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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 1934

STAFFORD :

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STAFFORDSHIRE COUNTY COUNCIL

Annual Report of the Medical Officer of Health

PRELIMINARY NOTE.

The Annual Report for 1934, as in former years, has been drawn up according to the suggestions of the Ministry of Health. The vital statistics show a higher birth rate and a lower death rate than those of the country as a whole, which indicates an active and healthy community.

At the beginning of April the full effect of the County Review of District Boundaries became operative. This resulted in a reduction of the number of districts by nine, four smaller urban and five rural districts being added to others to form larger districts. Following on this the County Health Visiting Area has been extended to comply with the policy of the Ministry of Health whereby the same Local Authority controls the measures dealing with the health of children from birth until they leave school. This has resulted in taking over the health visiting work in eight districts the Councils of which were not the School Authorities of their areas, so that now, with the exception of Stafford Borough, the County Council is responsible for the health visiting work in the whole of the County Elementary Education Area.

In the autumn it was decided to make further provision for ante-natal work in the Health Visiting Area and to provide dental treatment for expectant mothers and for children under five.

During the year further progress has been made towards the establishment of a General Hospital at the Newcastle Institution, which will serve the north of the County. Another important extension of public health work was decided upon by the County Council in the middle of the year when a scheme for a whole-time Veterinary Service was approved.

In the Report will be found an interesting account of the many activities of the County Bacteriological Laboratory. Its work and its importance in safeguarding the health of the community increases from year to year, and full advantage of the facilities offered has been taken by the District Councils and by the doctors practising in the County. The Report also shows that the work of the Chemical Laboratory is growing owing to the number of examinations called for by District Councils, and its resources were fully taxed, and this Laboratory, like the Bacteriological Laboratory, has, during the year, rendered much assistance to coroners and the police in the many investigations it has been called upon to carry out.

A large section of the Report has been given to the water and sewage disposal schemes promoted by District Councils. Although this County is more favourably situated than many as regards its water supply, it is satisfactory to note that the District Councils are fully aware of the need of this primary health service, and in the majority of rural areas full advantage has been taken of the grants now available towards the improvement of the water supply of their areas.

The prevention of the pollution of rivers and streams is an ever present problem in a County such as this, where the rivers and streams are comparatively small. The results of the surveys of these that are published in the Report give some indication of the magnitude of the tasks of the Local Authorities and in the Report will be found details of many schemes that have either been completed or are being prepared to meet these problems.

Public Health Officers.

(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) | 16 |
| " " Officer (Part-time) | 1 |
| County Ophthalmic Surgeon (Whole-time) | 1 |
| County Dental Officer (Whole-time) | 1 |
| Assistant Dental Surgeons (Whole-time) | 12 |
| 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 | 10 |
| Standon Hall Orthopaedic Hospital : | |
| Medical Staff (House Surgeon) | 1 |
| " " (Visiting Surgeons) | 2 |
| Nursing Staff | 39 |
| Teaching Staff | 3 |

(b) *Others.*

| | |
|---------------------------------------|---|
| County Chemical Laboratory : | |
| Analyst | 1 |
| Deputy Analyst | 1 |
| Assistants and Staff | 6 |
| Veterinary Staff : | |
| Chief Veterinary Officer | 1 |
| Assistant Veterinary Officers | 6 |

| | | | | |
|---|----|----|----|----|
| Sanitary Inspector and Assistant | .. | .. | .. | 2 |
| Food and Drugs Inspectors | .. | .. | .. | 7 |
| Vaccination Officers | .. | .. | .. | 32 |
| 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 | .. | .. | .. | 13 |

CHANGES DURING 1934.

Assistant Medical Officer—Additional Appointment:—

S. Knight, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H. (1.10.34).

Part-time Officers:—

The services of the under-mentioned Medical Officers were retained when the County Health Visiting Area was extended on the 1st April:—

T. H. Richmond, O.B.E., M.B., Ch.B., F.R.C.S.—Leek Ante-natal Clinic.

G. P. James, M.R.C.S., L.R.C.P., D.P.H.—Brewood Infant Welfare Centre.

W. W. Nock, M.R.C.S., L.R.C.P.—Penkridge Infant Welfare Centre and Ante-natal Clinic.

Consultants under the Puerperal Fever and Puerperal Pyrexia Regulations, and Consulting Obstetricians:—

Additional Appointments:—

Professor H. Beckwith Whitehouse, M.S., M.B., F.R.C.S., Ch.M., Birmingham.

C. D. Lochrane, M.D., Ch.B., F.R.C.S., Derby.

F. Milnes Blumer, Stafford, resigned his appointment as a Consulting Obstetrician, and was succeeded by C. E. M. Blumer, M.B., Ch.B., F.R.C.S., Stafford.

V.D. Medical Officer:—

A. D. Frazer resigned 17.3.34. Succeeded by R. P. A. Macaulay, M.D., Ch.B., M.R.C.P., D.P.H. (1.5.34).

County Chemical Laboratory:—

F. Dixon, B.Sc., F.I.C., designated Deputy Analyst.

Veterinary Staff:—

Chief Veterinary Officer :—

F. A. Davidson, B.Sc. (Vety.), M.R.C.V.S. (5.3.34).

Assistant Veterinary Officers :—

J. H. Findlay, M.R.C.V.S. (20.8.34).

F. H. Manley, B.Sc. (Vety.), M.R.C.V.S. (27.8.34).

R. Dudlyke, M.R.C.V.S. (3.9.34).

R. S. Wilson, M.R.C.V.S. (10.9.34).

A. J. Caldwell, M.R.C.V.S. (17.9.34).

G. B. Brook, D.Sc. (Vety.), M.R.C.V.S. (28.9.34).

Public Vaccinators :—

District No. 5 : T. C. Murphy, M.B., Ch.B., B.A.O., *vice*
J. Craig (26.3.34).

District No. 12 : A. Riley, M.B., Ch.B., *vice* W. Megaw (1.1.34).

District No. 41 : P. G. Duff, L.R.C.P., L.R.C.S., *vice* R. A. S.
Eden (1.10.34).

District No. 48 : R. E. Johnson, M.B., Ch.B., *vice* L. S. Tomkys
(1.1.35).

District No. 58 : G. I. Lambe, M.B., Ch.B., B.A.O., D.P.H.,
vice H. W. Smith (4.5.34).

District No. 68 : C. J. Murphy, M.B., Ch.B., M.R.C.S., L.R.C.P.,
vice J. R. Dallow (9.6.34).

The above-named also took over the offices of District Medical
Officer.

Health Visitors :—

Miss M. C. Baerlocher, left 31.12.33. Succeeded by Miss L.
Chapman, 1.1.34. (1, 2).

Miss L. Hallam, left 31.12.34. Succeeded by Miss M. R.
Killen, 7.1.35. (1, 2, 3).

Miss E. Roe, left 1.8.34. Succeeded by Miss K. Mathers,
17.9.34. (1, 2, 3).

Miss W. M. Smart, left 19.11.34. Succeeded by Miss R. Walch,
1.1.35. (1, 2, 3, 4).

Miss E. F. Surridge, left 6.1.34. Succeeded by Miss W. M.
Smart, 4.4.34. (1, 2, 3).

*Transfers and Appointments consequent upon the extension of the
County Health Visiting Area :—*

Health Visitors transferred from other Authorities, 1.4.34 :—

Mrs. K. Barbe (3, 5).

Miss F. E. Berry (2, 3).

Miss J. M. Clarke (2, 3, 6).

Miss E. H. Scarratt (2, 3).

Mrs. L. Bell (2, 3, 5), left 15.12.34. Succeeded by Miss A. G. Fry, 17.12.34. (1, 2, 3).

Miss A. O'Neill (2, 3, 6).

Miss E. H. Bambrough (2, 3, 6).

Miss E. A. Rose (3).

Miss E. Routledge (2, 3, 5, 7, 8).

Miss R. A. Stoodley (2, 3, 5, 7, 8).

School Nurses transferred to Health Visiting Staff, 1.10.34 :—

Mrs. B. A. Burnett (2, 3).

Miss L. Wilshaw (1, 2, 3).

Miss M. M. Lamb (1, 2, 3).

Miss P. Owen (1, 2, 3).

Miss G. Eastwood (1, 2, 6).

Miss E. M. Ellis (1, 2, 3).

New appointments, 1.10.34 :—

Miss V. Challenger (1, 2, 3).

Miss M. Lloyd (1, 2, 3, 9).

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 for Gynocological Nursing.
5. Health Visitor's Certificate, R.S.I. (prior 1926).
6. Fever Training.
7. T.B. Certificate, Royal Chest Hospital.
8. Diploma for Ray Therapy.
9. Ophthalmic Certificate, Manchester Royal Eye Hospital.

Summary of Statistics.

1.—GENERAL STATISTICS.

| | | |
|---|---------|------------|
| Area of Administrative County | (acres) | 685,503 |
| Population of Area (estimated mid. 1934) .. | | 718,650 |
| Rateable Value at 1st April, 1934.. .. | | £2,669,343 |
| Estimated net product of a penny rate 1934-35 | | £10,317 |

2.—EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

| | Total | M. | F. | |
|--------------------------|--------|-------|-------|-------------------------------------|
| Live (Legitimate) .. | 11,613 | 6,045 | 5,568 | } Birth-rate 16.6 |
| Births (Illegitimate) .. | 338 | 186 | 152 | |
| Stillbirths | 546 | 293 | 253 | Rate per 1,000 total births 43.7 |
| Deaths | 7,760 | 4,105 | 3,655 | Death-rate 10.8 |

| Deaths from Puerperal Causes :— | | Rate per 1,000 | |
|---------------------------------|---------|----------------|--|
| | Deaths. | total births. | |
| Puerperal sepsis .. | 28 | 2.2 | |
| Other puerperal causes | 27 | 2.1 | |
| Total | 55 | 4.4 | |

Death Rate of Infants under one year of age :—

| | |
|---|----|
| All infants per 1,000 live births | 57 |
| Legitimate infants per 1,000 legitimate live births | 57 |
| Illegitimate infants per 1,000 illegitimate live births.. | 77 |

| | |
|---|----|
| Deaths from Measles (all ages) | 36 |
| „ „ Whooping Cough (all ages) | 52 |
| „ „ Diarrhoea (under two years of age) .. | 64 |

AREA AND POPULATION.

During 1934 there have been only two slight alterations in the boundary of the Administrative County, which have not affected the population. Under the Staffordshire and Walsall County Borough (Alteration of Boundaries) Order, 1934, an area of 2 acres was transferred from the County Borough of Walsall to the Darlaston Urban District, and under the Staffordshire Review Order, 1934, an alteration in the boundary between the County Borough of Dudley and the Tipton Urban District entailed the transference of an area of 4 acres to Dudley: this latter district absorbed 21 acres from the Tipton Urban District, and lost 17 acres to Tipton. Both these changes took effect on the 1st April, 1934, and, as will be seen, the area of the Administrative County was decreased by 2 acres.

The many internal changes under the Staffordshire Review Order, 1934, also took place on the 1st April, and affected not only the boundaries of most of the sanitary districts, but also ward and parish boundaries. Certain sanitary districts and parishes ceased to exist, whilst others were newly formed. I do not propose to summarise the multitudinous alterations in areas and populations, but the 1931 Census populations of the sanitary districts as constituted at the 1st April have been amended by the Registrar-General, and will be found in the tables at the end of the report.

I would mention, however, that 7 sanitary districts, 2 urban and 5 rural, together with the Staffordshire portion of the Shifnal (Salop) Rural District, ceased to exist, whilst 2 new sanitary districts were formed. The following are the 8 districts which were absorbed into other areas:—

| | | |
|-------------------|----|---|
| Quarry Bank U.D. | .. | To form part of the new Brierley Hill Urban District. |
| Short Heath U.D. | .. | To Willenhall U.D. |
| Gnosall R.D. | .. | The major portion to Stafford R.D., and the remainder to Cannock R.D. |
| Kingswinford R.D. | .. | The major portion to form part of the new Brierley Hill U.D., and the remainder to Seisdon R.D. |
| Mayfield R.D. | .. | Divided between the Cheadle, Leek, and Uttoxeter Rural Districts. |

| | | |
|-------------------------|-------|---|
| Shifnal R.D. (Staffs.) | .. | To Cannock R.D. |
| Tamworth R.D. (Staffs.) | | To Lichfield R.D. |
| Walsall R.D. | | Part to the Darlaston and Willenhall Urban Districts. The remainder to form the new Aldridge U.D. |

As will be seen from the above table, the two newly formed sanitary districts were the Aldridge Urban District and the Brierley Hill Urban District. The former district contains the Parishes of Aldridge, Great Barr, Pelsall, and Rushall, of the late Walsall Rural District, the Parish of Bentley being the area divided between the Darlaston and Willenhall Urban Districts. Brierley Hill is now a large urban district, which was constituted by amalgamating the old Brierley Hill Urban District, the Quarry Bank Urban District, and practically the whole of the Kingswinford Rural District.

Prior to the 1st April the Administrative County contained 26 Urban Districts and 16 Rural Districts, including the portion of the Shifnal Rural District situated in Staffordshire, whilst there are now 25 urban districts and 10 rural districts.

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.

