot70$ $-14\cdot92$ Mean of 5 years, 1927-1931        15-3       11-8 $0\cdot56$ 1-11 $4\cdot00$ $$ Year       1931         15-0       12-3 $0\cdot32$ $1\cdot62$ nil       nil         Increase or decrease in 1932 on       5       years' average, 1927-1931 $-0\cdot3$ $+0\cdot5$ $-0\cdot24$ $+0\cdot51$ $-4\cdot00$ $$ Previous year $-0\cdot3$ $+0\cdot5$ $-0\cdot24$ $+0\cdot51$ $-4\cdot00$ $$ Previous year $-0\cdot3$ $+0\cdot5$ $-0\cdot24$ $+0\cdot51$ $-4\cdot00$ $$ Previous year <td>Mean of 5</td> <td>years,</td> <td>1927-</td> <td>-1931</td> <td></td> <td>12.9</td> <td>14.1</td> <td>0.71</td> <td>1.26</td> <td>6.62</td> <td>-</td> <td>104</td>	Mean of 5	years,	1927-	-1931		12.9	14.1	0.71	1.26	6.62	-	104
1932         15-5       13-9       0.71       1.43       nil       nil         Increase or decrease in 1932 on— $5$ years' average, 1927–1931 $+2.6$ $-0.2$ nil $+0.17$ $-6.62$ $-$ Previous year $+4.2$ $-0.4$ nil $+0.78$ $-15.70$ $-14.92$ kelmersdale.—       Population, 6,172. $+4.2$ $-0.4$ nil $+0.78$ $-15.70$ $-14.92$ kelmersdale.—       Population, 6,172. $15.8$ $10.9$ $0.64$ $1.12$ nil       nil         1931 $15.8$ $10.9$ $0.64$ $1.12$ nil       nil         1932 $15.6$ $10.9$ $0.64$ $1.12$ nil       nil         Increase or decrease in 1932 on— $5$ years' average, 1927–1931 $-0.3$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-$ Previous year $-0.8$ $+1.4$ $-0.82$ $+0.50$ nil       nil	Year-											
$\begin{array}{cccccccccccccccccccccccccccccccccccc$												120 137
Previous year $+4\cdot2$ $-0\cdot4$ nil $+0.78$ $-15\cdot70$ $-14\cdot92$ kelmersdale       Population, 6,172.         Mean of 5 years, 1927-1931 $15\cdot3$ $11\cdot8$ $0\cdot56$ $1\cdot11$ $4\cdot00$ $-$ Year       1931 $15\cdot8$ $10\cdot9$ $0\cdot64$ $1\cdot12$ nil       nil         1932 $15\cdot0$ $12\cdot3$ $0\cdot32$ $1\cdot62$ nil       nil         Increase or decrease in 1932 on $5$ years' average, 1927-1931 $-0\cdot3$ $+0\cdot5$ $-0\cdot24$ $+0\cdot51$ $-4\cdot00$ $-$ Previous year $-0\cdot8$ $+1\cdot4$ $-0\cdot32$ $+0.50$ nil       nil         tandish-with-Langtree       Population, 7,323. $-0\cdot8$ $+1\cdot4$ $-0\cdot39$ $1\cdot01$ $1\cdot88$ $-$ Year       1931 $14\cdot5$ $14\cdot3$ $0\cdot40$ $1\cdot49$ nil       nil         1932 $13\cdot7$ $11\cdot6$ $0\cdot68$ $1\cdot22$ nil       nil         Inc	Increase or	decrea	se in	1932 on	-0.0							
kelmersdale         Population, 6,172.         Mean of 5 years, 1927-1931       15-3       11-8       0-56       1-11       4-00          Year       1931         15-0       12-3       0-32       1-62       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927-1931        -0-3       +0-5       -0-24       +0-51       -4-00          Syears' average, 1927-1931        -0-8       +1-4       -0-82       +0-50       nil       nil         andish-with-Langtree       Previous year        -0-8       +1-4       -0-82       +0-50       nil       nil         andish-with-Langtree       Population, 7,328.       Mean of 5 years, 1927-1931        18-6       11-9       0-39       1-01       1-88          Year       1931        13-7       11-6       0-68       1-22       nil       nil         1932         13-7       11-6       0-68       1-22       nil       nil         1931         13-7       11-6       0-68       1-22       nil       nil			, 192	7-1931						and the second s	-	+33
Population, 6,172.         Mean of 5 years, 1927–1931        15·8       11·8       0·56       1·11       4·00          Year       1931         15·8       10·9       0·64       1·12       nil       nil         1932          15·0       12·3       0·32       1·62       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927–1931        -0·3       +0·5       -0·24       +0·51       -4·00          Syears' average, 1927–1931        -0·8       +1·4       -0·32       +0·50       nil       nil         andish-with-Langtree       Population, 7,323.          13·6       11·9       0·39       1·01       1·88          Year       1931         14·5       14·3       0·40       1·49       nil       nil         1932         13·7       11·6       0·68       1·22       nil       nil         Instantion, 7, 323.          13·7       11·6       0·68       1·22       nil	Previous	year				+4.2	-0.4	nil	+0.78	-15.70	-14.92	+17
Population, 6,172.         Mean of 5 years, 1927–1931        15·8       11·8       0·56       1·11       4·00          Year       1931          15·8       10·9       0·64       1·12       nil       nil         1932          15·0       12·3       0·32       1·62       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927-1931        -0·3       +0·5       -0·24       +0·51       -4·00          Syears' average, 1927-1931        -0·8       +1·4       -0·32       +0·50       nil       nil         andish-with-Langtree       Population, 7,323.          13·6       11·9       0·39       1·01       1·88          Year       1931         14·5       14·3       0·40       1·49       nil       nil         1932         13·7       11·6       0·68       1·22       nil       nil         Increase or decrease in 1932 on         13·7       11·6       0·68       1·22												
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Year- 1931         15.8       10.9       0.64       1.12       nil       nil         1932         15.0       12.3       0.32       1.62       nil       nil         Increase or decrease in 1932 on- 5 years' average, 1927-1931        -0.3 $+0.5$ $-0.24$ $+0.51$ $-4.00$ -         Previous year $-0.8$ $+1.4$ $-0.32$ $+0.50$ $-1.400$ -         andish-with-Langtree Previous year $-0.8$ $+1.4$ $-0.32$ $+0.50$ nil       nil         andish-with-Langtree Previous year $-0.8$ $+1.4$ $-0.32$ $+0.50$ nil       nil         andish-with-Langtree Population, 7,323. $13.6$ $11.9$ $0.39$ $1.01$ $1.88$ -         Year- 1931 $14.5$ $14.3$ $0.40$ $1.49$ nil       nil         1932 $13.7$ $11.6$ $0.68$ $1.22$ nil       nil         Increase or decrease in 1932 on-	Populati	on, 6,1	72.									
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1932         15.0       12.3       0.32       1.42       min       min       min         Increase or decrease in 1932 on—       5 years' average, 1927–1931 $-0.3$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-0.3$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-0.8$ $+1.4$ $-0.32$ $+0.50$ $-1.4.00$ $-0.8$ $+1.4$ $-0.32$ $+0.50$ $-1.4.00$ $-0.8$ $+1.4$ $-0.32$ $+0.50$ $-1.4.00$ $-1.88$ $-1.4.00$ $-1.4.00$ $-1.88$												
Increase or decrease in 1932 on— 5 years' average, 1927–1931 $-0.3$ $+0.5$ $-0.24$ $+0.51$ $-4.00$ $-$ Previous year $$ $-0.8$ $+1.4$ $-0.32$ $+0.50$ nil nil andish-with-Langtree.— Population, 7,323. Mean of 5 years, 1927–1931 13.6 11.9 0.39 1.01 1.88 — Year— 1931 $$ $$ $14.5$ $14.3$ $0.40$ 1.49 nil nil 1932 $$ $$ $13.7$ 11.6 0.68 1.22 nil nil Increase or decrease in 1932 on— 5 years' average, 1927–1931 $+0.1$ $-0.3$ $+0.29$ $+0.21$ $-1.88$ —	and the second se											40
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1932					15.0	12.3	0.32	1.62	nil	nil	107
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tandish-with-Langtree.—         Population, 7,323.         Mean of 5 years, 1927-1931 $Mean of 5 years, 1927-1931$				7-1931						-4.00		+45
Population, 7,323.         Mean of 5 years, 1927–1931        13.6       11.9       0.39       1.01       1.88          Year       1931        14.5       14.3       0.40       1.49       nil       nil         1932         13.7       11.6       0.68       1.22       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927–1931 $+0.1$ $-0.3$ $+0.29$ $+0.21$ $-1.88$	Previous	year			•••	-0.8	+1.4	-0.32	+0.20	nil	nil	+67
Population, 7,323.         Mean of 5 years, 1927–1931        13.6       11.9       0.39       1.01       1.88          Year       1931        14.5       14.3       0.40       1.49       nil       nil         1932         13.7       11.6       0.68       1.22       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927–1931        +0.1       -0.3       +0.29       +0.21       -1.88												
Population, 7,323.         Mean of 5 years, 1927–1931        13.6       11.9       0.39       1.01       1.88          Year       1931        14.5       14.3       0.40       1.49       nil       nil         1932         13.7       11.6       0.68       1.22       nil       nil         Increase or decrease in 1932 on       5       years' average, 1927–1931 $+0.1$ $-0.3$ $+0.29$ $+0.21$ $-1.88$	andish-with	-Langt	ree	-								
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1932         13.7       11.6       0.68       1.22       nil       nil         Increase or decrease in 1932 on— $5$ years' average, 1927–1931 $+0.1$ $-0.3$ $+0.29$ $+0.21$ $-1.88$	and the second se											
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5 years' average, 1927-1931 +0.1 -0.3 +0.29 +0.21 -1.88 -	and the second s					13.1	0.11.0	0.68	1.22	nil	nii	79
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Previous year $-0.8 - 2.7 + 0.28 - 0.27$ nil nil -	1 revious	year			•••	-0.8	-2.7	+0.28	-0.27	nil	nil	-42

