[Report 1935] / Medical Officer of Health, Staffordshire County Council.

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STAFFORDSHIRE COUNTY COUNCIL

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

W. D. CARRUTHERS, M.B., D.P.H.,

FOR THE YEAR 1935.

1936.

INDEX

STAFFORDSHIRE COUNTY COUNCIL

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

PRELIMINARY NOTE.

The Annual Report for 1935, which, from the point of view of the Ministry of Health, is an ordinary Report, has been prepared according to the suggestions of that Department. The vital statistics again show that there is a higher birth rate and a lower death rate in the Administrative County than in England and Wales as a whole.

The year has been notable in one respect, for there has been no alteration of County boundaries, and, whilst there was no striking development of Public Health measures, in each section the opportunity was taken to consolidate further the existing schemes.

The Health Visiting scheme has been made more comprehensive by a further development of ante-natal supervision, special sessions for this work having been arranged in the more populous areas, and in the rural areas where no Centres exist the family doctors have been asked to undertake the ante-natal examination of pregnant women sent by midwives. Obviously, these measures will take several years to produce a maximum result, and the natural reluctance of women to submit to an examination at such a time will eventually be overcome. Unfortunately, in spite of all the steps that are now being taken by the County Council to reduce further the maternal mortality rate, it remains substantially the same as it was many years ago. I am afraid it is only too true to say that, as yet, the women themselves often do not take full advantage of all the measures formulated especially to help them.

The value of the work of the County Bacteriological Laboratory has now become firmly established: each year it grows. District Councils have found it indispensable when preparing schemes of water supply for their areas, which has been a feature in so many Rural Districts in the last few years. The Laboratory has taken an important place in the measures to safeguard the milk supply for some considerable time, but this work has been considerably augmented by the "Accredited" Scheme of the Milk Marketing Board, and the establishment of the whole-time Veterinary Service for the County. The family doctors take full advantage of the facilities offered when dealing with the various infectious

diseases. A full account of the work undertaken will be found in the appropriate section of the Report, but what I have mentioned is sufficient to indicate what an important position the Laboratory has in every aspect of preventive medicine.

An interesting account of the work of the Chemical Laboratory is contained in the Report, and this also has grown, due mainly to the schemes of District Councils for improving the water supplies and sewage disposal arrangements. There has also been an increase in the number of investigations of river waters, and this extra work, in addition to the routine samples examined under the Food and Drugs Acts, taxed the resources of the Laboratory considerably.

This year the Report contains the first account of a full year's working of the Veterinary Department, and I should like to refer those interested especially to that section of the Report dealing with the prevention of bovine diseases, which is most important both from the public health and economic standpoints. It will also be noted that fewer cases of tuberculosis are now in an advanced stage before they are recognised, and this must be regarded as an important forward step.

Again this year, a large section of the Report has been devoted to the water and sewage disposal schemes promoted by District Councils, and on referring to this section the reader will observe that a large amount of work has been undertaken.

From a public health point of view, it can be said that 1935 has been a satisfactory year, for, as I have already stated, the vital statistics have been favourable, there has been little infectious disease, the incidence of tuberculosis is slowly but steadily declining, and the proportion of deaths during the active period of life is also much less than it was in the years immediately following the war.

(*a*) *Medical.*

County Medical Officer of Health	1
Deputy County Medical Officer of Health	1
School, Maternity and Child Welfare and Ante-natal Work:	
Senior Assistant Medical Officer (Whole-time)	1
†Assistant Medical Officers (Whole-time)	17
,, ,, Officer (Part-time)	1
County Ophthalmic Surgeon (Whole-time)	1
County Dental Officer (Whole-time)	1
Assistant Dental Surgeons (Whole-time)	14*
General Practitioners (Maternity and Child Welfare only)	5
Consultants under the Puerperal Fever and Puerperal Pyrexia Regulations and Consulting Obstetricians	8
Venereal Disease Medical Officer (North Staffs.)	1
District Medical Officers under Poor Law Acts	81
Public Vaccinators	77
County Bacteriological and Pathological Laboratory:	
Medical Staff	2
Assistants and Staff	13
Standon Hall Orthopædic Hospital.	
Medical Staff (House Surgeon)	1
,, ,, (Visiting Surgeons)	2
Nursing Staff	41
Teaching Staff	4

(*b*) *Others.*

County Chemical Laboratory:	
Analyst	1
Deputy Analyst	1
Assistants and Staff	8
Veterinary Staff:	
Chief Veterinary Officer	1
Assistant Veterinary Officers	7
Sanitary Inspector and Assistant	2
Food and Drugs Inspectors	7

Vaccination Officers	31
School, Maternity and Child Welfare and Ante-natal Work and Tuberculosis Health Visiting:	
Inspectors of Health Visitors (also act as Inspectors of Midwives)	3
Health Visitor Lecturers on Mothercraft	2
Health Visitors (Whole-time)	54
,, ,, (Part-time)	40
School Nurses (Whole-time)	2
Dental Nurses	15*

† Nine Whole-time Assistant Medical Officers hold appointments as District Medical Officers of Health.

* Includes one for Maternity and Child Welfare, and two supplied to Part III. Local Authorities. The dental treatment for the Public Assistance Committee, and the Staffordshire, Wolverhampton and Dudley Joint Committee for Tuberculosis, is also performed by the County Dental Staff.

CHANGES DURING 1935.

Assistant Medical Officer:—

F. Appleton, M.B., Ch.B., D.P.H. (1.5.35) *vice* W. B. Moore (left 31.1.35).

Assistant Medical Officer for Maternity and Child Welfare—Additional Appointment:—

J. O. F. Davies, M.D., B.S., M.R.C.S., L.R.C.P., D.C.O.G., D.P.H. (3.4.35).

Assistant Veterinary Officers:—

R. S. Cockburn, M.R.C.V.S. (26.6.35). *Vice* G. B. Brook (left 13.6.35).

F. A. Gordon, M.R.C.V.S., D.V.S.M. (2.9.35)—*Additional Appointment.*

W. C. Maitland, M.R.C.V.S. (2.12.35) *vice* F. H. Manley (left 30.11.35).

Public Vaccinators:—

District No. 35: H. G. Scott Kerr, M.B., Ch.B., *vice* H. G. Gosse (1.10.35).

Districts Nos. 41A. and 41B.: J. R. Eden, M.B., Ch.B., temporarily *vice* P. G. Duff (30.12.35).

District No. 56: W. W. McCullough, M.B., Ch.B., B.A.O., *vice* J. Stewart (1.1.36).

The afore-mentioned Public Vaccinators also took over the duties of District Medical Officer.

District Medical Officer :—

Chesterton : G. R. Bashford, M.B., Ch.B., *vice* S. E. Smyth (1.7.35).

Assistant County Sanitary Inspector :—

A. Seaton, Cert. R.S.I., Cert. Meat Inspector, Cert. Sanitary Science as applied to Buildings and Public Works, R.S.I. (1.10.35) *vice* R. W. T. Owen (left 8.9.35).

Health Visitors :—

Miss W. Walsh, 23.1.35. (1, 2, 3, 4) *vice* Miss M. Ryder, left 22.1.35.

Miss M. E. Kerrigan, 27.5.35. (1, 2, 3) *vice* Miss M. Latchford, died 26.3.35.

Miss S. M. Weeks, 1.6.35. (1, 2, 3) *vice* Miss M. Wilkins, died 11.4.35.

Miss G. M. Nunn, 23.9.35. (1, 2, 3) *vice* Miss R. E. V. Bullock, left 31.7.35.

Miss K. R. Richardson, 20.1.36. (1, 2, 3) *vice* Miss R. Walch, left 26.10.35.

1. Health Visitor's Certificate (approved by Ministry of Health, 1926) R.S.I.
2. Trained Nurse.
3. Certificate of Central Midwives Board.
4. Certificate of National Society of Day Nurseries.

1.—GENERAL STATISTICS.

Area of Administrative County	(acres) 685,503
Population of Area (estimated mid. 1935)	725,500
Rateable Value at 1st April, 1935	£2,797,588
Estimated net product of a penny rate 1935-36	£10,708 11s. 8d.

2.—EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total	M.	F.	
Live (Legitimate)	11,863	6,052	5,811	
Births (Illegitimate)	311	150	161	Birth-rate 16.8
Stillbirths	577	304	273	Rate per 1,000 total births 45.2
Deaths	8,086	4,284	3,802	Death-rate 11.1

Deaths from Puerperal Causes :—

	Deaths.	Rate per 1,000 total births.
Puerperal sepsis	20	1.5
Other puerperal causes	35	2.7
Total	55	4.3

Death Rate of Infants under one year of age :—

All infants per 1,000 live births	66
Legitimate infants per 1,000 legitimate live births	66
Illegitimate infants per 1,000 illegitimate live births.....	67
Deaths from Measles (all ages)	46
„ „ Whooping Cough (all ages)	60
„ „ Diarrhœa (under two years of age)	98

AREA AND POPULATION.

This year, for the first time since 1926, there has been no alteration in the area of the Administrative County.

The population figures of the various districts used in calculating the birth and death rates have again been supplied by the Registrar-General.

As all deaths of persons serving with H.M. Forces are now allocated to their area of residence in the same manner as civilian deaths, the estimates of resident populations as supplied by the Registrar-General have been used for the calculation of birth and death rates.

Last year the Registrar-General supplied Comparability Factors for adjusting local death rates, based on the average mortality rates experienced in England and Wales during the 3 years 1930-2, divided into 11 sex-age groups, which have been applied to the corresponding sex-age groups in the 1931 census population of every Borough, Urban District, and Rural District in the Country.

The rate obtained when the crude death rate is multiplied by this factor is then comparable, from a mortality point of view, with the crude death rate of the Country as a whole, or with the mortality of any other local area, the crude death rate of which has been similarly modified with its own factor for the purpose.

Strictly speaking, the adjusting factor applied only to death rates experienced in the year 1931, but population constitutions change relatively slowly, and, save in exceptional circumstances, the factor may be used for practical purposes until fresh population constitutions are available from the next census.

The rate for each district, adjusted by applying the Comparability Factor, is shown in the table at the end of the Report.

In the following table the census population of the Administrative County for 1931, and the estimated population to the middle of 1935, are set forth .—

	Census, 1931	Estimated Population as at middle of 1935.
Urban	490,632	*548,500
Rural	212,622	*177,000
Totals	†703,254	725,500

†The increase in the population of the Urban Districts, and the decrease in that of the Rural Districts, is due to the changes in Sanitary Districts and boundaries which took place on the 1st April, 1934, under the Staffordshire Review Order, 1934.

*The census population of the Administrative County as constituted at the 31st December, 1935, is less than this figure by 2,902. The estimated population in the portion of the County area transferred to the County Borough of Wolverhampton on the 1st April, 1933, was 5,419, but this decrease was partly neutralized by the fact that on the 1st April, 1932, a portion of the County of Warwick, with an estimated population of 2,517, was added to the Administrative County.

Births.

The live births registered in the Administrative County numbered 12,174, compared with 11,951 the previous year, the number in the Urban Districts being 9,490 and in the Rural Districts 2,684.

Stillbirths. There were 577 stillbirths registered during the year, of which 430 were in Urban and 147 in Rural Districts. The stillbirth rate per thousand of the population for the combined Urban and Rural Districts is 0.79. During the same period the rate for England and Wales was 0.62, and for the large towns in England 0.68.

The mean birth-rates in the whole Administrative County and in the Urban and Rural Districts respectively for nine quinquennial periods and for the past two years are shown in the following table, in which corresponding rates in England and Wales are included.

	DISTRICTS	Live Birth-Rate per 1,000 of Population										
		5 yrs 1889–1893	5 yrs 1894–1898	5 yrs 1899–1903	5 yrs 1904–1908	5 yrs 1909–1913	5 yrs 1914–1918	5 yrs 1919–1923	5 yrs 1924–1928	5 yrs 1929–1933	1934	1935
Staffordshire	Combined Urban & Rural	33.6	33.2	32.5	30.3	27.8	24.0	24.1	20.2	17.6	16.6	16.8
	Urban	35.5	34.7	33.6	31.5	29.2	25.0	25.0	20.7	18.1	16.9	17.3
	Rural	30.2	30.5	30.2	27.0	24.4	21.6	22.0	19.0	16.6	15.8	15.1
England and Wales		30.8	29.7	28.7	26.9	24.5	20.4	21.3	17.8	15.6	14.8	14.7
Large Towns in England		31.5	30.7	29.7	27.8	25.2	*20.9	22.0	18.2	15.8	14.7	14.8

* 4 years.

Deaths.

The number of deaths in the Administrative County amounted to 8,086, the number in the Urban Districts being 6,168 and in the Rural Districts 1,918.

In the following table comparative rates for nine quinquennial periods and for the past two years are given, together with corresponding figures for the Country as a whole, and for large and small towns throughout England.

DISTRICTS	Death-Rate per 1,000 of Population.										
	5 yrs 1889–1893	5 yrs 1894–1898	5 yrs 1899–1903	5 yrs 1904–1908	5 yrs 1909–1913	5 yrs 1914–1918	5 yrs 1919–1923	5 yrs 1924–1928	5 yrs 1929–1933	1934	1935
Staffordshire — Combined Urban & Rural	18.1	16.9	16.1	14.6	14.1	15.0	12.3	11.4	11.6	10.8	11.1
Staffordshire — Urban	18.9	17.5	16.6	15.1	14.7	15.5	12.6	11.5	11.8	10.7	11.2
Staffordshire — Rural	16.8	15.7	15.1	13.4	12.7	13.8	11.6	11.2	11.2	10.9	10.8
England and Wales	19.1	17.4	16.9	15.3	13.9	15.2	12.5	12.0	12.3	11.8	11.7
Large Towns	21.0	19.0	18.2	15.8	14.3	15.5	12.6	12.0	12.3	11.8	11.8
Smaller Towns	17.6	15.9	15.7	14.9	13.6	14.1	11.5	11.0	11.2	11.3	11.2

In the following table I have shown the chief causes of death for the last ten years, the numbers given for 1935 being 66.8 per cent. of the total deaths:—

Table Showing Chief Causes of Death.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
*Zymotic Diseases	337	386	242	376	301	281	311	231	223	303
Influenza	185	532	116	570	131	311	221	424	139	170
Tuberculosis of Respiratory System	497	465	423	492	476	497	412	469	438	434
Tuberculosis, other forms	139	156	99	100	104	112	113	87	93	86
Cancer, Malignant Disease	785	803	851	899	912	897	915	896	963	981
Cerebral Hæmorrhage	464	465	480	462	431	477	510	460	443	457
Heart Disease	1054	1047	1239	1448	1366	1500	1561	1579	1556	1618
Bronchitis	544	650	395	622	352	485	369	409	311	377
Pneumonia	660	865	563	933	588	630	570	607	570	562
Congenital Debility, etc.	496	453	428	420	409	459	443	413	412	415

*Typhoid and Paratyphoid Fevers, Measles, Small-pox, Scarlet Fever, Whooping Cough, Diphtheria and Diarrhœa.

The chief cause of death in 1935, as in previous years, was heart disease, accounting for no fewer than 1,618 deaths. On referring to the table, it will be seen that since 1926 there has been practically a continuous increase in the number of deaths from heart disease, but this may be partly accounted for by the terminology employed by some of the certifying doctors, for a disease which takes toll of the patient's strength may end in heart failure, but if the death certificate is worded correctly then the death is allocated by the Registrar-General to the disease itself and not to the final cause of death.

The number of deaths from cancer is about the same as for last year. This disease, like heart disease, has shown a steady increase from 1926 onwards. Possibly, some part of the increase may be due to the fact that increased facilities for diagnosis have been available of recent years, and patients have become more alive to the necessity of going to a doctor early when any suspicion of cancer is raised, so that in cases where death would previously have been ascribed to some concomitant condition, the diagnosis of cancer is now established beyond doubt. It will be noted that deaths from zymotic diseases, which include the infectious fevers, total 303, an increase of 80 over the previous year. The figures for influenza and bronchitis are somewhat larger than those for the previous year, but the disparity is not pronounced.

The following table shows the number of deaths in different age groups from various causes during 1935. It is interesting to compare this with the previous table showing the principal causes of death. Pneumonia again took heavy toll of child life, there being no fewer than 215 deaths in children under 5 years of age, and of the 808 total deaths occurring in children under one year of age, 127 of these were due to pneumonia. Deaths from infantile diarrhœa were increased compared with the previous year, there being 98 deaths in children under 2 years of age due to this cause, compared with 64 in 1934. The increase in bronchitis already noted was amongst the very young and the very old, as is to be expected. Amongst infectious diseases it is of interest to note that one death from scarlet fever took place in a person between the ages of 55 and 65, and two

between 45 and 55. In tuberculosis of the respiratory system the majority of the deaths took place between the ages of 15 and 45, as is usually the case. The death rate for tuberculosis is given under the appropriate heading at the end of this Report. It will be noted that deaths in infants under one year, due to congenital debility, malformation, premature birth etc., again amount to 400, a matter to which I drew attention in my last Report, and to which I refer in the appropriate section later in this Report.

Mortality at Different Ages from Various Causes.

The following table gives the mortality from various causes in different age groups in the Administrative County during 1935 :—

Causes of Death.	Age at Death											
	Under 1	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and over	Total
1. Typhoid and Para-typhoid Fevers	–	–	–	–	1	–	–	–	–	–	–	1
2. Measles	8	17	13	8	–	–	–	–	–	–	–	46
3. Scarlet Fever	–	2	5	5	–	1	–	2	1	–	–	16
4. Whooping Cough	29	15	11	5	–	–	–	–	–	–	–	60
5. Diphtheria	3	5	16	23	2	1	–	–	–	–	–	50
6. Influenza	5	1	2	2	12	9	21	15	38	34	31	170
7. Encephalitis Lethargica	–	–	–	–	–	1	–	–	1	–	1	3
8. Cerebro-spinal Fever	4	–	5	–	7	–	–	1	1	–	–	18
9. Tuberculosis of Respiratory System	2	–	2	13	98	108	78	77	44	12	–	434
10. Other Tuberculous Diseases	12	7	17	9	17	8	4	4	6	2	–	86
11. Syphilis	2	–	–	–	1	–	1	2	4	5	1	16
12. General Paralysis of the Insane, Tabes Dorsalis	–	–	–	1	1	–	–	6	6	1	–	15
13. Cancer, Malignant Disease	4	–	1	2	5	11	59	135	277	320	167	981
14. Diabetes	–	–	1	1	3	3	1	12	31	35	17	104
15. Cerebral Hæmorrhage, etc.	–	–	–	–	–	4	8	28	84	182	151	457
16. Heart Disease	1	–	1	24	28	37	51	98	301	545	532	1618
17. Aneurysm	–	–	–	–	2	2	2	2	5	4	2	19
18. Other Circulatory Diseases	–	–	1	1	2	2	3	8	50	111	176	354
19. Bronchitis	42	7	6	2	2	7	9	27	48	89	138	377
20. Pneumonia (all forms)	127	54	34	17	20	42	46	39	62	65	56	562
21. Other Respiratory Diseases	1	2	1	6	1	6	11	11	17	12	17	80
22. Peptic Ulcer	–	–	–	–	2	7	15	17	17	20	4	82
23. Diarrhœa, etc.	78	20	2	1	3	1	–	5	5	6	9	130
24. Appendicitis	1	–	1	5	2	2	6	11	5	2	2	37
25. Cirrhosis of Liver	–	–	–	–	–	–	–	6	8	5	–	19
26. Other Diseases ot Liver, etc.	–	–	–	–	2	1	2	1	7	7	6	26
27. Other Digestive Diseases	10	3	8	5	5	15	12	13	25	28	25	149
28. Acute and Chronic Nephritis	–	–	2	4	15	12	12	32	52	45	43	217
29. Puerperal Sepsis	–	–	–	–	7	6	7	–	–	–	–	20
30. Other Puerperal Causes	–	–	–	–	3	17	14	1	–	–	–	35
31. Congenital Debility, Premature Birth, Malformations, etc.	403	–	4	–	4	2	2	–	–	–	–	415
32. Senility	–	–	–	–	–	–	–	–	2	63	341	406
33. Suicide	–	–	–	–	4	18	9	10	21	10	3	75
34. Other Violence	17	6	18	28	53	26	37	43	34	36	42	340
35. Other Defined Diseases	58	18	10	38	46	31	52	92	97	130	78	650
36. Causes ill-defined or unknown	1	–	–	2	–	–	–	2	4	5	4	18
Totals	808	157	161	202	353	375	457	700	1253	1774	1846	8086
	Special causes included in No. 35 above.											
Polioencephalitis	–	–	1	–	–	–	–	1	–	–	–	2

The following table has been prepared covering the last 16 years in which the percentage of deaths under 45 years of age is worked out in relation to the total deaths at all ages, and in the table the sexes are divided.

Speaking generally, 30 per cent. of all deaths occur now under the age of 45, so that 70 per cent. occur afterwards. From a public health point of view, this is a matter for congratulation, for it shows how effective the preventive measures have been during youth and in the productive period of life. On reference to the previous table, giving the chief causes of death, it will be noted that there has been a gradual increase in the number of deaths from diseases usually associated with the later periods of life, such as cancer and heart disease, since a larger number of people over 45 survive than they did in years just following the war. Continuous medical research on the causes of these diseases is taking place, and although more light has been thrown on their origins, we cannot expect, as yet, to be able to formulate as successful measures of prevention as are now available for diseases of infective origin.

DEATHS UNDER 45 YEARS OF AGE—MALE AND FEMALE—SHEWING PERCENTAGE OF TOTAL DEATHS (ALL AGES).

YEAR	MALE			FEMALE		
	Deaths all ages	Deaths under 45	Per cent. of Total	Deaths all ages	Deaths under 45	Per cent of Total.
1920	4626	2295	49.61	4084	1935	47.38
1921	4545	2120	46.64	3985	1759	44.14
1922	4534	1943	42.85	4191	1793	42.78
1923	4197	1816	43.27	3788	1556	41.08
1924	4332	1795	41.43	3906	1520	38.91
1925	4556	1919	42.12	4161	1724	41.43
1926	4148	1658	39.97	3808	1441	37.84
1927	4458	1766	39.61	4082	1564	38.31
1928	3965	1449	36.54	3563	1180	33.12
1929	4813	1827	37.96	4293	1453	33.84
1930	4100	1473	35.92	3672	1211	32.98
1931	4376	1472	33.64	3933	1272	32.34
1932	4190	1425	34.01	3824	1174	30.70
1933	4213	1415	33.59	3900	1207	30.95
1934	4105	1261	30.72	3655	1054	28.84
1935	4284	1354	31.61	3802	1159	30.48

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

Local Government Act, 1929.

Mention was made in my Report for 1934 of proposals to convert Newcastle Institution into a Hospital. A scheme for the hospital treatment of the sick throughout the County has been prepared and presented to the Ministry. It is proposed that a new Hospital of 438 beds be built at Newcastle, on the site of the existing Public Assistance Institution which will be demolished, and that Wordsley Public Assistance Institution will be adapted where possible, and new pavilions added to convert it into a Hospital of 437 beds. The question of a further Hospital being provided at Lichfield, to serve the eastern portion of the County, has been postponed until it is seen what effect the centralising of the Hospitals at Newcastle and Wordsley has on the treatment of the sick in this area.

Poor Law Medical Out-Relief.

Since the transfer of this service, under the Local Government Act, 1929, to the County Council, its functions have been co-ordinated with the general health services of the County. Persons in need of treatment whose cases are referred in the first place to the Public Assistance Department, and who would formerly have been dealt with under the Poor Law Acts, are now referred, wherever possible, to the appropriate Committee of the County Council. Children form the majority of these cases of course, and many of them have been dealt with during last year under the Council's Orthopædic Scheme and by the Education Committee.

Institutional Provision for the Care of Mental Defectives.

There has been no alteration in the accommodation for Mental Defectives during the year, and 282 certified cases were in Institutions at 31st December.

Nursing in the Home.

(a) General Nursing.

During the year, the County Nursing Association formed one new local Nursing Association to serve Cheslyn Hay and Great Wyrley for general work only. In addition, the Marchington Nursing Association, which, through lack of

support, closed down on the 31st December, 1934, was re-organised in May, 1935, and commenced work again in August. This Association undertakes both midwifery and general work. Unfortunately, one Nursing Association which undertook midwitery as well as general nursing, viz. Abbots Bromley, found it impossible to continue, and its activities ceased on the 30th April, 1935. It is possible that this Association may be re-organised and re-started later. The only other change during 1935 in the organisation of the work of the County Nursing Association in the Administrative County was the employment of a third nurse by the Bilston Nursing Association for general district work. There are now 83 Nursing Associations affiliated to the County Nursing Association, and 8 which work independently. Sixty-seven of these Associations undertake midwifery in addition to general nursing.

(b) Infectious Diseases.

In the County Health Visiting Area, arrangements exist whereby local Medical Officers of Health, in the event of epidemics of measles or diarrhœa, can obtain the services of trained nurses to look after the cases in their own homes. Little advantage, however, has been taken of this arrangement, and during 1935 no application was received from any of the District Medical Officers of Health.

Midwifery.

The work undertaken under the Midwives Acts, 1902, 1918 and 1926, relates to the whole of the Administrative County, with an estimated population at the middle of the year of 725,500 whilst the health visiting work is limited to the special health visiting area of the County which now has a population of 429,090 as estimated by the Registrar-General.

269 midwives notified their intention to practise during the year. Of these 265 were trained and 4 were *bona-fide* midwives. There is a decrease since last year of 7 trained midwives, and one *bona-fide* midwife. In addition to these, 95 midwives residing in County Boroughs and adjoining Counties have also notified their intention to practice within the Administrative County, compared with 102 last year, but only 73 of these actually practised.

The ages of midwives who were practising in the Administrative County in the fifteen years 1921-1935, are indicated in groups in the following table, from which it will be observed that the majority were under 45 years of age :—

Year	21 to 44			45 to 64			65 & upwards			Totals.		
	North	Central	South	North	Central	South	North	Central	South	North	Central	South
1921	58	52	60	28	22	23	21	21	16	107	95	99
1922	51	64	68	21	21	21	14	16	14	86	101	103
1923	55	59	66	21	27	18	14	16	11	90	102	95
1924	50	56	62	22	26	19	14	11	12	86	93	93
1925	54	64	63	27	24	23	13	8	10	94	96	96
1926	50	63	74	26	26	15	13	9	9	89	98	98
1927	55	57	72	26	30	15	6	5	8	87	92	95
1928	58	60	79	24	29	13	3	5	5	85	94	97
1929	50	59	79	28	27	17	4	6	5	82	92	101
1930	54	63	65	26	23	20	4	5	5	84	91	90
1931	56	59	78	27	26	20	4	4	3	87	89	101
1932	53	57	59	27	28	34	4	2	3	84	87	96
1933	57	63	70	30	31	31	2	1	2	89	95	103
1934	47	63	63	33	29	32	4	4	2	84	96	97
1935	52	59	55	30	34	32	2	3	2	84	96	89

The number of cases attended by midwives during 1935 in the three areas of the County are as follows :—

	No. of Mid-wives	Total Births (Live and Still-born)	Births attended					‡Births in respect of which no record is available.	
			*As Midwives			†As Maternity Nurses.			
			Births	% of total	Mean No. of cases per mid-wife	Births	% of total	No.	% of total
North	84	2910	1937	66.6	23.0	611	21.0	362	12.4
Central	96	3446	2488	72.2	25.9	562	16.3	396	11.5
South	89	6395	4730	74.0	53.1	772	12.1	893	13.9
Totals	269	12751	9155	71.8	34.0	1945	15.3	1651	12.9

* Doctors not having been engaged for the confinements.
† Doctors having been engaged by the patients.
‡ These figures are in respect of births which (i) were attended by doctors, no midwife having been engaged ; (ii) took place outside the Administrative County ; (iii) took place in Institutions.