This year the Registrar-General has 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 applies 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 1934, are set forth :—

| | Census, 1931 | Estimated Population as at middle of 1934 of area as constituted at 31.12.34. |
|-------------|--------------|---|
| Urban | 490,632 | 543,340 |
| Rural | 212,622 | 175,310 |
| Total | *703,254 | 718,650 |

* The census population of the Administrative County as constituted at the 31st December, 1934, 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 11,951, compared with 11,424 the previous year, the number in the Urban Districts being 9,010 and in the Rural Districts 2,941,

Stillbirths. There were 546 stillbirths registered during the year, of which 413 were in urban and 133 in rural districts. The stillbirth rate per thousand of the population for the combined urban and rural districts is 0.76. During the same period the rate for England and Wales was 0.62 and for the large towns in England 0.66.

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 year 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 |
| Staffordshire | Combined Urban and Rural .. | 33.6 | 33.2 | 32.5 | 30.3 | 27.8 | 24.0 | 24.1 | 20.2 | 17.6 | 16.6 |
| | Urban | 35.5 | 34.7 | 33.6 | 31.5 | 29.2 | 25.0 | 25.0 | 20.7 | 18.1 | 16.9 |
| | Rural | 30.2 | 30.5 | 30.2 | 27.0 | 24.4 | 21.6 | 22.0 | 19.0 | 16.6 | 15.8 |
| England and Wales .. | | 30.8 | 29.7 | 28.7 | 26.9 | 24.5 | 20.4 | 21.3 | 17.8 | 15.6 | 14.8 |
| Large Towns in England | | 31.5 | 30.7 | 29.7 | 27.8 | 25.2 | *20.9 | 22.0 | 18.2 | 15.8 | 14.7 |

* 4 years.

DEATHS.

The number of deaths in the Administrative County amounted to 7,760, the number in the urban districts being 5,716 and in the rural districts 2,044.

In the following table comparative rates for nine quinquennial periods and for the past year 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 |
| Staffordshire | Combined Urban and Rural .. | 18.1 | 16.9 | 16.1 | 14.6 | 14.1 | 15.0 | 12.3 | 11.4 | 11.6 | 10.8 |
| | Urban | 18.9 | 17.5 | 16.6 | 15.1 | 14.7 | 15.5 | 12.6 | 11.5 | 11.8 | 10.7 |
| | Rural | 16.8 | 15.7 | 15.1 | 13.4 | 12.7 | 13.8 | 11.6 | 11.2 | 11.2 | 10.9 |
| England and Wales .. | | 19.1 | 17.4 | 16.9 | 15.3 | 13.9 | 15.2 | 12.5 | 12.0 | 12.3 | 11.8 |
| Large Towns | | 21.0 | 19.0 | 18.2 | 15.8 | 14.3 | 15.5 | 12.6 | 12.0 | 12.3 | 11.8 |
| Smaller Towns .. | | 17.6 | 15.9 | 15.7 | 14.9 | 13.6 | 14.1 | 11.5 | 11.0 | 11.2 | 11.3 |

The death rate per thousand of the population for this year is 10.8, whilst for England and Wales it is 11.8. This death rate for the County is less than that for last year, when it was 11.3.

In the following table I have shown the chief causes of death for the last ten years, the numbers given for 1934 being approximately 66·3 per cent. of the total deaths :—

TABLE SHOWING CHIEF CAUSES OF DEATH.

| | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|
| *Zymotic Diseases .. | 604 | 337 | 386 | 242 | 376 | 301 | 281 | 311 | 231 | 223 |
| Influenza .. | 325 | 185 | 532 | 116 | 570 | 131 | 311 | 221 | 424 | 139 |
| Tuberculosis of Respiratory System .. | 530 | 497 | 465 | 423 | 492 | 476 | 497 | 412 | 469 | 438 |
| Tuberculosis, other forms | 143 | 139 | 156 | 99 | 100 | 104 | 112 | 113 | 87 | 93 |
| Cancer, Malignant Disease .. | 790 | 785 | 803 | 851 | 899 | 912 | 897 | 915 | 896 | 963 |
| Cerebral Hæmorrhage | 542 | 464 | 465 | 430 | 462 | 431 | 477 | 510 | 460 | 443 |
| Heart Disease .. | 1053 | 1054 | 1047 | 1239 | 1448 | 1366 | 1500 | 1561 | 1579 | 1556 |
| Bronchitis .. | 648 | 544 | 650 | 395 | 622 | 352 | 485 | 369 | 409 | 311 |
| Pneumonia .. | 809 | 660 | 865 | 563 | 933 | 588 | 630 | 570 | 607 | 570 |
| Congenital Debility, &c. | 521 | 496 | 453 | 428 | 420 | 409 | 459 | 443 | 413 | 412 |

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

The chief cause of death in 1934, as in previous years, was heart disease. On referring to the table it will be seen that from 1925 to 1932 there was a progressive increase in the number of deaths from heart disease, but that since 1932 the figure has remained much the same. The number of deaths from cancer has again increased, being nearly 70 more than last year. This disease, like heart disease, has shown a steady increase from 1925 onwards, but possibly some part of this 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 the figures for influenza show a considerable drop compared with the previous year—139 compared with 424, whilst the deaths from bronchitis and pneumonia are less, showing the effect of a mild winter.

The following table, which was introduced for the first time last year, shows the number of deaths in different age groups from various causes during 1934. It is interesting to compare this with the previous table showing the principal causes of death. Pneumonia again took heavy toll of child life. Of the 689 deaths occurring in children under one year of age, 90 of these were due to pneumonia. In tuberculosis of the respiratory system the majority of deaths occurred 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., amount to 401 out of a total of 689. I give further details of this matter on page 49 of this Report.

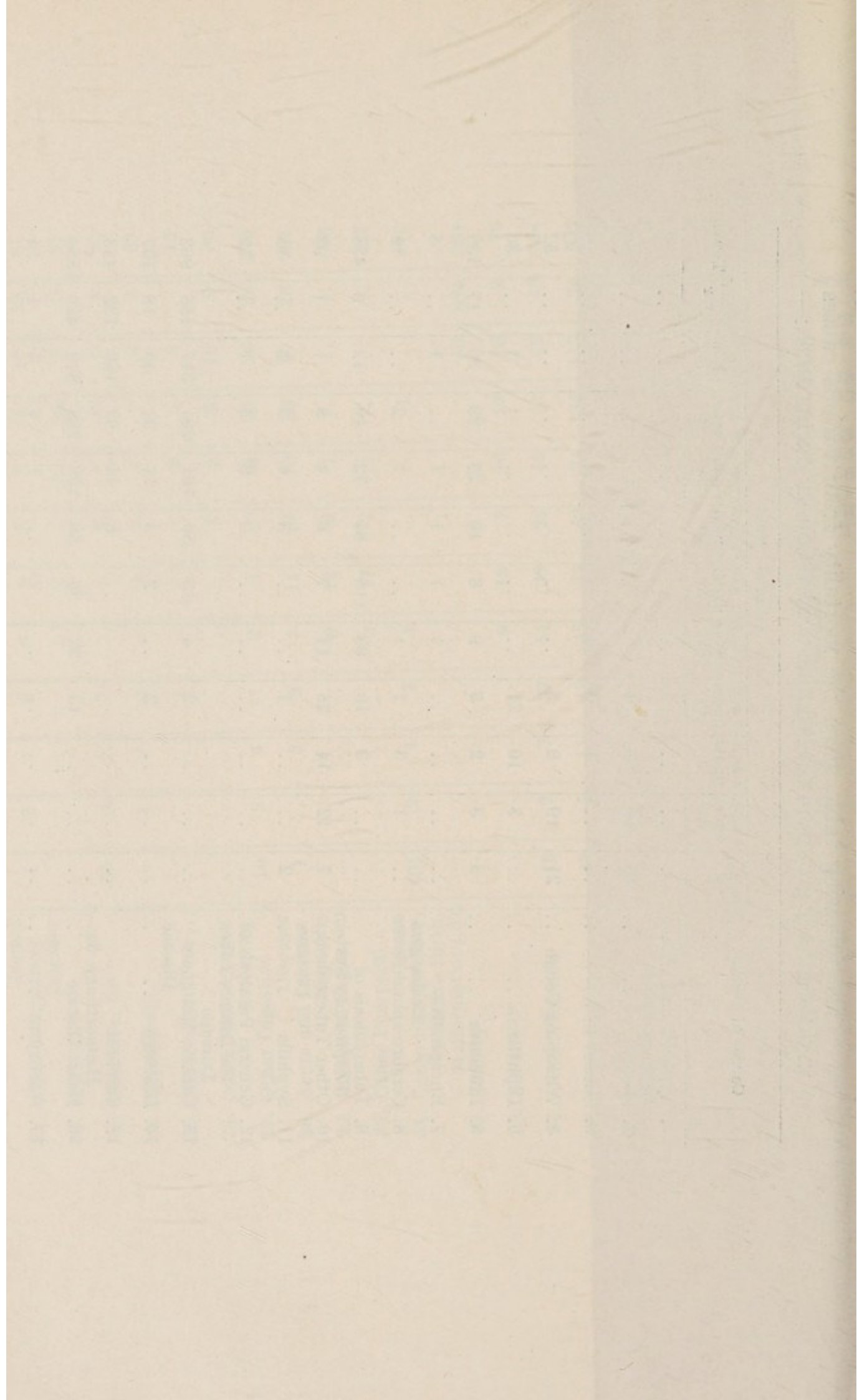
MORTALITY AT DIFFERENT AGES FROM VARIOUS CAUSES.

The following table gives the mortality from various causes in different age groups in the Administrative County during 1934:—

| Causes of Death | Age at Death | | | | | | | | | | TOTAL | | |
|--|--------------|---------------|---------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|-------------|------|
| | Under 1 | 1 and 2 under | 3 and 4 under | 5 and 15 under | 15 and 25 under | 25 and 35 under | 35 and 45 under | 45 and 55 under | 55 and 65 under | 65 and 75 under | | 75 and over | |
| 1. Typhoid and Paratyphoid Fevers | .. | .. | .. | 1 | .. | .. | .. | .. | .. | 1 | .. | .. | 2 |
| 2. Measles | 13 | 10 | 8 | 4 | 1 | .. | .. | .. | .. | .. | .. | .. | 36 |
| 3. Scarlet Fever | .. | .. | .. | 1 | 3 | 1 | 1 | .. | .. | .. | .. | .. | 6 |
| 4. Whooping Cough | 21 | 19 | 9 | 3 | .. | .. | .. | .. | .. | .. | .. | .. | 52 |
| 5. Diphtheria | .. | 3 | 10 | 21 | .. | .. | .. | .. | .. | 1 | 1 | .. | 36 |
| 6. Influenza | 3 | 3 | 2 | 3 | 9 | 8 | 10 | 23 | 29 | 32 | 17 | .. | 139 |
| 7. Encephalitis Lethargica | .. | .. | .. | .. | 1 | 1 | 1 | 1 | 1 | .. | 1 | .. | 5 |
| 8. Cerebro-spinal Fever | .. | 1 | 3 | 1 | 1 | .. | .. | .. | 1 | 2 | .. | .. | 9 |
| 9. Tuberculosis of Respiratory System | .. | .. | 3 | 10 | 93 | 115 | 84 | 72 | 46 | 12 | 3 | .. | 438 |
| 10. Other Tuberculous Diseases | 7 | 12 | 14 | 25 | 11 | 7 | 6 | 4 | 5 | 1 | 1 | .. | 93 |
| 11. Syphilis | 2 | .. | .. | 1 | .. | .. | 3 | 4 | 3 | 2 | .. | .. | 15 |
| 12. General Paralysis of the Insane, Tabes Dorsalis | .. | .. | .. | .. | .. | .. | 3 | 3 | 3 | 5 | 1 | .. | 12 |
| 13. Cancer, Malignant Disease | .. | .. | .. | 2 | 4 | 13 | 50 | 161 | 261 | 317 | 155 | .. | 963 |
| 14. Diabetes | .. | .. | .. | 2 | .. | 2 | 3 | 11 | 31 | 40 | 18 | .. | 107 |
| 15. Cerebral Haemorrhage, &c. | .. | .. | .. | .. | .. | .. | 8 | 44 | 93 | 166 | 132 | .. | 443 |
| 16. Heart Disease | .. | .. | .. | 13 | 32 | 30 | 56 | 108 | 288 | 549 | 480 | .. | 1556 |
| 17. Aneurysm | .. | .. | .. | .. | .. | 2 | .. | 1 | 6 | 4 | 1 | .. | 14 |
| 18. Other Circulatory Diseases | 1 | .. | .. | .. | .. | 2 | 1 | 18 | 36 | 123 | 163 | .. | 344 |
| 19. Bronchitis | 27 | 5 | 3 | 3 | 3 | 3 | 6 | 30 | 39 | 76 | 116 | .. | 311 |
| 20. Pneumonia (all forms) | 90 | 39 | 29 | 25 | 32 | 41 | 52 | 76 | 79 | 58 | 49 | .. | 570 |
| 21. Other Respiratory Diseases | 1 | 2 | 1 | 8 | 6 | 5 | 8 | 8 | 14 | 15 | 13 | .. | 81 |
| 22. Peptic Ulcer | .. | .. | 1 | .. | 2 | 5 | 7 | 14 | 16 | 9 | 3 | .. | 57 |
| 23. Diarrhoea, &c. | 55 | 9 | 2 | 2 | 1 | 2 | 3 | 1 | 6 | 6 | 4 | .. | 91 |
| 24. Appendicitis | .. | 1 | 7 | 7 | 9 | 9 | 5 | 8 | 7 | 8 | 2 | .. | 63 |
| 25. Cirrhosis of Liver | .. | .. | .. | 1 | .. | .. | 1 | 3 | 7 | 3 | .. | .. | 15 |
| 26. Other Diseases of Liver, &c. | .. | .. | .. | .. | .. | .. | 1 | 2 | 8 | 10 | 9 | .. | 30 |
| 27. Other Digestive Diseases | 10 | 3 | 4 | 11 | 2 | 4 | 11 | 18 | 20 | 36 | 29 | .. | 148 |
| 28. Acute and Chronic Nephritis | 1 | .. | 3 | 2 | 11 | 11 | 16 | 19 | 53 | 57 | 28 | .. | 201 |
| 29. Puerperal Sepsis | .. | .. | .. | .. | 6 | 12 | 9 | 1 | .. | .. | .. | .. | 28 |
| 30. Other Puerperal Causes | .. | .. | .. | .. | 3 | 17 | 7 | .. | .. | .. | .. | .. | 27 |
| 31. Congenital Debility, Premature Birth, Malformations, &c. | 401 | 2 | 4 | 3 | 1 | .. | .. | .. | 1 | .. | .. | .. | 412 |
| 32. Senility | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 50 | .. | 334 |
| 33. Suicide | .. | .. | .. | .. | 9 | 13 | 7 | 19 | 13 | 16 | 2 | .. | 79 |
| 34. Other Violence | 15 | 2 | 7 | 37 | 54 | 33 | 22 | 40 | 41 | 40 | 43 | .. | 334 |
| 35. Other Defined Diseases | 42 | 13 | 11 | 49 | 45 | 38 | 52 | 74 | 136 | 117 | 70 | .. | 647 |
| 36. Causes ill-defined or unknown | .. | .. | .. | .. | .. | .. | .. | 2 | 2 | 2 | 6 | .. | 12 |
| Totals | 689 | 124 | 122 | 237 | 337 | 374 | 432 | 766 | 1249 | 1752 | 1678 | .. | 7760 |