		22	5				
		PER 1,000 OF E	STIMATED POPULAT	FD-3M	Materna	Mortality Rate	Rate
	Li Birth	ve	Death-rate	Death-rate	>	0 Per 1,006 Teral	Death     under     One Ye
stretford			Respiratory System	California	Directos	(Live and Still) Births	Der 1,00 Live Bir
Population, 56,520.							
Mean of 5 years, 1927-1931	14	-4 11-5	0.50				
Year-			0.70	1.52	4.65		59
1931	13	8 10-6	0.70	1.33	9.09	0.50	
1932	13		0.53	1.38	3-83 4-08	3·56 3·84	54 59
Increase or decrease in 1932 of							
5 years' average, 1927-1931		4 -0.5	-0.17				
Previous year	0		-0.17	-0.14 + 0.05	-0.57 + 0.25	$+0.\overline{28}$	nil +5
winton and Pendlebury.—							
Population, 33,770.							
Mean of 5 years, 1927-1931	13-	4 11.4	0.50	1.0-			
Year-	10	• 11.4	0.56	1.37	5.69		72
1931	13-	6 11.8	0.51	1.52	2.22		
1932	13-		0.53	1.65	nil	2-09 nit	66 42
Increase or decrease in 1932 on							
5 years' average, 1927-1931	+0.	4 -0.3	-0.03	10.00	* 00		
Previous year	+0.		100 200	+0.28 + 0.13	-5.69 -2.22	-2.09	$-30 \\ -24$
						2 00	-24
ornton Cleveleys.—							
Population, 10,020.							
Mean of 5 years, 1927-1931	14-1	7 12-4	0.65	1.64	7.06		-
Year			0.00	1.04	1.00		52
1931 1932	13-1		1·28 1·09	1-28 2-19	7-46 nil	7-85 nil	67 51
Increase or decrease in 1932 on	_						
5 years' average, 1927-1931	5.1	+0.7	+0.44 -	+0.55	-7.06		
Previous year	3.6			+0.91	-7.46	-7.85	-1 - 16
							10
Population, 6,404.							
Mean of 5 years, 1927-1931	11.8	12.0	0.27	1.90	0.00		
lear-		12.0	0.27	1.30	2.98		57
1931	12.7	11.2	0-80	0.91	nil	nil	
1932	10.4		0-31	1.09	nil	nil	47
nerease or decrease in 1932 on-							
5 years' average, 1927-1931	1.4	+2.3	+0.04 -	0.01	0.00		
Previous year	2.3	+3.1		-0·21 -0·18	-2.98 nil	nil	+47 + 57
							1.01
wden.—							
Population, 2,547.							
lean of 5 years, 1927-1931	10.7	11-9	0.30	0.81			
car-	10-7	11.9	0.00	0.81	nil	-	78
1931	10.8	15-1	1.16	1.16			107
1932	10-6	15-3	nil	1.17	nil 37-03	nil 34-48	107 148
nerease or decrease in 1932 on-							140
5 years' average, 1927–1931		101	0.00		Station and sea		
Previous year	$\dots -0.1 \\ \dots -0.2$	$+3-4 \\ +0-2$			+37-03 +	34-48	+70
			110 1		101.00 +	01.10	+41