Since the Rules of the Central Midwives Board were altered so that more adequate attention could be paid to ante-natal care, every endeavour has been made to induce women not to book for their confinement at the very last stage of pregnancy, as so commonly happened in the past.

In compliance with the Rules of the Central Midwives Board, 4,252 notifications have been received from certified midwives in 1935 under the four headings set forth in the following table, which includes figures for comparison with the past 10 years, together with the number of births attended by midwives :—

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Number of Births attended by Midwives Sending for medical help	12201	10282	10523	10154	10115	9787	9621	8839	9172	9155
	2523	2564	2764	3154	3505	3741	3755	3789	3784	3865
Still-Births	208	212	208	233	225	221	229	203	236	226
Death of Mother	20	6	13	17	10	17	11	11	13	14
Death of Child	70	115	117	127	142	140	150	154	162	147

The following table shows to what extent midwives have had occasion to call in medical assistance at confinements over a period of 21 years. From this it will be observed that there has been a large increase in this period of the requests for medical help, which can be ascribed to the trained type of midwife that is now practising. This is also reflected in the increase in the fees paid by the County Council to medical practitioners, as shown in a subsequent table.

NUMBER OF PRACTISING MIDWIVES, CONFINEMENTS TAKEN BY MIDWIVES AND DOCTORS' CALLS BEFORE, AT AND AFTER CONFINEMENT, 1915—1935 :—

YEAR	No. of Practising Midwives at end of Year	Trained	Not Trained	No. of Confinements taken by Midwives as Midwives	Doctors Calls (Mother or Child)	% of Medical Calls
1915	320	129	191	11,325	1,209	10.7
1916	307	137	170	10,632	1,291	12.1
1917	301	145	156	10,377	1,202	11.6
1918	288	152	136	10,174	1,165	11.4
1919	284	179	105	10,616	1,809	17.0
1920	286	181	105	13,770	1,769	12.8
1921	301	207	94	12,800	1,948	15.2
1922	290	224	66	13,033	1,992	15.3
1923	287	230	57	11,637	1,894	16.2
1924	272	225	47	11,382	2,083	18.3
1925	286	247	39	11,780	2,219	18.8
1926	285	250	35	12,201	2,523	20.7
1927	274	252	22	10,282	2,564	24.9
1928	276	263	13	10,523	2,764	26.2
1929	275	262	13	10,154	3,154	31.0
1930	265	255	10	10,115	3,505	34.6
1931	277	268	9	9,787	3,741	38.2
1932	267	262	5	9,621	3,755	39.0
1933	287	282	5	8,839	3,789	42.9
1934	277	272	5	9,172	3,784	41.3
1935	269	265	4	9,155	3,865	42.2

The following figures show the causes which occasioned the sending for medical help:—

Causes of sending for Medical Aid	Northern District	Central District	Southern District	Total
PREGNANCY:				
Query Presentation	—	10	—	10
Threatened Abortion	7	30	37	74
Puffiness of face and hands	4	3	14	21
Fainting	—	6	12	18
Varicose Veins	5	17	33	55
Fits	—	1	6	7
Vaginal Discharge	2	9	14	25
Unsatisfactory condition & general health	45	80	77	202
Excessive Sickness	6	12	38	56
Loss of Blood	22	21	34	77
History of previous Still-births and Abortions	1	7	13	21
Œdema of Legs	—	13	10	23
Albuminuria	26	55	110	191
Sore of Genitals	—	—	8	8
Contracted Pelvis	5	13	72	90
	123	277	478	878
LABOUR:				
Premature Birth	—	18	7	25
Abnormal Presentation	33	21	52	106
Delayed or Difficult	194	257	316	767
Placenta Prævia	4	5	14	23
Hæmorrhage ante	13	33	20	66
Ditto post	11	27	27	65
Eclampsia	4	—	3	7
Prolapse of Cord	4	9	5	18
Lacerated Perinæum	164	150	305	619
Retained Placenta and Membranes	10	22	47	79
Unsatisfactory Condition	46	13	46	105
Inertia	29	40	67	136
Abortion	39	40	18	97
Purulent Discharge	—	—	3	3
Cough	1	—	4	5
	552	635	934	2121

Causes of sending for Medical Aid	Northern District	Central District	Southern District	Total
LYING-IN :				
High Temperature	40	28	77	145
Inflamed and painful leg	5	13	11	29
Convulsions	—	—	6	6
Unsatisfactory Condition	21	19	61	101
Offensive Lochia	—	1	12	13
Unusual Swelling of Breasts	2	6	17	25
Abdominal Swelling and tenderness	1	5	9	15
	69	72	193	334
CHILD :				
Deformities	2	13	19	34
Convulsions	—	3	10	13
Inflamed and discharging eyes	31	45	103	179
Feebleness and prematurity	27	45	94	166
Unsatisfactory Condition	23	20	32	75
Rash	1	5	11	17
Pemphigus	—	—	4	4
Spina Bifida	5	5	14	24
Hare Lip and Cleft Palate	2	3	3	8
Club Foot	—	1	5	6
Jaundice	—	1	5	6
	91	141	300	532
Grand Totals	835	1125	1905	3865

In the following Table, in which the County is divided into three districts, the numbers of the notifications received from midwives, together with the visits, interviews and inquiries of the Inspectors of Midwives, are shown :—,

VISITS AND INTERVIEWS OF INSPECTORS, NOTIFICATIONS, INQUIRIES ETC., DURING THE YEAR 1935.

District	Visits and Interviews	Notifications														Inquiries													
		Medical Assistance						Still-Births	Deaths		Puerperal Fever	Puerperal Pyrexia	Contact with infection	Laying out the dead	Artificial Feeding	Medical Assistance						Still-Births	Deaths		Puerperal Fever	Puerperal Pyrexia	Contact with infection	Laying out the dead	Artificial Feeding
		Ante-natal	Labour	Lying In		Child			Mother	Child						Ante-natal	Labour	Lying In		Child			Mother	Child					
				High Tem'ture	Other Conditions	Inflamed Eyes	Other Conditions											High Tem'ture	Other Conditions	Inflamed Eyes	Other Conditions								
North	292	123	552	40	29	31	60	71	5	33	4	25	31	8	54	.....	.....	40	1	31	8	.....	5	1	4	23	31	2	—
Central	389	277	635	28	44	45	96	59	6	41	11	32	51	13	78	6	5	28	7	45	10	5	6	2	11	26	51	.....	1
South	524	478	934	77	116	103	197	96	3	73	10	49	52	14	66	5	1	75	35	136	35	1	2	3	9	44	52	1	1
Totals	1205	878	2121	145	189	179	353	226	14	147	25	106	134	35	198	11	6	143	43	212	53	6	13	6	24	93	134	3	2

On comparing these tables with similar ones in previous reports, it is found that medical aid is called in during pregnancy to a much greater extent than formerly, and this would be expected owing to the attention now paid to ante-natal care both by the midwives under the rules of the Central Midwives Board and by the ante-natal work of the Maternity and Child Welfare Scheme.

In addition to the routine inquiries conducted by the Midwives' Inspectors, seven irregularities were specially investigated. As a result, five midwives received letters of caution, one was interviewed and cautioned verbally by me, and one was interviewed by the County Council acting as the Local Supervising Authority, and was severely censured.

Since the Act came into operation in 1902, the names of 115 midwives have been removed from the Roll in consequence of action taken by the Local Supervising Authority.

During the year the death of one practising midwife was reported.

In 1935, 11 District Nursing Associations who undertake Midwifery were subsidised to the extent of £439. At the end of the year there were 3 midwives in private practice receiving subsidies, and another midwife is provided with a telephone by the Local Supervising Authority in order that the area of her practice can be enlarged to include two somewhat isolated villages. On 31st December, 1935, there were 64 local Nursing Associations affiliated to the County Nursing Association, and 3 non-affiliated local Nursing Associations undertaking midwifery. The latter are Essington, Stafford, and Tutbury Nursing Associations.

Under Section 2 (1) of the Midwives and Maternity Homes Act, 1926, a total of £11 16s. 0d. was allowed by the County Council to four midwives as compensation for loss of practice on suspension after being in contact with infectious cases, the midwives not being in default.

Under the Rules of the Central Midwives Board, a midwife has to send for medical help if any abnormality occurs, and in the Midwives Act, 1918, provision is made for the payment of the doctor called in in this way, the fees allowed being according to a scale issued by the Ministry of Health.

During the financial year ended March, 1936, 3,995 notifications of sending for medical help were received, and, out of this number, medical practitioners claimed their fees from the County Council in 2,139 cases, that is 53.5 per cent. of the possible claims.

The fees paid by the County Council were as follows :—

FEES PAID TO MEDICAL PRACTITIONERS UNDER MIDWIVES ACT, 1918.

Financial Year	No. of Notifications of sending for Medical Aid	No. of Claims received	Percentage of claims received to Notifications	Total amount paid to Doctors during year	Amounts recovered from Patients during year
			%	£ s. d.	£ s. d.
1925–26	2228	780	35	1100 15 0	366 9 9
1926–27	2641	1147	43	1702 19 3	408 4 6
1927–28	2556	1136	44	1598 5 9	503 1 0
1928–29	2874	1419	49	2053 0 6	599 12 3
1929–30	3319	1810	55	2352 17 6	723 6 9
1930–31	3506	1950	56	2631 2 0	616 15 3
1931–32	3775	2176	57	3223 12 6	602 3 9
1932–33	3794	2255	59	2574 17 9	627 3 9
1933–34	3604	2208	61	3034 4 0	645 5 6
1934–35	3744	2127	57	3080 2 6	893 4 9
1935–36	3995	2139	54	3137 11 0	1047 18 0

No alteration has taken place in the income scale which came into operation on the 1st October, 1934, and is as follows :—

The amount recoverable to be assessed upon the net weekly income of the family, ascertained in the following manner :—

(1) Income to be taken into account :—

(*a*) The whole of the weekly earnings, Unemployment Benefit, or Transitional Payments, of all members of the family. For this purpose the average earnings etc., for six weeks up to date of assessment to be used.

(*b*) The weekly value of any other income of, or property owned, by any member of the family.

(2) Deduct from total of above :—

(*a*) 4s. 0d. per week in respect of each child under 14 years of age.

(*b*) 4s. 0d. per week, or one-quarter of the weekly earnings of any member of the family, other than the husband, whichever is the greater.

(*c*) Rent and rates.

(3) The balance to be treated as net income.

(4) Where the net income as calculated above—

(*a*) Exceeds 35s. 0d. per week	Total fees to be reclaimed.
(*b*) Exceeds 27s. 6d. but is not more than 35s. per week	Half-fees to be reclaimed.
(*c*) Is 27s. 6d. per week or less	No claim to be made.

Maternity Outfits.

The arrangements made in 1930 for the issue of maternity outfits at the various Clinics were continued, and in rural areas where there was no Clinic, Health Visitors were given charge of these. More advantage seems to have been taken of this scheme during the last year and 92 outfits were sold, compared with 44 the year before.

The Ministry of Health recommend that these outfits be examined periodically to ascertain whether they are sterile, and two outfits were examined bacteriologically during the year with satisfactory results.

Stillbirths.

It has already been noted that 577 stillbirths were registered during the year. Of these, 226 were reported by midwives under their Rules, and on comparing this figure with those for the past 13 years I find that there is little variation in this number. The result of the investigations made by the Midwives' Inspectors into the cause of these stillbirths is as follows:—

Albuminuria	1
Ante-partum Hæmorrhage	3
Cord Prolapse	7
Cord round neck	10
Deformities	24
Difficult Labour	10
Fall and Shock	5
Ill-nourished	1
Maceration	85
Malpresentation	8
Placenta Prævia	2
Premature	36
Spina Bifida	15
Unsatisfactory Condition of Mother	15
Injury during Birth	4

COUNTY BACTERIOLOGICAL LABORATORY.

Dr. J. Menton, the County Bacteriologist and Pathologist, reports that during 1935, 61,746 investigations were conducted at the County Bacteriological Laboratory, being an increase of 13,124 on the previous year. Of these, 41,749 were of a general bacteriological and serological nature; 1,676 were in respect of biochemical and pathological investigations (excluding medico-legal work); 485 were bacteriological, biochemical, and pathological investigations in connection with medico-legal work; and 17,836 were for the diagnosis and tests for cure of venereal diseases.

The general bacteriological and serological work was for the most part from the Administrative County, but of the milk examinations, 777 were undertaken for the City of Stoke-on-Trent, 116 for the County Borough of Dudley, and 12 for the County Borough of Derby. A special investigation, entailing the examination of 30 cerebrospinal fluids, was carried out on behalf of St. Andrew's Hospital, Thorpe, Norwich.

Of the tests for venereal diseases, 6,511 were from patients resident in Staffordshire, 9,227 from patients resident in the City of Stoke-on-Trent, 753 from patients resident in the County Borough of Dudley, 391 from patients resident in the Kesteven Division of Lincolnshire, and 954 from patients resident in other areas outside the Administrative County. With regard to the tests from Lincolnshire patients, these were conducted in accordance with the sanction obtained by the Kesteven County Council for such work to be done in this Laboratory.

The bulk of the bacteriological work was in relation to the direct diagnosis and prevention of infectious diseases, the supervision of the milk supply, and the bacteriological examination of drinking water for various Sanitary Authorities.

The General Medical Practitioners, the Medical Officers of Health, the Isolation Hospitals, the Venereal Diseases Clinics, the Poor Law Institutions and the Veterinary Officers, have made extensive use of the Laboratory. The whole time Veterinary Scheme has been responsible not only for an increase in the milk investigations, but also under it many specimens have been received for the diagnosis of animal diseases, especially those which are communicable to man.

The various biochemical and pathological investigations were conducted for the Staffordshire General Infirmary, Standon Hall Orthopædic Hospital, the North Staffordshire Cripples' Aid Society, the Cottage Hospital, Newport, Shropshire, the Victoria Hospital, Lichfield, the Coroners officiating in the Administrative County, and in connection with medico-legal cases.

Two special research investigations are in progress, one dealing with undulant fever in relation to contagious abortion in cattle, and the other dealing with human infections by the bovine tubercle bacillus.

Experience has shown that in all suspected cases of food poisoning it is of the utmost importance to submit specimens of fæces and vomited material for bacteriological examination as soon as possible after the onset of the symptoms. Samples of blood should also be taken throughout the course of the illness, and in every instance the suspected article of diet, when available, should also be forwarded for investigation.

The details of the year's work are as follows:—

GENERAL BACTERIOLOGY AND PATHOLOGY.

	Water examinations	Milk examinations	Diphtheria	Tuberculosis	Cerebro-spinal fever	Ringworm	Typhoid and Paratyphoid Fever	Brucella infections	Dysentery (all types)	Food poisoning	Medico-legal investigations	Veterinary work (other than milk)	Other examinations	Totals
First Quarter	131	3183	3930	1395	9	23	93	17	107	200	152	455	569	10264
Second Quarter	67	3303	2323	1377	12	33	184	32	217	377	61	162	809	8957
Third Quarter	163	4894	2283	1203	6	43	361	99	414	713	147	112	774	11212
Fourth Quarter	128	5193	3357	1183	4	37	189	272	188	327	125	124	674	11801
Totals	489	16573	11893	5158	31	136	827	420	926	1617	485	853	2826	42234

The 5,158 examinations under "Tuberculosis" included 4,084 sputa ; 121 specimens of pus ; 117 cerebrospinal fluids ; 57 other fluids ; 421 urines ; 31 fæces ; 275 biological tests ; 29 specimens of human organs and tissues ; and 23 others.

The 420 investigations under the heading "Brucella infections" included 126 specimens of blood from human beings, 10 of which gave agglutination reactions varying from 1 in 25 to 1 in 5,000. Eleven samples of blood from cattle were also examined, of which 6 gave positive results, and, in addition, 272 tests were conducted on samples of milk. The organism responsible causes contagious abortion in cattle and a type of undulant fever in man.

The majority of the serological tests for food poisoning were done for exclusion purposes, and, fortunately, proved negative, but there were three cases of mild Salmonella infection in various parts of the County.

In connection with the dysentery investigations, there was one case of infection due to Sonne's bacillus.

During the year the laboratory was called in to investigate 4 inquest cases and 5 police cases.

The 2,826 "Other examinations" included 385 bacteriological and cytological examinations of various body fluids and exudates ; 108 blood cultures ; 35 examinations for Vincent's Angina ; 420 general examinations of urine ; and various miscellaneous investigations.

In connection with the milk examinations, the reasons for these and the sources of the samples are shown in the accompanying tables. It will be noticed that 21 samples of "Grade A" milk and one "Pasteurised" sample gave positive biological reactions for tuberculosis. In March, 1935, the examination of samples under the Accredited Milk Scheme began, and the increase in the number of specimens examined for "Grade A" Licence in connection with this scheme is shown in the tables. Some increase in the milk examinations can also be attributed to the Milk-in-Schools Scheme, and the number of examinations involved under this heading is also shown in the tables.

		Bacteriological Count and Coliform Content.			Biological Tests.			Grand Total.
		Satis-factory.	Unsatis-factory.	Total.	Negative.	Positive.	Total.	
For "Grade A" Standard and "Grade A" Licence	First Quarter	383	23	406	119	7	126	532
	Second ,,	988	147	1135	95	9	104	1239
	Third ,,	692	404	1096	41	4	45	1141
	Fourth ,,	1085	161	1246	28	1	29	1275
For "Grade A. T. T." Standard and "Grade A.T.T." Licence	First ,,	58	1	59	19	.....	19	78
	Second ,,	45	5	50	16	.....	16	66
	Third ,,	40	14	54	18	.....	18	72
	Fourth ,,	55	4	59	16	.....	16	75
For "Certified" Standard and "Certified" Licence.	First ,,	13	1	14	6	.....	6	20
	Second ,,	14	3	17	4	.....	4	21
	Third ,,	20	4	24	4	.....	4	28
	Fourth ,,	23	4	27	5	.....	5	32
For "Grade A Pasteurised" Standard.	First ,,	2	.....	2	3	.....	3	5
	Second ,,	4	.....	4	2	.....	2	6
	Third ,,	.....	4	4	1	.....	1	5
	Fourth ,,	2	1	3	1	.....	1	4
For "Pasteurised" Standard.	First ,,	41	3	44	35	.....	35	79
	Second ,,	46	2	48	49	.....	49	97
	Third ,,	37	9	46	42	.....	42	88
	Fourth ,,	51	3	54	43	.....	43	97
Milk & Dairies (Consolidation) Act, 1915.	First ,,	439	55	494	1119	123	1242	1736
	Second ,,	260	49	309	927	93	1020	1329
	Third ,,	386	150	536	871	119	990	1526
	Fourth ,,	444	73	517	1465	214	1679	2196
School Milks.	First ,,	31	7	38	.....	.....	.....	38
	Second ,,	7	3	10	.....	1	1	11
	Third ,,	90	97	187	108	9	117	304
	Fourth ,,	116	15	131	6	2	8	139
Submitted by farmers, retailers and others for their own information.	First ,,	21	4	25	1	.....	1	26
	Second ,,	15	4	19	13	2	15	34
	Third ,,	18	9	27	2	.....	2	29
	Fourth ,,	36	28	64	.....	.....	.....	64
Tuberculosis Order, 1925.	First ,,	.....	.....	.....	.....	.....	.....	.....
	Second ,,	.....	.....	.....	.....	.....	.....	.....
	Third ,,	.....	.....	.....	2	.....	2	2
	Fourth ,,	.....	.....	.....	4	1	5	5

	Bacteriological Count and Coliform Content	Biological Test	Direct Film for Acid-Fast Bacilli.	Streptococci, etc.
From the Official Sampler :				
(*a*) Milk (Special Designations) Order, 1923	873	527	.....	.....
(*b*) Milk & Dairies (Consolidation) Act, 1915	1354	1392	.....	.....
From Official Veterinary Inspectors :				
(*a*) Tuberculosis Order, 1925	.....	4	.....	8
(*b*) Milk & Dairies (Consolidation) Act, 1915	30	2742	2153	78
(*c*) Milk (Special Designations) Order, 1923	1434			
(*d*) School Milks	366	134	5	2
From other Veterinary Inspectors :				
(*a*) Milk (Special Designations) Order, 1923	.....	318	330	.....
(*b*) For information	.....	3	.....	3
From Staffordshire Farm Institute, Producers, Retailers, etc.				
(*a*) For "Grade A" Licence and "Grade A" Standard	1953*	.....	.....	.....
(*b*) Experimental for "Grade A"	2	.....	.....	.....
(*c*) For "Certified" Licence and "Certified" Standard	9	.....	.....	.....
(*d*) For "Grade A.T.T." Licence	8	.....	.....	.....
(*e*) For information	123	14	.....	.....
From Local Authorities in the Administrative County :				
(*a*) Milk (Special Designations) Order, 1923	17	2	.....	.....
(*b*) Milk & Dairies (Consolidation) Act, 1915	129	146	.....	.....
(*c*) School Milk	.....	1	.....	.....
From Authorities outside the Administrative County :				
(*a*) For "Grade A" Licence	19	.....	.....	.....
(*b*) Milk (Special Designations) Order, 1923	80	40	.....	.....
(*c*) Milk & Dairies (Consolidation) Act, 1915	352	382	27	2
(*d*) Tuberculosis Order, 1925	.....	3	.....	.....
	6749	5708	2515	93

* This figure includes 1,884 examinations for "Grade A" Licence under the Accredited Milk Scheme.

In addition to the above, the following examinations were also conducted :—

Examination for cause of taint	26
Examination of churn washings	2
Examination of milk bottles for sterility	14
Tests for acidity	2
Reductase tests	1464
	1508

The particulars of the biochemical and pathological investigations (excluding medico-legal work) were as follows :—

PATHOLOGICAL AND BIOCHEMICAL WORK CONDUCTED DURING THE YEAR 1935.

Fractional Test Meals.	
Specimens of gastric contents	560
Urea (estimation of).	
Urine	106
Blood	86
Cerebrospinal fluid	4
Glucose (estimation of).	
Urine	35
Blood	145
Blood.	
Estimation of hæmoglobin	73
Leucocyte count	76
R.B.C. count	73
Reticulocytes	67
Differential leucocyte count	82
Platelets	5
Grouping	13
Carbon Monoxide	3
Estimation of calcium	2
Bleeding time	3
Coagulation time	4
Van Den Bergh Reaction	5
Urine.	
Estimation of diastase	2
,, ,, Lead	1
,, ,, Bile	2
,, ,, Urobilin	1
Acetone Derivatives	5
Zondek-Aschheim Test	2
Fæces.	
Examination for occult blood	9
Examination of calculi	4
Examination of Semen	1
Pathological Sections of human organs and tissues	217
Pathological Sections (Research)	90
Total	1676

The details of the Venereal Diseases tests are shown in the following table:—

EXAMINATIONS OF PATHOLOGICAL SPECIMENS CONDUCTED UNDER THE VENEREAL DISEASES SCHEME DURING THE YEAR 1935.

	For Detection of		For Wassermann Reaction	Sigma & Kahn Reactions	Other Examinations	Totals
	Spirochæta Pallida	Gonococci				
1st Quarter	1	303	1955	2008	401	4668
2nd Quarter	.....	258	1658	1601	400	3917
3rd Quarter	2	327	1693	1803	516	4341
4th Quarter	1	318	1953	2068	570	4910
Totals	4	1206	7259	7480	1887	17836

The 1,887 "Other examinations" consisted of:—

161 cerebrospinal fluids for cell count, protein estimation and colloidal gold test; 1,714 complement fixation tests for gonorrhœa; the examination of 1 urine for gonococci; and the making of 11 cultures for gonococci.

CHEMICAL LABORATORY.