Special causes included in No. 35 above.

| | | | | | | | | | | | | | |
|---------------|----|----|----|----|----|---|----|----|----|----|----|----|---|
| Poliomyelitis | .. | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | 1 |
|---------------|----|----|----|----|----|---|----|----|----|----|----|----|---|



The following table has been prepared covering the last 15 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. It will be observed that in both males and females the percentage of deaths under 45 is again reduced.

The figures shown in this table for this county confirm the statement often made that the expectation of life is being gradually extended.

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 | % of Total | Deaths all ages | Deaths under 45 | % 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 |

After the age of 45, heart disease becomes increasingly, year by year, the most important cause of death, and next to it is cancer. Bronchitis and pneumonia, as the statistics show, are also more fatal, but on the other hand tuberculosis has declined in recent years as a cause of death. With this in mind, and the information disclosed in the table, which shows that there is a tendency for the percentage of deaths under 45 to be smaller each year, it is obvious how important all measures are which will tend to reduce mortality from these diseases.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

Local Government Act, 1929.

In my Report for 1931 I gave a full account of the proposals for dealing with the sick in the Administrative County. No alteration in this scheme has taken place and plans are now being prepared for the conversion of the Newcastle Institution into a Hospital of 425 beds. The County Council have arranged for 50 beds to be at the disposal of the North Staffordshire Royal Infirmary Committee. By this arrangement provision will be made for the

treatment of such medical and surgical conditions as the voluntary Hospital cannot deal with, owing to pressure on their existing accommodation. The next step in the co-ordination of the Hospital Services will be the conversion of Wordsley Institution into a Hospital of approximately 400 beds, and plans are now being prepared with this in view. It is proposed that a further Hospital should be established by the conversion of the Lichfield Institution into a Hospital of 220 beds to serve the eastern portion of the County.

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 Orthopaedic 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 271 certified cases are in Institutions.

NURSING IN THE HOME.

(a) *General Nursing.*

During the year the County Nursing Association formed one new local Nursing Association to serve Pensnett and Bromley for general work only, and affiliated the Stone and Tipton Nursing Associations, which were already in existence, undertaking midwifery in addition to general nursing. The area of the Willenhall Nursing Association was also extended to include the late Short Heath Urban District. Other changes have also taken place, for the Beaudesert and Marchington Nursing Associations terminated their activities on the 31st March and 31st December respectively, owing to lack of support. In addition, the Castle Church Nursing Association closed down on the 31st March, as the greater part of the area it had served was transferred to the Borough of Stafford under the Staffordshire Review Order, 1934. Each of these three last named Associations undertook midwifery as well as general nursing, and the Rugeley Nursing Association, which had previously performed the combined services, gave up midwifery in the previous year. There are now 82 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 diarrhoea, 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 1934 no application was received from any of the District Medical Officers of Health.

MIDWIVES.

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 718,650 whilst the health visiting work is limited to the special health visiting area of the County which now has a population of 424,881 as estimated by the Registrar General.

277 midwives notified their intention to practise during the year. Of these 272 were trained and 5 were *bona-fide* midwives. There is a decrease since last year of 10 trained midwives. In addition to these, 102 midwives residing in County Boroughs and adjoining counties have also notified their intention to practise within the Administrative County, compared with 92 last year, but only 73 of these actually practised.

The ages of midwives who were practising in the Administrative County in the fourteen years, 1921–1934, are indicated in groups in the following table, from which it will be observed that the majority are 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 |

The number of cases attended by midwives during 1934 in the three areas of the County are as follows :—

| | No. of Midwives | Total Births (Live and Stillborn) | Births attended | | | | | ‡ Births in respect of which no record is available | |
|--------------|-----------------|-----------------------------------|-----------------|------------|-------------------------------|-----------------------|------------|---|------------|
| | | | * As Midwives | | | † As Maternity Nurses | | No. | % of total |
| | | | Births | % of total | Mean No. of cases per midwife | Births | % of total | | |
| North | 84 | 2964 | 2033 | 68.6 | 24.2 | 647 | 21.8 | 284 | 9.6 |
| Central.. .. | 96 | 3430 | 2525 | 73.6 | 26.3 | 518 | 15.1 | 387 | 11.3 |
| South | 97 | 6103 | 4614 | 75.6 | 47.6 | 674 | 11.0 | 815 | 13.4 |
| Totals | 277 | 12497 | 9172 | 73.4 | 33.1 | 1839 | 14.7 | 1486 | 11.9 |

* 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 my Annual Report for 1928 there is a table which shows the period of pregnancy at which patients have booked midwives, and it will be observed that in more agricultural areas the tendency is to book late in pregnancy, whereas in the southern area, which is largely urban in character, this is not the case. For the present Report I have reproduced the table for 1928 and in it have also shown corresponding figures for the year 1934. It will be noted that in every area there is a greater tendency for women to book with midwives earlier during pregnancy and that this is most marked in the southern part of the County which, as I have said, is largely urban in character. It is extremely gratifying to note this change for it indicates that we are getting much more co-operation from the patients themselves in the measures we are taking to make both pregnancy and child bearing safer, for it cannot be over-emphasized that if only we could get women to take full advantage of the various services organised by Local Authorities on their behalf, we could more confidently anticipate a greater reduction in maternal mortality which, unhappily, has not altered for many years.

| Period. | Northern Area. | | Central Area. | | Southern Area. | |
|----------------------|----------------|------|---------------|------|----------------|------|
| | Percentage. | | Percentage. | | Percentage. | |
| | 1928 | 1934 | 1928 | 1934 | 1928 | 1934 |
| Under 6 months | 10.9 | 29.8 | 19.3 | 34.8 | 31.7 | 41.3 |
| 6 months | 21.2 | 25.6 | 29.8 | 28.1 | 28.9 | 25.2 |
| 7 months | 31.9 | 24.4 | 29.7 | 22.6 | 23.6 | 20.9 |
| 8 months | 23.9 | 15.1 | 17.2 | 10.9 | 13.1 | 10.3 |
| 9 months | 12.0 | 5.0 | 3.9 | 3.6 | 2.6 | 2.2 |

In compliance with the rules of the Central Midwives Board, 4,195 notifications have been received from certified midwives in 1934 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 :—

| | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| Number of Births attended by Midwives | 11780 | 12201 | 10282 | 10523 | 10154 | 10115 | 9787 | 9621 | 8839 | 9172 |
| Sending for medical help | 2219 | 2523 | 2564 | 2764 | 3154 | 3505 | 3741 | 3755 | 3789 | 3784 |
| Still Births | 190 | 208 | 212 | 208 | 233 | 225 | 221 | 229 | 203 | 236 |
| Death of Mother | 11 | 20 | 6 | 13 | 17 | 10 | 17 | 11 | 11 | 13 |
| Death of Child | 60 | 70 | 115 | 117 | 127 | 142 | 140 | 150 | 154 | 162 |

The following table shows to what extent midwives have had occasion to call in medical assistance at confinements over a period of 20 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 better 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 DOCTOR'S CALLS BEFORE, AT AND AFTER
CONFINEMENT, 1915—1934 :—

| 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 |

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 : | | | | |
| Threatened Abortion | 6 | 31 | 43 | 80 |
| Puffiness of face and hands .. | 9 | 7 | 11 | 27 |
| Fainting | 2 | 5 | 12 | 19 |
| Varicose Veins | 7 | 5 | 16 | 28 |
| Fits | 5 | — | 6 | 11 |
| Vaginal Discharge | 2 | 8 | 13 | 23 |
| Unsatisfactory condition and general health | 37 | 80 | 94 | 211 |
| Excessive Sickness | 6 | 17 | 29 | 52 |
| Loss of Blood | 20 | 23 | 33 | 76 |
| History of previous Still-births and Abortions | 5 | 10 | 8 | 23 |
| Œdema of Legs | 2 | 25 | 17 | 44 |
| Albuminuria | 28 | 53 | 60 | 141 |
| Sore of Genitals | — | — | 4 | 4 |
| Contracted Pelvis | 5 | 15 | 45 | 65 |
| | 134 | 279 | 391 | 804 |
| LABOUR : | | | | |
| Premature Birth | — | 13 | 36 | 49 |
| Abnormal Presentation | 29 | 28 | 82 | 139 |
| Delayed or Difficult | 181 | 283 | 343 | 807 |
| Placenta Prævia | 1 | 2 | 10 | 13 |
| Hæmorrhage ante | 9 | 29 | 15 | 53 |
| Ditto post | 23 | 24 | 28 | 75 |
| Eclampsia | — | — | 2 | 2 |
| Prolapse of Cord | 2 | 9 | 14 | 25 |
| Lacerated Perinæum | 152 | 122 | 274 | 548 |
| Retained Placenta and Membranes | 18 | 25 | 49 | 92 |
| Unsatisfactory Condition | 33 | 19 | 26 | 78 |
| Inertia | 30 | 44 | 64 | 138 |
| Abortion | 43 | 54 | 19 | 116 |
| Purulent Discharge | — | 2 | 1 | 3 |
| Cough | — | 1 | 8 | 9 |
| Albuminuria | 1 | 3 | 1 | 5 |
| | 522 | 658 | 972 | 2152 |

| Causes of sending for Medical Aid | Northern District | Central District | Southern District | Total |
|---|-------------------|------------------|-------------------|-------|
| LYING-IN : | | | | |
| High Temperature .. | 34 | 21 | 58 | 113 |
| Inflamed and painful leg .. | 7 | 13 | 13 | 33 |
| Convulsions | — | 4 | 3 | 7 |
| Unsatisfactory Condition .. | 20 | 18 | 64 | 102 |
| Offensive Lochia | — | — | 7 | 7 |
| Unusual Swelling of Breasts... | 3 | 5 | 11 | 19 |
| Abdominal Swelling and tenderness | — | 4 | 9 | 13 |
| | 64 | 65 | 165 | 294 |
| CHILD : | | | | |
| Deformities | 4 | 17 | 33 | 54 |
| Convulsions | 1 | 2 | 11 | 14 |
| Inflamed and discharging eyes | 31 | 59 | 120 | 210 |
| Feebleness and prematurity .. | 23 | 62 | 67 | 152 |
| Unsatisfactory Condition .. | 20 | 9 | 37 | 66 |
| Rash | — | 1 | 6 | 7 |
| Pemphigus | 2 | — | 1 | 3 |
| Spina Bifida | 2 | 5 | 5 | 12 |
| Hare Lip and Cleft Palate .. | 4 | 1 | 2 | 7 |
| Club Foot | — | 2 | — | 2 |
| Jaundice | — | 4 | 3 | 7 |
| | 87 | 162 | 285 | 534 |
| Grand Total | 807 | 1164 | 1813 | 3784 |

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, nine irregularities were specially investigated. As a result, eight midwives received letters of caution, 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 no death of a practising midwife was reported.

In 1934, 9 District Nursing Associations who undertake Midwifery were subsidised to the extent of £260. At the end of the year there were 4 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, 1934, 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 £6 16s. 6d. was allowed by the County Council to three midwives as compensation for loss of practice on suspension after being in contact with four 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, 1935, 3,744 notifications of sending for medical help were received, and out of this number medical practitioners claimed their fees from the County Council in 2,127 cases, that is 56·8 per cent. of the possible claims.

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

FEES PAID TO MEDICAL PRACTITIONERS UNDER MIDWIVES
ACT, 1918.

| Finan- cial 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 |

The new income scale mentioned in my last report 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 re-claimed.
- (b) Exceeds 27s. 6d. but is not more than 35s. 0d. per week .. Half-fees to be re-claimed.
- (c) Is 27s. 6d. per week or less .. No claim to be made.

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. Forty-four outfits only were sold during the year and comparatively little advantage appears to be taken of this scheme.

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

STILLBIRTHS.