	220		
	PER 1,000 OF ESTIMATED POPULATION	Maternal Mortality Rate	Rate of
	Live Death-rate Death-rate	Per 1,000 Fer 1,000	Deaths under
	Birth-rate Death-rate from from Tuberculosis of Cancer	Live Total Births (Live and	One Year per 1,00
	Respiratory System	Still) Births	Live But
Turton			
Population, 11,720.	•		
Mean of 5 years, 1927-1931	11.0 13.7 0.55 1.79	7.25 —	70
Year 1931	10.4 13.1 0.50 1.92	8.00 7.69	48
1932	9.7 12.1 0.42 1.70	nil nil	43
Increase or decrease in 1932 on	-		
5 years' average, 1927-1931	$\dots$ $-1.3$ $-1.6$ $-0.13$ $-0.09$	-7.25	-27
Previous year	$\dots -0.7 -1.0 -0.08 -0.22$	-8.00 $-7.69$	-5
Tyldesley-with-Shakerley			
Population, 14,880.			
Mean of 5 years, 1927-1931	16.4 12.5 0.53 1.41	4.72 -	78
Year-			
1931	15.1 11.8 0.66 1.13	4.38 4.06	0.0
1932	15.3 11.1 0.80 1.34	nil nil	87 96
Increase or decrease in 1932 on	-		
5 years' average, 1927-1931	$\dots$ -1·1 -1·4 +0·27 -0·07	-4.72	+18
Previous year	$\dots +0.2 -0.7 +0.14 +0.21$	-4.38 -4.06	+9
Ulverston.—			
Population, 9,232.			
Mean of 5 years, 1927-1931	14.2 15.5 0.49 1.93	8.05 -	66
			00
Year- 1931	14.0 17.0 0.44 1.65		
1932	12.5 14.9 0.43 2.49	nil nil 8-62 8-00	62 34
		0.07 0.00	34
Increase or decrease in 1932 on	-		
5 years' average, 1927-1931	$\dots -1.7 -0.6 -0.06 +0.56$	+5.57	-32
Previous year	$\dots$ -1.5 -2.1 -0.01 +0.84	+8.62 +8.00	-28
Upholland.—			
Population, 5,641.			
Mean of 5 years, 1927-1931	16.7 11.6 0.34 1.47	2.04 -	54
Year-			
1981	18.7 10.8 nil 1.98	nil nil	38
1932	16-1 7.9 0.88 0.70	nil nil	32
Increase or decrease in 1932 on	-		
5 years' average, 1927-1931	$\dots -0.6 -3.7 + 0.54 - 0.77$	-2.04	-22
Previous year	$\dots -2.6 -2.9 + 0.88 - 1.28$	nil nil	-6
Urmston			
Population, 9,393.			
Mean of 5 years, 1927-1931	13.8 12.7 0.71 1.97	4.85 -	43
Year-			
1931	14.0 13.8 0.42 2.14	7.69 7.14	
1932	11.9 10.0 0.31 1.49	7-63 7-14 nil nil	76 71
		an an	
Increase or decrease in 1932 on			
5 years' average, 1927-1931	1.9 -2.7 -0.40 -0.48	-4.85 -	+28
Previous year	$\dots -2 \cdot 1  -3 \cdot 8  -0 \cdot 11  -0 \cdot 65$	-7.63 -7.14	-5