Mr. E. V. Jones, the County Analyst, reports that during 1935 by far the largest number of samples analysed was under the Food and Drugs (Adulteration) Act, 1928. Under this Act he received the following samples, as tabulated:—

SAMPLES.	Number Examined.			No. Adulterated or below Standard.		
	Total	Formal	Informal	Total	Formal	Informal
Almonds, Ground	6	1	5	—	—	—
Almonds, Sugared	1	—	1	—	—	—
Arrowroot	3	2	1	—	—	—
Baking Powder	2	—	2	—	—	—
Banana Cream	1	—	1	—	—	—
Barley, Pearl	8	4	4	—	—	—
Beeswax	1	—	1	—	—	—
Brawn	7	1	6	2	1	1
Brazil Whirls	1	1	—	—	—	—
Bread Crumbs, Golden (Guaranteed to contain no artificial colouring matter)	2	1	1	2	1	1
Brisling in Olive Oil	3	—	3	—	—	—
Butter	37	23	14	4	4	—
Cheese	1	—	1	—	—	—
Cheese, Cheddar	1	—	1	—	—	—
Cheese, Gorgonzola	2	—	2	—	—	—
Cherries, Glace	1	—	1	—	—	—
Chicken and Ham Roll	1	—	1	—	—	—
Chocolate Spread	1	—	1	—	—	—
Cinnamon, Ground	1	—	1	—	—	—
Cocoa	6	3	3	—	—	—
Cocoa, Malted Milk with Egg	1	—	1	—	—	—
Coconut, Desiccated	1	1	—	—	—	—
Coffee	3	—	3	—	—	—
Cornflour	5	—	5	—	—	—
Cream	6	—	6	—	—	—
Cream, Sterilized	12	—	12	—	—	—
Cream of Tartar	1	1	—	—	—	—
Currie Powder	2	—	2	—	—	—
Custard Powder	5	—	5	—	—	—
Dripping	5	—	5	—	—	—
Egg Substitute Powder	1	—	1	—	—	—
Epsom Salts	1	—	1	—	—	—
Flour	2	1	1	—	—	—

SAMPLES	Number Examined			No. Adulterated or below Standard.		
	Total	Formal	Informal	Total	Formal	Informal
Flour, Self-raising	10	3	7	—	—	—
Friar's Balsam	1	—	1	—	—	—
Gentian Root, Powdered	9	2	7	5	2	3
Ginger	4	1	3	1	—	1
Ginger, Ground	8	5	3	3	2	1
Ginger, Preserved	1	—	1	—	—	—
Glauber's Salt	1	—	1	—	—	—
Glycerin	3	—	3	—	—	—
Golden Pudding Powder	1	—	1	—	—	—
Gregory's Powder	1	—	1	—	—	—
Honey	4	—	4	—	—	—
Honey, Prepared	1	—	1	—	—	—
Horse Radish Cream	1	—	1	—	—	—
Iodine, Tincture of	3	—	3	—	—	—
Jam, Apricot	2	—	2	—	—	—
Jam, Black Currant	1	—	1	—	—	—
Jam, Damson	2	—	2	—	—	—
Jam, Plum	3	—	3	—	—	—
Jam, Raspberry	6	—	6	—	—	—
Jam, Strawberry	2	—	2	—	—	—
Lard	24	15	9	4	4	—
Lard Compound	3	2	1	—	—	—
Lemon Cheese	5	—	5	—	—	—
Macaroni	1	—	1	—	—	—
Macaroni with Egg	4	—	4	1	—	1
Mace, Ground	1	—	1	—	—	—
Magnesia Fluid	1	—	1	—	—	—
Magnesium Carbonate	1	—	1	—	—	—
Margarine	8	2	6	—	—	—
Marmalade	4	—	4	—	—	—
Milk	1764	1046	718	170	110	60
Milk, "Certified"	3	3	—	1	1	—
Milk, "Grade A"	39	33	6	3	2	1
Milk, "Grade A (T.T.)"	8	4	4	—	—	—
Milk, Pasteurized	36	31	5	1	1	—
Milk, Skimmed	1	1	—	—	—	—

SAMPLES.	Number Examined			No. Adulterated or below Standard.		
	Total	Formal	Informal	Total	Formal	Informal
Milk, Sterilized	40	36	4	6	6	—
Milk, Condensed, Full Cream, Sweetened	1	—	1	—	—	—
Milk, Condensed, Full Cream, Unsweetened	4	—	4	—	—	—
Milk, Condensed, Machine Skimmed, Sweetened	2	—	2	—	—	—
Mincemeat	8	—	8	—	—	—
Mint Sauce	2	—	1	—	—	—
Mustard	1	—	—	—	—	—
Oatmeal	4	4	5	—	—	—
Oil, Camphorated	5	—	5	—	—	—
Oil, Castor	5	—	2	—	—	—
Oil, Cod Liver	2	—	1	—	—	—
Oil, Cod Liver and Malt Extract	1	—	11	—	—	—
Oil, Olive	11	—	3	—	—	—
Ointment, Boric	3	—	1	—	—	—
Ointment, Calomel	1	—	1	—	—	—
Ointment, Eucalyptus	1	—	2	—	—	—
Ointment, Iodine	2	—	1	—	—	—
Ointment, Pink	1	—	4	—	—	—
Ointment, Zinc	4	—	2	—	—	—
Olive Oil and Raspberry Vinegar	2	—	2	—	—	—
Orange Squash	1	—	1	—	—	—
Paraffin, Liquid	1	—	1	—	—	—
Parrish's Chemical Food	1	—	1	—	—	—
Parsley (Dried)	1	—	1	—	—	—
Paste, Anchovy	1	—	1	—	—	—
Paste, Bloater	2	—	2	—	—	—
Paste, Game	1	—	1	—	—	—
Paste, Kipper Creme	1	—	1	—	—	—
Paste, Salmon	2	—	2	—	—	—
Paste, Salmon and Shrimp	3	—	3	—	—	—
Peas, Tinned	1	—	1	—	—	—

SAMPLES.	Number Examined.			No. Adulterated or below Standard.		
	Total	Formal	Informal	Total	Formal	Informal
Peel, Orange Candied	1	1	—	—	—	—
Pepper	13	2	11	—	—	—
Petroleum Jelly	1	—	1	—	—	—
Pickles	2	—	2	—	—	—
Plum Pudding	1	—	1	—	—	—
Polony	1	—	1	—	—	—
Quinine, Ammoniated Tincture of	1	—	1	—	—	—
Rhubarb and Castor Oil	1	—	1	—	—	—
Rice	7	4	3	—	—	—
Rice, Flaked	2	1	1	—	—	—
Rice, Ground	17	11	6	—	—	—
Rusks, Toasted (Brown-it)	1	—	1	—	—	—
Sage, Dried	1	—	1	—	—	—
Sauce	1	—	1	—	—	—
Sausage	10	1	9	3	1	2
Semolina	10	9	1	—	—	—
Sild in Olive Oil	3	—	3	—	—	—
Spice, Mixed	3	1	2	—	—	—
Suet, Beef	2	1	1	1	1	—
Suet, Beef Flaked	1	—	1	—	—	—
Suet, Beef, Shredded	3	—	3	—	—	—
Sugar	1	—	1	—	—	—
Sugar, Demerara	3	2	1	—	—	—
Sulphur, Flowers of	2	—	2	1	—	1
Sweets, Acid Drops	1	—	1	—	—	—
Sweets, Mints	2	—	2	—	—	—
Sweets, Toffee, Rum and Butter	1	—	1	—	—	—
Tablets, Aspirin	3	—	3	—	—	—
Tablets, Bismuthated Magnesia	1	—	1	—	—	—
Tapioca	3	1	2	—	—	—
Tea	32	2	30	—	—	—
Treacle	1	—	1	—	—	—
Turpentine, Oil of	1	—	1	—	—	—
Vinegar	2	1	1	—	—	—
Vinegar, Malt	9	3	6	—	—	—
	2357	1267	1090	208	136	72

Of the above samples, those reported against were as follows :—

Brawn. Of seven samples, two contained Boric Acid. No preservative is permitted in this article of food, neither is Boric Acid included in the permissible preservatives of the Public Health (Preservatives etc. in Food) Regulations.

Bread Crumbs, Golden. Two samples, one informal and the other formal, both of the same brand, were submitted. They both contained a little coal tar dye. No offence would have been committed had not the article been guaranteed to be free from artificial colouring matter.

Butter. Of thirty-seven samples, four proved to be margarine.

Gentian Root Powdered. Of nine samples, two were adulterated with powdered fruit stone shells, and three were below the Standard laid down by the British Pharmacopœia.

Ginger. Of four samples of ginger and eight of ground ginger, one of ginger and three of ground ginger contained sulphur dioxide. The Public Health (Preservatives etc. in Food) Regulations do not classify ginger as an article permitting the use of preservative.

Lard. Of twenty-four samples, four proved to be lard compound consisting of beef-fat and cotton seed oil.

Milk. Of 1,890 samples, 181 were adversely reported upon as follows :—

60 contained added water.
7 contained added water and were also deficient in fat.
93 were deficient in fat.
12 were deficient in solids-not-fat.
2 contained Boric Acid.
2 contained Boric Acid, and were also deficient in fat.
1 contained Boric Acid and was also deficient in solids-not-fat.
4 contained a little colouring matter, viz., annatto.

The average composition of the Milks was :—

	On all samples	On genuine samples.
Solids-not-fat	8.76 %	8.79 %
Fat	3.61 %	3.68 %

Of the 1,709 samples passed as genuine, 99 were below the presumptive standard of 8.5 per cent. solids-not-fat, but this deficiency was shown by the Freezing Point Depression (Hortvet) to be due to natural causes and not to the addition of water.

The Regulations of the Board (now the Ministry) of Agriculture state that where a sample of milk contains less than 8.5 per cent. of solids-not-fat, it shall be presumed, until the contrary is proved, that either solids-not-fat have been abstracted or water has been added. Any deficiency in solids-not-fat, therefore, raises the presumption of, but does not prove, adulteration ; it is implied that although the milk is of low quality in this respect, it may still be genuine. By the application of the Freezing Point Test we can distinguish between milks which are naturally low in solids-not-fat and those which have had the solids-not-fat reduced by the addition of water, thus there is no necessity to subject the farmer to the trouble and annoyance of appearing in Court to prove his innocence. Although a sample can be certified as containing added water without the trouble of visiting the farm and taking samples from the cows, it is always the custom in this County to take "Appeal to Cow" samples, where possible, before instituting proceedings. The usual analyses are carried out and the Freezing Point Depression of the "Appeal to Cow" samples determined, so that when a case is taken to Court there is no possible doubt of the presence of water.

Of 70 "Appeal to Cow" samples, 27 were below the presumptive standard, 13 were deficient in solids-not-fat, 4 were deficient in both solids-not-fat and fat, and 10 were deficient in fat, but the Freezing Point Depressions of all these samples were normal.

Sausage. Of ten samples submitted, three were reported against for containing Sulphur Dioxide. Had the article been labelled preserved, or a notice exhibited in the shop to this effect, no offence would have been committed, as the amounts were well below that permissible in preserved sausage.

Suet. Of two samples, one was slaked suet containing 13 per cent. wheat flour.

Sulphur, Flowers of. Of two samples, one was slightly in excess of the British Pharmacopœia Standard for acidity.

FERTILIZERS AND FEEDING STUFFS ACT, 1926.

	Total.	*Satisfactory.*	*Unsatisfactory.*
Meat and Bone Meal	1	1	—
Linseed Cake	1	—	1
	2	1	1

Of the two samples submitted, the Linseed Cake was slightly below the Warranty in Oil.

CORONER SAMPLES.

Six cases were sent to this Laboratory, consisting altogether of 19 samples, 2 of which were only for Carbon Monoxide poisoning.

POLICE SAMPLES.

One sample of Bedding Material and one of Feathers were sent to be examined for Paraffin or other inflammable liquids.

Nine samples were also sent by Medical Practitioners for examination for poisons.

In addition to the above, I have received from different Authorities :—

469 samples of *Drinking Water*, of which only 128 were of satisfactory quality, 150 contained sewage, 30 were organically impure, 93 were of doubtful quality, 13 contained metallic contamination, 7 were excessively hard, 28 contained both animal and vegetable contamination, 2 contained organic and metallic contamination, 9 contained sewage and metallic contamination, 5 contained sewage and were also excessively hard, 1 was of doubtful quality organically and was excessively hard, 1 contained metallic contamination and was excessively hard, 2 contained sewage, metallic contamination and were also excessively hard.

169 *River Waters*, of which 107 were for full analysis and 62 for partial analysis.

74 *Effluents*, of which 70 were for full analysis and 4 for partial analysis.

1 *Water* was examined for Free Chlorine.

2 *Swimming Bath Waters* were fully analysed, including dissolved oxygen.

2 *Waters* were also examined for suitability for swimming and paddling.

1 *Water* was also examined for drinking purposes, and also for full mineral analysis.

5 *Milks.*

1 *Deposit* from Sewer Manhole.

2 Samples of *Stone.*

2 *Butters.*

3 Samples of *Household Ammonia.*

1 Sample of *Urine* for Lead, and 1 for Sugar.

1 *Cotton Seed Oil.*

1 *White Deposit.*

1 *Contents of Steel Drum from River.*

1 *Ground Nut Cake.*

1 Sample of *Lint* for Mercuric Iodide.

Additional Work.

Stoke-on-Trent.

	Samples.
Food and Drugs (Adulteration) Act, 1928	794
Fertilizers and Feeding Stuffs Act, 1926	8
Rag Flock Regulations, 1912	6
Various	6

Newcastle-under-Lyme.

Food and Drugs (Adulteration) Act, 1928	156

HOSPITALS.

In my Annual Report for 1930 full detaiis were given of the County's Hospital Services, and I have already referred, on page 18, to the County Council's proposals with regard to Public Assistance Institutions under their control.

The County's Orthopædic Hospital at Standon Hall has continued to give excellent service. Ninety-five of the beds there are allotted to tuberculous conditions, 10 to cases sent by the Education Committee, 10 to Health Visiting Committee cases, and 5 for the use of the Public Assistance Committee. The Hospital works in close association with nine voluntary After-care Centres, four of which are staffed by the same Visiting Surgeons who attend the Standon Hospital, and all the in-patient orthopædic treatment undertaken by the County Council is centralised at this institution. During 1935, 159 cases were treated for the Joint Tuberculosis Committee, of which 61 were discharged to attend the After-care Centres and 3 patients died. The Education Committee were responsible for 21 cases during the year, the Health Visiting Committee for 24, and the Public Assistance Committee for 9. These numbers give some indication of the lengthy period of treatment required for orthopædic cases, and in order that the education of the patients shall not suffer, all those of school age who are able to receive instruction are under the control of four teachers. In view of the nature of the disabilities of the patients, special teaching has to take the place of the ordinary methods.

MATERNITY AND NURSING HOMES.

At the end of the year the number of premises registered under the Nursing Homes Registration Act, 1927, was 22 ; three exemptions from registration previously allowed were continued. Two applications for re-registration, the homes having been transferred to other premises, were received in 1935, and were granted. One Home was given up. The 22 Homes registered, with the exception of 10, are for one or two beds only, four applications made during the year for increased numbers of beds having been acceded to. The County Council have not delegated any of their powers under the Nursing Homes Registration Act, 1927, to District Councils, nor have any applications been received for such delegation.

No Maternity Homes have been established by the County Council as yet, but they have arrangements with the Mrs. Legge Memorial Home, Wolverhampton, where prospective unmarried mothers can be sent for their confinements and remain there for

six months. The County Council contribute 40/- per patient per week for six weeks, the cost of the remainder of the period being defrayed from philanthropic sources. In 1935, 15 cases were admitted to this Home.

The County Council also have arrangements for the admission of patients from the Administrative County to Cleveland House, Wolverhampton, an institution for the reception of expectant mothers suffering from venereal disease. In 1935, fourteen such patients were treated, nine of whom were admitted during the year.

In addition, arrangements have been made for midwifery cases to be sent from the Health Visiting Area to the following Hospitals and Maternity Homes:—

Ashbourne (Derbyshire).
Newport (Salop).
Bath Road Maternity Home, Wolverhampton.
North Staffordshire Royal Infirmary, Stoke-on-Trent.
Crewe.
Longton Cottage Hospital.
Corbett Hospital, Stourbridge.
Women's Hospital, Wolverhampton.
Birmingham Maternity Hospital.
Derbyshire Hospital for Women, Derby.

The cases so sent are limited to those who live in unsatisfactory home conditions or have some complication in connection with their pregnancy which makes it unsafe for them to remain at home. During the year 65 patients who complied with these conditions were sent by the County Council.

In addition, twenty-two women were admitted to the Ashbourne Maternity Home, Derbyshire, but paid their own fees, the County Council merely guaranteeing any loss which the Derbyshire Authority might sustain if a patient was subsequently unable to pay the accepted fee.

Besides the Maternity Homes already mentioned, cases are received at the Wordsley Public Assistance Institution, in private wards accommodating 12 beds for patients who can pay either the whole cost or a portion of the cost of treatment. At the Sedgley Institution there is a special block known as the Rosemary Ednam Maternity Home, built by the late Board of Guardians, in which there are 9 beds for paying patients under similar conditions to those that exist at the Wordsley Institution. Cases can also be sent to either of these Maternity Units by the Health Visiting Committee where the home conditions or some complication of pregnancy make this desirable.

MATERNAL MORTALITY.

In the accompanying table the maternal mortality rate for the Administrative County, showing the deaths per thousand (live and still) births in the last seven years, is given.

Year	Total (Live and Still) Births.	Deaths from		Maternal Mortality per 1,000 (Live and Still) Births	
		Puerperal Sepsis	Other Diseases and Accidents of Parturition	Staffs.	England and Wales.
1929	13,675	17	42	4.3	4.1
1930	13,823	22	23	3.2	4.2
1931	13,338	11	29	3.0	3.9
1932	12,917	21	29	3.9	4.0
1933	11,960	19	18	3.1	4.3
1934	12,497	28	27	4.4	4.4
1935	12,751	20	35	4.3	3.9

It will be observed that the maternal mortality rate for 1935 is practically the same as that for the previous year. Fifty-five cases died from puerperal sepsis or other diseases and accidents of parturition, which is exactly the same number as for last year, but the total number of births was rather greater in 1935 than in 1934, so that the rate per thousand births (live and still) is very slightly less. Although it is disappointing to report this result in view of the efforts that have been made to diminish maternal mortality, it should be pointed out that Staffordshire is by no means one of the black spots of the Country as regards maternal mortality, and by comparing the figures for the County for the preceding seven years with those of the Country as a whole, it will be seen that Staffordshire has an average in the neighbourhood of that of England and Wales. It may be said in criticism that this is nothing upon which to congratulate the County, but it should be realised that although the Commission on Maternal Mortality have found that approximately 50 per cent. of maternal deaths are preventable, it by no means follows that by taking certain steps a Local Authority can halve its maternal mortality rate in any given time. So many factors are involved that I think it would be expecting too much to promise to halve a rate as low as four deaths per thousand births. At the same time, now that women are beginning to take more advantage of the facilities available, particularly ante-natal care, we may reasonably hope that some reduction in the mortality rate can be expected.

It is the duty of a midwife to notify all deaths that occur in her practice, whether as a midwife or as a maternity nurse. This rule only relates to the period in which she is actually in attendance, and, consequently, if the patient is removed to Hospital, or not being attended at the time of death by the midwife, the death is not reported by her. During the year 14 deaths were so reported out of a total of 55 maternal deaths registered.

The causes of death in these cases were as follows:—

Accidental Ante-partum Hæmorrhage	1
Ante-partum and Post-partum Hæmorrhages	1
Concealed Accidental Hæmorrhage	1
Eclampsia	1
Placenta Prævia: Ante-partum Hæmorrhage	1
Post-partum Hæmorrhage	3
Pulmonary Embolism	3
Cardiac Disease: Shock	1
Pneumonia	1
Tuberculosis	1

In previous reports full details were given of the scheme approved by the County Council for providing the services of Obstetric Consultants in such cases where the family doctor desires his assistance at any time during pregnancy, labour, or the puerperium. Under the same scheme, Ante-natal Clinics are in existence at most Infant Welfare Centres, and midwives are encouraged to take their patients there for examination by the Medical Officer. At these Centres no treatment is given, but if such is found necessary the midwives are advised to send the patients to their own doctors.

More advantage seems to have been taken of that part of the scheme which allows the family doctor to call in a Consultant when necessary, this provision being made use of on 83 occasions as against 30 in 1934.

(*a*) Investigation of Maternal Deaths.

The same arrangements as for 1931 still hold good for investigating maternal deaths. This work is carried out by the Medical Officer of Health of the district concerned or by one of the Assistant Medical Officers of the County Council.

Reports on each maternal death are forwarded to the Ministry of Health when completed, for the information of the special committee set up by that department to deal with this matter. This has been referred to previously on page 48.

(*b*) Work under the Puerperal Fever and Puerperal Pyrexia Regulations.

In previous Annual Reports the scheme adopted by the County Council for carrying out the duties imposed by these Regulations was set forth. The following is the number of notifications during 1935:—

Puerperal Pyrexia Notifications, 1935.

	In Health Visiting Area.	*Not in Health Visiting Area.*	*Total.*
Urban Districts	37	39	76
Rural Districts	30	.....	30
			106

The case rate per thousand total births (live and stillbirths) for the County was 8.3, whilst that for England and Wales was 9.4.

Puerperal Pyrexia is defined as any febrile condition occurring in women within 21 days after childbirth or miscarriage, in which a temperature of 100.4 or more has been sustained during a period of 24 hours or has recurred during that period. Cases of puerperal fever are included in this definition, and, as the latter condition can still be notified, the following are the notifications:—

Puerperal Fever Notifications, 1935.

	In Health Visiting Area.	*Not in Health Visiting Area.*	*Total.*
Urban Districts	9	8	17
Rural Districts	8	.....	8
			25

The case rate per thousand total births (live and stillbirths) for Staffordshire is 1.9 as compared with 3.6 for England and Wales.

The midwives under their rules have also to notify to the Local Supervising Authority any rises of temperature in their practices, and these, which number 145, were specially investigated by the Midwives' Inspectors, who reported that the conditions to which they were due were as follows:—

Adherent Placenta	4
Albuminuria	3
Cystitis	1
Emotional State	2
Engorged Breasts	1
Lacerated Perinæum	8
Mastitis	22
Offensive Lochia	5
Phlebitis	2
Phlegmasia Alba Dolens	4
Post-Partum Hæmorrhage	2
Prolapse of Cord	1
Puerperal Insanity	2
Pyelitis	1
Retained Membranes	5
Sapræmia	6
Septicæmia	5
Toxæmia	5
Unsatisfactory General Condition	4
Bronchitis	5
Cardiac Trouble	1
Chill	5
Constipation	11
Debility	1
Diarrhœa	1
Empyema	1
Erysipelas	2
Influenza	19
Pleurisy	1
Pneumonia	1
Septic Rash	2
Septic Thumb	1
Tonsilitis and Septic Throat	9
Tuberculosis	2

It will be observed that in many instances the rise of temperature could not be definitely associated with the puerperal state, but although these special investigations have taken up much time of the Midwives' Inspectors, there is little doubt that they were worth while and have resulted in no case of septic condition of the genital tract being overlooked. In each case

the midwife, according to her rules, had to call in a medical practitioner, so that appropriate treatment could be given. Such cases as comply with the definition given would then be notified by the medical practitioner under the Puerperal Pyrexia Regulations, and, during the year, under the Health Visiting Committee's Scheme a Consultant's opinion was obtained in 12 cases, and 46 cases sent to hospitals. In 12 instances the patients remained at home and special nursing was provided.

In addition to the cases referred to above, it was ascertained that 17 patients from the Health Visiting area were sent to hospital through other agencies.

INFANTILE MORTALITY.

The infant mortality rate for 1935 was 66 per 1,000 live births, as against 57 last year. The rate in Urban Districts was 69 compared with 59, and in the Rural Districts 56 as against 53 in the previous year. In England and Wales in 1935 the infant mortality rate was 57 compared with 59 last year. It has been noted in examining the causes of death of children under one year that of recent years there has been no reduction in the deaths from prematurity, malnutrition, and similar causes in the Country generally, and the following table, giving the death rates per 1,000 live births in the County during the last decade, shows little variation from year to year. I think this rate is too high and that this is a field of action which has received little attention from Public Health Authorities and practitioners in preventive medicine.

Year.	Live Births.	Deaths of Children under one year of age from Congenital Debility, Malformations, Premature Birth, Etc.	Death-rate per 1,000 Live Births
1926	14,535	488	33.5
1927	13,856	444	32.0
1928	13,742	412	30.0
1929	13,125	415	31.6
1930	13,243	401	30.3
1931	12,752	446	35.0
1932	12,335	436	35.3
1933	11,424	403	35.3
1934	11,951	401	33.5
1935	12,174	403	33.1

Under the rules of the Central Midwives Board, deaths of infants within the first 10 days of life are notified by midwives, and 147 deaths were so reported, the causes of death being as follows:—

Anæmia	1
Asphyxiated	5
Congenital Heart	12
Convulsions	10
Deformities	16
Feebleness and Prematurity	95
Inattention at birth	1
Jaundice (septic)	3
Pemphigus Neonatorum	1
Pneumonia	3

CLINICS AND TREATMENT CENTRES.

The number of Clinics and Treatment Centres was set out in detail in the 1930 Report, and the changes in each subsequent year have been stated in my Annual Reports.

The changes in Infant Welfare Centres which have taken place during 1935 are given in the section of the Report below dealing with the Health Visiting Scheme.

HEALTH VISITING SCHEME.

As I have already mentioned, the County Health Visiting Area consists of 17 Urban and 10 Rural Districts, which have a total population of 429,090.

My Report for 1934 (pages 50—53) indicated the changes which took place as a result of the extension of the Health Visiting Area during that year.

Dr. Davies, who was specially appointed to undertake the work of the Ante-Natal, Maternity and Infant Welfare schemes, commenced duty at the beginning of April. This appointment has enabled the establishment of five Ante-Natal Clinics in the populous parts of the Health Visiting Area, which are quite independent of the Welfare Centres. The separation of these centres, and the re-organisation of the ante-natal portion of the scheme, has resulted in a great increase in the attendances of expectant and nursing mothers.

The scheme for the dental treatment of expectant and nursing mothers and pre-school children came into being on the 2nd September, when the newly appointed Dental Surgeon

and Nurse commenced duty. Although these additional officers were appointed specially, they have been merged into the Dental Staff of the County, so that the work of the Health Visiting Committee is divided between the whole of the staff. This saves both time and expenses of transport. The patients are recommended for treatment from the Ante-natal Clinics and Infant Welfare Centres, or, in Rural Districts where such do not exist, by the General Practitioners who examine expectant mothers under our ante-natal scheme for those areas. As far as possible patients attend at the main Dental Clinics provided by the Education Committee, and a tentative arrangement has been made with that Committee whereby, in the case of adults, 1s. 0d. per patient is paid in lieu of rent. In certain areas, however, where groups of patients will need treatment from time to time, special clinics are held as and when required, and the accommodation has been rented by the Health Visiting Committee. At present, the places concerned are Cheslyn Hay, Featherstone, Pelsall, Rugeley and Walsall Wood. The scheme includes the supply of dentures to expectant and nursing mothers, and at the moment these are prepared by Dental Mechanics in private practice. When dentures are provided, the family circumstances of the patient are investigated so that the appropriate Committee can decide whether or not any contribution towards the cost should be demanded. As regards the future supply of dentures etc., towards the end of 1935 the County Council decided to equip a dental workshop and appoint a Dental Mechanic to serve all Committees giving dental treatment. This workshop will be in the Public Health Department, but the accommodation is not yet available. As soon as the room is ready for adaptation this part of the scheme will be proceeded with. In connection with the dental scheme generally, I would mention that the County Council have undertaken to carry out this service in the Borough of Stafford at an agreed payment. The work performed in the County Health Visiting Area during 1935 is given later in this section of the Report.

In my report last year I anticipated that the scheme previously in force in the Cannock and Lichfield Rural Districts, under which a fee of 10s. 0d. is paid to a midwife if she loses a case as a result of County Council activities, would be extended to the whole of the area in which we control the maternity and child welfare work. This was done, and, as I also said in the 1934 report, the payment of midwives' fees in necessitous cases commenced in July, 1935. The extent to which these facilities were taken advantage of is shown in a subsequent paragraph.

The scheme for the ante-natal examination of uninsured expectant mothers resident in rural districts where there are no Ante-natal Clinics, was extended to the whole area in July, 1935. Previously it had been in force in the Cannock Rural District only.

Centres and Clinics.

There are 37 Combined Centres, (i.e. Minor Ailment Clinics and Welfare Centres), 22 Welfare Centres and one Voluntary Centre in the Health Visiting Area. The majority of these Centres are equipped for ante-natal work.

The only Welfare Centre outside the County Scheme is a voluntary one at King's Bromley.

The work of the County Infant Welfare Centres and Ante-natal Clinics is chiefly educational, cases requiring treatment being sent to their family doctor, except crippling conditions and those who must be seen by an Ophthalmic Surgeon.

During the year, the Minor Ailment Clinics at Stone, Brierley Hill and Featherstone, were merged with the Infant Welfare Centres and became Combined Clinics.

A new Welfare Centre, which is held weekly, was opened at Endon in May, and was so well attended and appreciated that its scope was extended to include the provision of care for ante-natal cases.

The Warslow Centre, which served a thinly populated area, was closed in March owing to the decreasing attendance.