It has already been noted that 546 stillbirths were registered during the year. Of these 236 were reported by midwives under their rules and on comparing this figure with those for the past 12 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 :—

| | |
|---------------------------------------|----|
| Ante-partum Hæmorrhage | 1 |
| Cord Prolapse | 5 |
| Cord round neck | 3 |
| Deformities | 16 |
| Difficult Labour | 21 |
| Fall and Shock | 3 |
| Maceration | 97 |
| Malpresentation | 17 |
| Placenta Prævia | 1 |
| Premature | 49 |
| Spina Bifida | 6 |
| Unsatisfactory Condition of Mother .. | 16 |
| Injury during Birth | 1 |

County Bacteriological Laboratory.

Dr. J. Menton, the County Bacteriologist, reports that during 1934, 48,622 investigations were conducted at the County Bacteriological Laboratory, being an increase of 3,066 on the previous year. Of these, 31,598 were of a general bacteriological and serological nature; 1,106 were in respect of biochemical and pathological investigations; and 15,918 were for the diagnosis of 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, 778 were undertaken for the City of Stoke-on-Trent, 97 for the County Borough of Dudley, and 5 for the County Borough of Derby.

Of the tests for venereal diseases, 5,589 were from patients resident in Staffordshire, 8,753 from patients resident in the City of Stoke-on-Trent, 573 from patients resident in the County Borough of Dudley, 54 from patients resident in the Kesteven division of Lincolnshire, and 949 from patients resident in other areas outside the Administrative County. One bottle of gonococcal vaccine was also made. 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 for not only 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 Coroners officiating in the Administrative County, and in connection with medico-legal cases.

Two special research investigations were conducted; one dealing with diphtheria and one with tuberculosis.

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 were as follows:—

The 5,286 examinations under "Tuberculosis" included 3,901 sputa; 170 specimens of pus; 50 cerebrospinal fluids; 54 other fluids; 375 urines; 22 fæces; 338 biological tests; 9 pathological sections; and 367 others.

The 575 investigations under the heading "Brucella infections" included 132 specimens of blood from human beings, 13 of which gave agglutination reactions varying from 1 in 25 to 1 in 2,500. Thirty-seven samples of blood from cattle were also examined, of which 17 gave positive results, and in addition 387 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 4 cases of mild Salmonella infection in various parts of the County.

In connection with the dysentery investigations, there were 3 cases of infection due to Flexner's bacillus.

During the year the laboratory was called in to investigate 9 inquest cases and 1 police case.

The 2,577 "other examinations" included 310 bacteriological and cytological examinations of various body fluids and exudates; 132 blood cultures; 25 examinations for Vincent's Angina; 374 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 40 samples of "Grade A" milk gave positive biological reactions for tuberculosis and that 1 "Grade A Tuberculin Tested" and 1 "Pasteurised" sample gave similar results.

| | Bacteriological Count and Coliform Content | | | Biological Tests. | | | Grand Total. |
|---|--|----------------|-------|-------------------|----------|-------|--------------|
| | Satisfactory | Unsatisfactory | Total | Negative | Positive | Total | |
| For "Grade A" Standard and "Grade A" Licence. | 281 | 12 | 293 | 65 | 12 | 77 | 370 |
| | 264 | 37 | 301 | 105 | 12 | 117 | 418 |
| | 263 | 51 | 314 | 104 | 7 | 111 | 425 |
| | 268 | 17 | 285 | 79 | 9 | 88 | 373 |
| For "Grade A.T.T." Standard and "Grade A.T.T." Licence. | 61 | 2 | 63 | 11 | — | 11 | 74 |
| | 58 | 11 | 69 | 24 | 1 | 25 | 94 |
| | 52 | 24 | 76 | 16 | — | 16 | 92 |
| | 56 | 5 | 61 | 16 | — | 16 | 77 |
| For "Certified" Standard, and "Certified" Licence. | 10 | 1 | 11 | 2 | — | 2 | 13 |
| | 14 | — | 14 | 6 | — | 6 | 20 |
| | 10 | 6 | 16 | 5 | — | 5 | 21 |
| | 12 | 3 | 15 | 3 | — | 3 | 18 |
| For "Grade A. Pasteurised" Standard. | 3 | — | 3 | — | — | — | 3 |
| | 3 | — | 3 | 2 | — | 2 | 5 |
| | 3 | — | 3 | 1 | — | 1 | 4 |
| | 1 | 1 | 2 | — | — | — | 2 |
| For "Pasteurised" Standard. | 34 | 2 | 36 | 12 | — | 12 | 48 |
| | 28 | 3 | 31 | 33 | 1 | 34 | 65 |
| | 33 | 4 | 37 | 36 | — | 36 | 73 |
| | 38 | 4 | 42 | 31 | — | 31 | 73 |
| Submitted by farmers, retailers and others for their own information. | 3 | 1 | 4 | 5 | — | 5 | 9 |
| | 8 | 5 | 13 | 4 | 1 | 5 | 18 |
| | 5 | 6 | 11 | — | 2 | 2 | 13 |
| | 3 | — | 3 | 2 | — | 2 | 5 |
| Milk and Dairies (Consolidation) Act, 1915. | 268 | 57 | 325 | 523 | 88 | 611 | 936 |
| | 388 | 98 | 486 | 689 | 82 | 771 | 1257 |
| | 188 | 116 | 304 | 571 | 81 | 652 | 956 |
| | 387 | 114 | 501 | 814 | 83 | 897 | 1398 |
| Tuberculosis Order, 1925. | — | — | — | 3 | 2 | 5 | 5 |
| | — | — | — | 5 | — | 5 | 5 |
| | — | — | — | 1 | 1 | 2 | 2 |
| | — | — | — | — | — | — | — |
| Special Investigation Fole Dairy. | 136 | 39 | 175 | 251 | 46 | 297 | 472 |
| | 19 | 22 | 41 | 111 | 29 | 140 | 181 |
| | — | — | — | 278 | 41 | 319 | 319 |
| | — | — | — | 91 | 11 | 102 | 102 |
| School Milks submitted by Official Veterinary Officers. | 77 | 49 | 126 | — | — | — | 126 |
| | 2974 | 690 | 3664 | 3899 | 509 | 4408 | 8072 |

The particulars of the biochemical and pathological investigations were as follows:—

PATHOLOGICAL AND BIOCHEMICAL WORK CONDUCTED DURING THE
YEAR 1934.

Fractional Test Meals.

Specimens of gastric contents 549

Urea (estimation of).

Urine 40
Blood 64
Cerebrospinal fluid 1
Abdominal fluids.. .. 2

Glucose (estimation of).

Urine 33
Blood 58

Blood.

Grouping 21
Estimation of hæmoglobin 31
Estimation of calcium 3
Differential count of white cells.. .. 39
R.B.C. count 28
Leucocyte count 30
Sedimentation Rate 2
Estimation of phosphorus 1
Reticulocyte count 3

Urine.

Bile content 1
Diastase content 2
Examination for lead 1
Acetone Derivatives 4
Albumin estimation 1

Examination of Calculi 2

Examination of sodium taurocholate 1

Fæces.

Examination for occult blood 1

Pathological Sections of human organs and tissues .. 188

1106

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 1934.

| | For Detection of | | For Wassermann Reaction | Sigma & Kahn Reactions | Other Examinations | Total |
|-------------|------------------|-----------|-------------------------|------------------------|--------------------|-------|
| | Spirochætes | Gonococci | | | | |
| 1st Quarter | 1 | 323 | 1764 | 1693 | 246 | 4027 |
| 2nd Quarter | 2 | 294 | 1681 | 1687 | 243 | 3907 |
| 3rd Quarter | 3 | 294 | 1681 | 1635 | 276 | 3889 |
| 4th Quarter | 1 | 287 | 1700 | 1785 | 322 | 4095 |
| Total .. | 7 | 1198 | 6826 | 6800 | 1087 | 15918 |

The 1,087 "other examinations" included under the Venereal Diseases Scheme were:—90 cerebrospinal fluids for cell count, globulin estimation and colloidal gold test; 966 complement fixation tests for gonorrhœa; the examination of 9 urines for gonococci; the making of 19 cultures for gonococci; and the examination of 3 pathological sections.

Chemical Laboratory

Mr. E. V. Jones, the County Analyst, reports that during 1934 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, Essence of | 1 | — | 1 | — | — | — |
| Almonds, Ground | 1 | — | 1 | — | — | — |
| Aniseed, Balsam of | 1 | — | 1 | — | — | — |
| Baking Powder | 4 | 1 | 3 | — | — | — |
| Banana Cream | 2 | — | 2 | — | — | — |
| Barley, Pearl | 8 | 7 | 1 | — | — | — |
| Beef, Pressed | 1 | — | 1 | — | — | — |
| Beeswax | 1 | — | 1 | — | — | — |
| Bicarbonate of Soda | 1 | — | 1 | — | — | — |
| Brawn | 6 | — | 6 | — | — | — |
| Brimstone, Flour of | 1 | — | 1 | — | — | — |
| Brisling in Olive Oil | 1 | — | 1 | — | — | — |
| Brisling in Tomato Sauce | 1 | — | 1 | — | — | — |
| Butter | 31 | 12 | 19 | — | — | — |
| Cakeoma | 1 | — | 1 | — | — | — |
| Camomile Flowers | 1 | — | 1 | — | — | — |
| Caraways | 1 | — | 1 | — | — | — |
| Cheese | 8 | — | 8 | — | — | — |
| Cherries, Preserved | 1 | — | 1 | — | — | — |
| Cider | 1 | 1 | — | — | — | — |
| Cocoa | 2 | — | 2 | — | — | — |
| Cocoa, Malted Milk with Eggs | 1 | 1 | — | — | — | — |
| Coconut, Desiccated | 2 | 1 | 1 | — | — | — |
| Coconut, Desiccated, Tinted | 1 | — | 1 | — | — | — |
| Cod Liver Oil Emulsion | 1 | — | 1 | — | — | — |
| Coffee | 4 | 1 | 3 | — | — | — |
| Confectionery, Chocolate | 3 | — | 3 | 1 | — | 1 |
| Cornflour | 1 | 1 | — | — | — | — |
| Cream | 4 | — | 4 | — | — | — |
| Cream, Tinned.. .. . | 7 | — | 7 | 1 | — | 1 |
| Currants | 3 | — | 3 | — | — | — |
| Custard Powder | 3 | 1 | 2 | — | — | — |
| Dripping | 5 | 1 | 4 | 2 | — | 2 |
| Epsom Salts | 1 | — | 1 | — | — | — |
| Eucaliptics (Menthol and Eucalyptus) | 1 | — | 1 | — | — | — |
| Figs, Syrup of | 1 | — | 1 | — | — | — |

| SAMPLES. | Number Examined | | | No. Adulterated or below Standard. | | |
|---|-----------------|--------|----------|------------------------------------|--------|----------|
| | Total | Formal | Informal | Total | Formal | Informal |
| Mustard, Ready Mixed | 1 | — | 1 | — | — | — |
| Oatmeal | 3 | 1 | 2 | — | — | — |
| Oats, Rolled | 1 | — | 1 | — | — | — |
| Oats, Waverley | 1 | 1 | — | — | — | — |
| Oil, Camphorated | 5 | — | 5 | — | — | — |
| Oil, Castor | 5 | — | 5 | — | — | — |
| Oil, Eucalyptus | 2 | — | 2 | — | — | — |
| Oil, Mustard and other Oils with Camphor | 1 | — | 1 | — | — | — |
| Oil, Olive | 6 | — | 6 | — | — | — |
| Ointment, Calomel | 2 | — | 2 | 1 | — | 1 |
| Ointment, Iodine | 1 | — | 1 | — | — | — |
| Ointment, Zinc | 2 | — | 2 | — | — | — |
| Parrish's Chemical Food (not B.P.).. | 1 | — | 1 | — | — | — |
| Parsley, Dried | 1 | — | 1 | — | — | — |
| Paste, Bloater | 3 | — | 3 | — | — | — |
| Paste, Crab | 2 | — | 2 | — | — | — |
| Paste, Lobster | 1 | — | 1 | — | — | — |
| Paste, Prawn | 1 | — | 1 | — | — | — |
| Paste, Salmon and Shrimp | 3 | — | 3 | — | — | — |
| Peas, Dried | 1 | — | 1 | — | — | — |
| Pepper | 14 | 3 | 11 | — | — | — |
| Peppermints | 1 | — | 1 | — | — | — |
| Raspberry Vinegar and Olive Oil .. | 3 | — | 3 | — | — | — |
| Rice | 7 | 4 | 3 | — | — | — |
| Rice Flakes | 1 | — | 1 | — | — | — |
| Rice, Ground | 6 | 5 | 1 | — | — | — |
| Sardines in Olive Oil | 1 | — | 1 | — | — | — |
| Sausage | 15 | 2 | 13 | 4 | 2 | 2 |
| Sausage, Preserved | 2 | — | 2 | — | — | — |
| Scones | 1 | — | 1 | — | — | — |
| Semolina | 11 | 9 | 2 | — | — | — |
| Sild in Olive Oil | 3 | — | 3 | — | — | — |
| Sild in Tomato Sauce | 1 | — | 1 | — | — | — |
| Spirits, Gin | 1 | — | 1 | — | — | — |
| Spirits, Whisky | 6 | — | 6 | 1 | — | 1 |

| SAMPLES. | Number Examined. | | | No. Adulterated or below Standard. | | |
|-----------------------------|------------------|--------|----------|------------------------------------|--------|----------|
| | Total | Formal | Informal | Total | Formal | Informal |
| Stout | 1 | — | 1 | — | — | — |
| Suet, Shredded Beef | 4 | 1 | 3 | — | — | — |
| Sugar | 3 | — | 3 | — | — | — |
| Sugar, Demerara | 4 | 3 | 1 | — | — | — |
| Sulphur, Flowers of | 2 | — | 2 | — | — | — |
| Tapioca | 4 | — | 4 | — | — | — |
| Tea | 20 | 18 | 2 | — | — | — |
| Toffee, Treacle | 1 | — | 1 | — | — | — |
| Tongue | 1 | — | 1 | — | — | — |
| Vinegar | 1 | — | 1 | — | — | — |
| Vinegar, Malt | 16 | 11 | 5 | — | — | — |
| | 2020 | 1335 | 685 | 189 | 146 | 43 |

FERTILIZER AND FEEDING STUFFS ACT, 1926.

| | Total. | Satisfactory. | Unsatisfactory. |
|---------------------------------|--------|---------------|-----------------|
| Rose Fertilizer | 2 | 2 | — |
| Superphosphate | 1 | 1 | — |
| Meat and Bone Meal | 1 | 1 | — |
| Pure Hoof Meal | 1 | 1 | — |
| Sweet Pea Fertilizer | 1 | 1 | — |
| General Fertilizer | 2 | 1 | 1 |
| Organic Lawn Fertilizer | 1 | — | 1 |
| | 9 | 7 | 2 |

Of the 9 samples submitted, 1 General Fertilizer was 0.64% below the Guarantee in Water Soluble Phosphate, and 1 Organic Lawn Fertilizer was 1.36% below the Guarantee in Water Soluble Phosphate. Both these articles were informal samples from the same firm, who guaranteed the Phosphates in terms of Tri-Calcium Phosphate instead of Phosphoric Anhydride, and the Nitrogen was guaranteed in terms of Ammonia instead of Nitrogen as required by the Regulations.