		22	7				
and and strand where		Per 1,000 or Est	IMATED POPULAT	TOON	Maternal 2	Mortality Rate	Rate of
and a second barrent	Live Birth-rat	e Death-rate	Death-rate from Tuberculosis of	Death-rate from Cancer	Per 1,000 Line Births	Total (Live and	Deaths under One Year per 1,000
/alton-le-Dale			Respiratory System			Still) Births	Live Birth
Population, 12,980.							
Mean of 5 years, 1927-1931	14-8	12.8	0.71	1.72	5.59	-	63
Year- 1931	14.7	18.5	0.78	1.79	10.50	0.70	10
1932	12.5	11-0	0-30	1.54	10-58 6-13	9·70 5·68	42 55
Increase or decrease in 1932 or							
5 years' average, 1927–1931 Previous year	$\dots -1.8 \\ \dots -2.2$	$-1.8 \\ -2.5$	-0.41	-0.18	+0.54	-	-8
Trees gen	2.2	-2.3	-0.48	-0.25	-4-45	-4.02	+13
ardle							
Population, 4,455.							
Mean of 5 years, 1927-1931	12.1	18.5	0.43	1.00	0.00		I) Isobili
Year-		10.0	0.49	1.00	8.88	Line and State	76
1931 1932	9.4	14-1	0.44	1.57	nil	nil	166
1932	11.6	14-8	0.22	1.57	nil	nil	38
Increase or decrease in 1932 or	-						
5 years' average, 1927–1931 Previous year	0.5	+1.8	-0.21	+0.57	-8.83		-38
Previous year	+2·2	+0.7	-0.55	nil	nil	nil	-128
Vaterloo-with-Seaforth							
Population, 30,830							
Mean of 5 years, 1927-1931	16.5	12.8	0.89	1.48	3.01		
Year-			0.00	1.40	0.01	A.T. MARCH	62
1931	15.4	18.5	0.98	1.84	nil	nil	49
1932	15.6	12-4	0.81	1-81	4.15	3.89	79
Increase or decrease in 1932 on	83.0						
5 years' average, 1927-1931	0.9	+0.1	-0.08	+0.33	+1.14		+17
Previous year	+0.2	-1.1	-0.15	-0.03	+4.15	+3.89	+30
<ul> <li>On the 1st April, 1932, a small strict and a small area was transfer. The birth and death rates for 19</li> </ul>	ICG IFOID COPER-	Crosny to Ma	tenon with Se	eatorth.			
esthoughton.—							
Population, 15,940.							
Mean of 5 years, 1927–1931 Year—	13.7	11.8	0.51	0.76	8.88	- 4 Ja	85
1981	14-8	11.9	0.61	0.80	4.29	4.18	81
1932	13.8	11-4	0.50	1.12	4.52	4.34	85
Increase or decrease in 1932 on							
5 years' average, 1927-1931	+0.1	-0.4	-0.01	+0.36	+1.19	SAN STATE	nil
Previous year	0.5	-0.5		+0.32	+0.23	+0.16	+4
hitefield							
Population, 9,803.							
Mean of 5 years, 1927–1931	14.7	13.2	0.78	1.48	4-45	-	67
Year	14-0	14.8	0.75	1.40	<b>T</b> 00	M 30	
1932	··· 14·0 ··· 15·9	13.5	0.40	1.93	7·69 12·82	7·19 11·90	76 70
Increase or decrease in 1932 on							
5 years' average, 1927-1931	+1.2	+0.3		+0.45	+8.87	-	+3
Previous year	+1.9	-1.8	-0.35	+0.53	+5.13	+4.71	-6
P*							

	PER 1,000 OF ESTIMATED FOPULATION.									
	Bir	Live th-rate	Death-rate	Death-rate from Tubercolosis of Respiratory System	Death-rate from Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still) Births	Death unde One Yo per 1,6 Live Bi		
Whitworth.—										
Population, 8,263.	TRUE		10		1 40	1 00		201		
Mean of 5 years, 1927–1931	1	4-3	16.5	0.95	1.59	1.62	-	10		
Year-	1	15-2	15-8	0.59	2.01	nil	nil	92		
1931 1932		5.0	15-2	0.36	2.05	8.06	7.57	80		
Increase or decrease in 1932 on-	-									
5 years' average, 1927-1931	+	0.7	-1.3	-0.59	+0.46	+6.44		-25		
Previous year		0.2	-0.1	-0.53	+0.04	+8-06	+7.57	-18		
Widnes (Borough).—										
Population, 41,130.										
Mean of 5 years, 1927-1931	5	21-1	12.2	0.90	1.11	8.21	-	72		
Ycar- 1931	1.	19.7	18-1	0.97	1.19	8.70	8.55	8		
<b>1931</b> <b>1932</b>		20-1	11.5	1.02	1.33	6.04	5.80	7		
Increase or decrease in 1932 on-	-0.5									
5 years' average, 1927-1931		1.0	-0.7 -1.6	+0.12	$+0.22 \\ +0.14$	+2.83 + 2.34	+2.25	+		
Previous year	+	0-4	-1-0	+0-05	40.14		72.20	-		
Withnell.— Population, 2,931.										
Mean of 5 years, 1927-1931	1	11.9	11.7	0.42	1.40	12.54		45		
Year-										
1931		18.7	10-4	0.32	1.96	nil	nil	20		
1932	1	11-9	12-6	1.02	0.68	nil	nil	28		
Increase or decrease in 1932 on-	100 10-5									
5 years' average, 1927–1931		nil	+0.9	+0.60	-0.72	-12.54	The second	-1		
Previous year		1.8	+2.2	+0.70	-1.28	nil	nil	+:		
Manufau										
Worsley.— Population, 14,590.										
Mean of 5 years, 1927–1931	1	1.0	18-1	0.89	1.61	12-42	Alt muitals	74		
Year-										
1931 1932		11.7	18-7 11-6	0-34 0-47	1.70 1.37	11-62 nil	11-11 nil	93 59		
Increase or decrease in 1932 on-										
THE THE OF THE TOTAL THE TOTAL OFF	and the second									
5 years' average, 1927-1931	+	0.5	-1.5	+0.08	-0.24	-12.42		-15		