It is gratifying to report that in Brierley Hill, Wednesfield and Longnor, much more convenient, attractive and suitable premises have been obtained, and the change thus made has in each case resulted in a satisfactory increase in the volume of work in these centres.

As previously stated, the Medical Officer appointed for maternity and child welfare work has been developing the ante-natal scheme, and in this connection special half-day sessions of the Clinics at the undermentioned Centres were commenced on the following dates:—

Brierley Hill	weekly	11.4.35
Brownhills	fortnightly	6.9.35
Kidsgrove	weekly	25.9.35
Darlaston	weekly	8.10.35
Willenhall	fortnightly	11.10.35
	weekly	22.11.35

During the year, 923 expectant mothers attended the Ante-Natal Clinics, with a total attendance of 1,860, and in the last quarter of the year records were kept of cases in which deviations from normal health were observed.

The following table indicates the nature of the complaints found: those requiring treatment are sent in the first place to the midwife concerned, and then to their own doctor.

Abnormal Urine—Albumin	18
Sugar	3
Anæmia	28
Blepharitis	1
Bronchitis	10
Constipation	44
Contracted Pelvis	26
Dental Caries	102
Gastritis	3
Goitre	3
Hæmorrhoids	3
High Blood Pressure	17
Hyperemesis	7
Insomnia	6
Nipples abnormal	5
Pyelitis	13
Threatened Abortion	2
Tuberculosis of Lungs	2
Vaginal Discharge	30
Valvular Disease of the Heart	8
Varicose Veins	47
Venereal Disease	3

In the table at the end of the report will be found details of the work of the Centres and Clinics, from which it will be seen that during 1935, apart from the attendances at Ante-natal Clinics mentioned above, 41,602 attendances were made by children under one year, and 42,856 by children between one and five years.

Rural Ante-Natal Scheme.

In my general remarks concerning this section of the Report I mentioned that the scheme, under which a midwife can refer her uninsured patients to their own doctors for ante-natal examination, has now been extended to cover all the portions of the Rural Districts not served by Ante-natal Clinics. This scheme provides for the examination of expectant mothers by their own doctors, whether their condition seems normal or not. This examination is to supplement the

one made by all midwives under their rules at the time they book each case. If it is found that any treatment is necessary the midwife concerned is informed of this so that she can send the doctor the ordinary "Record of Sending for Medical Help" provided for in the Rules of the Central Midwives Board. Then, if the family doctor desires to obtain a Specialist's opinion of the case, the County Council have made arrangements with Consulting Obstetricians in various parts of the County, and if the Consultant thinks that admission to Hospital is necessary he arranges for this. It will be observed, therefore, that by this scheme women living in the rural areas of the County are not in any way handicapped as they used to be in former days, when it was not easy to obtain skilled advice owing to their isolation.

The facilities mentioned were available in the Cannock Rural District during the whole of 1935, and the extension of the scheme took place in July. The response was quite satisfactory, and 264 expectant mothers were examined by the end of the year.

Orthopædics.

The County Council have not established any Orthopædic Clinics, but have arrangements with voluntary bodies who have established Clinics at Leek, Stourbridge, Hartshill, Birmingham, Stafford, Lichfield, Tamworth, Walsall and Dudley, where cases are received on payment.

Ninety-seven new cases, as against 72 last year, were sent to Orthopædic Clinics for out-patient treatment in the first instance, as follows:—

Bow Legs	16
Flat Feet	3
Fracture	2
Knock Knees	10
Knock Knees allied with Flat Feet	7
Metatarsus Varus (Club Foot)	5
Paralysis	8
Pigeon Toe	3
Rickets	9
Spina Bifida	2
Talipes—Equino Varus: Calcaneus	8
Torticollis	6
Miscellaneous	18

It will be noted that only nine cases of rickets are given in this list, but of course there are many more conditions, classified under other headings, of which rickets has probably been the primary cause.

I give below details of the out-patient attendances, etc. during the year :—

No. of children on books at 31.12.34		175
New cases referred during 1935		97
		272
Removals on account of :—		
Discharged cured	32	
Left the area	7	
Referred back to Infant Welfare Centre for supervision	1	
Attained school age	40	
Transferred to Joint Committee for Tuberculosis	1	
Treatment refused	28	
No treatment necessary	3	
	——	112
No. of cases at end of year		160

The total number of attendances at Out-Patient Clinics during the year was 2,283.

Twenty-four children received in-patient treatment at Standon Hall Orthopædic Hospital, fourteen of whom were admitted during the year. As a result of the extension of the Health Visiting Area there is a greater need of accommodation for orthopædic cases, and, pending the proposed extension of Standon Hall, the Health Visiting Committee, in April, 1935, authorised the use of five additional beds at outside Institutions. In this way seventeen further children under five years of age received in-patient treatment, mostly short stay cases, fourteen being admitted to the Hartshill Orthopædic Hospital and three to the Birmingham Cripples' Hospital.

Artificial Light Treatment.

The facilities available for ultra-violet light treatment are confined to the Leek and Lichfield areas. The Health Visiting Committee have a fully equipped Clinic at the Lichfield Infant Welfare Centre, whilst at Leek an arrangement has been entered into with the Cripples' Aid Society there

for the treatment of our cases. At each place the patients are under supervision by our Assistant Medical Officers.

During 1935, 30 children under 5 years of age received treatment at the Lichfield Clinic, 21 being referred for the first time, and the total number of attendances was 591. At Leek 31 patients were treated, including 18 new cases, 708 attendances being made.

The ailments for which the patients were referred to the Clinics are shown below, and in the majority of cases the conditions improved under ultra-violet radiation :—

Alopecia Areata	1
Bronchial Catarrh	1
Bronchitis	2
Debility and Malnutrition	19
Delayed Dentition	1
Enlarged Glands	2
Marasmus	3
Pink Disease	1
Rickets	30
General Condition	1

Ophthalmic Treatment.

The eye cases in children under 5 years of age, seen during the year by the County Ophthalmic Surgeon, included 126 new ones. Sixty-nine of these were cases of squint and glasses were prescribed for them. The Health Visiting Committee provided these in 19 cases and in one instance half the cost was allowed. Generally, where there was unilateral squint the sound eye was occluded, but if this was found to be impracticable, atropine was inserted weekly until it was found possible to have the eye occluded. These children were kept under constant supervision.

In 41 of the remaining 57 cases advice or treatment was necessary, and this was given.

Patients seen in previous years were re-examined during 1935, and the total number of attendances at the Clinics, including both old and new cases, was 322.

Ophthalmia Neonatorum.

Ophthalmia Neonatorum is defined as a purulent discharge from the eyes of an infant occurring within twenty-one days from the date of its birth, and is a notifiable disease. During 1935, 52 such cases occurred in the County Health Visiting Area, and in 40 instances home nursing was carried out by

the Health Visitors. Two children attended hospitals as out-patients and eleven were admitted for treatment. As a result, in 51 cases the vision was unimpaired, the remaining child being still under treatment at the end of the year. The County Council has arrangements for the treatment of this condition at the North Staffordshire Royal Infirmary, Stoke-on-Trent, The Birmingham and Midland Eye Infirmary, and the Wolverhampton and Midland Counties Eye Infirmary. The children who were referred to hospitals this year, however, were mainly sent through other channels, for only 2 of them were dealt with under our scheme.

A table showing the statistics for the whole of the Administrative County is given towards the end of the Report.

Dental Treatment.

During the year 1935, the dental staff of the County Council attended to the dental needs of 107 nursing and expectant mothers, and of 270 "toddlers," in the County Health Visiting Area.

In the following table the treatment given is enumerated:

Centre or District.	No. of patients seen.		Extractions.		Fillings (adults)	Dressings (children)	Scalings (adults)	Dentures. (adults)
	Mothers.	Children	Temp. teeth	Perm. teeth				
Audley	7	6	8	34	.....	1	.....	.....
Biddulph	4	13	19	21	2	8	.....	.....
Brierley Hill	6	31	54	42	1	11	2	.....
*Brownhills	12	34	50	41	.....	14	.....	.....
Cheadle	.....	1	.....	.....	.....	1	.....	.....
Darlaston	14	23	26	30	.....	4	.....	.....
Leek, Endon and Waterhouses	3	26	40	9	.....	.....	.....	.....
*Lichfield	16	14	26	13	4	2	1	.....
Quarry Bank	3	.....	.....	4	.....	.....	.....	1
Sedgley	31	44	102	244	11	22	8	28
Uttoxeter	2	19	33	6	.....	5	1	.....
Willenhall	5	12	23	8	.....	.....	.....	5
Cannock Rural	4	12	21	4	.....	4	.....	.....
Newcastle Rural	.....	2	3	.....	.....	1	.....	.....
Stafford Rural	.....	33	54	.....	1	6	.....	.....
Totals	107	270	459	456	19	79	12	34

* Including cases at Featherstone, Pelsall, Walsall Wood, Cheslyn Hay and Great Wyrley.

The 34 dentures supplied were complete in 26 cases, partial in 6 cases, and repair to old dentures in 2 cases.

Of the 107 expectant or nursing mothers seen, treatment has been completed in comparatively few cases owing to the fact that the full scheme did not come into operation until September, and, consequently, at the end of the year the majority of the cases were waiting for dentures, or treatment had been postponed on account of the fact that the pregnancy was terminating or the patient had not recovered from her confinement.

Twelve children under 5 years of age were examined at Standon Hall Orthopædic Hospital, and 2 required treatment, but in view of their general condition this had to be deferred.

Payment of Midwives Fees.

In the general remarks at the beginning of this section of the Report I mentioned the two schemes under which midwives' fees are paid.

During this year, 13 applications for compensation were received where cases were admitted to hospital for their confinements under the County Council scheme. After the necessary investigations, the amount of 10/- was paid in each instance.

In 25 cases where the patient could not afford to pay either the whole fee or an outstanding balance, midwives applied for the amounts due to them. The family circumstances of each patient were investigated, and, on applying our scale, it was found that the County Council could accept responsibility, in each instance the case being a necessitous one. The average fee for the district is allowed, and in 24 cases the maximum payment was made, half fees being granted in the other. The total expenditure during the year was £31 17s. 0d.

Health Visitors.

There was no change in the Health Visiting Staff during 1935, and at the end of the year there were 56 whole-time Health Visitors. These serve a population of approximately 358,115, two of them being Lecturers on Mothercraft. There are 40 part-time Health Visitors serving a population of approximately 70,975, mainly in the Rural Districts. These are District Nurses appointed by District Nursing Associations, who, before they took up their duties, received special instruction at Sedgley under the direction of the whole-time Health Visitors there. On reference to the table at the end of the Report the districts and populations served by both whole-time and part-time Health Visitors are set forth.

The visits paid by the Health Visitors during the year were as follows:—

To expectant mothers:—	
(1) First visits	2,006
(2) Total visits	5,818
To infants under 1 year.—	
(1) First visits	6,599
(2) Total visits	61,526
To children, 1—5 years:—	
Total visits	109,310

Lectures.

Talks on mothercraft, which were instituted five years ago, have been continued at the Infant Welfare Centres. During the year, talks were given at 414 sessions of 54 Centres in various parts of the Health Visiting Area. There were 9,980 attendances of mothers at the lectures, in addition to which, on a few occasions when groups could not be formed owing to small attendances, individual talks were given. The syllabus of these talks is comprehensive and covers ante-natal care, the feeding and care of infants, clothing of infants (including demonstrations in cutting out clothing, etc.), the care of the toddler, and hygiene of the home. From the interest displayed, and the questions asked at the end of these lectures, it is obvious that they fulfil the purpose for which they were started, viz., to educate the mother to a better understanding of herself and her child.

CHILDREN ACT, 1908.

In the Health Visiting Area the Health Visiting Inspectors, the whole-time Health Visitors, and the part-time Nurses, have been appointed as Infant Life Protection Visitors. The work of supervision and visitation of the children who are boarded out under Part I. of the above Act is carried out by these Visitors. A preliminary examination is made by the Health Visitor when an application is received for registration of the foster-home, and monthly visits are subsequently paid by her. Regard is had to the general health and well-being of the children, and the suitability of the premises for their reception. The County Council also have power to limit the number of children under nine years of age in such a home.

The work carried out under this scheme during the year is shown in the following table:—

Number of children on Register at the end of December, 1935	60
Number of reports on visits to children received during the year 1935	698

Number of new cases during 1935, for which preliminary reports were sent in by Health Visitors 22

Number of foster parents on Register at end of 1935 60

The registration of the home mentioned in my last report, where children were received from a large hospital for convalescence, was cancelled on the 17th September. Up to that date 24 children had been received.

VENEREAL DISEASES.

Under the County Council scheme for the treatment of Venereal Diseases, agreements have been made with the North Staffordshire Royal Infirmary, Stoke-on-Trent; the Staffordshire General Infirmary, Stafford; the Royal Hospital, Wolverhampton; the General Hospital, Walsall; the Guest Hospital, Dudley; and the Corbett Hospital, Amblecote, for the establishment of special clinics.

The following table shows the number of Staffordshire cases treated during the year, including cases from the County who attended clinics outside the area:—

STAFFORDSHIRE CASES TREATED FOR VENEREAL DISEASES DURING THE YEAR 1935.

Clinic	Syphilis.	Soft chancre.	Gonorrhœa.	Non-Venereal.	Total.	Attendances.
Birmingham General Hospital	11	1	19	44	75	1893
Burton-on-Trent General Infirmary	—	—	6	—	6	149
Derby Royal Infirmary	—	—	2	4	6	173
Dudley Guest Hospital	18	—	46	43	107	4987
Stafford (Staffordshire General Infirmary)	17	—	33	14	64	2828
Stoke-on-Trent (North Staffordshire Royal Infirmary)	54	3	73	57	187	10393
Stoke-on-Trent (Municipal Clinic, Shelton)	11	—	36	34	81	3654
Stourbridge (Corbett Hospital)	2	—	8	7	17	2084
Walsall General Hospital	11	—	26	18	55	1491
Wolverhampton Royal Hospital	42	—	73	74	189	6813
Totals	166	4	322	295	787	34465

In comparing the total number of cases treated at the clinics with those for last year, it has been found that 787 patients were treated as against 808. It is gratifying that the attendances in proportion to the new cases still maintain a high ratio. These figures show that the patients are anxious to get the best out of the treatment.

At the end of 1935 there were 38 medical practitioners authorised to receive free supplies of Salvarsan or its substitutes for the treatment of Staffordshire cases in their practices; 8 doctors on the list availed themselves of this provision during the year.

WATER SUPPLIES.

The problem of water supplies in Rural Districts was not so much to the fore in 1935 as in the previous two years, owing to the rainfall being more in keeping with that of an English summer, but the droughts of the previous years had drawn attention to areas where the supplies were deficient and likely to give out during dry periods, or were polluted and therefore unfit for domestic purposes. Schemes were formulated by most of the Rural Councils to deal with these areas, and applications were made for a Government Grant under the Rural Water Supplies Act, 1934, and from the County Council, whose grant was equal to that of the Government's. By the end of 1935 the greater part of the million pounds set aside by the Government towards establishing new water supplies and helping in the improvement of old ones had been allotted, and those areas which were dilatory in preparing schemes and applying for aid from the Government will have to bear an added burden as a result. Most of the District Councils, as I have said, realised the deficiencies, but in those cases where action was not being taken the County Council have communicated with the Rural District Council, for, from the report of the Consulting Engineer engaged by the County Council to make a survey of the Rural Districts and their water supplies, it was obvious what remained to be done in this way.

A list of the schemes for which grants were promised by the County Council during the year will be found on page 77.

In my Annual Report each year I have given details of improvements in the water supplies of Urban and Rural Districts, and of unsatisfactory conditions for which remedial measures were undertaken or were to be considered in the near future. For the most part this information has been

extracted from the Annual Reports of District Medical Officers of Health, and below are given details for 1935:—

BIDDULPH U.D.—Mention was made in last year's report of proposals to build a new reservoir at Biddulph Park and to provide an additional engine at the Pumping Station. A start was made on this work in 1935. Efforts have been made to clear the old pipes of deposit in certain parts of the area, by a new process in which chemical compound is forced through under pressure. An improvement has been made by this means, though absolute success was not attained.

During the year it was decided to extend the water supply as far as possible to the farms and houses on the high ground surrounding the valley where a water shortage has been experienced during the drought of recent years, and plans and estimates have been prepared for Biddulph Park, Overton, and a further section of Mow Cop. Similar preparations were made for providing mains in New Road, Biddulph Moor, and at Leek Lane End.

LEEK U.D.—In October, 1935, the new source at Poole End was made available; this supply will act as an auxiliary to the present one from the Roaches.

NEWCASTLE M.B.—A scheme for supplying the Seabridge area with a piped service, mentioned in my report for 1934, was completed towards the end of the year.

RUGELEY U.D.—"Nothing further has yet been done concerning the supply of water to about 100 houses owned by Brereton Colliery."

STAFFORD M.B.—A scheme has been formulated to deal, by means of a new bore-hole, with the enlargement of the area. This bore-hole will be situated in the same geological formation as the present one on the Cannock Chase, but some distance from it, so that there will not be any question of affecting the yield from this.

TAMWORTH M.B.—Work on the new pumping station at Hopwas was started in June, 1935, but has not yet been completed.

UTTOXETER U.D.—Instructions have been given to the Council's Consulting Engineers to prepare a report on a proposed scheme for an increased supply of water, and the enlargement of the storage reservoir.

WILLENHALL U.D.—It was found that samples of water taken from nine wells, supplying 16 houses in the Bentley area, were polluted, and in one case the cottage has been connected to the main. Negotiations are taking place between the Council and Wolverhampton Corporation with a view to an arrangement being made for connecting the remaining houses. Meanwhile, the occupiers have been advised not to use the water without first boiling it.

CANNOCK R.D.—Most of the villages in this area are supplied from the Mains of the South Staffs. Waterworks Company, or Wolverhampton Corporation Waterworks Company, but the following parishes have no public pipe supply:—

Acton Trussell and Bednall.
Teddesley Hay.
Blymhill.
Weston-under-Lizard.

During 1935 extensions to the South Staffs. mains took place in the Longridge and Levedale area, in the Parish of Penkridge.

Requests have been made to the Council to provide a pipe supply at Kiddemore Green and Bishops Wood, in the Parish of Brewood, and for an extension of the Mains along the Watling Street.

CHEADLE R.D.—Extensions to the existing supplies have been carried out, including that from the Teanford springs which now supply Freehay, Hollington, and Boundary, and for which the County Council have promised a grant; this scheme was completed in August, 1935, at a cost of £10,087. Extensions to the water mains have also been carried out at Cheddleton, and, owing to the effects of the drought having made themselves felt, the Council intend to sink a borehole and install an electrically driven centrifugal pump to augment the supply.

Schemes are under consideration by the Local Authority for supplying Ipstones Edge, Consall and Kingsley.

Extensions of the mains from the Cheddleton supply were made to supply Caverswall, Wetley Moor Common and Brookhouse Lane area, whilst, by extensions of the Tean Scheme, properties at Totmonslow which have been affected by the drought were also supplied.

LEEK R.D.—Early in 1935 the County Council instructed a Consulting Engineer to investigate the water supplies of certain areas in this district, and on the 29th April he re-

ported on the conditions existing at Hill Top (Brown Edge), and in the Parishes of Alstonefield, Butterton, Grindon, Longnor, Longsdon, Horton and Wetton. From his report it was apparent that serious inadequacy of existing supplies was, in almost every case, very pronounced, and on the 10th May, 1935, the Clerk of the County Council communicated with the Clerk of the Rural District Council requesting that steps should be taken to rectify the known deficiencies. On the 13th June, representatives of the Rural District Council had an interview with an Inspector of the Ministry of Health, when the whole position of water supplies in the district was considered. As a result, the Engineer of the District Council was instructed to proceed immediately with a scheme for Longnor, and to report on the possibility of supplying water to the other Parishes.

LICHFIELD R.D.—Schemes for extending the South Staffordshire Waterworks mains were completed in the following districts:—Fradley (Alrewas), Chorley, Colton, Kings Bromley, Mavesyn Ridware and Hilton (parishes of Hammerwich and Shenstone). Further schemes for the supply of water were under consideration for Clifton Campville, Edingale, Elford, Harlaston, Thorpe Constantine, Orgreave, Stoneywell, Riley Hill, Blithbury, Drayton Bassett, Huddlesford and Williford, Fisherwick, Alrewas Hayes and Sittles. In all these schemes applications for grants from the County Council have already been made.

NEWCASTLE R.D.—*Ashley Parish.*—The Medical Officer of Health has reported in previous years on the need for a piped water supply in this area, and a scheme has been prepared for a supply from Nantwich Rural District Waterworks at Bearstone. Promises of grants have been made towards the cost of this by the Ministry of Health and the County Council.

Audley Parish.—Two new boreholes were sunk near the existing wells. Pumping tests of the supply from these were satisfactory and tenders for the extension of the works are now to be obtained.

Balterley Parish.—The extension of the main at Betley to this small parish was completed in March, 1935.

Chorlton Parish.—The scheme submitted to the Ministry of Health has met with legal difficulties in connection with the acquisition of privately owned mains. At the end of the year the Council had alternative schemes under consideration.

Maer Parish.—The extension of the main to Weymouth was completed early in 1935. A scheme for the provision of a main supply at Meir Heath, and to the hamlet of Blackbrook, was in course of preparation at the end of the year.

Whitmore Parish.—The Medical Officer of Health reports that the supply at Buckton remains unsatisfactory.

SEISDON R.D.—The scheme for a piped supply in the Parish of Pattingham, mentioned in my Report for 1934, was completed. The scheme entailed the extension of the Wolverhampton Corporation mains.

STAFFORD R.D.—I mentioned in my Report for 1934 that the drought had affected the water supplies very adversely throughout the Stafford Rural District, and that where supplies were adequate the purity of the source was in doubt. During the year, the Rural District Council engaged the services of a firm of Consulting Engineers and a scheme was prepared covering a large part of the Rural District. This was subsequently amended and added to at the request of the Rural District Council, and the enlarged scheme is at the moment awaiting the approval of the Ministry of Health. This scheme will cover the whole of the western portion of Stafford R.D. and will cost £53,000. Grants will be made towards the cost of this by the Government and the County Council. A smaller scheme to cover the eastern portion of the Rural District has been prepared. It is very gratifying to note that, at long last, efforts have been made by the Rural Council to meet what has been a very serious state of affairs in this district.

STONE R.D.—*Eccleshall.*—The scheme mentioned in my last year's Report has received the approval of the Ministry of Health, but, owing to various delays, work on the laying of the mains and the building of the reservoir has not yet been started.

A scheme has been formulated to extend the Eccleshall mains to Chebsey, Norton Bridge and Shallowford, which the Medical Officer of Health reports are in urgent need of a piped supply.

Hilderstone.—Samples from various sources of water supply in this village were tested and found to be unsatisfactory for drinking purposes.

Yarnfield.—"The water supply is partly from wells and partly from a brook which is inevitably contaminated. Steps are being taken by the Council to sink a borehole and thus provide an adequate supply of pure water in the village."

TUTBURY R.D.—The Council has provided an extension of the water mains of the South Staffordshire Waterworks Company for about five miles in the Parishes of Anslow and Hanbury—this was mentioned in my Report for 1934.

UTTOXETER R.D.—The water supply schemes are now in progress in the villages of Blithfield and Newton, Abbots Bromley, Admaston, Leese Hill, Draycott-in-the-Clay and Marchington. The supply in each case is from the South Staffordshire Waterworks Company and grants for some of these have been promised by the County Council and the Government.

Schemes have also been prepared for the villages of Ellastone, Wootton and Leigh, and Gratwich.

RIVERS POLLUTION PREVENTION.

A Hydrographical Survey of the River Trent was instituted by the Standing Committee on River Pollution of the Ministry of Agriculture and Fisheries in 1923, and has been continued yearly since that date.

In the accompanying Table the percentage of oxygen saturation in the streams at certain fixed points is shown for the last 10 years. The extent of the pollution can be judged when it is remembered that a percentage saturation of oxygen below 65 means that the stream is too polluted to support fish life. On reference to the Table it will be noticed that the heavy pollution of the streams that is now taking place in the industrial areas is observed for a considerable distance down stream. Unfortunately, as the streams in the industrial areas are so small, the degree of purification of effluents before discharge into them has to be much greater than if they found their way into a large river, and, consequently, the expense is correspondingly greater. In last year's Report a summary of the work undertaken by the various Sanitary Authorities during the year was given, and this year similar details are included in the succeeding paragraphs. The greater part of this information is culled from the Annual Reports of the District Medical Officers of Health.

Location.	Percentage of Oxygen Saturation.																			
	1926		1927		1928		1929		1930		1931		1932		1933		1934		1935	
	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.	July	Sept.
River Trent at Strongford Bridge	41	45	53.5	40.5	6.5	30.0	16.5	6.0	19.0	26.0	50.0	20.0	21.6	37.2	46	28	12	30	27	19.5
River Trent at Darlaston above Stone	21	29	41	34.5	17.0	14.0	26.0	19.0	28.5	37.0	39.5	56.5	1.3	36.4	27	20	13	55.5	15.5	24.5
River Trent at Aston, below Stone	24	29	44.5	43	29.5	50.5	16.5	25.0	13.5	34.0	36.5	59.0	6.6	28.2	21	15	Nil	25	8.5	14.5
River Trent at Great Haywood Mill, before receiving River Sow	21	40	33.5	50	14.0	41.5	13.5	31.5	33.5	39.0	50.5	56.5	36.5	37.8	32	10	17.5	30	12	31.5
River Trent at Great Haywood Mill, below Weir	40	43	48	60	46.5	51.0	49.5	56.5	60.0	62.0	57.5	60.5	43.2	45.4	48	18	26	42.5	21.5	33.5
River Sow at G.N. Railway Bridge	40	57	52	68.5	63.0	59.5	79	62	69.5	53.5	64.0	67.5	71.1	67.0	75	107	70	78	98	80.5
River Sow at Brick Bridge	33	75	36	67.5	88.5	67.5	66	52	54.5	59.5	58.0	58.0	87.9	63.5	66	66	81	70	86.5	58.5
River Penk at Radford	56	82	26.5	34.5	66.5	64.0	91	73	81.0	59.5	74.0	72.5	77.9	71.0	65	76	82.5	66.5	79	74
River Sow at St. Thomas	22	65	40	52.5	57.5	32.5	44	42	49.5	42.5	66.5	62.5	68.1	60.0	33	61	49.5	61.5	68.5	63.5
River Trent at Weetman's Bridge, near Little Haywood	27	34	27.5	51	35.0	48.0	38.5	29.5	51.5	49.0	51.0	57.5	39.0	44.5	36	36	29	36	17	39.5
River Trent at High Bridge, below Rugeley Sewage Works	31	48	35.5	51	45.5	42.0	36.5	29.0	57.5	53.0	57.5	67.5	47.1	54.5	43	45	69.5	55	50	58.5
River Trent at Wychnor Bridge, above confluence with River Tame	70	76	62	78.5	80.5	80.5	62	59.0	79.0	75.5	67.0	81.0	52.2	58.6	58	54	78.6	54	72.5	60.5
River Tame at Walsall Road Bridge, Perry Barr, before entering Birmingham	21	39	37	31.5	19.0	26.0	25.5	42.5	50.5	30.0	5.0	28.5	32.6	23.1	19	23	7.4	13.5	32.5	16.5
River Tame at Chetwynd Bridge, above confluence with River Trent	37	46	45	53	39.0	47.5	39	36.5	50.0	51.5	61.0	61.5	28.0	52.0	37	50	56	53.5	41	69.5
River Trent at Walton Bridge, below junction with River Tame	45	53	56.5	67	56.5	57.5	47	45.5	61.0	53.5	57.0	71.5	29.7	57.0	49	59	64	56	53.5	69.5
River Trent at Burton Bridge (North Boundary of Burton-on-Trent)	54	62	46.5	71.5	66.5	56.5	48	52.5	63.5	54.0	58.0	69.5	50.6	57.7	52	59	74	49	57	71
River Dove at Monks' Bridge, above confluence with River Trent	83	100	87.5	88.5	104	105	84	78.5	104.0	77.5	87.0	96.0	89.7	97.4	102	100	109	97.5	104.5	102

RIVER MERSEY WATERSHED.