CORONER SAMPLES.

Six cases were sent to this Laboratory, consisting altogether of 66 samples.

POLICE SAMPLES.

One was a box of Female Pills for analysis, and the other a tin of Cocoa alleged to contain poison.

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

327 samples of *Drinking Water*, of which 121 were of satisfactory quality, 106 contained sewage, 23 were organically impure, 41 were of doubtful quality, 8 contained metallic contamination, 1 was condemned as unsuitable for drinking on account of its hardness, 13 contained both animal and vegetable pollution, 8 contained both sewage and metallic pollution, 1 contained both organic and metallic contamination, and 5 were only partially analysed.

151 *River Waters*, of which 82 were for full analysis and 69 for partial analysis.

95 *Effluents*, of which 70 were for full analysis and 25 for partial analysis.

10 *Crude Sewage*, of which 4 were for full analysis and 6 for partial analysis.

Nine samples of *Water* were examined.

One *Deposit* from Swimming Bath Plant.

Two samples of *Stone* for Silica.

One *Lung* for Silica.

35 samples of *Coal*.

Four samples of *Milk*.

One *Calculus* for Silica.

Four samples of *Dried Milk*.

Two samples of *Urine* for Lead.

One sample of *Margarine*.

One sample of *Olive Oil*.

One sample of *Dust* for full analysis.

Six *Meat Extracts*.

Two *Organs* from Sheep for Metallic Contamination.

ADDITIONAL WORK.

STOKE-ON-TRENT.

| | | | | | |
|-----------------------------------|----|----|----|----|-----|
| Food and Drug Samples | .. | .. | .. | .. | 812 |
| Fertilizer and Feeding Stuffs Act | .. | .. | .. | .. | 7 |
| Rag Flock Act | .. | .. | .. | .. | 4 |
| Public Health Department | .. | .. | .. | .. | 4 |

NEWCASTLE-UNDER-LYME.

| | | | | | |
|-----------------------|----|----|----|----|----|
| Food and Drug Samples | .. | .. | .. | .. | 95 |
|-----------------------|----|----|----|----|----|

Hospitals

In my Annual Report for 1930 full details were given of the County's Hospital Services and I have already referred, on page 17, to the County Council's proposal 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 eight 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 1934, 156 cases were treated for the Joint Tuberculosis Committee, of which 56 were discharged to attend the After-care Centres and 6 patients died. The Education Committee were responsible for 18 cases during the year, the Health Visiting Committee for 17, and the Public Assistance Committee for 8. 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 three teachers, and because 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 23; three exemptions from registration previously allowed were continued. Two applications for registration were received in 1934, and were granted. Three Homes were given up. The 23 homes registered, with the exception of 6, are for one or two beds only. 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 confinement 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 1934, 13 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 1934 twelve 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 27 patients who complied with these conditions were sent by the County Council.

In addition, two patients were sent to the Lichfield Public Assistance Institution and two to the Rosemary Ednam Maternity Home, Sedgley. 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.

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 six 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. | |
| 1929 | 13,675 | 17 | 42 | 4.3 |
| 1930 | 13,823 | 22 | 23 | 3.2 |
| 1931 | 13,338 | 11 | 29 | 3.0 |
| 1932 | 12,917 | 21 | 29 | 3.9 |
| 1933 | 11,960 | 19 | 18 | 3.1 |
| 1934 | 12,497 | 28 | 27 | 4.4 |

It will be observed that the maternal mortality rate for 1934 is greater than that for the previous year, 55 cases dying from puerperal sepsis or other diseases and accidents of parturition, compared with 37 in 1933. It is disappointing to have to report this result in view of the efforts that are being made to diminish maternal mortality. The majority of the deaths occurring during 1934 have been the subject of a special investigation and reports on these have been forwarded to the Ministry of Health for the consideration of the Special Committee set up some years ago. From a scrutiny of these reports it would appear that there is no special factor in this County to which the maternal deaths can be attributed: such factors as the age of the woman, the sufficiency, or otherwise, of ante-natal care and supervision, the circumstances of the mother, the facilities available for treatment and the number of cases in which interference at labour has been necessary, have all been taken into account, but no definite conclusions can be drawn from the data at our disposal.

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 13 deaths were so reported out of a total of 55 maternal deaths registered.

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

| | | |
|---|----|---|
| Ante-Partum and Post-Partum Hæmorrhage.. | .. | 1 |
| Cellulitis | .. | 1 |
| Cerebral Embolism | .. | 1 |
| Nephritis | .. | 1 |
| Placenta Prævia and Post-Partum Shock .. | .. | 1 |
| Post-Partum Eclampsia.. .. . | .. | 1 |
| Post-Partum Hæmorrhage and Shock.. .. | .. | 1 |
| Pyelitis (Acute) and Post-Partum Hæmorrhage | .. | 1 |
| Uræmia | .. | 1 |
| Illegal Operation.. .. . | .. | 1 |
| Pneumonia | .. | 3 |

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 have been established in connection with various 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 30 occasions as against 18 in 1933.

(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.

(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 1934 :—

PUERPERAL PYREXIA NOTIFICATIONS, 1934.

| | <i>In Health</i> | <i>Not in Health</i> | |
|--------------------|-----------------------|-----------------------|---------------|
| | <i>Visiting Area.</i> | <i>Visiting Area.</i> | <i>Total.</i> |
| Urban Districts .. | 32 | .. 34 | .. 66 |
| Rural Districts .. | 16 | .. — | .. 16 |
| | | | — |
| | | | 82 |
| | | | — |

The case rate per thousand of the population for the County was 0·11, whilst that for England and Wales was 0·15.

When calculated on the basis per thousand total births (live and stillbirths) the rate for Staffordshire is 6·5 and for England and Wales 9·6.

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, 1934.

| | <i>In Health</i> | <i>Not in Health</i> | |
|--------------------|-----------------------|-----------------------|---------------|
| | <i>Visiting Area.</i> | <i>Visiting Area.</i> | <i>Total.</i> |
| Urban Districts .. | 13 | .. 13 | .. 26 |
| Rural Districts .. | 12 | .. — | .. 12 |
| | | | — |
| | | | 38 |
| | | | — |

The case rate per thousand of the population for the County was 0·05 as compared with 0·06 for England and Wales.

When calculated on the basis per thousand total births (live and stillbirths) the rate for Staffordshire is 3·0 and for England and Wales 4·0.

The midwives under their rules have also to notify to the Local Supervising Authority any rises of temperature in their practice and these, which number 113, were specially investigated

by the Midwives' Inspectors, who reported that the conditions to which they were due were as follows :—

| | |
|--|----|
| Cellulitis | 1 |
| Cystitis | 2 |
| Difficult Delivery | 1 |
| Engorged Breasts | 1 |
| Fibroid | 1 |
| Lacerated Perineum | 3 |
| Mastitis.. .. . | 19 |
| Offensive Lochia | 2 |
| Old Cervical Tear | 1 |
| Pelvic Thrombosis | 2 |
| Phlebitis | 1 |
| Phlegmasia Alba Dolens | 1 |
| Puerperal Insanity | 4 |
| Purulent Discharge | 1 |
| Pyelitis | 2 |
| Retained Clots.. .. . | 1 |
| Retained Membranes | 11 |
| Salpingitis | 2 |
| Sapræmia | 7 |
| Septicæmia | 5 |
| Septic Laceration | 1 |
| Suppurative Perineum | 1 |
| Unsatisfactory General Condition | 4 |
| Alveolar Abscess | 1 |
| Appendicitis | 1 |
| Bronchitis | 2 |
| Chill | 3 |
| Constipation | 9 |
| Debility | 1 |
| Duodenal Ulcer | 1 |
| Heart Disease (Chronic) | 1 |
| Influenza | 7 |
| Neuritis.. .. . | 1 |
| Pneumonia | 6 |
| Scarlet Fever | 1 |
| Septic Throat | 2 |
| Tonsillitis | 2 |
| Tuberculosis | 1 |

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 9 cases, and 39 cases sent to hospitals. In 6 instances the patients remained at home and special nursing was provided.

In addition to the cases referred to above, it was ascertained that 13 patients from the Health Visiting area were sent to hospital and three were seen by a Consultant through other agencies.

Infantile Mortality.

The infant mortality rate for 1934 was 57 per 1,000 live births, as against 69 last year. The rate in urban districts was 59 compared with 72, and in the rural districts 53 as against 63 in the previous year. In England and Wales in 1934 the infant mortality rate was 59 compared with 64 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, the rate for 1934 being exactly the same as that for 1925.

| Year. | Live Births. | Deaths of Children under one year of age from Congenital Debility, Malformations, and Premature Birth, &c. | Death-rate per 1,000 Live Births. |
|-------|--------------|--|-----------------------------------|
| 1925 | 15,241 | 511 | 33·5 |
| 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 |

Under the rules of the Central Midwives' Board, deaths of infants within the first 10 days of life are notified by midwives

and 162 deaths were so reported, the causes of death being as follows :—

| | |
|---|-----|
| Asphyxiated | 6 |
| Cerebral Hæmorrhage.. .. . | 1 |
| Congenital Heart | 15 |
| Convulsions | 15 |
| Deformities | 15 |
| Feebleness and Prematurity.. .. . | 100 |
| Inattention at birth | 1 |
| Injury at birth.. .. . | 1 |
| Jaundice | 2 |
| Over-lying | 1 |
| Pneumonia (Broncho).. .. . | 1 |
| Serious Skin Eruption | 1 |
| Spina bifida | 1 |
| Unsatisfactory Condition of Mother.. .. . | 2 |

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.

Health Visiting Scheme.

As mentioned below, on the 1st April, 1934, the County Health Visiting Area was considerably increased by the addition of 8 Sanitary Districts. When this change took effect 19 Infant Welfare Centres, previously administered by the Authorities concerned, were taken over, as follows :—

| | |
|------------------------|---|
| Alrewas | Oddfellows' Hall. |
| Amblecote | Wesleyan Methodist School. |
| *Armitage | Primitive Methodist Temple. |
| Brewood | Congregational Church. |
| *Brierley Hill | 16, Moor Street. |
| *Chasetown | Social Institute. |
| *Cheslyn Hay | Salem Chapel. |
| *Darlaston | Jane Mills Institute. |
| Essington | Nurses' Home, Brownshore Lane. |
| *Featherstone | United Methodist Chapel. |
| Great Wyrley | Wesleyan School, Landywood. |
| Huntington | St. Thomas' Church Institute. |
| *Leek | Cripples' Aid Society Clinic, Salisbury St. |
| *Penkridge | Peace Memorial Hall. |
| Shareshill | Temperance Hall. |
| Shenstone | Oddfellows' Hall. |
| Stone | Christ Church Parish Hall. |
| *Tettenhall | Council Offices, Upper Green. |
| Whittington | Girls' Club. |

*Equipped as Ante-natal Clinics.

The County Council now have 34 Combined School Clinics and Infant Welfare Centres and 25 Infant Welfare Centres. These Centres serve the more populous portions of the County Health Visiting Area, and, with the exception of the very smallest Centres, special arrangements have been made for ante-natal work. In addition to these Centres, Voluntary Centres at Tutbury and Kings Bromley have been in operation, apart from the County Council Scheme.

As already mentioned, on the 1st April, 1934, there was an extension of the County Health Visiting Area. The Minister of Health in the exercise of his powers under Sections 60 and 61 of the Local Government Act, 1929, made an Order, cited as the Stafford (Transfer of Maternity and Child Welfare Service) Order, 1934, transferring certain services under the Maternity and Child Welfare Act, 1918, in the under-mentioned districts to the County Council, and also made the County Council the authority for the purpose of the Notification of Births Act, 1907 :—

Amblecote Urban District.
Brierley Hill Urban District.
Darlaston Urban District.
Leek Urban District.
Stone Urban District.
Tettenhall Urban District.
Cannock Rural District.
Lichfield Rural District.