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# RURAL DISTRICTS.

and the second	-	the second s	1,000 or Es	IMATED POPULAT	TON	Materna	d Mortality Rate	Rate of
and the second s	1	Live Birth-rate	Death-rate	Death-rate from Tuberculosis of Respiratory	Death-rate from Cancer	Per 1,00 Live Births	Total (Live and Still)	Deaths under One Year per 1,000 Live Births
arton-upon-Irwell				System			Births	
Population, 16,880.								
Mean of 5 years, 1927-1931		15.9	10.8	0.57	1.32	4.70		63
Year- 1981	0.10	13.9	11.9	0.76	1.98	9.17	8.62	82
1932		15.7	10-6	0.53	1-42	3.75	3.55	56
Increase or decrease in 1932 on-	0.22							
5 years' average, 1927-1931	02.0-	-0.2	-0.2	-0.04	+0.10	0.05		
Previous year		+1.8	-1.3	-0.53	-0.26	$-0.95 \\ -5.42$	-5.07	$-7 \\ -26$
lackburn								
Population, 11,820.								
Mean of 5 years, 1927-1931		10.8	10.1	0.37	0.07			
Year-				17 (1 (a) (b)	0.87	4.99		58
1932		11.5 11.5	8·5 12·1	0·17 0·17	0.58	7-69 nil	7·40	53
				•	1.01	m	nil	76
Increase or decrease in 1932 on-								
5 years' average, 1927–1931 Previous year		+0.7	+2.0	-0.20	+0.80	-4.99	-	+23
Previous year		nil	+3.6	nil	+1.14	-7.69	-7.40	+23
urnley								
Population, 17,590.								
Mean of 5 years, 1927-1931		11.7	13-0	0.49	1.17	1.79		
Year-			10 0	0 40	1.11	1.49		65
1931 1932	11.5	11·9 12·0	15·5 11·9	0·56 0·56	1.58 0.90	4.76 nil	4-48 nil	71 56
Increase or decrease in 1932 on-								
5 years' average, 1927-1931		+0.3	-1.1	10.07	0.07	1 50		
Previous year		+0.3 +0.1	-3.6	+0.07 nil	$-0.27 \\ -0.68$	$-1.79 \\ -4.76$	-4.48	$-9 \\ -15$
ıry.—								
Population, 8,739.								
Mean of 5 years, 1927–1931 Year—		12.8	18.0	0.42	1.27	3.36	1	69
1931		11.7	12.1	0.33	1.68	9.52	8.40	
1932		9.3	14.7	0.57	1.48	36.58	34.88	85 85
Increase or decreases in 1020					No. AL		No. and and a second	a c i
Increase or decrease in 1932 on-			1.7.5	10.75	10.05	Station 1		
5 years' average, 1927–1931 Previous year		-3.5 -2.4	$^{+1\cdot7}_{+2\cdot6}$			$+33.22 \\ +27.06$	+26.48	+16 nil
and the second s								
lorley								
Population, 22,190.								
Mean of 5 years, 1927-1931		14.7	11.8	0.40	1.30	5.61	All constella	67
Year-			- 11	++2		1411-121		
1931		12.9	11.6	0.53	1.07	10.38	9.93	65
1932		13-6	11-1	0.27	1.26	3.30	3.02	75
Increase or decrease in 1932 on-								
5 years' average, 1927-1931		-1.1	-0.7	-0.13	-0.04	-2.31		10
Destand a set		-0.7	-0.5		+0.19	-2.31	-6.91	$^{+8}_{+10}$
10-0-0- 02-0- P		VO-D		and the second se				