BIDDULPH U.D.—A comprehensive scheme for the drainage and sewerage of the district has been adopted by the Council. This scheme falls into three parts:—

(1) The Biddulph Moor and Knypersley area, with a new disposal works near Mill Hayes.

(2) Hall Fields Area. The sewering of this area will entail the enlargement of the present sewage works at Marsh Green and new filter beds will be built there.

(3) The northern section, embracing the Hurst Pool Fold, the Orthopædic Hospital, The Forge, etc.

It was decided to do this work in three sections, and as the southern section, that is, the Biddulph Moor and Knypersley area, was the largest, this was taken first and plans are being prepared for this scheme.

KIDSGROVE U.D.—*Newchapel Ward.*—The scheme mentioned in my Report for 1934 has been completed.

Talke Ward.—The scheme for the treatment of sewage in this Ward, which was reported last year to be in course of preparation, has not yet been presented to the Ministry of Health for approval.

NEWCASTLE R.D.—*Audley Parish.*—The Medical Officer of Health reports that it was not found possible to commence work on the final part of the Council's scheme for the sewerage of Audley and he states that conditions at Wereton, Wood Lane, Miles Green, Halmerend and Alsagers Bank, remain in the very unsatisfactory state referred to in previous Reports.

Madeley Parish.—The reconstruction of the 30 year old sewage works has been under consideration by the Council, and it is hoped that at an early date a scheme for their enlargement will be accepted. This will make it possible for the sewage from Leycett to be dealt with at these works.

Ashley Parish.—The Council have had under consideration schemes for sewerage and sewage disposal in this area, and at the end of the year were awaiting the presentation of a modified scheme prepared by a Consulting Engineer.

RIVER TRENT WATERSHED.

CHEADLE R.D.—Various extensions to the existing sewers have taken place in the Parishes of Forsbrook, Checkley, Ipstones, Cheadle, Kingsley, Caverswall and Draycott.

Plans are being prepared for a sewage scheme for Cheddleton, to include the Mental Hospital and the village of Wetley Rocks, and the whole of Cellarhead District and Armshead will shortly have a modern water-carriage system of sewage disposal.

NEWCASTLE M.B.—The connecting up of the main sewers to the Stoke works at Strongford enabled the Borough to discard four unsatisfactory disposal works. Portions of the area as yet unsewered include Audley Road (part), Springwood, High Lane and Black Bank, Ravensdale and Clayton Village.

The Medical Officer of Health reports that building developments in this latter area have increased considerably and a sewerage scheme covering the district had been inaugurated by the end of the year. The elimination of the effluents from the disposal works mentioned above, owing to the agreement with Stoke, has meant that the condition of the Lyme Brook has improved considerably.

LEEK R.D.—Although it was noted in my Annual Report for last year that schemes for sewage disposal at Baddeley Green and at Norton-in-the-Moors had received the sanction of the Ministry of Health, no work was started on these during 1935, but I understand that at the moment of writing work is in progress.

STONE R.D.—The problem of sewage disposal at Barlaston has been the subject of comment in my Annual Report for many years. Although no scheme had been prepared to deal with this during 1935, one was presented during 1936, and it is hoped that the approval of the Ministry will shortly be obtained and the work carried out at an early date.

STONE U.D.—A scheme has been prepared by the Urban Council's Consulting Engineer to replace the present sewage works, which are inadequate, with larger ones on a different site. It is hoped that this work will be put in hand at an early date and so eliminate what has been a considerable source of pollution to the River Trent for some years past.

UTTOXETER U.D.—A scheme for the enlargement of the present works has at last been commenced.

SEISDON R.D.—The scheme mentioned in my previous Report has not yet been commenced.

BROWNHILLS U.D.—*Norton Canes.*—After considerable delay, owing to negotiations over the purchase of the site, the plans for this sewage disposal scheme have been forwarded to the Ministry and it is hoped that the work will be commenced at an early date.

STAFFORD R.D.—A scheme for drainage and sewage disposal at Walton and Milford has been submitted to the Ministry of Health for their approval.

CANNOCK R.D.—The Medical Officer of Health again draws attention to the advisability of a sewerage scheme for the houses at Cannock Wood, Wedges Mills, Cheslyn Hay and Wood Lane, Saredon.

The sewage works and sewers at Coven have been completed during the year.

"The nuisance caused by the pollution of a stream at Gunstone, in the Parish of Brewood, has now ceased; the Cheese Factory causing it was closed down at the end of the year."

RUGELEY U.D.—The new works mentioned in my Report for 1934 were completed during the year. One-third of the sewage from the district was estimated to be dealt with at these works, the rest receiving land treatment. Trade waste from the Tannery, and the fact that this is only a partial scheme, prevented a good effluent being produced, and following a conference with the Tannery Company some alteration in the treatment is contemplated.

A scheme for the sewering of the Brereton area is in course of preparation.

LICHFIELD R.D.—A scheme for sewering and sewage disposal in Armitage with Handsacre has not yet been prepared, but it is hoped to present this to the Council this year.

TUTBURY R.D.—Schemes for sewering the parishes of Branstone, Outwoods and Stretton, have been prepared by the Council's Consulting Engineers, and application has been made to the Ministry of Health for sanction to a loan of £68,500 for carrying out the work.

RIVER TAME WATERSHED.

OLDBURY M.B. (Worcs.)—The modified scheme at the new sewage works at Oldbury, mentioned in my Report for 1934, has now been completed, and the following is an extract from the Annual Report of the Medical Officer of Health for 1935:—"The first instalment at the Sewage Works was completed in September, 1935, and the scheme consists of Detritus Tanks, Sedimentation Tanks, 5 Bacteria Filter Beds, Humus Tanks and Storm Water Tanks, and the effluent discharging into the river from these works is very satisfactory. The second instalment is now in process of construction, and comprises an additional 6 Bacteria Beds, Sewage Pumping Station and Humus Tanks."

BROWNHILLS U.D.—*Shelfield and High Heath.*—A scheme for the laying of a valley sewer to the Goscote new works has been submitted to the Ministry of Health and approved.

ALDRIDGE U.D.—The reconstruction of the Goscote Joint Sewage Disposal Works is mentioned below. The scheme for sewerage and sewage disposal of the Great Barr area was the subject of an Inquiry by the Ministry of Health in October, 1935. After representations had been made by the Birmingham Corporation, the Birmingham Tame and Rea Joint Sewage Board, the Great Barr Mental Colony, and residents in the neighbourhood, the Ministry directed that other avenues should be explored and I understand that negotiations for the reception of sewage from this area at the Birmingham Tame and Rea Joint Board's sewage works have been successful, and the Aldridge U.D.C. thereby becomes a constituent member of this Board.

WALSALL C.B.—The Joint Sewage Works mentioned in my Report for last year are now practically complete. The main portion of the works was brought into operation on the 5th November, 1935, and it was expected that they would be fully completed by June, 1936. A new scheme for the drainage of the south-eastern portion of the Borough, necessitated by reason of development of the district, is at present under consideration.

Bescot Sewage Works.—A scheme for the extension of the above-mentioned works, at an estimated cost of £51,000, was presented to the Ministry for approval, and it is hoped to put the works in hand during 1936.

WILLENHALL U.D.—A scheme has been prepared for the sewage of the Short Heath and Bentley areas, and for an extension to the Willenhall Disposal Works. It is hoped

that when this scheme is finished the pollution of the River Tame, which has been noted recently, will be eliminated.

The media on the five existing filter beds has been washed by direct labour during the year.

DARLASTON U.D.—During 1935 the work on the extensions to the sewage works was completed, and this has meant the elimination of what was at one time a source of pollution of the stream.

TIPTON U.D.—The scheme for the provision of primary and secondary sludge digestion tanks has been completed and the production of gas has commenced. Sufficient sludge gas will be produced to drive the whole of the gas engines for sewage and sludge pumping.

SEDGLEY U.D.—The question of extensions which are required at the Upper Gornal sewage works is still under consideration by the Urban District Council. The Medical Officer of Health reports.—"extensions at certain of the other works in the district, to cope with the rapid growth of building and the Council's housing schemes, will have to be considered in the near future."

WEST BROMWICH C.B.—The new outfall works at Gray Hall, mentioned in my Report for 1933, has now been completed, and also the re-modelling of the existing Friar Park Disposal Works. The River Tame has improved considerably in appearance as a result of this.

TAMWORTH JOINT SEWAGE BOARD.—The new pumping station and storm water tanks were completed about the middle of December.

RIVER SEVERN WATERSHED.

SEISDON R.D.—(*Wrottesley Detached*)—A Ministry of Health Inquiry was held in June, 1935, to consider a scheme for a new works for the detached portion of Wrottesley Parish.

Wombourn.—"Plans and proposals for a deep drainage scheme for Wombourn have been approved by the Ministry, and it is anticipated the scheme will be commenced at an early date."

Kinver.—I mentioned in my Report for last year that the Kinver sewage works were inadequate to deal with the present flow and the Seisdon Rural District Council are considering the report of their Consulting Engineers.

BRIERLEY HILL U.D.—A scheme has been prepared for dealing with the sewage from the area now served by the Whittington Farm. It provides for sewage up to three times the dry weather flow to be pumped to the irrigation area, and storm water from three to six times the dry weather flow to be stored in tanks at the side of the present pumping stations at Heath Brook and Wordsley.

SEDGLEY U.D.—The question of extensions to Gospel End sewage works is still under consideration, but it is hoped that the Council will decide at an early date and carry out this work, and so deal with the increased pollution and rapid building development which has taken place recently.

MINISTRY OF HEALTH INQUIRIES.

The following Inquiries were held by the Ministry of Health during the year 1935 into applications for loans in respect of schemes of sewerage and sewage disposal, and water supply:—

District.	Date of Inquiry.	Amount of Loan.	Purpose.
Seisdon, R.D.	9.1.35	£8,070	For works of sewerage (Codsall and Wrottesley).
Uttoxeter U.D.	12.2.35	£16,034	For works of sewerage and sewage disposal.
Seisdon R.D.	19.6.35	£10,946	For works of sewage disposal (Wrottesley).
Uttoxeter R.D.	12.7.35	£6,186	For works of water supply (Abbots Bromley).
Lichfield R.D.	11.9.35	£11,660	For works of sewerage and sewage disposal—excess expenditure (Alrewas).
Stone R.D.	24.9.35	£15,785	For works of water supply (Eccleshall).
Brierley Hill U.D.	4.10.35	£6,100	For works of sewerage.
Aldridge U.D.	10.10.35	£26,000	For works of sewerage and sewage disposal (Great Barr).
Stafford M.B.	27.11.35	£18,000	For works of sewerage.
Wednesbury M.B.	28.11.35	£30,000	For works of sewerage and sewage disposal.

CONTRIBUTIONS TO DISTRICT COUNCILS FOR WATER AND SEWAGE DISPOSAL SCHEMES.

In the Report for 1930 the principles governing contributions from the County Council towards the cost of these schemes were set out in full. To summarise them briefly: if, after allowance has been made for the cost of a water or sewerage scheme, the

rate which would have to be levied on the parish concerned is more than the average rate for the rural districts in the County as a whole, then the County Council agree to make a contribution towards the scheme, subject to the Rural District Council making a contribution towards the parish expenses of a sum at least equal to that of the County Council's grant. Details of the scheme must be submitted beforehand, and the necessity and suitability of the scheme must be approved by the County Medical Officer.

During 1935, the County Council have considered applications in respect of 18 new schemes, 5 for sewerage and sewage disposal, and 13 for water supplies. In the undermentioned cases contributions were promised.—

Sanitary District.	Parish in which Scheme is Situated.
Sewerage and Sewage Disposal.	
Cheadle R.D.	Cheddleton.
Seisdon R.D.	Codsall.
	Wrottesley.
Water Supplies.	
Biddulph U.D. (Horton)	
Cannock R.D.	Penkridge.
*Cheadle R.D.	Kingsley.
Lichfield R.D.	Colton.
do.	Hamstall Ridware.
do.	Hammerwich. } Hilton.
	Shenstone. } Hilton.
do.	Kings Bromley.
	Mavesyn Ridware.
Newcastle R.D.	Ashley.
	Mucklestone.
	Tyrley.
do.	Chapel and Hill Chorlton.
†Tutbury R.D.	Hanbury.
Uttoxeter R.D.	Abbots Bromley.
do.	Croxden (Great Gate).

* This scheme includes portions of the Parishes of Cheadle, Consall and Dilhorne, but a contribution was granted in respect of the Kingsley portion only.

† Revised scheme submitted later in year and grant amended.

With regard to the four remaining applications, three were in respect of sewerage and sewage disposal schemes, two being not granted and one deferred. One application in respect of a water supply was not granted.

In addition to the above, revised water supply schemes were submitted, affecting grants already decided upon in 1934, as follows.—

Lichfield R.D.—*Chorley.*—Two revisions were made in this case, the first in view of an extension of the scheme and the second as the capital cost was reduced.

Stone R.D.—*Eccleshall.*—As mentioned in my last Report, as a result of a revised scheme, the County Council contribution was reduced.

I give below particulars of the schemes in respect of which contributions were actually made during 1935, together with the financial years concerned. In each case the scheme was for sewerage and sewage disposal:—

Sanitary District.	Parish in which Scheme is situated.	Financial Year.
Tettenhall U.D.	Tettenhall	1935-36
Lichfield R.D.	Burntwood	1933-34
do.	Hammerwich	1933-34
do.	Shenstone	1933-34
Newcastle R.D.	Audley Rural	1934-35
Seisdon R.D.	Codsall	1931-32; 1932-33 1933-34; 1934-35
do.	Lower Penn	1932-33; 1933-34

RURAL HOUSING.

The Housing Act, 1935, placed upon Local Authorities the duty of ascertaining the number of overcrowded houses in their area and of planning for the elimination of this, either by redistribution of families or the building of new houses. A complete survey of working-class property has had to be made for this purpose, and most Councils are now in a position to judge what their problem for the future will be, and to formulate their schemes for presentation to the Ministry. There has been considerable development in housing during recent years, but this has been due mainly to private enterprise and the need of the lower-paid working-classes has been met to a small extent only. It is hoped that by means of the new Housing Act, Local Authorities will be able to deal to some extent with this problem, but, as is so often the case in public health problems, the economic factor, that is, the question of rent compared with wages, is one that looms largely in the lives of the people.

HOUSING (RURAL WORKERS) ACT, 1926.

Under this Act contributions are given by the County Council for the re-conditioning of old houses in rural areas, and for the conversion into dwellings of buildings not previously used for that purpose. Applications for grants must come from the owner of the property concerned. During the year, 10 applications were received, two being withdrawn and three refused, whilst in the remaining five instances grants were either made or promised, as follows:—

Rural District.	Parish.	No. of Houses.	Amount of Grant.
			£ s. d.
Cannock	Lapley	4	400 0 0
Lichfield	Hints	3	232 0 0
,,	Alrewas	1	73 13 4
Stafford	Church Eaton	1	200 0 0
Stone	Eccleshall	1	200 0 0

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

MILK SAMPLING.

In the following tables the numbers of samples of ordinary and specially designated milks taken during the year by the Official Sampling Officer of the County Council are shown, together with the results of the bacteriological and biological tests carried out in the County Laboratory. In the table of ordinary milk the numbers of samples taken in the various Sanitary Districts of the County are indicated.

ORDINARY MILK SAMPLES.

1st January to 31st December, 1935.

Sanitary Authority.	No. of Samples Submitted.	Result of Examination.		T.B.
		Cleanliness.		
		Satisfactory.	Unsatisfactory.	
Urban				
Aldridge	34	32	2	4
Amblecote	9	9	.....	4
Biddulph	26	22	4	2
Bilston	13	8	5	1
Brierley Hill	33	28	5	1
Brownhills	50	44	6	1
Cannock	53	50	3	10
Coseley	14	12	2	1
Darlaston	7	5	2	2
Kidsgrove	45	43	2	3
Leek	44	36	8	5
Lichfield	29	27	2	2
Rowley Regis	39	35	4	2
Rugeley	21	19	2	3
Sedgley	42	39	3	2
Stafford	56	52	4	8
Stone	19	16	3	1
Tamworth	22	19	3	6
Tettenhall	18	12	6	.....
Tipton	18	13	5	3
Uttoxeter	31	31	.....	3
Wednesbury	7	5	2	1
Wednesfield	11	8	3	2
Willenhall	33	31	2	9
Rural.				
Cannock	70	63	7	6
Cheadle	128	112	16	14
Leek	90	71	19	6
Lichfield	112	95	17	8
Newcastle	66	56	10	5
Seisdon	62	57	5	8
Stafford	29	26	3	4
Stone	32	30	2	2
Tutbury	60	48	12	3
Uttoxeter	34	24	10	3
Totals	1357	1178	179	135

Certain samples included in the preceding table were unsatisfactory from a cleanliness standpoint and also contained tubercle bacilli. The total number of unsatisfactory samples was 292, and the results of the tests were as follows :—

Due to Coliform Bacilli	118
,, Count	14
,, Coliform Bacilli and Count	25
, Coliform Bacilli and presence of tubercle bacilli	16
,, Count and presence of tubercle bacilli	4
,, Coliform Bacilli, Count and presence of tubercle bacilli	2
Tubercle Bacilli only found	113

(Total samples in which Tubercle Bacilli were found, 135).

SPECIALLY DESIGNATED MILK.

1st January to 31st December, 1935.

	Total	Satisfactory	Unsatisfactory.			
			Due to Coliform Bacilli	Due to Count	Due to Col. Bac & Count	Due to T.B.
"Certified"	51	45	5	.....	1	.....
"Grade A (T.T.)"	195	172	19	.....	4	.....
"Grade A. Pasteurised'	11	7	4	.....	.....	.....
"Grade A"	441	389	20	6	12	15*
"Pasteurised"	172	157	.....	15	.....	.....
Totals	870	770	48	21	17	15

* One also included under "Count."

(1) Cleanliness.

Ordinary Milk.—Of the 1,357 samples mentioned in the appropriate table, which were all bacteriolically examined, 1,178 were found to conform to a certain standard of cleanliness, the remaining 179 failing to do so. Of the unsatisfactory samples, 164 were produced within the County and 15 outside. The percentage of samples reported clean was 86.8 compared with 75.2 last year.

Action regarding the unsatisfactory samples is taken by the Veterinary Department, and, as in previous years, the names of the producers were reported to the County Farm Institute, the Assistant Director for Agricultural Education communicating with the farmers concerned to offer every assistance. In accordance with the usual practice, if no improvement in the cleanliness of the milk resulted, the District Council in whose area the premises are situated was communicated with so that the necessary steps could be taken under the Milk and Dairies Order, 1926.

Specially Designated Milk.—On referring to the table it will be seen that of the 870 samples submitted for bacteriological test 86 were unsatisfactory from a cleanliness standpoint, viz:—9.9 per cent.

As regards the unsatisfactory samples of "Certified," "Grade A (T.T.)" and "Grade A" milks, 23 were produced in the County and 44 outside. The sources of production of the 19 unsatisfactory samples of "Grade A Pasteurised" and "Pasteurised" milks were not known, but only 4 were treated at premises within the County, the remaining 15 coming from outside.

(2) TUBERCULOSIS.

All samples in which tubercle bacilli were found during 1935 were referred to the Veterinary Department, and are included in the figures appearing in the following section of the Report.

VETERINARY DEPARTMENT.

In the following pages will be found an interesting and instructive account of the work of the Veterinary Department during the year, which has been prepared by Mr. F. A. Davidson, the Chief Veterinary Officer. In addition to giving the particulars of the work of controlling the milk supply of the County, Mr. Davidson details much information that will be of great practical use to the milk producers in conserving the health of their stock.

This Annual Report covers the first complete year of work carried out by the Veterinary Staff, which was appointed by the County Council during 1934 to undertake all duties under the Milk and Dairies Acts and Orders, and the Tuberculosis Order, 1925.

The staff commenced the methodical routine inspection of herds about 1st October of the same year, and at the commencement of 1935 approximately 40 per cent. of the known herds in the County had been visited.

The Milk-in-Schools Scheme was inaugurated towards the end of 1934, and by 1st January, 1935, a supply was available at schools for over 90 per cent. of the children.

Later in the year the Accredited herd scheme of the Milk Marketing Board was introduced, and the Committee allocated to this Department the bulk of the administrative and executive duties.

These two Schemes have thrown much extra work on the Veterinary Department, and it is gratifying to record that the Veterinary Officers were able to make 7,645 routine herd examinations, with a total of 137,344 cows.

Staff and Veterinary Districts.

The scheme of the Council provided for a Chief Veterinary Officer and six Assistant Veterinary Officers, which was the staff at the commencement of the year. Previous to 1st October, 1934, the Chief Veterinary Officer made a survey and divided the County into six Veterinary Districts, viz: Leek, Newcastle, Cheadle, Uttoxeter, Stafford and South Staffs. (Wolverhampton), with an Assistant Veterinary Officer stationed within each area at a place with suitable accommodation and a convenient rail centre for transport of samples. Intersection by County Boroughs, within which no inspections are carried out by the County Staff, interfered with the allocation of districts, especially in the south. No permanent provision was made for the Lichfield area, the major portion being included with Stafford and eight parishes divided between Uttoxeter and South Staffs. This proved very convenient later in the year, when, on the appointment of an additional Assistant Veterinary Officer, a Lichfield District was formed with very little re-arrangement of records. The additional appointment was made in view of increased duties under the Milk (Special Designations) Order, 1923.

REGISTER OF DAIRY PREMISES.

	No. of herds.	Total No. of cows.	Average No. of cows per herd.
MUNICIPAL BOROUGHS:			
Bilston	3	51	17.0
Newcastle	49	801	16.3
Rowley Regis	18	189	10.5
Stafford	28	612	21.9
Tamworth	11	130	11.8
Wednesbury	1	9	9.0
URBAN DISTRICTS:			
Aldridge	34	428	12.6
Amblecote	3	52	17.3
Biddulph	144	1312	9.1
Brierley Hill	32	336	10.5
Brownhills	36	209	5.8
Cannock	26	275	10.6
Coseley	15	153	10.2
Darlaston	6	56	9.3
Kidsgrove	52	579	11.1
Leek	40	831	20.8
Lichfield	13	162	12.5
Rugeley	22	284	12.9
Sedgley	24	356	14.8
Stone	11	280	25.5
Tettenhall	15	216	14.4
Tipton	3	24	8.0
Uttoxeter	40	812	20.3
Wednesfield	20	205	10.3
Willenhall	8	75	9.4
RURAL DISTRICTS:			
Cannock	285	6,135	21.5
Cheadle	872	12,307	14.1
Leek	948	12,648	13.3
Lichfield	419	8,445	20.2
Newcastle	336	7,124	21.2
Seisdon	135	2,906	21.5
Stafford	579	13,313	23.0
Stone	530	10,880	20.5
Tutbury	248	5,602	22.6
Uttoxeter	624	12,691	20.3
	5,630	100,488	17.8
Small producers retailing at door etc. (no milk sold wholesale). approx.	200	600	
Grand Totals	5,830	101,088	

The previous table includes only herds and cows actually examined by the Department up to the end of 1935, as further dairies have been found during 1936.

The registers supplied by the Borough and District Councils showed approximately 5,000 dairies registered under the Milk and Dairies (Consolidation) Act, 1915, but it was found that milk selling had ceased from over 200 of these. Unfortunately, owing to insufficient addresses etc., these registers were found to be of very little use to the Department, and it was necessary for the Veterinary Officers to make inquiries from various sources almost daily, with as much assistance as possible from the office. The 200 dairies, with 600 cows, added to the above figures are premises which have been visited, and, though similar to other holdings, are mainly devoted to stock rearing etc., varying quantities of milk being sold to neighbours.

Routine Inspections.

The following table refers to routine inspections only:—

Table I.

Herds examined.	Cows examined.			Av. No. of cows per herd.	Adjusted Figures.								
							Tuberculous Animals (except under "Not affected" Column).						
							Slaught'd under T.B. Order by Staffs. C.C.			No. of udders affected.	Reported to separate Authorities for T.B. Order.	Sold for slaughter by owner, or cow died before positive sample report.
	In-milk	Dry.	Total.		Herds exam'd	Cows exam'd.	Adv. T.B.	Not adv. T.B.	Not affected.			
7,645	115,621	21,723	137,344	17.97	7,690	138,268	334	431	6	328	3	14

The "Adjusted Figures" section in Table I is the record of the completed inspections.

For statistical purposes, a herd inspection is only considered complete when, in addition to the routine clinical examinations, all further work that may be entailed, such as bacteriological and biological examinations and post-mortem work, is finished.

The number of routine inspections carried out was reduced owing to changes and shortage of staff, increased work under the Milk (Special Designations) Order, and weather conditions. Pre-arranged inspections were cancelled on very few occasions, due mainly to impassable roads and illness.

The figures given in the table in respect of cows slaughtered under the Tuberculosis Order, 1925, refer only to animals reported by the County Veterinary Officers at the time of routine herd inspections, the full figure of all animals slaughtered being given later in the report. Animals reported to other Local Authorities were those discovered at routine inspections in the Municipal Boroughs of Newcastle, Stafford and Wednesbury, which are separate Authorities under the Diseases of Animals Acts.

MILK AND DAIRIES (CONSOLIDATION) ACT, 1915. SECTION 4.

Section 4 of this Act provides that if a sample of milk offered for sale within the County area, whether or not produced therein, is found to contain tubercle bacilli, notice must be given to the County Medical Officer of Health, whose duty it is to cause the cattle in the dairy concerned to be inspected, and to make such other investigations as may be necessary.

On receiving the positive result of a sample produced within the County, the Chief Veterinary Officer arranges for a veterinary examination of the suspected herd. After the removal of any clinical cases of tuberculosis, single or group samples of milk are taken from the remainder of the herd, thus ensuring that the source of the contamination is removed.