In all these areas the County Council is the Authority for Elementary Education, and the Order was made as it was deemed advisable that they should also take over the Maternity and Child Welfare work, so that the same Medical and Health Visiting Staffs could be responsible for the duty of looking after the children from the time of birth until they leave school.

The Order mentioned was not made until the 27th March, 1934, and it was impossible for the County Council to take over control immediately ; in order to avoid an *interregnum* the District Councils concerned were asked if they would administer the services on our behalf until the 30th September, 1934. This they readily agreed to do, and thus gave us ample time to reorganise and absorb the various schemes.

Nineteen Infant Welfare Centres existed in the eight districts, and were taken over, the list of which is given on page 50. Except in Darlaston and Tettenhall, these were served by part-time Medical Officers, and our staff of Assistant Medical Officers was increased by one so that, with the exception of the Brewood and Penkrige Centres, whole-time Officers are in attendance.

In addition, the Lichfield Rural District Council had an Ultra-Violet Ray Clinic, the equipment of which was transferred to the County Council Infant Welfare Centre in Lichfield, where it is to be continued, and the Leek Urban District had a special Antenatal Clinic attended by Mr. T. H. Richmond, the Consulting Obstetrician, where no change has been made, the services of the Specialist being retained.

With regard to the Health Visiting Staff, except in the Stone Urban District where the health visiting work was performed by the local Nursing Association, whole-time Health Visitors were employed, and ten were taken over on the 1st April. On considering the matter it was decided that this number could not adequately deal with the population in the transferred area, and it was agreed to appoint two additional Health Visitors, and merge into the Health Visiting Staff six nurses who had previously been engaged solely in School Medical Inspection. These last mentioned additions took place on the 1st October, 1934, the date on which the County Council took over full control of the service.

The districts served by Part-time Health Visitors had also to be reorganised, both in view of alterations in boundary under the Staffordshire Review Order, 1934, and the extension of the whole-time staff. The Castle Church Nursing Association, Stafford, ceased to exist on the 1st April owing to the fact that the majority of the area it served was added to the Municipal Borough of Stafford on that date, and the health visiting work was taken over by a whole-time Officer. When the general reorganisation took place on the 1st October, the Part-time Health Visiting Area was again diminished, for it was found that with the additional Whole-time Health Visitors their districts could be extended further. As a result, the areas previously served by the under-mentioned Nursing Associations in the late Tamworth Rural District portion of the Lichfield Rural District, and by an emergency nurse in the Uttoxeter Rural District, were so absorbed:—

Fazeley Nursing Association.

Hints and Weeford Nursing Association.

Lapley and Wheaton Aston Nursing Association.

The areas served by the remaining Nursing Associations were also subject to review as a result of the alterations in boundary, and the matter was satisfactorily settled in consultation with the Superintendent of the County Nursing Association.

As to the work undertaken by the several Local Authorities, whose districts were taken over for Maternity and Child Welfare purposes, in a few instances it was practically similar to the scheme of the County Council, but in others developments were required.

At their meeting in December the Health Visiting Committee considered and approved a report I had submitted dealing with various suggestions which had previously been made by the Minister of Health, as to extending the Maternity and Child Welfare Service, as follows :—

- (a) The appointment of an Assistant Medical Officer with special experience in Maternity and Child Welfare work, in order that special attention could be given to the development of ante-natal work.
- (b) The provision of dental treatment for mothers and children, necessitating the appointment of an Assistant Dental Surgeon and a Dental Nurse.
- (c) The extension to the pre-school child of the facilities which exist for the treatment of defects found in school children.

In the Darlaston and Leek Urban Districts, schemes were in force for the institutional treatment of ailing babies, and it was decided to continue this, as it was also decided to carry on Ultra-Violet Light Treatment at the Cripples' Centre, Leek, where the Leek Urban District Council previously had an arrangement.

Where they differed from our own, the arrangements made with Obstetric Consultants and Hospital Authorities in the districts taken over by the County Council were continued.

The extension of the ante-natal scheme mentioned in previous reports, whereby in scattered Rural Districts where no ante-natal centres are available, the patient can be sent to the local practitioner for ante-natal supervision, the County Council being responsible for his fee, came into operation in July, 1935. The Cannock Rural District Council already had such a scheme when the transfer took place, and it was continued by the County Council as from the 1st April. During the nine months ended 31st December, 1934, 39 ante-natal examinations were made under this arrangement.

With regard to midwives, in the Cannock and Lichfield Rural Districts a scheme was in force for the payment of a fee of 10s. 0d. where a case was lost as a result of the operation of the Councils' schemes. This was continued, and it is proposed to extend the principle to the whole of the County Health Visiting Area. During 1934 only four applications were made for this fee. The payment of Midwives' fees in necessitous cases, which had previously been considered, was brought into operation in July, 1935.

The particulars of the Health Visiting work which follow relate, of course, to the late Health Visiting Area for the whole of

1934, and to the added areas for the nine months ended 31st December.

As I have mentioned, the County Health Visiting Area now serves a population of 424,881, which, at the end of the year, included 17 urban and the 10 rural districts.

In the table at the end of the report will be found details of the work at the Centres.

During 1934, 1,294 attendances were made by expectant mothers, 556 attending for the first time, 35,037 attendances by children under one year, and 39,706 by children between one and five years.

The work of the Centres 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.

ORTHOPÆDICS.

Seventy-two new cases as against 97 last year were sent to Orthopædic Clinics for out-patient treatment in the first instance, and 32 cases were taken over from the transferred areas on the 1st April, as follows :—

| | <i>New Cases.</i> | <i>From transferred Areas.</i> |
|---|-------------------|--------------------------------|
| Arthritis | 1 | — |
| Bow Legs | 11 | 2 |
| Congenital Deformities | — | 2 |
| Congenital Dislocation of Hip | 1 | 1 |
| Flat Feet | 2 | 2 |
| Fracture | — | 1 |
| Knock Knees | 7 | 2 |
| Knock Knees allied with flat feet, etc. | 11 | 1 |
| Metatarsus Varus (Club Foot) | 4 | 4 |
| Paralysis | 10 | 5 |
| Rickets | 12 | 3 |
| Talipes—Equino Varus : Calcaneus | 4 | 3 |
| Torticollis | 4 | — |
| Valgoid Ankles | 2 | — |
| Miscellaneous | 3 | 6 |

It will be noted that only fifteen 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.

Seventeen children received in-patient treatment at Standon Hall Orthopædic Hospital, eight of whom were admitted during the year.

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

With regard to out-patient treatment, I give below details of the attendances during the year :—

| | | |
|--|---------|------|
| No. of children who attended during the year | .. | 262 |
| Removals on account of :— | | |
| Discharged cured.. | | 34 |
| Left the area | | 3 |
| Died | | 2 |
| Attained school age | | 27 |
| Transferred to Joint Committee for Tuberculosis.. | | 1 |
| Treatment refused | | 19 |
| No treatment necessary.. | | 1 |
| | | — 87 |
| No. of cases at end of year | | 175 |

The total number of attendances at Out-patient Clinics during the year was 2,531.

ARTIFICIAL LIGHT TREATMENT.

As previously stated, ultra-violet light treatment is given at Leek and Lichfield. Twenty-seven children under 5 years of age attended the former clinic and 32 the latter, the total attendances being 852 and 461 respectively. In addition, one expectant mother made 8 attendances at the Lichfield Clinic.

OPHTHALMIC TREATMENT.

The eye cases in children under 5 seen by the County Ophthalmic Surgeon included 106 new cases, for whom glasses were necessary in 66 instances. In 26 cases other forms of treatment were advised. 242 other cases seen previously were re-examined. In 9 cases the Committee provided the glasses prescribed, and in one case half the cost was allowed.

DENTAL TREATMENT.

During the year 1934 the dental staff of the County Council attended to the dental needs of 39 nursing and expectant mothers and of 227 "toddlers." In addition, 32 mothers and 40 "toddlers" were inspected in relation to the special enquiry of the Ministry of Health concerning dental conditions of these classes and this enquiry, which commenced on October 28th, 1930, has been completed and the results forwarded to the Ministry. The enquiry was carried out, in conjunction with the Medical Officers, at the following centres:—

| | |
|---------------|---------------|
| Willenhall. | Short Heath. |
| Pensnett. | Wednesfield. |
| Sedgley. | Kingswinford. |
| Lower Gornal. | |

It has afforded much valuable data on points which were previously only a matter of conjecture and has indirectly laid the foundation for a more thorough and comprehensive scheme which it is hoped to introduce gradually throughout the County.

The treatment cases arose as shown in the following table, which also enumerates the treatment given:—

| Centre | No. of patients seen | | Extractions | | Fillings | Dressings | Sundries |
|-----------------------|----------------------|---------|-------------|-------------|----------|-----------|----------|
| | Mothers | Child'n | Temp. teeth | Perm. teeth | | | |
| Darlaston | 5 | 31 | 44 | 35 | 0 | 0 | 3 |
| Brierley Hill | 2 | 18 | 26 | 0 | 0 | 0 | 0 |
| Leek | 0 | 22 | 22 | 0 | 6 | 4 | 0 |
| Uttoxeter | 0 | 12 | 23 | 0 | 0 | 1 | 2 |
| Stafford Rural | 0 | 37 | 45 | 0 | 2 | 3 | 3 |
| Audley | 0 | 6 | 7 | 0 | 0 | 0 | 0 |
| Willenhall | 7 | 13 | 22 | 60 | 1 | 0 | 0 |
| Sedgley | 21 | 31 | 54 | 127 | 0 | 10 | 0 |
| Lichfield | 0 | 6 | 8 | 0 | 0 | 4 | 0 |
| Brownhills | 2 | 24 | 35 | 5 | 0 | 1 | 3 |
| Newcastle Rural | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| Biddulph | 0 | 12 | 16 | 0 | 5 | 1 | 2 |
| Cannock Rural | 2 | 5 | 8 | 20 | 0 | 0 | 0 |
| Total | 39 | 218 | 312 | 247 | 14 | 24 | 13 |

In addition to the operations tabulated, 13 cases of dentures were completed, the cost of two of same being borne by the Public Assistance Committee and the remainder of these dentures by the patients. These dentures consisted of nine cases of complete and four cases of partial replacement.

HEALTH VISITORS.

At the end of the year there were 56 whole-time Health Visitors compared with 38 the previous year, the added areas accounting for this increase. These Health Visitors serve a population of approximately 354,621, two of them being Lecturers on Mothercraft. There are 40 part-time Health Visitors serving a population of approximately 70,260, 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 | 1,890 |
| (2) Total visits | 5,921 |

To infants under 1 year.

| | |
|--------------------------|--------|
| (1) First visits | 6,086 |
| (2) Total visits | 54,266 |

To children, 1—5 years.

| | |
|----------------------|---------|
| Total visits | 107,026 |
|----------------------|---------|

LECTURES.

Talks on mothercraft, which were instituted four years ago, have been continued at the Infant Welfare Centres. During the year talks were given at 437 sessions of 35 Centres in various parts of the Health Visiting Area, at which there were 8,959 attendances of mothers. 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, &c.), 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 carried out 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 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, 1934 | 68 |
| Number of reports on visits to children received during the year 1934 | 514 |
| Number of new cases during 1934, for which pre- liminary reports were sent in by Health Visitors | *36 |
| Number of foster parents on Register at end of 1934 | 67 |

* This number includes 20 cases taken over when the districts previously mentioned were added to the County Health Visiting Area on 1st April.

In addition, the registration was continued of the home mentioned in my last report, where children are received from a large hospital for convalescence, the maximum number being fixed at four, two of which must not be under five years of age. The usual period of stay is approximately two weeks, and during 1934 forty children were received. At the end of the year there were four children in the home.

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 1934.

| CLINIC. | Syphilis | Soft chancre. | Gonorrhoea. | Non-Venereal. | Total. | Attendances. |
|--|------------|---------------|-------------|---------------|------------|--------------|
| Birmingham General Hospital .. | 8 | — | 26 | 22 | 56 | 1509 |
| Burton-on-Trent General Infirmary .. | 2 | — | 2 | 3 | 7 | 128 |
| Derby Royal Infirmary | — | — | 3 | 3 | 6 | 219 |
| Dudley Guest Hospital | 26 | — | 41 | 44 | 111 | 4703 |
| Salford | — | — | — | — | — | 1 |
| Stafford (Staffs. General Infirmary) .. | 25 | — | 21 | 26 | 72 | 2587 |
| Stoke-on-Trent (North Staffs. Royal Infirmary) | 52 | — | 57 | 39 | 148 | 11738 |
| Stoke-on-Trent (Municipal Clinic) .. | 13 | — | 45 | 41 | 99 | 3778 |
| Stourbridge (Corbett Hospital) | 6 | — | 13 | 8 | 27 | 1809 |
| Stockport | — | — | — | — | — | 11 |
| Walsall | 12 | — | 14 | 12 | 38 | 1761 |
| Wolverhampton Royal Hospital .. | 54 | 1 | 97 | 92 | 244 | 6440 |
| TOTALS | 198 | 1 | 319 | 290 | 808 | 34684 |

In comparing the total number of cases treated at the clinics with those for last year it has been found that 808 patients were treated as against 865. 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 1934 there were 38 medical practitioners authorised to receive free supplies of Salvarsan or its substitutes for the treatment of Staffordshire cases in their practices; six doctors on the list availed themselves of this provision during the year.