	.8101	1.000 or Es	TIMATED FOPULA	TION	Maternal M	fortality Rate	Ratec
	Live Birth-rate	Death-rate	Death-rate from Tuberculosis of	Death-rate from	Per 1,000 Live Births	Per 1,000 Total (Live and	Death under One Ye per L00 Live Bir
			Respiratory System			Still) Births	Live Bg
Clitheroe							
Population, 8,872.		The second	1.000	1 1	1.00		
Mean of 5 years, 1927–1931 .	9.2	8.9	0.39	1.15	9.28	10,01	69
	9·0 <b>8·3</b>	9·4 7·5	0-44 nil	1·10 0·90	12·19 nil	11-36 nil	78 13
Increase or decrease in 1932 on-			0.90	0.05	0.00		-
a grant and grant	-0.9 -0.7	$-1.4 \\ -1.9$	-0.39 -0.44	-0.25 -0.20	-9.28 -12.19	-11.36	-56 -60
Tretono geni in in	2.0 - 0.5	0- 6			LUST-SUM)	LUND ALL	
Fylde.— Population, 16,850.							
70 00 1007 1021	14.7	11.2	0.31	1.24	7.71	R. II. dieith	55
	10 10	0	01 0 01	01	1001.000		10.00
Year- 1931	16.4	11.6	0.12	1.89	3.86	8.66	5-
1932	14.9	12.0	0.47	1.06	7.93	7.51	91
Increase or decrease in 1932 on-							
5 years' average, 1927-1931 .	+0.2	+0.8	+0.16	-0.18	+0.22	sentences and	+3:
D	1.5	+0.4	+0.35	-0.33	+4.07	+3.85	+3
Garstang							
Population, 11,590.				- i	.00		arrest f
Mean of 5 years, 1927–1931 .	16.2	11.7	0.31	1.11	4.90	a particular a	5:
Year	13.7	11.8	0.17	1.46	nil	nil	
4000	15.1	11-4	0.25	0.94	5-68	5.52	5 6
Increase or decrease in 1932 on-							
		0.9	0.00	0.17	10.00		and the second
n	$-1 \cdot 1$ $+1 \cdot 4$	$-0.3 \\ -0.4$	-0.06 + 0.08	-0.17 -0.52	+0.78 + 5.68	+5.52	+1
Lancaster							
Population, 9,505.							
Mean of 5 years, 1927–1931	15.5	12.7	0.41	1.27	7.09	er viene a	5
Year-							
1000	13.9	12·7 13·0	0.62	1.25	22.55	21.12	67
1932	11-8	13.0	0.31	2.03	nil	nil	
Increase or decrease in 1932 on-	an marse						
	3.7 2.1	+0.8	-0.10	+1.36	-7.09		+2
Previous year	2.1	+0.3	-0.31	+1.38	-22.55	-21.12	+1
Leigh.—							-100
Population, 11,860.							
34	14.4	11.3	0.65	1.11	4.86	a second and	8
Year-	0.1 27.	0	11 . 0.0				1
1981	18.9	11.6	0.34	0.34	6.21	5.88	18
1932	15.1	10.9	0.35	1.32	5.81	5-68	9
Increase or decrease in 1932 on-							
	+0.7	-0.4	-0.30	+0.21	+0.95	The search is a	+1
Previous year	+1.2	-0.7	+0.01	+0.98	-0.40	-0.50	-8

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		Par	a 1,000 or Esti	INATED POPULATS	ON	Maternal	Mortality Rate	Rate o
		Live Birth-rate	Death-rate	Death-rate from Tuberculosis of Respiratory System	Death-rate from Cancer	Per 1,000 Lise Births	Per 1,000 Total (Live and Still) Births	One Yes per 1,00 Live Birt
mehurst.—				oyotan			. Dirtins	
Population, 8,656								
Mean of 5 years, 1927-1931		12.9	11.5	0.44	1.25	10.25	1	57
Year-		10.0						
1931 1932		10·2 10·9	12-0 11-0	0.58 0.80	1.51	nil nil	nil	82
				0.00	1.12	au	nil	73
Increase or decrease in 1932 o								
5 years' average, 1927-1931		-2.0	-0.5		-0.10	-10.25	Service of	+16
Previous year		+0.7	-1.0	+0.22	-0.36	nil	nil	+41
nesdale								
Population, 6,624.								
Mean of 5 years, 1927-1931		15.1	12.4	0.37	1.18	1.83	There a	42
Year—					1.10	1.00		
1981		15.6	11.8	0.15	1.22	nil	nil	49
1932		13.1	11-6	0.30	0.45	11-49	10.86	11
ncrease or decrease in 1932 o								
5 years' average, 1927-1931		-2.0	0.0	0.07	0.50	10.00		
Previous year		-2.5	$-0.8 \\ -0.2$		-0.73 -0.77	+9.66 + 11.49	+10.86	$-31 \\ -38$
iston.—								
Population, 30,830.								
Mean of 5 years, 1927–1931		18.9	11.0	0.85	1.12	6.00		64
Year-								matrick
1931		14-1	11.3	0.39	0.93	7.05	6-65	44
1932		12.6	9.6	0.19	0.90	7.69	7.31	58
nerease or decrease in 1932 of	n							
5 years' average, 1927-1931		-1.3	-1.4	-0.16 -	-0.22	+1.69		
Previous year		-1.5	-1.7		-0.03	+0.64	+0.66	-6 + 14
								A MARY COLOR
Illes								
Hon		10.0		and the supplication of the	and a start			
Mean of 5 years, 1927–1931		17.2	13.1	0.95	1.45	6.25	the beat the	63
Year- 1931		91.0	19.0	1.10	0.00			
1932		21-9 14-2	13·9 2·8	1·19 nil	2-39 nil	nil	nil	18
								nil
* On the 1st April, 1932, the R The birth and death rates for	19652 319	<ul> <li>calculated</li> </ul>	1 THEFT I CHIEF	of the normal	OTTOM THE	the last and a second second	and the second division of the second s	cashire.
plied by the Registrar-General ;	the rates	are based	on the birth	is and deaths	in the fir	st quarter o	nly.	a populat
							e termine f	
verston								