In the case of milk produced outside, but sold in the County area, which is found to contain tubercle bacilli, a representation under this Section of the Act is made to the Medical Officer of Health of the outside Authority concerned, who then takes the necessary action as regards the herd.

Similarly, we receive representations from outside Authorities in respect of milk produced in Staffordshire.

Two hundred and thirty-one complaints of the presence of tubercle bacilli in milk produced in Staffordshire were received during the year, as compared with 245 during 1934. The sources of the complaints were as follows :—

Staffs. C.C.—Samples taken by Official Sampling Officer :—	
(1) Undesignated Milk	124
(2) Designated Milk	11
Staffs. C.C.—Samples taken by Veterinary Staff	9
Samples taken by Sanitary Inspectors within the County	9
Samples taken in areas outside the County and reported to Staffs. under Section 4—Milk & Dairies (Consolidation) Act, 1915	78
Total	231

One hundred and thirty-five samples, which are detailed above, taken by the Official Sampling Officer during 1935, were found to contain tubercle bacilli, and investigations under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, were carried out at 126 farms. These were consequent upon 123 complaints, in three instances the samples containing milks from two farms. As regards the remaining twelve complaints, the infection at the farms had been dealt with before the positive reports were received.

Fifteen samples, eleven of ordinary milk and four of designated milk, taken by the Official Sampling Officer, which were produced in areas outside Staffordshire but sent into this County for sale, were found to contain tubercle bacilli, and representations under Section 4 of the Act were made to the appropriate Authorities. These cases were investigated, in six instances with negative results. In seven cases tuberculosis was found and eleven animals were slaughtered, two being in an advanced state, four were not advanced, and information was not supplied as to the state of the disease in the remaining five. The infection at two farms, in respect of which complaints were made, had been cleared up by the Authorities concerned prior to the date of the representation.

The following table gives details of the investigations carried out by the Veterinary Staff of the County and refers only to inspections under Section 4 of the Milk and Dairies (Consolidation) Act, 1915 :—

TABLE II.

Herds examined.	Cows examined.			Av. No. of cows per herd.	Adjusted Figures.							
							Tuberculous Animals (except under "Not affected" Column).					
							Slaught'd under T.B. Order by Staffs C.C.					
	In-milk	Dry.	Total.		Herds examined.	Cows exam'd.	Adv. T.B.	Not adv. T.B.	Not affected	No. of udders affected	Reported to separate Authorities for T.B. Order.	Sold for slaughter by owner or cow died before positive sample report
212	4,443	737	5,180	24.43	200	4,892	91	85	.....	159	2	7

As in the case of routine inspections, the "Adjusted Figures" section in Table II is the record of completed inspections.

It should be noted, however, that in these Section 4 investigations every milking cow in the herd is covered by a single or bulk sample of milk. Inquiries are also made with regard to dry cows which were in milk at the date of the original sample, cows sold as milch cows or for slaughter, and purchases of milk by retailers from other producers. These inquiries often reveal that cows removed from the herd by the owner and slaughtered between the dates of the sample and the herd inspection were suffering from tuberculosis; also, in certain cases when milk has been mixed, the offending cow has been found in a herd other than that reported. In several cases a routine inspection of the herd had been made subsequent to the date of the sample, one or more cows having been slaughtered previous to the receipt of the report, and bulk samples taken from the remaining cows have been reported negative to the biological test. The herds are always examined for all forms of tuberculosis, as the possibility of infection of milk from fæces, urine and sputum, cannot be disregarded. In fact, the combined evidence of the examination of bulk samples taken by the County Sampling Officer, and herd investigations by the Veterinary Staff, point towards these probable sources in certain cases. Further, a cow which is only slightly suspicious as a possible source of infection in milk can often be diagnosed clinically, or from sputum, as suffering from pulmonary tuberculosis, the post-mortem later showing either definite tuberculous mastitis or extensive tuberculosis of the peritoneum and abdominal viscera and lymphatic system with probably microscopic tubercles in the mammary tissue.

Diseases of Dairy Herds.

There is no doubt that either Mastitis, Abortion or "Johnè's" disease, cause greater losses in dairy herds in Staffordshire than tuberculosis, and cows suffering from one or more of these diseases in a chronic form are probably more liable to develop acute or extensive forms of tuberculosis.

Mastitis is probably the most important of all financially, and appears to be becoming more widespread each year. Although none of them are specific, there are several forms of treatment for cases of mastitis, but, unfortunately, farmers do not make sufficient use of the services of their private Veterinary Surgeons in this respect. One affected quarter

means a loss of from £5 to £10 in the value of a cow, with the possibility of spread to other cows. Treatment of affected cows, however, should *always* be combined with strict hygienic measures and short notes on these can be obtained from this Department.

Abortion.—Routine reports of Veterinary Officers, and investigations carried out on a large number of milk samples by the County Bacteriologist, show that this disease is very prevalent in the County. Farmers are content to place the loss at the price of a calf, but this is probably the least part of it. A conservative estimate of the loss of milk alone from each aborting cow is probably a quart per day, or about £4 per annum, to which must be added, in 75 per cent. of cases, loss from retention of the placenta, sterility, breaking of contract quantities etc: also, cows with swollen knees, hocks, arthritis and tender feet, are much more common in abortion infected herds. Recent observations have shown that a large percentage of the cases of fistulous withers and poll evil in horses are found on farms where contagious bovine abortion is prevalent, and brucella abortus has been isolated from such lesions.

The County Veterinary Officer is of opinion that, if farmers would only realise all their losses from this disease, a serious effort would be made to control it by means of the blood test and by more discrimination in the purchase of stock in the open market. No hard and fast rules can be laid down, as each herd has its own problems which can only be tackled with professional assistance and by inquiry into the history of the herd.

"*Johnè's*" *Disease* has assumed an alarming position in the County and in certain instances has resulted in complete disaster to stock owners. The two main factors are, first, water supplies, and secondly, drainage. The system of watering stock in the fields by pits is the undoubted source of the bulk of the infection, and also ditches and small sluggish streams passing through successive pastures. One affected animal with access to such water supplies is liable to infect a large percentage of the cattle using the same water. The danger is intensified greatly where drainage from cowsheds and manure pits used by infected cattle is allowed to flow into this type of water supply. We impress this on farmers, and in one or two instances the advice given has been acted upon with excellent results. To quote one example—herd of from 40 to 50 cows with young stock—average annual losses from "Johnè's" 10 to 15. After

studying the contour of the farm, a pump and large tank were installed and a piped water supply, with troughs, was laid to every field, and all pits, ditches and streams fenced. For the first nine months very little change—then rapid decline in the number of cases, so that there has been only one case during the past eighteen months. The cost of the water supply, making use of the labour on the farm, was almost £200, but if one places the average annual loss of cattle at ten, and the average capital loss per animal at £10, the scheme was repaid in two years. There has also been increased production throughout the whole herd, and a saving in the cost of treatment etc. To complete the eradication, testing for "Johnè's" on lines similar to the intradermal tuberculin test is sound, as many animals act as carriers of the disease for a long time before they lose condition and show clinical symptoms. The water schemes now being proceeded with in the County will sooner or later justify the cost in improved conditions in agriculture alone, and should receive the support of all stock owners and milk producers in particular.

The general position as regards cattle diseases in the County is normal for a district devoted mostly to milk production and rearing a small percentage of young stock. It is gratifying to note, however, that during the second series of herd inspections the average age of cows had dropped by about two years and many uneconomical animals had been disposed of. Unfortunately, the economic position of the store cattle trade has reduced the breeding areas within the County to a minimum, with a change over to milk production, a fact which is having, and will have for some time, serious effects on the herds.

Losses from damage to teats and udders and sterility are far too high, and during the past two years the poor pastures and hay crops, as a result of drought, have caused a variety of complaints, though there has been a definite reduction in cases of "liver fluke."

MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

The "Accredited" Herd Scheme of the Milk Marketing Board commenced on 1st May, and there was immediately a large increase in the number of "Grade A" licences within the County. On 31st December, 1934, there were 77, and this had risen to 1,633 by 31st December, 1935. It was impossible, therefore, for the County Sampling Officer to carry out the usual monthly sampling of these herds with a

biological test each quarter, and arrangements were made for the Veterinary Staff to sample each "Grade A" producer quarterly, a bacteriological examination only being made. From July to the end of the year 1,327 samples were taken, of which 1,022, or 77 per cent., complied with the standards laid down, and 305, or 23 per cent., failed to do so. Included in these figures are 158 repeats of unsatisfactory samples of which 137 reached the standard and 21 did not. It is interesting to note that the percentage of unsatisfactory samples for the third quarter was 46.9 and for the fourth quarter 11.25. During that time, short notes on clean milk production were prepared and printed, and a copy sent to each producer with reports of unsatisfactory results. In addition, at the time of visiting, the Veterinary Staff pointed out the probable sources of contamination. Undoubtedly, methods—especially cleansing and sterilisation of the utensils—are the main factors affecting bacteriological results. Producers and others claim, unfortunately, that premises do not matter, but two of the main overhead charges in milk production are labour costs and wastage from disease, and properly constructed premises help to reduce both to a minimum. The cleanliness of a higher grade of milk must always be judged first from the disease aspect, the ordinary cleanliness as indicated by bacteriological and other standards being of secondary importance. Therefore, if the proper construction of buildings is an essential part in the reduction of bovine disease, it must be considered in relation to the granting of a licence to produce a higher grade of milk. Also, as stated above, properly constructed buildings lead to a reduction in labour and improved cleanliness with less possibility of unsatisfactory samples. To assist in this work, notes on the construction of dairy premises have been made and are available to farmers etc., on request.

In spite of the rapid increase in the number of licensed producers, the quarterly examination of the herds has been kept up to date. Many farmers have had to be warned with regard to the marking of cows and keeping of their registers.

"CERTIFIED" AND "GRADE A (T.T.)"

The number of producers licensed at the end of the year was four "Certified," and six "Grade A (T.T.)" There was no change in the system of monthly sampling, with quarterly biological tests. The production of these grades of milk is controlled by the Ministry of Health, but as this Department is often consulted by intending applicants, it

seems advisable to make a few comments in this Report. The proportion of Tuberculin Tested herds in the County is very low, but this is expected in a County which breeds very few young stock, and no sound advance can be made until that position is improved. The following is the main basis of any approach to an increase in the number of such herds :—

1. Herds should be self supporting as far as possible, and any producers who have such herds should get in touch with their Veterinary Surgeons at once and proceed by :—

(*a*) Preliminary tuberculin testing of *all* stock,

(*b*) Immediate eradication of all reactors amongst young stock, and isolate all non-reactors from adult stock.

(*c*) Feed calves off cows which have passed the test,

(*d*) Before bringing calving heifers into the sheds the required number of stalls should be made vacant together in one shed by moving cows into empty stalls. The stalls used for the heifers to be scrubbed out with hot water and soda, disinfected, and then treated with a blow-lamp. This process to be repeated with each lot of calving heifers so that the cows are gradually moved down to one end of the farm buildings,

(*e*) All non-reacting milk stock to be grazed separate as far as possible, and fed, milked etc., first.

2. Reacting cows can be removed when there are non-reacting calving heifers to replace them, unless, of course, the owner wishes to obtain a licence to produce Tuberculin Tested milk at once.

3. Stock from herds known to have been free from tuberculosis for some years should not be added to herds which have recently had a high percentage of reactors until all possible sources of infection have been dealt with thoroughly.

4. Where young stock are not up to the required numbers, the period of eradication can be shortened by purchasing :—

(*a*) calves immediately after calving,

(*b*) young stock previous to service, testing them immediately, and again a month before calving, or

(*c*) calving heifers, if possible, one to two months before calving.

Purchases under (*b*) and (*c*) should be from breeding areas where the stock are tied in sheds as little as possible. These exist, as far as is known, in certain parts of Wales, Ireland and Scotland. Where a group of such stock has been purchased from a particular farm or area, and there is a high percentage of reactors, none of them should be retained, as it is probable that the majority of the remainder will react at the next tests, which, in calving heifers, means that they will have to be disposed of at considerable loss two to six months after they have calved, and are only one to five months in calf.

5. Farmers with two farms should be able to segregate at once all reactors, but the aim must always be to proceed on the above lines and rear all heifer calves from both places at the free premises, so that eradication at the second farm can be proceeded with after the first has been freed. If this is not done, the second herd deteriorates rapidly, and it should be noted that under the Milk (Special Designations) Order, 1936, it is not possible to have an "accredited" licence for the farm to which reactors are moved.

MILK IN SCHOOLS SCHEME.

As already stated, the Milk in Schools Scheme was put in force in the County towards the end of 1934. Supplies of milk were approved from premises licenced for Pasteurised Milk and from producers licenced for "Grade A" milk. All other supplies were investigated by the Veterinary Department, a clinical examination of the herd being carried out and a sample of bulk milk examined bacteriologically, the basis of approval being that for "Grade A." During 1935, the Veterinary Department carried out periodical investigations of the supplies, and 249 samples, from approximately 120 supplies, were submitted for bacteriological examination. These samples were taken at the various schools after delivery, and, as several suppliers send milk to as many as twenty schools each, all schools receiving milk under the Scheme were covered by these samples at least once during the Summer and Autumn terms, the Winter term being covered by the investigations of supplies previous to approval at the end of 1934. Of these 249 samples, 188 were found to comply with the standard for "Grade A" approximately twelve hours after delivery to the schools, the remaining 61

being unsatisfactory according to that standard. The unsatisfactory suppliers, both retailers and producers, were notified by the Veterinary Department of these results and advice given as to the future handling of the milk. Following this, repeat samples were taken, and those again unsatisfactory were investigated by the Veterinary Officers where the source of supply was within the County. In almost every case the cause of the contamination was found and an immediate and permanent improvement effected.

In addition to the sampling at the schools, the herds from which the milk is produced are examined approximately once every quarter according to the length of the term, and either individual or bulk samples are taken for biological examination. All school supplies are examined in detail towards the end of the term, so that the result of the biological examination will be received about the time the school-children return from vacations, and any possible source of contamination removed prior to the commencement of the term. As a result of the clinical examination of herds, and biological examination of samples, eighteen cows from herds supplying schools were dealt with under the Tuberculosis Order, 1925, as possible sources of tuberculosis in milk supplies. The milk from all the other cows in these herds was examined biologically and reported negative for tubercle bacilli.

At the commencement of the scheme we considered that, in addition to any examination of supplies at the source, whether at farms or pasteurising plants etc., samples should be taken after delivery to the schools as a final check to assure that approved supplies were being delivered to the schools. The past year's samples etc., taken at the schools, have proved that this condition is very desirable, and, in future, sampling will be continued in addition to all other quarterly investigations.

Since early in 1934 the milk supplies to Sanatoria have been supervised by this Department in a manner similar to that detailed for raw supplies to schools. It is regretted that, so far, we have been unable to arrange for "Tuberculin Tested" supplies to these institutions, but this difficulty has arisen in the majority of other areas in England, though some Local Authorities now produce their own "Tuberculin Tested" milk. The Milk-in-Schools Scheme of the Milk Marketing Board, owing to price etc., unfortunately precludes the supply of "Tuberculin Tested" milk to schools.

TUBERCULOSIS ORDER OF 1925.

This Order, though made under the Diseases of Animals Acts, is so closely associated with the inspection of herds that it must form an appendix to any report under the Milk and Dairies Acts.

The following is a summary of cases dealt with during 1935 :—

TABLE III (A.)

Number of premises on which disease was reported but not confirmed	197
Number of premises on which disease was declared to exist	1,583
Total number of bovine animals on the premises	62,772
Number of animals examined by Veterinary Inspectors	23,630

	Preliminary Inquiry.	*At Post-mortem examination.*
Number of animals having tuberculosis of the udder	503	721
Number of animals giving tuberculous milk	6	3
Number of animals suffering from tuberculous emaciation	250	246
Number of animals suffering from chronic cough and showing definite clinical signs of tuberculosis, and at post-mortem examination found to be affected, but not as in the above three classes	974	751
	1,733	1,721
Number of animals found on post-mortem examination to be not affected		12
		1,733

Results of Post-mortem examinations :—

Number of animals certified as suffering from ADVANCED TUBERCULOSIS	916
Number of animals certified as suffering from TUBERCULOSIS NOT ADVANCED	805
Number of animals found to be NOT AFFECTED	12
	1,733
Number of animals for which compensation was paid	1,733
Total compensation paid	£8,367 1s. 3d.
Total salvage received	£2,727 6s. 3d.

TABLE III (B.)

CASES REPORTED BY OWNERS, ETC.

Total No. of reports.	No. not dealt with under Order.	No. slaughtered	Advanced T.B.	Not Advanced T. B.	No. Not affected.
1,034	244	790	501	282	7

For information and statistical purposes, I have included under Tables I. and II. the cows actually dealt with at herd inspections and not reported by owners, but the figures in these tables only refer to inspections which have been completed, whereas Table III. (A) deals with all animals slaughtered during 1935. Table III. (B) refers only to animals reported by owners or their Veterinary Surgeons.

A comparison of Tables I. and III. (B) shows that routine inspection definitely leads to a number of cows being removed before the disease has become very advanced, as owners are often late in reporting suspicious cases or calling in their Veterinary Surgeons. The majority of animals reported, but not slaughtered under the Order, were found to be suffering from "Johnè's" Disease or Mastitis.

It is interesting to note that a number of animals was slaughtered as suffering from tuberculous emaciation or tuberculosis with chronic cough, but, at post-mortem, tuberculosis of the udder was also found.

The percentage of udder cases is very high, and it is our experience that there is very little fall in these cases until after the first three years of routine herd inspection, but as a large number of cows is imported into this County, this period may be longer. It must be understood that the origin of over 90 per cent. of tuberculous udders found during any year was tuberculous milk fed to calves over three years previously. The practice of feeding calves and pigs from cows with bad udders cannot be too strongly condemned. Therefore, the full effect of early eradication of udder cases will not bear fruit until the heifers born after the commencement of herd inspection calve, and are added to the milking herds. Educational methods at the time of herd and post-mortem examinations are also invaluable. Post-mortems often show that the infection has remained dormant for over three years in the mesenteric and hepatic lymph glands, liver, and possibly the undeveloped udder, until after the strain of one or more calvings.

In spite of this position, however, there is no doubt that the gross infection of bulk milk by tubercle bacilli is reduced considerably during this period of three years, though, owing to the mixing of milk, the number of notifications of the presence of tubercle bacilli in bulk milk does not drop for some time. The number of cases of tuberculous emaciation is usually the first to drop, accompanied by a steady increase in the number of cases of tuberculosis with chronic

cough, following more intensive inspection, collection of sputa and detailed histories of the herds. Examination of sputa undoubtedly leads to very early eradication of pulmonary cases and should be adopted as a routine procedure, though certain precautions must be taken with regard to collection. These facts are appreciated very fully on the Continent and collection by direct methods from the cow is adopted, but, unfortunately, it is doubtful whether we have powers under any of the Acts to use their methods.

In addition to the cows dealt with by the Department, there is no doubt that a large number of animals has been slaughtered by the owners previous to herd inspections, and, as noted earlier in the Report, towards the end of the year there was a decided drop in the average age of the herds.

District Sanitary Inspectors have also co-operated willingly with us by reporting the presence of tuberculosis in calves and pigs at slaughterhouses. It is interesting to note that in one or two instances we have traced the infection in pigs to a probable contact with tuberculous poultry, and in one instance, where the owner presented the Chief Veterinary Officer with an affected pig, retropharyngeal, mediastinal and mesenteric glands were excised at post-mortem, and the organisms were typed by the Bacteriologist at the County Laboratory and found to be Avian.

It will be noted that the salvage realised more than covers the County's share of one quarter of the compensation paid.

CHEMICAL EXAMINATION OF FOOD AND DRUGS.

Samples analysed under the Food and Drugs Acts are shown in the report of the County Analyst, already referred to, from which it will be observed that 2,357 samples were submitted, 2,149 of which were found to be genuine and 208 adulterated or below standard.

(1) Milk.

During the year 1,764 samples of ordinary milk were chemically examined and 170 were found to be unsatisfactory.

Eighty-six samples of specially designated milks were chemically examined, and 1 "Certified," 3 "Grade A" and 1 "Pasteurised" milks, were found to be below standard.

The following samples were also examined:—40 sterilised milks, 7 condensed milks and 1 skimmed milk. They were all found to be satisfactory except 6 samples of sterilised milk.

Action taken.—Of the 170 unsatisfactory samples of ordinary milk, 23 were "Appeal to Cow" samples and 60 were informal and no action could be taken. In 28 cases representing 45 unsatisfactory samples, two or more having been taken simultaneously from the same purveyor in several instances, the degree of deficiency in fat was very small and cautions only were issued. Twenty-three prosecutions were instituted in respect of 32 samples, 26 for added water, five in respect of added preservative and one for fat deficiency. The Farm Institute, Rodbaston, was asked to give assistance in respect of ten samples from two producers.

Seventy-five samples, which were below the presumptive standard in solids-not-fat, were found by the Freezing Point Depression test not to be adulterated with added water.

As regards the graded milk, cautions were issued in respect of one pasteurised sample, six sterilised samples from four sources, two "Grade A" samples and one "Certified" sample. One "Grade A" informal sample was adulterated.

In total, 36 retailers or producers were cautioned and 23 proceedings were instituted. Fines amounting to £213 6s. 0d. with £67 18s. 0d. costs were imposed.

(2) General Articles of Food.

Four hundred and fifty-nine general articles of food were examined, and 27 were found to be adulterated or below standard.

Proceedings were instituted against a firm of Retail Chemists for selling powdered Gentian Root containing powdered fruit stone shells. A warranty defence was successfully pleaded and the case against them dismissed. The firm of wholesale Chemists supplying the Gentian Root were then summoned and fined £5 and £5 5s. 0d. costs. Proceedings were also instituted against a firm of grocers for selling margarine as butter, and lard containing 90 per cent. of foreign fat, resulting in fines and costs amounting to £5.

The following were the unsatisfactory samples concerned:—

4 Butter.
2 Gentian Root—Powdered.
3 Lard.

Cautions were issued in respect of the following samples :—

1 Brawn.
1 Sausage.
1 Suet, Beef.
1 Breadcrumbs (Golden).
2 Ginger (Ground).
1 Lard.

The following informal samples were found to be adulterated :—

1 Brawn.
1 Breadcrumbs (Golden).
3 Gentian Root.
1 Ginger (Lump).
1 Ginger (Ground).
1 Macaroni with egg.
1 Flowers of Sulphur.
2 Sausage.

PREVENTION OF, AND CONTROL OVER, INFECTIOUS DISEASE.

A scheme under Section 63 of the Local Government Act, 1929, has been prepared by the County Council and presented to the Ministry, whereby Local Authorities throughout the County joined themselves into various sections for the purpose of providing an Isolation Hospital service. The matter has been the subject of conferences between the County Council and the Ministry of Health, and is still under discussion.

SMALLPOX.—No case of smallpox was recorded in 1935, a similar experience to that of last year. The last case recorded in the County was in 1930.

SCARLET FEVER.—The incidence of this disease in the County was less than that for the previous year. There were 2,142 notifications as against 2,595 last year, 1,654 in Urban Districts and 488 in Rural Districts. Ten deaths occurred in Urban Districts and six in Rural Districts. The case rate per thousand of the population is 2.95 compared with 2.96 for England and Wales as a whole. The death-rate in the Urban Districts is 0.02, and in the Rural Districts 0.03. The prevailing type of the disease was mild.

DIPHTHERIA.—More cases were notified in 1935 than in the previous year, the numbers being 902 as against 604. The increase was in the Urban Districts where there were 708 cases compared with 495 in 1934. 194 cases were notified in Rural Districts as against 109 in the previous year. The case rate was 1.24 compared with 1.60 for England and Wales. Thirty-six deaths occurred in Urban Districts with a death-rate of 0.06 per thousand of the population. Fourteen died in Rural Districts, which yields a death-rate of 0.08. On reference to the tables at the end of the Report the numbers and death-rates for each Sanitary District will be found. The prevailing form of diphtheria, although more severe than scarlet fever, was mild. Cases were notified in 34 of the 35 Sanitary Districts.

By arrangement with the District Medical Officers of Health, the Assistant Medical Officers carried out Schick testing and immunization in children attending schools in the Aldridge, Brierley Hill, Brownhills, Leek, Stafford, Tettenhall, Uttoxeter and Willenhall (Short Heath portion) Urban Districts and the Cannock and Uttoxeter Rural Districts. The work undertaken was a continuation of that started in previous years, except in Brownhills, Short Heath and the Uttoxeter Urban and Rural Districts, where it was first commenced in 1935. Certain Quarry Bank Schools, which are situated in Brierley Hill, were also included for the first time. It was intended to continue immunisation at schools in Rugeley but this had to be deferred owing to the prevalence of measles.

Full advantage has been taken of the facilities afforded at the County Laboratory for bacteriological investigations, and 11,893 specimens were sent by medical practitioners, compared with 9,477 in the previous year. This included 117 virulence tests undertaken in special cases.

ENTERIC FEVER.—Seven notifications of typhoid fever in Urban and five in Rural Districts were received during the year, compared with the total of four in 1934. One death occurred in an Urban District. The case rate was 0.01 compared with 0.04 for England and Wales. On reference to the tables at the end of the report, the areas in which these cases occurred will be seen.

ENCEPHALITIS LETHARGICA.—No cases were notified during 1935, but three deaths were reported, and the districts in which they occurred will be found in the tables at the end of the Report.

DYSENTERY.—During the year 66 cases of dysentery were notified. Fifty-eight of these were at the Cheddleton Mental Hospital, and seven cases were notified from the Babies' Hospital at Canwell Hall in the Lichfield Rural District. The remaining case occurred in the Lichfield Urban District.

CEREBRO-SPINAL FEVER.—During the year 21 cases were notified, 18 in Urban Districts and 3 in Rural Districts; 8 of these recovered. In no instance did these cases constitute an epidemic. The number of deaths from cerebro-spinal fever registered during the year is 18.

Twenty-nine specimens of cerebro-spinal fluid were examined in the County Bacteriological Laboratory. In addition, two swabs were examined. In various areas throughout the County the services of Consultants are at the disposal of General Practitioners, and special arrangements have been made for the cerebro-spinal fluid to be sent to the Laboratory in a portable incubator, because these organisms do not survive if sent through the post in the ordinary way.

With reference to non-notifiable infectious diseases, the deaths from measles, whooping cough, diarrhœa and enteritis are as follows:—

MEASLES.—There were 42 deaths in Urban Districts with a death-rate of 0.07, and 4 deaths in Rural Districts with a death-rate of 0.02. As the disease is not notifiable the number of cases is unknown, but from the returns sent by the Head Teachers of Elementary Schools, I find that a total of 4,686 cases of measles and 134 cases of German measles occurred in children of school age.

At the same time, it must be pointed out that the cases so reported relate only to the County Elementary Education Area, having an estimated population of 460,060 out of 725,500 for the Administrative County, and consequently there must have been many more cases.