Water Supplies

I mentioned in my Report for 1933 the problem of rural water supplies, which had exercised the minds of all those concerned with public health. This problem continued during 1934, and in some districts the shortage of water was acute, as plans which had previously been made to improve water supplies where they were known to be inadequate had not been carried out. With the drought which we have experienced during the last two years,

Rural District Councils have been made aware of the difficulties in their areas, and it is hoped that in the near future deficiencies, where they exist, will be made good and existing supplies safeguarded from pollution, so that an adequate supply of pure water should be available even in remote parts of the County.

In April, 1934, the Government allotted £1,000,000 towards establishing new water supplies in rural areas and helping in the improvement of old ones. This money has been distributed in the form of grants, such grants being conditional on the Rural District Council and the County Council contributing towards the cost, either by lump sum or annual payments, an amount at least equivalent to the Exchequer grant. Applications were received from many Rural District Councils during the year and details of these and of the action taken by the County Council are given later in this Report. I mentioned also in my Report for 1933 that a Consulting Engineer had been appointed by the County Council to carry out a survey of certain rural areas, in which the water supply was known to be inadequate or unsuitable. Mr. Waters, the Consulting Engineer, has recently completed this survey and the results of his investigations have been communicated to the Councils concerned, with a view to the necessary action being taken by them.

The problem of water supplies in rural districts is often a difficult one, as the populations are frequently sparse and scattered, and the houses of such low rateable value that little financial return can be expected from the extension of existing schemes or the establishment of new ones. Property owners or tenants who live in isolated parts of the district and who therefore cannot be served by a main, piped supply, naturally feel that they should not be asked to contribute towards a water scheme which does not benefit them, but, of course, it is the need of the greatest number which must be considered in all public health matters.

During 1934, under the ægis of the Ministry of Health, a conference of Local Authorities in the Counties of Staffordshire, Warwickshire, and Worcestershire, and representatives of Water Undertakings, was held at Birmingham, and the County Council were represented there. It was proposed that a Regional Committee should be formed (*a*) to carry out a comprehensive survey of future requirements of water supplies for a long period of years, and to formulate proposals for meeting these requirements for the consideration of the bodies concerned, (*b*) to advise in the preparation and co-ordination of schemes of water supplies within the region. The Chairman of the Public Health Committee has been appointed as the County's representative on this Committee.

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 1934 :—

BIDDULPH U.D.—“ During the year much consideration was given to the question of better storage and distribution. An Inspector from the Ministry of Health held an Inquiry and visited the reservoirs, etc., making suggestions which were later incorporated in the scheme. This provided for an additional engine at the Pumping Station, where for a few years we have been dependent on a single engine to work the pumps and it was also suggested that the new reservoir at Biddulph Park should be placed at some higher altitude than that proposed in our plans, and steps were taken to secure the necessary land. In some parts of the area the original pipes, 60 years old, are now so much narrowed by deposit that the supply is very exiguous. These will need scraping or replacement.

“ All round the higher situated houses and farms on both sides of the valley there has been a water shortage owing to failure of the wells. These have been assisted as far as possible, and at a few places short lengths of piping have been laid, which has relieved the situation, but there are still places left, especially in the Biddulph Park area, to which water should be taken if arrangements can be made.”

KIDSGROVE U.D.—“ *Newchapel Ward.*—The water supply here has been augmented by connecting up to the mains of the Biddulph U.D.C. and obtaining water in bulk from that Authority. The water from this source supplies Long Lane, Stadmoreslow, Newchapel, and Whitehill. The remaining parts of the ward are supplied from the Council's own water works at Mow Cop. This water is obtained from wells 100 feet deep and pumped into a service reservoir high up on Mow Cop. An additional supply of water from the Congleton R.D.C. has been available since 1934 and the supply of water to this ward is now entirely satisfactory in quantity.

“ Owing to the greenish discolouration of this supply of water several samples were submitted for analysis to the County Laboratory in July, 1934, and the condition was reported to be due to the presence of algæ. The reservoir has since been cleaned out and covered and the discolouration has now been completely removed. There are still complaints of excessive hardness of the water.”

LEEK U.D.—“ In September, 1934, an Inspector from the Ministry of Health conducted an Inquiry into the progress of the scheme for supplying additional water from the new bore hole at Pool End (mentioned in the Report for 1933). He was satisfied with the progress already made but urged expedition in order to minimise the risk of a shortage by drought.”

NEWCASTLE BOROUGH.—“ Twelve samples of water were submitted for chemical and bacteriological analysis, eleven of which were reported as unfit. Most of these were taken in the Seabridge area. A piped supply for this area was under consideration at the end of the year.”

RUGELEY U.D.—“ In the area of Brereton about 100 houses are supplied with water from a private supply belonging to the Brereton Collieries. This water at times contains a considerable amount of sediment and two samples submitted to the County Bacteriologist showed evidence of contamination. I understand that the Colliery owners, who are the owners of the houses affected, are hoping to arrange for a supply from the South Staffordshire Waterworks Company.”

STAFFORD BOROUGH.—“ In the area added to the Borough in April there is a number of houses, approximately 23, which draw their supply of water from wells. The probability is that a considerable proportion of these may be unsatisfactory, and two have already been found to be contaminated.”

TAMWORTH BOROUGH.—“ An ample supply of water has been maintained throughout the year and rationing was not resorted to, as the Joint Committee's appeal for economy and to prevent all waste had an excellent response.”

An application was made to the Minister of Health and an investigation made in November, 1934, as to the provision of a proposed new reservoir at Hopwas, with a capacity of one-and-a-half million gallons, at an estimated cost of £11,345. Sanction for this has been received and the work is now in progress. When this is completed the whole of the distribution system will be by gravitation from this reservoir, the top water level of which will be 419.5 O.D. and will afford a good pressure throughout the area of supply.

UTTOXETER U.D.—“ Negotiations have been carried out for a further supply of 7,000 and 6,000 gallons per day to Stramshall and Bramshall from the Uttoxeter Urban District Council's supply.”

CHEADLE R.D.—“Improvements in general sanitation have been numerous both by way of added sewers and extensions to water supplies: of the latter the scheme for the supply of Freehay, Hollington and Boundary is making good progress and the question of a piped supply to Draycott and the added areas of Waterfall, Calton, etc., is having the consideration of the Council. There is a serious shortage of good water in these areas and a piped supply to them is badly needed.

“During the drought it was found desirable to curtail the water supplies in some parts of the district, but in none other than the sparsely populated areas—those areas already known to have a poor supply—and the town of Cheadle itself, where the piped supply was cut off owing to a series of accidents, was there a serious shortage of water. Already the local authority has taken steps to improve the supply to various parts of the district. For Freehay, Hollington and Boundary a comprehensive scheme is in hand. A scheme is also in hand for the supply of that sparsely populated area between Blakeley Lane and Kingsley Moor, and at Waterfall, Calton, etc.—the newly added areas which were found to have a very poor water supply—negotiations are taking place whereby they will probably have a piped supply laid on in the near future.

“At Draycott and Totmonslow the water supply is still very poor although a few houses at the former are supplied by the Staffordshire Waterworks Board.

LICHFIELD R.D.—In April, 1934, the Medical Officer of Health in a special report to his Council on the water supply in general for the district, recommended that steps be taken to obtain pure supplies for those parishes where they were insufficient. The South Staffordshire Waterworks Co., Ltd., was asked to submit schemes for Fradley Village, Chorley, Colton, Kings Bromley, Mavesyn Ridware, Hilton, and plans were later submitted and adopted by the Council. Work was commenced during the year and will be completed about the end of June, 1935.

NEWCASTLE R.D.—Considerable extension of the areas now supplied with water from the mains has taken place during 1934. Anxiety was caused by prolonged drought in the early part of the year and again in the summer. With regard to the piped supplies, no definite shortage was experienced. Appeals for economy were made and these resulted in the conservation of adequate supplies. In certain parts of the district where the supply is derived from shallow wells, there was a serious shortage, occupiers of several farms and houses having to carry water a considerable distance.

In Chorlton Parish, arrangements were made by the Council for water to be obtained from one of the Potteries Water Board

mains, to be carted and delivered at about 20 houses and at 3 farms, during the period July—November. Previous to the drought the Council had in hand the question of mains supplies to most of the parts of the parishes which were affected, and when the scheme has been carried out, shortage owing to the failure of shallow wells will no longer occur, except in a few unavoidable cases.

Ashley Parish.—“The present supply obtained from six public and numerous private wells has been markedly deficient in quantity and the results of analysis have been unsatisfactory in some instances. Of the various schemes considered by the Council the one for obtaining a piped supply from the Pumping Station at Bearstone in the Nantwich Rural District seems to offer the best possibilities.”

Audley Parish.—“Boring near the waterworks for an additional supply was completed during the first week of 1935 and the results of preliminary pumping tests are now awaited.”

Balterley Parish.—“By the end of the year, work had been started on carrying an extension of the main into this small parish from Betley.”

Betley Parish.—Of the 180 houses in the parish practically all, including those at Cracow Moss and Betley Common, are now on the main, the supply being obtained from the Bearstone Waterworks in the Nantwich Rural District.

Chorlton Parish.—“A scheme for purchasing private mains and laying additional mains was put before the Ministry in the autumn.”

Madeley Parish.—The piped supply from Bearstone Waterworks was taken to the village of Onneley during the year.

Maer Parish.—Work was started on laying mains to Weymouth towards the end of the year.

Muccestone Parish.—A piped supply (from Bearstone) was provided at the village of Knighton. With regard to Muccestone Village, if a supply to Ashley Parish is brought from Bearstone it will pass through this village.

SEISDON R.D.—During the year a scheme for a piped supply of water in the Parish of Pattingham was sanctioned. It was hoped to commence work early in 1935.

STAFFORD R.D.—As a result of the drought in 1933 many of the wells throughout the whole district dried up and many

others became so low that the water was found to be unfit for drinking. A Consulting Engineer was engaged to survey the whole Rural District and report on the best means of overcoming the difficulties that stood in the way of an ample and pure supply. The Medical Officer of Health, in anticipation of this report, refrains from making any comment on individual areas. He remarks that generally the succeeding drought of 1934 in the district was such as to aggravate the pre-existing state of affairs.

STONE R.D.—The District Council have had under consideration water schemes for the Parish of Eccleshall, for Yarnfield, and for Moss Gate. The original Eccleshall scheme has been enlarged to provide for Blackwaters, Croxton, Sugnall, and Pershall in the Parish of Eccleshall, as well as for the town of Eccleshall. Water will be provided from a bore hole which has been sunk at Croxton, and on completion of the negotiations now taking place the scheme will be proceeded with forthwith. An application for a grant has been received by the County Council who promised to contribute towards the scheme.

TUTBURY R.D.—It is proposed to extend the water mains in Tutbury by about 1,000 yards. The South Staffordshire Waterworks Company have extended their mains in the Parishes of Outwoods and Rolleston. A scheme is under consideration by the South Staffordshire Waterworks Company for their mains to be extended to Hanbury, where a reservoir will be constructed and the water distributed throughout the village. A supply would also be available for a portion of the Parish of Anslow.

UTTOXETER R.D.—*Abbots Bromley and Admaston*.—The villages of Abbots Bromley and Admaston obtain their water supply from private wells which are far from satisfactory. The chemical and bacteriological analyses show in the majority of cases that the water is not fit for domestic use, and a scheme has been submitted to the Ministry of Health for supplying these Parishes from the South Staffordshire Waterworks Company.

Schemes are now being prepared for a supply of water to the following Parishes:—Marchington, Draycott-in-the-Clay, Kingstone, Ellastone, and Wootton.

Croxden.—Arrangements have been made for a supply of water in bulk from the Cheadle Rural District Council. During the drought the wells throughout the whole district have been severely tested.

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. 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.

RIVER TRENT.

PERCENTAGE OF OXYGEN SATURATION.