-100										
tion, 1	6,540.									
5 years	, 1927-	1931		15.0	18.9	0.52	2.01	5.70		58
				13.6	14.0	0.18	1.83	4-48	4.31	62
••••				13-4	14.7	0.48	1.57	4.50	4-42	54
or decre	case in	1932 of	n—							
' avera,	ge, 192			-1.6	+0.8	-0.04	-0.44	-1.20	_	-4
us year				-0.5	+0.7	+0.30	-0.26	+0.02	+0.11	-8
	tion, 1 5 years  or decre avera	tion, 16,540. 5 years, 1927-  or decrease in ' average, 192	tion, 16,540. 5 years, 1927–1931  or decrease in 1932 of ' average, 1927–1931	tion, 16,540. 5 years, 1927–1931  or decrease in 1932 on— ' average, 1927–1931	tion, 16,540. 5 years, 1927–1931 15.0 13.6 13.4 or decrease in 1932 on— ' average, 1927–19311.6	tion, 16,540. 5 years, 1927–1931 15.0 13.9 13.6 14.0 13.4 14.7 or decrease in 1932 on— $2^{\circ}$ average, 1927–1931 $-1.6$ +0.8	tion, 16,540. 5 years, 1927–1931 15.0 13.9 0.52 13.6 14.0 0.18 13.4 14.7 0.48 or decrease in 1932 on— 2 average, 1927–1931 $-1.6$ $+0.8$ $-0.04$	tion, 16,540. 5 years, $1927-1931$ 15.0 13.9 0.52 2.01 13.6 14.0 0.18 1.83 13.4 14.7 0.48 1.57 or decrease in 1932 on— ? average, $1927-1931$ $-1.6$ $+0.8$ $-0.04$ $-0.44$	tion, 16,540. 5 years, $1927-1931$ $15\cdot0$ $13\cdot9$ $0\cdot52$ $2\cdot01$ $5\cdot70$ $13\cdot6$ $14\cdot0$ $0\cdot18$ $1\cdot83$ $4\cdot48$ $13\cdot4$ $14\cdot7$ $0\cdot48$ $1\cdot57$ $4\cdot50$ or decrease in 1932 on— ? average, $1927-1931$ $-1\cdot6$ $+0\cdot8$ $-0\cdot04$ $-0\cdot44$ $-1\cdot20$	tion, 16,540. 5 years, $1927-1931$ 15.0 13.9 0.52 2.01 5.70 - 13.6 14.0 0.18 1.83 4.48 4.31 13.4 14.7 0.48 1.57 4.50 4.42 or decrease in 1932 on- ' average, $1927-1931$ $-1.6$ +0.8 -0.04 -0.44 -1.20 -

		These	1.000 en Ean	NATED POPULATE		N	and the Party	
		Live Birth-rate	Death-rate	Death-rate from Tuberculosis of Respiratory System	Death-rate from Cancer	Per 1,000 Line Births	Per 1,000 Total (Live and Still) Births	Rate of Deaths under One Yes per 1,00 Live Birt
Warrington.— Population, 16,490.								
Mean of 5 years, 1927-1931		13-4	9.6	0.55	1.20	4.82	1	58
Year 1931 1932	X	12-8 11-1	9·0 9·4	0-42 <b>0-30</b>	1·16 <b>1·63</b>	4·78 nil	4·54 nil	71 86
Increase or decrease in 1932 on	_							
5 years' average, 1927–1931 Previous year		-2·3 -1·7	-0.2 + 0.4		+0·43 +0·47	-4·82 -4·78	-4.54	$^{+28}_{+15}$
*West Lancashire.— Population, 25,300.								
Mean of 5 years, 1927-1931		14.5	11.9	0.44	1.55	6.10	10.0	58
Year		14.8	12.1	0.24	1.78	2.78	2.64	65
1932 (Extended Area)		10.0	9.8	0.48	1.21	nil	nil	61
Increase or decrease in 1932 on	-							
5 years' average, 1927–1931 Previous year			$^{-2\cdot 1}_{-2\cdot 3}$		$-0.34 \\ -0.57$	$-6.10 \\ -2.73$	-2.64	+3 -4

On the 1st April, 1932, the Rural District of Sefton was amalgamated with the Rural District of West Lancashire, statistics include the births and deaths occurring in the added area from that date. The birth and death rates for 1932 are calculated on an estimated population supplied by the Registrar-General.
 † Rates relating to the West Lancashire and Sefton Rural areas combined.

±Whiston	_										
Popula		0,870.									
Mean of	5 years	, 1927	-1931	09+0	14.6	9-2	0.38	1.02	4.87	-	64
Year 1931 <b>1932</b>					14-6 14-3	9.8 10.0	0-30 <b>0-23</b>	1-85 <b>1-39</b>	5-98 6-49	5·74 6·19	30 51
Increase	or decre	ease in	1932 o	n—							
5 years Previou			27-1931		$-0.3 \\ -0.3$	$^{+0.8}_{+0.2}$	-0.15 -0.07	+0.37 +0.04	$^{+1.62}_{-0.51}$	+0.45	-18

‡ On the 1st April, 1932, parts of the Townships of Eccleston, Knowsley, and Whiston were transferred to the Urban 1-trict of Prescot. The statistics exclude the births and deaths occurring in the transferred areas from that date. The birth and death rates for 1932 are calculated on an estimated population supplied by the Registrar-General.

Wigan.—											
Popula	ation, 6	3,294.									
Mean of	5 years	s, 1927-	-1931		18.5	12.8	0.58	1.29	2.46	adapted Ends	67
Year-											
1931					14.7	16-3	0.81	1.62	nil	nil	65
1932					16-3	12.3	0.79	1.74	nil	nil	67
Increase	or decr	ease in	1932 on	_							
5 years	a avera	ge, 192	7-1931		+2.8	-0.5	+0.26	+0.45	-2.46	Summer.	nil
Previo					+1.6	-4-0	-0.02	+0.12	nil	nil	+2
											and the second sec

## ADMINISTRATIVE COUNTY.

For Stillbirth rate and number of Legitimate and Illegitimate Births see Table 2, pages 15 to 22. • For populations used for the calculation of birth and death rates, see footnote to Table 2, page 22.