WHOOPING COUGH.—In 1935 there were 54 deaths in Urban Districts with a death-rate of 0.10 and 6 deaths in Rural Districts with a death-rate of 0.03. The deaths occurred in 13 of the 25 Urban Districts; only 4 of the 10 Rural Districts were affected. The school teachers in the County Elementary Education Area reported 626 cases in children of school age, but the disease specially attacks children during infancy, and is more fatal at that period of life. As the disease is not notifiable we have no accurate knowledge of its incidence.

DIARRHŒA AND ENTERITIS.—85 deaths occurred in Urban Districts with a death-rate of 8.9 per thousand live births, and 13 in Rural Districts with a death-rate of 4.8 per thousand births, in children under 2 years of age. The cases occurred in 14 of the Urban Districts and in 6 of the Rural Districts.

INFLUENZA.—In 1935 there were 125 deaths in Urban and 45 in Rural Districts, as compared with 110 and 29, respectively, during the previous year.

The number of cases of Notifiable Infectious Diseases, with the deaths, in the Administrative County during 1935, are as follows:—

Diseases.	Notifications.		Deaths.		†Cases admitted to Hospital.
	Urban.	Rural.	Urban.	Rural.	
Small-pox	—	—	—	—	—
Scarlet Fever	1,654	488	10	6	1,308
Diphtheria	708	194	36	14	713
Enteric Fever	7	5	1	.....	7
Puerperal Fever	17	8	17	3	19
Puerperal Pyrexia	76	30			42
Erysipelas	266	63	*	*	28
Cerebro-Spinal Fever	18	3	14	4	17
Poliomyelitis	2	.....	.....	.....	.....
Pneumonia	935	207	468	94	63
Encephalitis Lethargica	.....	.....	1	2	.....
Dysentery	1	65	*	*	60

* Not classified in Registrar-General's Return.

† Information obtained from District Reports.

OPHTHALMIA NEONATORUM.—The Table on the next page shows the cases for the last 12 years. One hundred and fifty-three out of the total of 179 notified in 1935 were not severe, and, as will be noted from the table, 177 were completely cured. In two cases the vision was impaired, the condition in each case being due to gonorrheal infection. Only 14 cases were in-patients in hospital, 3 were treated in the out-patient department, and the others received treatment at home.

Year	CASES				Vision unimpaired	Vision impaired	Total Blindness	Deaths
	Notified	TREATED						
		At Home	In Hospital					
			In-patient	Out-pat'nt				
1924	109	89	20		107	1	.....	1
1925	138	96	*42		135	1	.....	1
1926	166	149	12	5	162	3	.....	1
1927	166	135	13	18	162	3	.....	1
1928	145	129	7	9	143	.....	.....	2
1929	193	170	14	9	190	.....	.....	3
1930	148	130	17	1	145	1	.....	2
1931	191	169	20	2	186	1	.....	4
1932	194	174	14	6	192	2	.....	.....
1933	185	160	19	6	183	.....	.....	2
1934	210	186	20	4	208	2	.....	.....
1935	179	162	14	3	177	2	.....	.....

* One case removed from district; result not known.

VACCINATION.

The ineffectiveness of the working of the Vaccination Acts is shown on examination of the Returns of the various Vaccination Officers for the year 1st January to 31st December, 1934, where it is seen that out of 10,359 children born during the year in whom vaccination was possible, only 27.9 per cent. were subsequently protected against smallpox.

TUBERCULOSIS.

At the end of the year there were 6,695 cases of all forms of tuberculosis on the registers of the district Medical Officers of Health, made up as follows:—

Total Cases.	Pulmonary.			Non-Pulmonary.		
	M.	F.	Total.	M.	F.	Total.
6,695	2,411	2,280	4,691	1,053	951	2,004

This indicates that there is one case of tuberculosis in every 108 persons, or just 9.2 per 1,000 of the population, and, on reference to the mortality tables which follow, it will be found that approximately one death occurs amongst thirteen cases in the year.

During the year, 434 persons died from pulmonary tuberculosis, giving a death-rate of 0.60 per thousand of the population, whilst 86 deaths occurred from other forms of tuberculosis with a death-rate of 0.12.

The following table shows new cases of tuberculosis, including primary notifications and cases which came to notice otherwise than by formal notification, and deaths from the disease classified according to ages and sex:—

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—	—	1	5	3	1	1	7	5
1—	4	6	18	24	2	—	12	12
5—	18	16	25	16	5	8	4	5
10—	20	9	14	13				
15—	43	54	8	15	36	62	8	9
20—	42	56	11	8				
25—	82	91	9	11	55	53	7	1
35—	77	54	5	3	42	36	3	1
45—	68	28	4	2	57	20	3	1
55—	28	19	1	2	26	18	3	3
65 and upwards	8	4	1	1	10	2	—	2
Totals	390	338	101	98	234	200	47	39

In the General Tables at the end of the Report, the death-rates for each Sanitary District during 1935 will be found.

On reference to the tables ,it will be seen that, as regards the pulmonary form of the disease, the incidence is greater in males than in females, but is more marked in females between the ages of 15 and 25. It will also be noted that more deaths occur in young women, but after the age of 35 more men are fatally affected. The non-pulmonary forms of the disease occur mainly before adult life is reached, and are particularly fatal during the first years of life. In the succeeding years the disease is more chronic, and, whilst resulting in much disability and ill-health, does not often cause death. The non-pulmonary forms arise from infection through tuberculous milk and from open cases of pulmonary tuberculosis.

The following shows the number of primary notifications received since 1913:—

1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
1722	1399	1233	1048	873	856	699	642	929	971	1029	974	1232

1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
1400	1106	1194	1017	1021	1129	1074	1011	929	825

With regard to notifications, speaking generally, this duty is satisfactorily performed in the County. As already noted, the ratio of deaths to cases is approximately one to thirteen, and this compares favourably with the figure laid down by experts that for every death there are at least ten persons suffering from the disease. The District Medical Officers of Health reported 102 cases as against 96 last year that had come to their knowledge in various ways not having been previously notified. It was found that 54 had died without being formally notified under the Regulations: 30 were taken from the death returns of the local Registrars, and 18 were transferable deaths sent by the Registrar-General, that is to say, the death occurred outside the district where the person usually resided. Six cases were notified to the Medical Officer of Health after the death had occurred.

The ratio of non-notified tuberculosis deaths to the total tuberculosis deaths is 1 in 9.63; roughly 9 out of 10 deaths were notified under the regulations before death.

With regard to the unreported cases, I am afraid we cannot expect always to receive the notifications before death, especially where the disease is extremely acute, and some cases are bound to occur in which the practitioner was under the impression that the disease had been notified previously.

Dispensaries and Treatment.

The Tuberculosis Dispensaries in the County are under the control of the Joint Committee for Tuberculosis. There are twelve Dispensaries of which four are main Dispensaries and have been built specially for the purpose. Premises have

been acquired at Shelfield, which, after conversion, will be used as a Sub-Dispensary for this area. This will obviate patients having to travel some distance to the nearest Dispensaries at Lichfield or Cannock.

An account of the treatment afforded for tuberculosis will be found in the annual report of the Joint Committee of the Staffordshire County Council and the Wolverhampton and Dudley County Boroughs. This body is only responsible for treatment and not for measures of prevention, which duty falls upon the District Councils, and their contribution towards the measures for dealing with this complex subject relates to the environmental conditions of the patient, among these being adequate housing in each district, which is of paramount importance. An investigation of the environmental conditions of each patient is made by the Health Visitors as soon as the disease is notified, and although every effort is made to arrange the accommodation in the house so that the patient can have a room to himself, this has only been found possible in 33.8 per cent. of the cases reviewed in the Joint Committee's area in 1935. In every case in which overcrowding occurred the District Medical Officer's attention was specially drawn to the matter, but for some years now it has been found very difficult to take adequate measures.

At the same time, I desire to emphasise the necessity of District Councils utilising to the full all the powers they possess under the Housing Acts, for it is one of the primary duties of a Sanitary Authority to provide adequate housing accommodation for the population in their area.

During the year, no action was found to be necessary under the Public Health (Prevention of Tuberculosis) Regulations, 1925, which prohibit persons suffering from tuberculosis engaging in milking operations.

No action was taken under Section 62 of the Public Health Act, 1925, during the year.

The accompanying table shows the death-rates in the Urban and Rural Districts of the County from 1914:—

Year.	Death Rate per 1,000 of the Population.			
	Phthisis.		Other forms of Tuberculosis.	
	Urban.	Rural.	Urban.	Rural.
1914	0.89	0.54	0.31	0.20
1915	0.94	0.67	0.34	0.29
1916	1.01	0.80	0.40	0.29
1917	1.01	0.74	0.34	0.31
1918	1.03	0.88	0.31	0.28
1919	0.83	0.61	0.22	0.30
1920	0.75	0.56	0.30	0.21
1921	0.80	0.53	0.23	0.21
1922	0.80	0.55	0.24	0.17
1923	0.75	0.58	0.25	0.22
1924	0.73	0.58	0.22	0.20
1925	0.83	0.49	0.22	0.14
1926	0.74	0.50	0.22	0.11
1927	0.73	0.44	0.21	0.22
1928	0.64	0.48	0.14	0.13
1929	0.76	0.54	0.15	0.12
1930	0.72	0.54	0.15	0.13
1931	0.78	0.52	0.17	0.13
1932	0.64	0.42	0.16	0.14
1933	0.72	0.50	0.14	0.08
1934	0.67	0.43	0.11	0.16
1935	0.67	0.35	0.13	0.08

W. D. CARRUTHERS,

County Medical Officer of Health.

September, 1936.

TABLES.

Table showing Population, Number of Persons per acre, Birth and Death-rates as well as the Death-rates at all ages and among Children under 1 year, and the Death-rates from Zymotic Diseases, Tuberculosis, Diseases of the Respiratory Organs, &c.

URBAN.

District.	Population at all ages.		Number of Persons per acre.	Live Birth-rate per 1,000 of population.	Still-births, Rate per 1,000 of Population.	Crude death-rate per 1,000 of population.	Adjusted death-rate by comparability factor.	Mortality in children under one year per 1000 registered live births.	Zymotic Mortality. Per 1,000 of population.						Per 1,000 live Births.	Per 1,000 of Population.								
	Census, 1931 of areas as constituted after changes in Boundary.	Estimated to middle of 1935.							Typhoid and Paratyphoid Fevers.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhœa, etc. (under 2 years).	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Cirrhosis of Liver.	Nephritis.	Congenital Debility and Malformation, Premature Birth.
Aldridge	14,446	15,860	1.7	17.2	0.82	9.9	11.3	58	.....	.....	.....	.....	.....	.....	3.6	0.50	0.12	1.07	0.31	0.38	0.31	.....	0.25	0.57
Amblecote	3,099	3,017	4.5	15.2	0.66	14.6	14.1	65	.....	.....	.....	0.33	.....	.....	.....	0.33	.....	2.32	0.66	0.66	0.33	.....	.....	0.33
Biddulph	8,990	9,341	1.4	18.9	1.71	11.9	13.4	90	.....	.....	.....	.....	0.43	0.11	.....	0.43	.....	1.50	0.64	0.64	.....	.....	0.43	1.07
Bilston	31,221	31,670	16.9	18.7	0.72	12.0	14.6	67	.....	.....	0.16	0.03	0.06	0.12	15.1	0.91	0.06	1.29	0.79	1.23	0.12	0.06	0.25	0.63
Brierley Hill	44,671	45,190	7.6	16.4	0.60	10.8	11.9	64	.....	.....	0.06	0.02	0.02	0.04	6.7	0.66	0.13	1.13	0.82	0.73	0.22	0.02	0.42	0.40
Brownhills	18,368	18,970	3.0	17.4	0.68	10.6	12.3	73	0.05	.....	0.05	0.05	.....	0.05	3.0	0.63	0.10	1.37	0.74	0.79	0.10	.....	0.31	0.79
Cannock	35,300	35,990	4.4	15.7	0.66	10.4	11.5	88	.....	.....	0.03	.....	0.05	0.03	14.2	0.61	0.05	1.41	0.39	0.86	0.05	.....	0.19	0.75
Coseley	25,137	26,420	8.0	19.4	1.02	10.8	12.5	68	.....	.....	0.04	.....	0.07	0.15	17.5	0.68	0.19	1.32	0.41	1.13	0.04	.....	0.11	0.53
Darlaston	20,053	20,110	13.1	19.8	0.50	11.3	14.0	55	.....	.....	0.10	0.05	0.45	0.05	.....	0.99	0.25	1.44	0.40	0.94	0 15	.....	0.10	0.64
Kidsgrove	14,940	14,720	3.6	15.5	0.95	10.4	11.9	57	.....	.....	.....	.....	.....	.....	.....	0.20	0.13	1.49	0.68	0.41	0.07	.....	0.47	0.54
Leek	19,442	19,530	4.5	13.2	0.82	11.8	12.3	73	.....	.....	.....	.....	0.05	0.05	.....	0.51	0.05	1.48	0.20	0.25	0.05	.....	0.20	0.46
Lichfield	8,574	8,690	2.4	20.6	0.57	14.2	12.3	67	.....	.....	.....	.....	.....	.....	.....	0.23	0.23	2.30	.....	0.69	0.34	.....	0.34	1.03

Deaths occurring during the year [illegible] classified according to Diseases and [illegible]

Deaths occurring during the year 1935 classified according to Diseases and Localities, together with Births occurring during the year.

URBAN

District	Live Births.	Still-Births.	Deaths from all causes.	Deaths under 1 year.	Smallpox.	Typhoid and Paratyphoid Fevers.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Cerebro-Spinal Fever.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Syphilis.	General Paralysis of the Insane, Tabes Dorsalis.	Cancer, Malignant Disease.	Diabetes.	Cerebral Hæmorrhage, etc.	Heart Disease.	Aneurysm.	Other Circulatory Diseases.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Peptic Ulcer.	Diarrhœa, etc. (under 2 years).	Appendicitis.	Cirrhosis of Liver.	Other Diseases of Liver, etc.	Other Digestive Diseases.	Nephritis.	Puerperal Sepsis.	Other Puerperal Causes.	Congenital Debility, Premature Birth, Malformation, etc.	Senility.	Suicide.	Other Violence.	Other Defined Diseases.	Causes ill-defined or Unknown.
Aldridge	273	13	158	16	–	–	–	–	–	–	2	–	–	8	2	1	–	17	–	10	41	–	7	5	6	5	1	1	1	–	1	4	4	1	1	9	8	1	5	17	–
Amblecote	46	2	44	3	–	–	–	1	–	–	2	–	–	1	–	–	–	7	1	3	11	–	2	2	2	1	–	–	–	–	–	–	–	–	–	1	3	1	–	6	–
Biddulph	177	16	111	16	–	–	–	–	4	1	3	–	–	4	–	1	–	14	2	5	20	–	4	6	6	–	1	–	1	–	1	1	4	–	2	10	3	1	8	9	–
Bilston	594	23	382	40	–	–	5	1	2	4	15	–	1	29	2	1	–	41	3	14	72	–	14	25	39	4	2	9	2	2	–	6	8	2	–	20	19	4	12	24	–
Brierley Hill	743	27	491	48	–	–	3	1	1	2	18	–	1	30	6	3	1	51	5	28	88	2	17	37	33	10	8	5	6	1	1	8	19	2	1	18	24	3	19	38	1
Brownhills	330	13	202	24	–	1	1	1	–	1	2	–	2	12	2	1	–	26	–	12	35	1	6	14	15	2	2	1	–	–	–	4	6	1	1	15	7	–	14	17	–
Cannock	564	24	374	50	–	–	1	–	2	1	5	–	2	22	2	–	1	51	5	21	65	1	20	14	31	2	3	8	1	–	1	8	7	–	2	27	26	3	16	26	–
Coseley	513	27	287	35	–	–	1	–	2	4	4	1	–	18	5	–	–	35	4	11	53	1	10	11	30	1	4	9	1	–	–	4	3	–	2	14	28	2	10	18	1
Darlaston	399	10	228	22	–	–	2	1	9	1	1	–	–	20	5	–	–	29	1	11	42	–	10	8	19	3	2	–	1	–	–	2	2	1	–	13	16	5	11	13	–
Kidsgrove	229	14	153	13	–	–	–	–	–	–	3	–	–	3	2	–	–	22	5	6	30	1	8	10	6	1	2	–	–	–	1	3	7	–	–	8	5	1	7	21	1
Leek	259	16	230	19	–	–	–	–	1	1	5	–	1	10	1	–	1	29	3	16	75	–	11	4	5	1	5	–	1	–	1	7	4	–	2	9	4	3	8	22	–
Lichfield	179	5	124	12	–	–	–	–	–	–	2	–	–	2	2	–	1	20	1	9	26	–	11	–	6	3	1	–	1	–	–	5	3	2	1	9	4	–	6	9	–
Newcastle	993	78	729	85	–	–	–	–	8	3	14	–	4	32	7	–	3	88	8	44	166	2	18	48	60	5	7	6	2	6	–	29	21	–	5	32	19	9	20	60	3

District.	Population at all ages.		Number of Persons per acre.	Live Birth-rate per 1,000 of population.	Still-births. Rate per 1,000 of Population.	Crude death-rate per 1,000 of population.	Adjusted death-rate by comparability factor.	Mortality in children under one year, per 1,000 registered live births.	Zymotic Mortality.							Per 1,000 of Population.								
									Per 1,000 of Population.						Per 1,000 Live Births								
	Census 1931 of areas as constituted after changes in Boundary.	Estimated to middle of 1935.							Typhoid and Paratyphoid Fevers.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhœa, etc. (under 2years).	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Cirrhosis of Liver.	Nephritis.	Congenital Debility and Malformation, Premature Birth.
Rowley Regis	41,235	42,420	11.1	16.5	0.63	10.6	12.6	61	.....	.....	0.14	0.05	0.23	0.09	8.5	0.63	0.07	1.22	0.63	0.80	0.12	0.02	0.42	0.59
Rugeley	7,137	7,568	2.6	16.6	0.26	11.7	11.9	87	.....	.....	0.26	.....	.....	.....	7.9	0.66	0.26	1.19	0.92	0.53	0.26	.....	0.26	0.79
Sedgley	19,262	19,980	5.2	17.9	0.70	10.8	11.6	64	.....	.....	0.05	.....	.....	0.05	.....	1.15	.....	0.85	0.70	0.85	0.05	.....	0.10	0.75
Stafford	30,851	30,970	6.1	13.8	0.45	10.1	10.4	37	.....	.....	0.06	.....	0.03	0.03	.....	0.51	0.16	1.13	0.35	0.48	0.09	.....	0.29	0.32
Stone	6,399	6,310	3.9	14.6	0.16	10.8	9.7	32	.....	.....	.....	.....	.....	0.16	.....	0.47	.....	1.27	0.47	0.63	0.16	.....	0.47	0.47
Tamworth	11,711	12,170	4.5	15.8	0.90	10.2	10.0	46	.....	.....	.....	.....	0.08	0.08	.....	0.24	0.08	1.81	0.33	0.82	.....	.....	0.33	0.49
Tettenhall	5,967	6,532	2.6	10.5	0.46	12.1	11.0	14	.....	.....	0.15	.....	.....	0.15	.....	0.61	.....	2.75	0.30	0.76	.....	.....	0.61	0.15
Tipton	35,814	36,410	16.8	21.6	0.60	12.9	15.2	63	.....	.....	0.27	0.03	0.08	0.16	6.3	1.15	0.16	1.32	0.79	1.04	0.08	0.05	0.27	0.55
Uttoxeter	6,234	6,612	2.0	15.6	0.91	10.4	10.4	68	.....	.....	.....	.....	.....	.....	29.1	0.60	0.15	1.96	.....	1.51	.....	0.15	.....	0.45
Wednesbury	31,531	32,420	16.0	19.4	1.14	11.7	13.4	102	.....	.....	0.09	0.03	0.31	.....	39.8	0.71	0.37	1.32	0.46	0.98	0.12	.....	0.28	0.74
Wednesfield	9,106	10,270	4.1	19.1	0.29	10.1	11.8	51	.....	.....	0.10	.....	.....	0.10	5.1	0.48	0.10	0.87	0.48	1.07	0.10	.....	0.48	0.39
Willenhall	26,421	27,220	9.6	18.6	0.81	10.8	12.8	75	.....	.....	0.11	0.03	.....	0.07	9.8	0.92	0.18	1.28	0.59	1.10	0.07	.....	0.29	0.77
Totals and Averages	530,648	548,500	5.5	17.3	0.78	11.2	12.5	69	0.00	.....	0.07	0.02	0.10	0.06	8.9	0.67	0.13	1.35	0.58	0.85	0.11	0.02	0.29	0.59
121 large towns in England	.....	.....	.....	14.8	0.68	11.8	.....	62	0.00	.....	0.04	0.01	0.04	0.09	7.9	.....	.....	.....	.....	.....	.....	.....	.....	.....

URBAN—continued.

District.	Live Births.	Still-Births.	Deaths from all causes.	Deaths under 1 year.	Smallpox.	Typhoid and Paratyphoid Fevers.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Cerebro-Spinal Fever.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Syphilis.	General Paralysis of the Insane, Tabes Dorsalis.	Cancer, Malignant Disease.	Diabetes.	Cerebral Hæmorrhage, etc.	Heart Disease.	Aneurysm.	Other Circulatory Diseases.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Peptic Ulcer.	Diarrhœa, etc. (under 2 years).	Appendicitis.	Cirrhosis of Liver.	Other Diseases of Liver, etc.	Other Digestive Diseases.	Nephritis.	Puerperal Sepsis.	Other Puerperal Causes.	Congenital Debility, Premature Birth, Malformation, etc.	Senility.	Suicide.	Other Violence.	Other Defined Diseases.	Causes ill-defined or unknown.
Rowley Regis	701	27	449	43	–	–	6	2	10	4	8	–	1	27	3	–	–	52	4	38	68	–	16	27	34	5	3	6	4	1	1	5	18	2	1	25	19	3	13	43	–
Rugeley	126	2	89	11	–	–	2	–	–	–	3	–	1	5	2	–	–	9	3	4	18	–	3	7	4	2	1	1	–	–	–	1	2	–	–	6	2	2	3	8	–
Sedgley	358	14	217	23	–	–	1	–	–	1	7	–	–	23	–	–	1	17	2	16	42	–	3	14	17	1	1	–	–	–	–	5	2	–	3	15	24	–	10	12	–
Stafford	429	14	312	16	–	–	2	–	1	1	4	–	–	16	5	4	1	35	7	26	72	1	22	11	15	3	2	–	–	–	1	8	9	–	–	10	15	5	10	24	2
Stone	92	1	68	3	–	–	–	–	–	1	4	–	–	3	–	–	–	8	–	1	20	–	3	3	4	1	–	–	–	–	1	3	3	–	–	3	5	1	1	3	–
Tamworth	193	11	124	9	–	–	–	–	1	1	1	–	1	3	1	–	–	22	3	9	25	–	7	4	10	–	4	–	1	–	–	1	4	–	2	6	4	2	6	6	–
Tettenhall	69	3	79	1	–	–	1	–	–	1	–	–	–	4	–	1	1	18	3	2	19	–	2	2	5	–	2	–	1	–	–	2	4	–	–	1	2	–	3	5	–
Tipton	788	22	470	50	–	–	10	1	3	6	12	–	–	42	6	–	–	48	9	28	76	2	7	29	38	3	4	5	2	2	2	5	10	1	1	20	49	4	19	26	–
Uttoxeter	103	6	69	7	–	–	–	–	–	–	–	–	–	4	1	–	–	13	–	5	11	–	7	–	10	–	–	3	–	1	–	3	–	–	–	3	1	–	2	5	–
Wednesbury	628	37	380	64	–	–	3	1	10	–	3	–	–	23	12	–	–	43	2	17	64	2	8	15	32	4	5	25	–	–	1	6	9	3	3	24	23	5	10	27	–
Wednesfield	196	3	104	10	–	–	1	–	–	1	2	–	–	5	1	–	–	9	1	2	26	–	4	5	11	1	1	1	–	–	1	1	5	1	–	4	2	2	4	13	–
Willenhall	508	22	294	38	–	–	3	1	–	2	5	–	–	25	5	2	–	35	4	11	47	–	13	16	30	2	1	5	1	–	2	5	8	1	–	21	8	3	10	28	–
Totals	9490	430	6168	658	–	1	42	10	54	36	125	1	14	371	72	14	10	739	76	349	1212	13	233	317	468	60	62	85	26	13	15	126	162	17	27	323	320	60	227	480	8

District.	Population at all ages.		Mean Area per Person in acres.	Live Birth-rate per 1,000 of population.	Still-births, Rate per 1,000 of Population.	Crude death-rate per 1,000 of population.	Adjusted death-rate by comparability factor.	Mortality in children under one year per 1000 registered live births.	Zymotic Mortality. Per 1000 of population.						Per 1000 Live Births	Per 1000 of Population.								
	Census, 1931 of areas as constituted after changes in Boundary.	Estimated to middle of 1935.							Typhoid and Paratyphoid Fevers.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhœa & c under 2 years	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Cirrhosis of Liver.	Nephritis.	Congenital Debility & Malformation, Premature Birth.
Cannock	20,792	21,200	2.7	17.9	1.08	10.3	11.0	58	.....	.....	.....	.....	.....	0.09	13.2	0.47	0.09	1.37	0.38	0.52	0.14	0.05	0.19	0.66
Cheadle	28,102	30,120	2.0	14.4	0.89	9.6	10.1	58	.....	.....	.....	.....	0.10	0.03	4.6	0.33	0.16	1.43	0.40	0.43	0.06	0.03	0.33	0.43
Leek	14,435	15,640	4.6	15.0	1.28	10.3	10.2	55	.....	.....	.....	0.13	0.06	.....	8.5	0.13	0.06	1.15	0.32	0.51	0.06	.....	0.19	0.57
Lichfield	31,551	32,540	2.6	15.6	0.80	9.3	9.7	57	.....	.....	0.06	.....	0.03	0.06	1.9	0.43	0.06	0.98	0.31	0.52	0.12	0.06	0.18	0.61
Newcastle	16,872	16,580	2.4	13.8	0.54	13.4	13.2	43	.....	.....	0.06	0.12	.....	0.06	.....	0.42	0.06	1.51	0.30	0.90	0.24	.....	0.66	0.36
Seisdon	13,850	15,020	2.8	15.1	0.53	10.0	8.8	39	.....	.....	0.06	.....	.....	.....	.....	0.53	0.06	1.40	0.33	0.60	0.20	.....	0.40	0.33
Stafford	12,895	13,090	6.1	14.6	1.14	12.6	11.1	73	.....	.....	.....	.....	.....	0.07	.....	0.07	0.07	1.68	0.23	0.61	.....	0.07	0.23	0.76
Stone	11,945	12,000	5.1	13.1	0.66	11.5	10.6	38	.....	.....	.....	0.16	.....	0.25	6.3	0.25	.....	1.41	0.41	0.58	0.08	0.08	0.41	0.16
Tutbury	10,356	11,290	2.8	16.4	0.26	13.1	11.6	70	.....	.....	.....	.....	0.09	0.18	10.8	0.53	0.09	1.77	0.35	0.35	0.09	.....	0.35	0.62
Uttoxeter	8,906	9,520	5.9	14.6	0.84	12.6	11.1	65	.....	.....	.....	.....	.....	0.21	.....	0.21	.....	1.57	0.31	0.21	0.10	.....	0.31	0.63
Totals and Averages	169,704	177,000	3.3	15.1	0.83	10.8	10.6	56	.....	.....	0.02	0.03	0.03	0.08	4.8	0.35	0.08	1.37	0.34	0.53	0.11	0.03	0.31	0.52

District.	Live Births.	Still-Births.	Deaths from all causes.	Deaths under 1 year.	Smallpox.	Typhoid and Paratyphoid Fevers.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Cerebro-Spinal Fever.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Syphilis.	General Paralysis of the Insane, Tabes Dorsalis.	Cancer, Malignant Disease.	Diabetes.	Cerebral Hæmorrhage, &c.	Heart Disease.	Aneurysm.	Other Circulatory Diseases.	Bronchitis.	Pneumonia.	Other Respiratory Diseases.	Peptic Ulcer.	Diarrhœa, &c. (under 2 years).	Appendicitis.	Cirrhosis of Liver.	Other Diseases of Liver, &c.	Other Digestive Diseases.	Nephritis.	Puerperal Sepsis.	Other Puerperal Causes.	Congenital Debility, Premature Birth, Malformation, etc.	Senility.	Suicide.	Other Violence.	Other Defined Diseases.	Causes ill-defined or unknown.
Cannock	379	23	218	22	–	–	–	–	–	2	4	–	–	10	2	1	2	29	1	16	42	2	6	8	11	3	–	5	1	1	1	4	4	1	1	14	19	–	12	16	–
Cheadle	433	27	289	25	–	–	–	–	3	1	10	–	1	10	5	–	–	43	6	15	55	–	20	12	13	2	5	2	3	1	2	10	10	–	2	13	6	1	11	26	1
Leek	235	20	162	13	–	–	–	2	1	–	4	1	–	2	1	–	–	18	2	9	31	–	9	5	8	1	2	2	1	–	–	4	3	–	–	9	12	1	9	21	4
Lichfield	508	26	304	29	–	–	2	–	1	2	13	–	1	14	2	–	–	32	7	14	58	2	20	10	17	4	3	1	2	2	1	11	6	–	2	20	3	1	26	27	–
Newcastle	229	9	223	10	–	–	1	2	–	1	6	–	2	7	1	–	1	25	2	13	51	–	12	5	15	4	2	–	2	–	1	4	11	–	–	6	12	4	9	23	1
Seisdon	227	8	151	9	–	–	1	–	–	–	2	–	–	8	1	–	–	21	3	10	30	1	16	5	9	3	3	–	1	–	1	2	6	–	–	5	4	1	5	12	1
Stafford	192	15	165	14	–	–	–	–	–	1	–	1	–	1	1	–	1	22	2	12	45	1	10	3	8	–	1	–	1	1	–	4	3	–	2	10	10	1	11	11	2
Stone	157	8	138	6	–	–	–	2	–	3	3	–	–	3	–	1	–	17	–	8	29	–	6	5	7	1	2	1	–	1	1	7	5	1	–	2	7	1	7	18	–
Tutbury	185	3	148	13	–	–	–	–	1	2	1	–	–	6	1	–	–	20	2	5	34	–	8	4	4	1	1	2	–	–	2	7	4	1	–	7	7	3	15	10	–
Uttoxeter	139	8	120	9	–	–	–	–	–	2	2	–	–	2	–	–	1	15	3	6	31	–	14	3	2	1	1	–	–	–	2	2	3	–	1	6	6	2	8	6	1
Totals	2684	147	1918	150	–	–	4	6	6	14	45	2	4	63	14	2	5	242	28	108	406	6	121	60	94	20	20	13	11	6	11	55	55	3	8	92	86	15	113	170	10

Table showing the number of cases of certain Infectious Diseases notified in each sanitary area during the year 1935, and the Attack-Rates per 1,000 of the population.

URBAN

District.	Estimated Population in the middle of 1935 for calculating rates.	Small-pox		Scarlet Fever		Diphtheria		Enteric Fever		Puerperal Fever		Erysipelas		Pneumonia		Cerebro-spinal Fever Cases	Poliomyelitis Cases	Encephalitis Lethargica Cases	Puerperal Pyrexia Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate				
Aldridge	15,860	.....	.....	77	4.85	13	0.82	.....	.....	.....	.....	5	0.31	25	1.57	.....	.....	.....	3
Amblecote	3,017	.....	.....	5	1.66	5	1.66	1	0.33	.....	.....	1	0.33	1	0.33	.....	.....	.....	.....
Biddulph	9,341	.....	.....	42	4.49	32	3.42	1	0.11	.....	.....	5	0.53	39	4.17	.....	.....	.....	3
Bilston	31,670	.....	.....	86	2.71	44	1.39	.....	.....	1	0.03	21	0.66	107	3.38	.....	.....	.....	10
Brierley Hill	45,190	.....	.....	162	3.58	63	1.39	.....	.....	2	0.04	29	0.64	45	0.99	2	.....	.....	7
Brownhills	18,970	.....	.....	104	5.48	27	1.42	.....	.....	1	0.05	14	0.74	33	1.74	.....	.....	.....	5
Cannock	35,990	.....	.....	104	2.89	18	0.50	.....	.....	2	0.05	21	0.58	8	0.22	3	.....	.....	2
Coseley	26,420	.....	.....	109	4.12	43	1.63	.....	.....	1	0.04	8	0.30	50	1.89	3	.....	.....	2
Darlaston	20,110	.....	.....	66	3.28	22	1.09	.....	.....	.....	.....	5	0.25	37	1.84	.....	.....	.....	4
Kidsgrove	14,720	.....	.....	22	1.49	11	0.75	.....	.....	.....	.....	13	0.88	19	1.29	.....	.....	.....	2
Leek	19,530	.....	.....	75	3.84	56	2.87	.....	.....	.....	.....	9	0.46	11	0.56	1	.....	.....	2
Lichfield	8,690	.....	.....	8	0.92	1	0.11	.....	.....	2	0.23	3	0.34	1	0.11	.....	.....	.....	1
Newcastle	60,110	.....	.....	161	2.68	21	0.35	1	0.01	1	0.01	15	0.25	80	1.33	6	.....	.....	6

URBAN—continued.

District.	Estimated Population in the middle of 1935 for calculating rates.	Small-pox		Scarlet Fever		Diphtheria		Enteric Fever		Puerperal Fever		Erysipelas		Pneumonia		Cerebro-spinal Fever Cases	Poliomyelitis Cases	Encephalitis Lethargica Cases	Puerperal Pyrexia Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate				
Rowley Regis	42,420	.....	.....	81	1.91	104	2.45	.....	.....	.....	.....	17	0.40	89	2.10	.....	.....	.....	4
Rugeley	7,568	.....	.....	4	0.53	.....	.....	.....	.....	.....	.....	1	0.13	2	0.26	.....	.....	.....	.....
Sedgley	19,980	.....	.....	79	3.95	3	0.15	.....	.....	.....	.....	25	1.25	66	3.30	.....	.....	.....	3
Stafford	30,970	.....	.....	82	2.65	7	0.22	3	0.09	2	0.06	8	0.26	29	0.93	2	.....	.....	8
Stone	6,310	.....	.....	11	1.74	12	1.90	.....	.....	.....	.....	1	0.16	8	1.27	.....	.....	.....	.....
Tamworth	12,170	.....	.....	53	4.35	8	0.66	.....	.....	.....	.....	8	0.66	37	3.04	1	1	.....	1
Tettenhall	6,532	.....	.....	9	1.38	6	0.92	.....	.....	1	0.15	2	0.30	4	0.61	.....	.....	.....	.....
Tipton	36,410	.....	.....	128	3.51	109	2.99	.....	.....	.....	.....	22	0.60	96	2.63	.....	.....	.....	4
Uttoxeter	6,612	.....	.....	23	3.48	49	7.41	.....	.....	.....	.....	4	0.60	.....	.....	.....	1	.....	.....
Wednesbury	32,420	.....	.....	73	2.25	16	0.49	1	0.03	1	0.03	14	0.43	64	1.97	.....	.....	.....	3
Wednesfield...	10,270	.....	.....	40	3.89	18	1.75	.....	.....	1	0.10	6	0.58	30	2.92	.....	.....	.....	2
Willenhall	27,220	.....	.....	50	1.83	20	0.73	.....	.....	2	0.07	9	0.33	54	1.98	.....	.....	.....	4

RURAL

District.	Estimated Population in the middle of 1935 for calculating rates.	Small-pox		Scarlet Fever		Diphtheria		Enteric Fever		Puerperal Fever		Erysipelas		Pneumonia		Cerebro-spinal Fever Cases	Poliomyelitis Cases	Encephalitis Lethargica Cases	Puerperal Pyrexia Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate				
Cannock	21,200	.....	.....	62	2.92	28	1.32	.....	.....	2	0.09	10	0.47	28	1.32	.....	.....	.....	5
Cheadle	30,120	.....	.....	127	4.21	26	0.86	1	0.03	2	0.06	17	0.56	72	2.39	1	.....	.....	4
Leek	15,640	.....	.....	54	3.45	3	0.19	.....	.....	1	0.06	2	0.13	12	0.77	.....	.....	.....	2
Lichfield	32,540	.....	.....	68	2.09	23	0.70	.....	.....	2	0.06	15	0.46	39	1.20	1	.....	.....	6
Newcastle	16,580	.....	.....	36	2.17	14	0.84	.....	.....	.....	.....	8	0.48	16	0.96	1	.....	.....	2
Seisdon	15,020	.....	.....	24	1.60	6	0.40	.....	.....	.....	.....	3	0.20	12	0.80	.....	.....	.....	1
Stafford	13,090	.....	.....	32	2.44	7	0.53	4	0.30	1	0.07	.....	.....	12	0.91	.....	.....	.....	3
Stone	12,000	.....	.....	40	3.33	46	3.83	.....	.....	.....	.....	6	0.50	11	0.91	.....	.....	.....	6
Tutbury	11,290	.....	.....	22	1.95	11	0.97	.....	.....	.....	.....	.....	.....	2	0.18	.....	.....	.....	.....
Uttoxeter	9,520	.....	.....	23	2.41	30	3.15	.....	.....	.....	.....	2	0.21	3	0.31	.....	.....	.....	1

Maternity and Infant Welfare

Particulars relating to the work of the Infant Welfare Centres and Ante-natal Clinics during the year ended 31st December, 1935.

District.	Centre.	Sessions.	Average Monthly No. on books during 1935.			No. of Attendances for First Time.			Total No. of Attendances.			No. of Sessions.
			Expectant Mothers.	Children.		Expectant Mothers.	Children.		Expectant Mothers.	Children.		
				Under one year.	Between 1 and 5 years.		Under one year.	Between 1 and 5 years.		Under one year.	Between 1 and 5 years.	
URBAN.												
Aldridge	Aldridge	Weekly	—	46	79	—	58	44	—	763	1213	51
	Pelsall	,,	3	37	71	19	55	16	38	872	941	49
	Rushall	,,	—	36	61	—	56	12	—	610	595	50
Amblecote	Amblecote	,,	—	36	47	—	49	25	—	859	535	51
Biddulph	Biddulph	Twice Weekly	12	79	197	44	101	80	92	1213	1509	100
Bignall End	Brierley Hill	Weekly	26	103	116	99	158	115	259	1561	825	49
	,, Special Ante-Natal Clinic (from 11.4.35)											32
	Brookmoor	,,	—	41	61	—	44	16	—	759	579	51
Bignall Hill	Kingswinford	,,	1	45	98	9	49	28	9	896	908	48
	Pensnett	,,	—	63	117	2	86	70	3	1050	1059	49
	Quarry Bank	,,	25	85	47	101	69	9	184	1108	650	51
	Wordsley	,,	1	76	197	7	73	24	9	1023	1419	49
Brownhills	Brownhills	,,	12	100	76	91	90	25	186	1565	855	49
	,, Special Ante-Natal Clinic (from 6.9.35)	Fortnightly										7
	Norton Canes	Weekly	3	25	47	14	36	28	25	443	515	47
	Walsall Wood	,,	7	36	87	38	54	18	60	798	1435	51
Darlaston	Darlaston	Twice Weekly	8	245	267	30	232	110	85	2950	1912	96
	,, Special Ante-Natal Clinic (from 8.10.35)	Weekly										11
Kidsgrove	Harriseahead	,,	10	26	49	32	42	5	72	410	517	49
	Kidsgrove	,,	12	58	63	68	76	62	127	984	734	46
	,, Special Ante-Natal Clinic (from 25.9.35)	,,										13
	Talke	,,	1	52	123	8	37	8	10	869	723	51
Leek	Leek	,,	7	88	114	27	111	52	42	1237	796	51
	,, Special Ante-Natal Clinic	Monthly										12
Lichfield	Lichfield	Weekly	1	48	79	7	75	37	8	857	1110	50
Rugeley	Rugeley	,,	4	59	99	30	51	38	38	1055	1497	46
Sedgley	Lower Gornal	,,	—	45	91	2	66	29	5	896	1098	49
	Sedgley	,,	3	68	120	16	106	56	38	1201	1163	49
Stone	Stone	,,	—	54	144	—	80	57	—	1111	1684	49
Tamworth	Bolehall	Fortnightly	—	27	63	—	34	17	—	294	407	23
	Tamworth	Weekly	—	54	55	3	84	22	3	946	714	50
Tettenhall	Tettenhall	,,	2	31	49	8	47	36	23	686	318	51
Uttoxeter	Uttoxeter	,,	5	33	115	18	51	33	28	493	922	50
Wednesfield	Wednesfield	,,	2	68	78	14	102	28	42	1825	1265	49
Willenhall	Portobello	,,	1	60	55	8	55	9	20	884	780	50
	Short Heath	,,	—	65	47	2	44	16	12	660	595	49
	Willenhall	Twice Weekly	7	141	142	66	166	51	169	2152	1941	99
	,, Special Ante-Natal Clinic: fortnightly from 11.10.35 & from 22.11.24	Weekly										8
RURAL.												
Cannock	Brewood	Twice Monthly	—	32	68	—	41	29	—	311	545	24
	Cheslyn Hay	,,	3	21	21	14	25	16	21	208	192	23
	Essington	Monthly	—	12	46	1	16	16	1	68	145	11
	Featherstone	Twice Monthly	12	33	76	29	51	80	46	280	321	24
	Great Wyrley	,,	—	21	23	—	28	10	—	218	268	23
	Huntington	,,	—	29	22	—	25	14	—	328	161	24
	Penkridge	,,	4	18	45	11	27	20	25	264	389	23
	Shareshill	Monthly	—	10	38	—	12	13	—	74	130	12
Cheadle	Caulkon	Weekly	—	6	22	—	3	1	—	27	42	50
	Cheadle	,,	—	49	90	—	64	20	—	466	959	51
	Checdleton	,,	—	26	58	2	32	29	2	448	669	50
Leek	Endon (from 13.5.35)	,,	2	64	38	17	82	51	21	622	334	29
	Longnor	,,	—	15	24	—	20	7	—	293	340	50
	Warslow (closed 25.3.35)	,,	—	3	6	—	3	2	—	13	15	12
Lichfield	Alrewas	Twice Monthly	—	10	17	3	13	8	6	115	200	24
	Armitage	,,	3	22	29	18	22	15	26	193	284	22
	Chasetown	Weekly	8	59	46	27	56	16	43	1057	769	50
	,, Special Ante-Natal Clinic	Monthly										12
	Shenstone	,,	1	17	28	4	11	5	14	91	197	12
	Whittington	,,	1	19	26	4	16	11	8	106	116	12
Newcastle	Audley	Weekly	—	38	95	1	54	42	1	684	778	49
	Halmerend	,,	—	31	96	3	39	34	3	358	620	49
	Madeley	,,	—	26	92	—	45	29	—	531	1030	51
Seisdon	Codsall	,,	—	21	27	—	30	11	—	321	520	49
	Kinver	,,	3	30	68	14	44	23	26	556	937	49
	Womborne	,,	1	22	25	3	23	12	8	316	305	30
Stafford	Great Haywood	,,	—	13	44	—	10	5	—	248	914	47
Stone	Eccleshall	,,	1	13	37	9	17	15	12	178	301	50
Tutbury	Barton-under-Needwood	Fortnightly	—	19	30	—	19	1	—	188	179	26
			192	2709	4292	923	3265	1702	1980	41602	42856	2745

Maternity and Infant Welfare

L.—LEGITIMATE.
I.—ILLEGITIMATE.

Particulars relating to the work of the Health Visitors during the year ended 31st December, 1935.

District.	Population Estimated at middle of 1935.	No. of Health Visitors at 31.12.35. Whole-time.	Part-time.	Births. Registered Live Births L.	I.	Registered Still-Births L.	I.	Notified. Live Births. Full term. L.	I.	Premature. L.	I.	Stillborn. Full term. L.	I.	Premature. L.	I.	By Midwives. L.	I.	By Parents and Doctors. L.	I.	Transfers from other Districts during the year. Under ten days. L.	I.	Over 10 days and under one year. L.	I.	One year and under five. L.	I.
URBAN.																									
Aldridge	15,860	2	—	265	8	12	1	261	5	5	—	8	—	3	—	243	5	24	—	—	—	45	—	56	1
Amblecote	3,017	1(a)	—	43	3	2	—	38	2	3	—	2	—	—	—	42	2	1	—	—	—	3	—	7	—
Biddulph	9,341	2	—	173	4	16	—	160	2	8	1	4	—	12	—	178	2	6	1	—	—	18	1	60	—
Brierley Hill	45,190	6	—	733	19	26	1	704	10	29	1	15	—	9	—	703	10	34	1	—	—	73	—	185	1
Brownhills	18,970	3(b)	—	322	8	13	—	317	5	5	—	19	—	1	—	324	5	9	—	—	—	25	—	67	1
Darlaston	20,110	4(c)	—	390	9	10	—	373	7	19	—	8	—	1	—	384	7	17	—	—	—	34	—	70	—
Kidsgrove	14,720	3	—	221	8	14	—	224	4	2	1	9	—	1	—	235	4	1	1	—	—	26	1	56	1
Leek	19,530	3	—	249	10	16	—	243	8	6	—	16	—	2	—	197	6	63	2	—	—	43	5	206	1
Lichfield	8,690	2(b)	—	170	8	5	—	162	3	3	—	3	—	2	—	149	3	23	—	—	—	24	—	27	—
Rugeley	7,560	1(d)	—	123	1	2	—	120	—	—	—	4	—	—	—	120	—	4	—	—	—	2	—	21	—
Sedgley	19,980	3	—	352	6	13	1	325	4	14	—	10	—	1	—	329	4	21	—	—	—	21	—	47	1
Stone	6,310	1	—	87	5	1	—	88	4	4	—	—	—	—	—	88	3	4	1	—	—	5	—	17	—
Tamworth	12,170	2(e)	—	187	6	11	—	185	2	1	—	8	—	—	—	190	2	4	—	—	—	21	—	26	—
Tettenhall	6,332	1	—	67	2	3	—	61	1	1	1	—	—	—	—	48	2	16	—	—	—	3	—	15	—
Uttoxeter	6,612	—	2(f)	99	4	6	—	107	1	1	—	4	—	—	—	85	—	27	1	—	—	6	—	13	—
Wednesfield	10,270	1	—	192	4	3	—	188	4	6	—	—	—	3	—	167	3	28	1	—	—	22	1	49	—
Willenhall	27,220	4	—	501	7	21	1	511	—	1	—	13	—	4	—	459	—	70	—	—	—	53	—	64	—
RURAL.																									
Cannock	21,200	5	—	369	11	21	2	372	5	12	—	16	—	5	—	372	4	24	1	—	—	48	2	105	1
Cheadle	30,120	1	10(g)	415	18	26	1	434	9	16	—	17	—	4	1	433	9	16	1	—	—	78	1	69	5
Leek	15,640	2	1	229	8	20	—	212	5	3	—	17	—	—	—	192	4	41	1	—	—	27	—	31	—
Lichfield	32,540	3	2	400	18	22	1	400	5	8	1	20	—	1	1	438	5	31	2	—	—	37	—	73	3
Newcastle	16,580	3	3(h)	218	11	9	—	193	6	5	—	8	—	2	—	182	5	28	1	—	—	18	1	41	1
Seisdon	15,020	2(i)	—	221	6	7	1	237	—	1	—	3	1	1	—	213	1	29	—	—	—	16	—	35	—
Stafford	13,090	—	8(j)	179	13	14	1	173	5	5	—	7	1	4	—	176	6	13	—	—	—	19	—	34	1
Stone	12,090	—	7(k)	136	7	7	1	129	2	10	—	4	—	2	—	129	2	16	—	—	—	13	—	17	—
Tutbury	11,290	1(l)	1	173	12	3	—	139	2	3	1	4	—	—	—	118	3	48	—	—	—	14	2	27	—
Uttoxeter	9,520	—	6(m)	133	6	8	—	116	6	4	—	5	—	1	—	119	1	16	1	—	—	10	—	12	—
	*429,090	54	40	6752	212	314	11	6531	107	176	6	213	2	59	2	6314	100	669	17	—	—	638	15	1333	17

District.	First Visits. Expectant Mothers.	Children Under 1 year.	Children Between 1 & 5 years.	Revisits. Expectant Mothers.	Children Under 1 year.	Children Between 1 & 5 years.	Total Visits. Expectant Mothers.	Children Under 1 year.	Children Between 1 & 5 years.	Children on Visiting List at end of 1935. Under 1 year.	One year and under five.	Deaths, Removals and Transfers of Children on Visiting List during 1935. Under ten days. Deaths. L.	I.	Removals. L.	I.	Over ten days and under one year. Deaths. L.	I.	Removals. L.	I.	One year and under five. Deaths. L.	I.	Removals. L.	I.	Transferred to School.	No. of cases of insanitary conditions reported to Medical Officer of Health.
URBAN.																									
Aldridge	129	272	56	179	1698	4361	299	1971	4617	235	848	8	—	—	—	7	—	40	2	2	—	64	—	174	12
Amblecote	8	47	6	14	399	540	22	446	546	39	108	—	—	—	—	3	—	6	1	1	—	12	—	29	3
Biddulph	52	194	68	52	1750	3511	104	1944	3579	153	630	5	1	—	—	9	—	20	1	4	—	67	—	164	4
Brierley Hill	200	767	238	170	5424	11961	370	6191	12579	715	2424	23	—	—	—	33	2	93	1	24	1	298	2	608	59
Brownhills	54	323	25	30	1671	3232	84	1994	3260	290	1082	9	—	—	—	19	—	43	1	12	—	88	1	293	16
Darlaston	74	367	13	116	3107	3912	190	3474	3925	275	1166	7	—	3	—	8	—	48	1	8	—	91	—	186	13
Kidsgrove	40	253	46	68	2282	3942	108	2535	7988	210	875	5	—	—	—	8	—	31	1	3	—	83	2	220	12
Leek	64	228	41	51	2555	5208	115	2793	5249	220	891	8	—	—	—	12	—	65	4	3	—	124	2	230	21
Lichfield	31	172	31	30	934	1514	61	1066	1545	136	374	6	—	2	—	5	—	67	—	1	—	52	1	92	—
Rugeley	24	83	15	26	451	722	50	534	737	106	476	1	—	—	—	3	—	9	—	1	—	9	—	60	14
Sedgley	80	361	48	47	2220	5502	127	2581	5545	311	1018	14	—	—	—	5	—	49	—	3	—	57	1	272	1
Stone	—	89	13	—	829	1567	—	918	1720	78	235	2	—	—	1	1	—	16	—	2	—	12	—	61	—
Tamworth	16	149	4	26	2406	2654	42	2555	2658	172	622	3	—	—	—	9	—	43	1	1	—	52	—	145	—
Tettenhall	31	54	12	28	520	1764	59	574	1776	48	184	—	1	—	—	—	—	24	1	3	—	39	1	82	2
Uttoxeter	—	106	10	—	946	1554	—	1052	1564	90	307	3	—	—	—	6	—	17	—	1	—	19	—	77	—
Wednesfield	92	194	26	132	1874	3049	224	2068	3075	182	568	3	—	—	—	4	—	34	—	3	—	46	—	136	12
Willenhall	112	463	27	170	4737	6843	282	5200	6870	534	1917	16	—	—	—	26	—	44	—	7	—	60	—	469	22
RURAL.																									
Cannock	167	428	110	200	2762	6655	367	3190	6725	332	1193	10	1	—	—	12	—	79	2	8	1	167	1	277	21
Cheadle	188	396	45	630	3749	7209	818	4139	7254	426	1584	5	—	2	—	9	—	52	1	7	—	113	4	335	—
Leek	96	237	21	194	2004	2995	290	2241	3016	293	787	5	—	—	—	6	—	39	1	2	1	60	1	206	—
Lichfield	147	480	34	299	3529	6971	446	3969	7025	390	1378	11	1	4	—	21	—	65	2	6	1	135	2	404	11
Newcastle	93	226	33	157	1892	4423	250	2118	6456	212	813	2	—	—	—	5	1	22	2	4	—	53	3	203	28
Seisdon	30	219	27	26	1662	5175	56	1881	5202	239	760	2	—	—	—	4	—	46	—	1	—	59	—	143	8
Stafford	109	161	29	479	1809	3600	588	1970	3629	175	694	3	—	—	—	7	—	37	6	3	—	87	2	169	2
Stone	94	123	9	454	1234	2993	548	1357	3002	124	521	2	—	1	—	3	—	28	—	4	1	56	—	114	—
Tutbury	38	155	26	67	1462	3683	105	1617	3707	150	483	—	2	—	—	4	—	23	1	3	—	62	—	204	1
Uttoxeter	46	107	5	167	1021	2672	213	1128	2677	123	520	3	—	—	—	6	—	16	1	—	—	28	1	92	1
	2006	6099	1037	3812	54927	108253	5818	61326	109310	6302	22301	158	6	12	1	229	4	1041	30	117	5	1974	26	5248	294

(a) Also serves part of Brierley Hill U.D.
(b) One H.V. also serves part of Lichfield R.D.
(c) " " " " Wednesfield U.D.
(d) Also serves parts of the Lichfield and Uttoxeter R.D's.
(e) One H.V. also serves part of Lichfield R.D. and the other an area in Warwickshire.
(f) Also serves part of Uttoxeter R.D.
(g) Two H.V's. also serve parts of the Leek, Stone, and Uttoxeter R.D's.
(h) One H.V. also serves part of Stone R.D.
(i) Also serve parts of the Brierley Hill and Wednesfield U.D's.
(j) Two H.V's. also serve part of Stone R.D.
(k) Three H.V's. also serve parts of the Cheadle, Newcastle, and Stafford R.D's.
(l) Also serves part of Uttoxeter R.D.
(m) One H.V. also serves part of Cheadle R.D.