	P	ER 1,000 OF EST	IMATED POPULATE	ON,	Maternal	Mortality Rate	Rate of
and the second s	Live Birth-rate	Death-rate	Death-rate from Tuberculosis of Respiratory System	Death-rate from Cancer	Per 1,000 Live Births	Per 1,000 Total (Live and Still) Births	Deaths under One Yea per 1,000 Live Birth
gregate of County Urban							
Districts							
* Population, Estimate 1932	-1,536,200.						
Mean of 5 years, 1927-1931	14-25	12.88	0.61	1.42	5.19	_	73
Year-							
1931	18.90	18.05	0.59	1.52	4.62	4.38	72
1932	13.50	12.50	0.56	1.52	4.72	4.47	68
Increase or decrease in 1932 on-							
5 years' average, 1927-1931	0.75	-0.38	-0.05	+0.10	-0.47		-5
Previous year	0.40	-0.55	-0.03	nil	+0.10	+0.09	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
and the second se							
gregate of County Rural							
Districts							
* Population, Estimate 1932	-266,500.						
Mean of 5 years, 1927-1931	13.98	11.46	0.43	1.26	5.87	_	62
rear-							
1931	13.51	11.78	0.38	1.32	6.13	5.82	63
1932	13.12	11.09	0.37	1.28	4.56	4.34	65
Increase or decrease in 1932 on-							
5 years' average, 1927-1931	0.86	-0.87	-0.06	+0.02	-0.81		1.0
Previous year	0.39	-0.64		-0.02	-0.81	-1.48	$^{+3}_{+2}$
						1 10	
and the second second							
ministrative County							
Population, Estimate 1932	-1.802.700.						
Mean of 5 years, 1927-1931	14.21	12.67	0.58	1.40	5.88		72
Vear-			0.00	1 10	0.00	_	12
1931	13.85	12.86	0.56	1.49	4-83	4.58	70
1932	13-44	12.29	0.54	1.49	4.70	4-45	67
1 1000							
ncrease or decrease in 1932 on-							
5 years' average, 1927–1931 Previous year	0.77	-0.38 -0.57	-0.04 -0.02	+0.09	-0.68		-5
Previous year	0.\$1	-0.57	-0.02	nil	-0.13	-0.13	-8

## \*EXTRACT FROM THE METEOROLOGICAL REPORT

### BY THE

## Rev. J. P. ROWLAND, S.J., B.Sc., F.R.A.S., F.R.MET.Soc.,

## OF STONYHURST COLLEGE OBSERVATORY.

#### SUMMARY OF OBSERVATIONS FOR 1932.

Result of Observe	ations take	n du	ring the Ye	ar.			Mean for the last 85 years.
READE	NGS OF B	ARO	METER IN	IN IN	CHES.	G Urban	1000 10 910
Mean of the year						29.541	29-493
Highest Monthly Mean (February)						30.082	29.749
Lowest " " (October)						29.213	29-225
Highest Reading (January 26th)						80.547	30-297
Lowest " (January 6th)						28.582	28.213
Range	1		0 K			1.965	2.084
	ERMOMETE		FAHRENH	EIT.			
Highest Monthly Mean Temperature	(August)					59.6	58-6
	(February					87.8	35-8
Highest Reading of a Max. Therm. (.						77.8	81-1
Lowest Reading of a Min. Therm. (M	arch 12th	)				21-9	16-7
Range of Thermometer Readings						55-9	64-4
Mean of Highest Daily Readings						58-4	54-3
Mean of Lowest Daily Readings						42.4	41-1
Mean Daily Range						11.0	18.2
Deduced Mean Temperature (from M	can of Ma	IX. S	and Min.)			46.8	46.7
Mean Temperature from Dry Bulb						48.1	47.2
Adopted Mean Temperature of the Y	ear					47.5	47-0
Mean Temperature of Evaporation						45.4	44.6
Mean Temperature of Dew Point						42.5	42.1
Mean elastic force of Vapour					inches	0.279	0.274
Mean weight of Vapour in a cubic for	ot of air				grains	3.2	8.2
Mean additional weight required for s						0.8	0.7
Mean degree of Humidity (saturation )	100)					81	84
Mean weight of a cubic foot of air					grains	538.7	539-0
Mean amount of Cloud (0-10)						7.4	7.3
Total fall of Rain					inches	46-613	47-601
Greatest Monthly Rainfall (October)						7.909	7-634
Least " " (February)						0.123	1.225
Greatest Rainfall in one day (Septem	ber 2nd)					2.800	1.672
No. of days per Month on which .005	inch or n	nore			1	17.2	17-2

#### SUMMARY OF WIND.

	1	1	1						
	N.	N.E.	E.	S.E.	8.	s.w.	w.	N.W	
fini	84	75	25	7	39	55	103	2	
per hour	5-6	8.2	8.1	5.8	13-4	12.4	9-6	84	
Total No. of miles for each direction	4547	14762	4847	981	12497	16379	28704	5868	
							la	for the st cars.	
stered					81	3082	84	899-7	
l (January) (February)			•••			and the second sec		9906-0	
(rebruary)	www. 15th						41	892-1	
Wind							100	50-8 W	
ly velocity (J Wind	ry 15th	ı)				44 W			
Janu		5-6 4547  15th	5-6 8-2 4547 14762	5-6         8-2         8-1           4547         14762         4847	5-6 8-2 8-1 5-8 4547 14762 4847 981 	5-6         8-2         8-1         5-8         13-4           4547         14762         4847         981         12497               81               81               81               81               81	5-6         8-2         8-1         5-8         13-4         12-4           4547         14762         4847         981         12497         16379                9385              4208           / 15th)           44	84         75         25         7         39         55         103           5·6         8·2         8·1         5·8         13·4         12·4         9·6           4547         14762         4847         981         12497         16379         23704           Mean la 65 y               981         12497         16379         23704           Mean la 65 y            9885         90             9885         944           7         15th)           44         44         44	

· Introduced by kind permission.