| LOCATION. | 1924 | | 1925 | | 1926 | | 1927 | | 1928 | | 1929 | | 1930 | | 1931 | | 1932 | | 1933 | | 1934 | | |
|---|--------|---------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|---------|---------|-------|------|---------|---------|---------|-------|
| | July | Sept. | 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 | 29.47 | 25.35 | 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 | 21.6 | 37.2 | 46.28 | 12.30 | 21.6 | 37.2 |
| River Trent at Darlaston above Stone | 29.49 | 29.30 | 21.29 | 41.34 | 5.43 | 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 | 1.3 | 36.4 | 27.20 | 13.55.5 | 13.55.5 | 55.5 |
| River Trent at Aston, below Stone | 34.43 | 37.30 | 24.29 | 44.5 | 43.29 | 5.43 | 29.5 | 50.5 | 25.0 | 13.5 | 34.0 | 36.5 | 59.0 | 6.6 | 28.2 | 21.15 | Nil | 6.6 | 28.2 | 21.15 | Nil | 25.25 | 25 |
| River Trent at Great Haywood Mill, before receiving River Sow | 37.47 | 38.12 | 21.40 | 33.5 | 50.14 | 4.5 | 41.5 | 13.5 | 31.5 | 33.5 | 39.0 | 50.5 | 56.5 | 36.5 | 37.8 | 32.10 | 17.5 | 36.5 | 37.8 | 32.10 | 17.5 | 30.30 | 30 |
| River Trent at Great Haywood Mill, below Weir | 60.61 | 48.33 | 40.43 | 48.60 | 46.5 | 51.0 | 49.5 | 56.5 | 62.68 | 5.63 | 0.59 | 5.79 | 62.68 | 5.63 | 0.59 | 5.79 | 26.42 | 43.2 | 45.4 | 48.18 | 26.42 | 42.5 | 42.5 |
| River Sow at G.N. Railway Bridge | 58.71 | 66.71 | 40.57 | 52.68 | 5.63 | 0.59 | 5.79 | 62.68 | 5.63 | 0.59 | 5.79 | 62.68 | 5.63 | 0.59 | 5.79 | 75.107 | 70.78 | 71.1 | 67.0 | 75.107 | 70.78 | 70.78 | 78.78 |
| River Sow at Brick Bridge | 59.73 | 102.89 | 33.75 | 36.67 | 5.88 | 5.67 | 5.66 | 52.52 | 52.52 | 88.5 | 67.5 | 66.5 | 58.0 | 87.9 | 63.5 | 66.66 | 81.70 | 87.9 | 63.5 | 66.66 | 81.70 | 70.70 | 70 |
| River Penk at Radford | 60.66 | 115.86 | 56.82 | 26.5 | 34.5 | 66.5 | 64.0 | 91.73 | 42.42 | 66.5 | 64.0 | 91.73 | 42.42 | 66.5 | 64.0 | 65.76 | 82.5 | 77.9 | 71.0 | 65.76 | 82.5 | 66.5 | 66.5 |
| River Sow at St. Thomas | 53.69 | 69.56 | 22.65 | 40.52 | 5.57 | 5.32 | 5.44 | 42.42 | 42.42 | 57.5 | 32.5 | 44.42 | 42.42 | 57.5 | 32.5 | 33.61 | 49.5 | 68.1 | 60.0 | 33.61 | 49.5 | 61.5 | 61.5 |
| River Trent at Weetman's Bridge, near Little Haywood | 43.50 | 38.44 | 27.34 | 27.5 | 51.35 | 48.0 | 38.5 | 29.5 | 29.5 | 35.0 | 48.0 | 38.5 | 29.5 | 39.0 | 44.5 | 36.36 | 29.36 | 39.0 | 44.5 | 36.36 | 29.36 | 36.29 | 36.36 |
| River Trent at High Bridge, below Rugeley Sewage Works | 61.52 | 53.46 | 31.48 | 35.5 | 51.45 | 42.0 | 36.5 | 29.0 | 29.0 | 45.5 | 42.0 | 36.5 | 29.0 | 47.1 | 54.5 | 43.45 | 69.5 | 47.1 | 54.5 | 43.45 | 69.5 | 55.55 | 55.55 |
| River Trent at Wychnor Bridge, above confluence with River Tame | 81.85 | 99.81 | 70.76 | 62.78 | 5.80 | 5.80 | 5.62 | 59.0 | 59.0 | 80.5 | 80.5 | 62.59 | 62.59 | 80.5 | 80.5 | 58.54 | 78.6 | 52.2 | 58.6 | 58.54 | 78.6 | 54.54 | 54.54 |
| River Tame at Walsall Road Bridge, Perry Barr, before entering Birmingham | 32.37 | 13.11 | 21.39 | 37.31 | 5.19 | 0.26 | 0.25 | 42.5 | 42.5 | 19.0 | 26.0 | 25.5 | 42.5 | 32.6 | 23.1 | 19.19 | 7.4 | 32.6 | 23.1 | 19.19 | 7.4 | 13.5 | 13.5 |
| River Tame at Chetwynd Bridge, above confluence with River Trent | 60.45 | 44.46 | 37.46 | 45.53 | 39.0 | 47.5 | 39.36 | 36.5 | 36.5 | 50.0 | 51.5 | 61.0 | 61.5 | 28.0 | 52.0 | 37.37 | 56 | 28.0 | 52.0 | 37.37 | 56 | 53.5 | 53.5 |
| River Trent at Walton Bridge, below junction with River Tame | 74.56 | 42.39 | 45.53 | 56.5 | 67.56 | 57.5 | 57.5 | 47.45 | 45.5 | 61.0 | 53.5 | 57.0 | 71.5 | 29.7 | 57.0 | 49.49 | 64 | 29.7 | 57.0 | 49.49 | 64 | 56.56 | 56.56 |
| River Trent at Burton Bridge (North Boundary of Burton-on-Trent) | 73.65 | 77.57 | 54.62 | 46.5 | 71.5 | 66.5 | 56.5 | 48.52 | 52.5 | 66.5 | 56.5 | 48.52 | 52.5 | 50.6 | 57.7 | 52.52 | 74 | 50.6 | 57.7 | 52.52 | 74 | 49.49 | 49.49 |
| River Dove at Monks' Bridge, above confluence with River Trent | 103.84 | 100.103 | 83.100 | 87.5 | 88.5 | 104 | 105 | 84.78 | 78.5 | 104 | 105 | 84.78 | 78.5 | 87.0 | 96.0 | 102.100 | 109 | 87.0 | 96.0 | 102.100 | 109 | 97.5 | 97.5 |
| River Trent at Willington Bridge, below confluence with River Dove | 82.77 | 82.72 | 58.63 | 62.78 | 5.88 | 5.73 | 5.76 | 62.62 | 62.62 | 88.5 | 88.5 | 73.5 | 76.62 | 65.0 | 78.5 | 68.73 | 73 | 65.0 | 78.5 | 68.73 | 73 | 60.0 | 60.0 |

RIVER MERSEY WATERSHED.

BIDDULPH U.D.—The Council have given careful consideration to the questions arising out of the drainage system, both at the existing sewage disposal works at Marsh Green, and the sewerage and sewage disposal of the southerly part of the district. Formerly, it was always considered that the chief problem was to devise means to prevent the pollution of the Biddulph Brook, but a new problem has developed through the erection of so many houses in the Knypersley area. Also, this Knypersley area lies in the natural drainage system of the River Trent, while the present sewage disposal works are in the Weaver-Mersey Watershed. The sewage from the Knypersley area discharges into the engine pool at Mill Hayes from whence it was pumped to feed boilers at an Ironworks. Owing to the closing of the Ironworks this pumping has ceased resulting in the serious pollution of the Mill Hayes Pool. There is also the further addition that the natural drainage of the most populous section of the part of Horton Parish which was added to Biddulph on 1st April, 1934, is towards the Knypersley area.

The Medical Officer of Health reports :—“ A comprehensive scheme for the whole district seems called for, and when it is being considered it would be well to include in it provision for a water-carriage system of sanitation in the central area.”

KIDSGROVE U.D.—*Newchapel Ward*.—A scheme for carrying out the work of an enlargement of the Rookery sewage works has been commenced and will be completed during 1935. The sewage from Harriseahead, Newchapel and Whitehill, will then be diverted to this sewage works and the treatment of the whole of the sewage of the Newchapel Ward will be concentrated at the Rookery works.

Talke Ward.—A scheme for the treatment of sewage in this ward was mentioned in my Report for 1933. The preparation of the scheme is now practically complete and will be presented to the Ministry of Health at an early date.

NEWCASTLE R.D.—*Audley Parish*.—“ It has not been found possible to commence work on the final part of the Council's scheme for the sewerage of this Parish. Conditions at Wereton, Miles Green, Halmerend and Alsagers Bank, remain in the very unsatisfactory condition referred to in previous Reports. As the Parishes are in a distressed area with a high rate of unemployment, the financial difficulties are great, but the Council is most anxious that the final part of the scheme should be completed as soon as possible. The County Council now make a grant *pro rata* on work that has been done and have promised £1,000 a year when the scheme is complete.

“A periodic inspection is made by a Consulting Engineer of the Audley sewage disposal works: conditions appear to be satisfactory but his last report stated that at some future time it was desirable to provide a settlement tank for the effluent before discharge, as a large amount of inert matter in suspension was leaving the filters and getting into the stream.”

RIVER TRENT WATERSHED.

LEEK U.D.—The new sewage disposal works at Leekbrook were formally opened on the 10th May, 1934. The town has now one sewage disposal works dealing with the whole of the domestic sewage and trade wastes, though the Ladderedge and Birchall areas are not yet coupled up to the main outfall sewer laid through them.

CHEADLE R.D.—“Numerous extensions to sewers have been made but the construction of a new sewage works has been too long delayed at Cheddleton and several nuisances from cesspools, etc., are to be found in that village.

“At the commencement of the year under review, the village of Forsbrook, comprising 99 houses, was drained *via* the road water storm sewers directly into the River Blythe, thus causing a great amount of pollution at this point. The house drains and storm sewers were mostly very old and insanitary in condition.

“Separate soil sewers now being available in the village leading to a sewage outfall works recently provided by the Council, steps were commenced during house inspection work to have properties re-drained to the new sewers, with the result that up to date 58 of the houses have been entirely re-drained and connected with the proper sewer.

“Practically the whole of this work has been attended to following informal action, and when a number of notices already served have been complied with, and subsidiary sewers have been laid as authorised by the Council, the remainder of the houses will be connected up to the outfall works.

“Informal action during the year has also resulted in the provision of modern disposal plants being put down at a recently established Dyeworks at Waterhouses, to treat the trade effluent and protect the river Hamps.

“Two farm premises at Cresswell where drainage was found to be seriously polluting an old Mill Race leading to the River Blythe have been re-drained to proper cesspools to prevent further pollution.

“*Closet Accommodation.*—The number of conversions made from the conservancy system to the water carriage system during the year under review is 89, which compares very favourably with the number dealt with during the previous year.”

NEWCASTLE M.B.—As mentioned in the Report for 1933, agreement has been reached with the City of Stoke-on-Trent whereby certain of the sewage works in Newcastle will be discontinued, the sewage being conveyed by new outfall sewers to the recently constructed works at Strongford Bridge. Some 15,300 yards of new sewers including 10,000 yards of main outfall sewer, were laid during the year in the Clayton, Porthill, Hemstalls Lane, and other housing areas. Portions of the area as yet unsewered include Audley Road (part) and Springwood, High Lane and Black Bank, Ravensdale and Clayton Village. Building development in this latter area is increasing and a sewerage scheme is in hand.

LEEK R.D.—An Inquiry was held by the Ministry of Health into a scheme for sewage disposal at Baddeley Green and in the Parish of Norton-in-the-Moors on the 23rd October, 1934. I understand this has now received sanction, and it is hoped that work will be begun at an early date.

STONE R.D.—*Barlaston.*—Once again I have to report the urgent necessity for a sewage scheme for this village. A scheme is being prepared by a firm of engineers, and I understand the sewage from this district is to be treated at the new Stoke-on-Trent sewage works at Strongford.

STONE U.D.—The question of sewage disposal in this district has been mentioned in previous Reports. Alternative schemes have been prepared by a Consulting Engineer: these are still under consideration by the Council. It is hoped that work on the one which they decide to adopt will be commenced at an early date, as pollution of the river in this area has been taking place for a considerable time.

UTTOXETER U.D.—A scheme for the enlargement of the present works has been presented to the Minister of Health, approved of by him, and arrangements have been made to carry it out.

UTTOXETER R.D.—*Rocester.*—The Medical Officer of Health again reports that the Disposal Works are inadequate.

SEISDON R.D.—A scheme has been formulated for the extension of the Codsall Sewage Disposal Works.

BROWNHILLS U.D.—*Norton Canes.*—The scheme for sewerage and sewage disposal works mentioned in my Report for 1933 has been submitted to the Ministry of Health and instructions have been received to proceed with the provisional purchase of the necessary land. Difficulties have been encountered in this connection and negotiations are still proceeding.

CANNOCK U.D.—In addition to the new main sewage disposal works at Longford Lane and the small works at Cannock Wood and Heath Hayes, Cannock Urban District Council now exercises supervision over a fourth sewage works, which was taken over in the added area of Hazelslade on the 1st April. It was found necessary to provide new distributors at these works as a temporary measure. In the future it is hoped that some extension of the sewers and better arrangements for disposal can be carried out.

STAFFORD R.D.—The sewerage and sewage disposal schemes for Milford and Walton villages mentioned in my Annual Report for 1933 is still under consideration by the Rural District Council. The scheme for Brocton is being postponed, at any rate for the time being.

CANNOCK R.D.—The Medical Officer of Health again draws attention to the unsatisfactory conditions at Wood Lane, Saredon, and along the Cannock Road at Wedges Mills, Cheslyn Hay, where there are increasing numbers of houses being erected.

Coven.—“ The comprehensive scheme of sewerage and sewage disposal works for a large area at Brewood has been partially completed by the erection of a sewage works and the laying down of sewers to deal with about 100 houses in the Coven area. The original scheme embraces Four Ashes and Coven Heath areas. The extension of the sewer to the latter area is indicated at the first opportunity.”

Trade Wastes.—“ Nuisance has been experienced in Brewood Parish from the decomposition of waste products from a small cheese factory. Although presenting a difficult problem it is hoped that with the full co-operation of the owner the matter will be satisfactorily dealt with.”

RUGELEY U.D.—The construction of the new sewage works is now proceeding. In this scheme no provision is made for dealing with sewage from the recently added area, but plans for the sewerage of this district are now in course of preparation.

LICHFIELD R.D.—“ Drainage of the Handsacre part of the parish of Armitage is far from satisfactory, and proper sewers and outfall works will be provided at an early date.”

TUTBURY R.D.—A scheme has been prepared for the sewerage and sewage disposal of the parishes of Branstone, Outwoods, and Stretton, and has been presented to the Minister of Health for his approval.

RIVER TAME WATERSHED.

OLDBURY BOROUGH, part of (Worcs.).—As mentioned in my Report for 1933, a modified scheme is in course of completion at the new sewage works at Oldbury. It is hoped that a great improvement in the condition of the River Tame will result from the erection of these works.

BROWNHILLS U.D.—*Shelfield, High Heath.*—The Council have entered into an agreement with the Joint Committee for the sewage from the above area to be treated at the new works at Goscote and a firm of Consulting Engineers has been instructed to prepare the necessary scheme for valley sewers to gravitate sewage to Rushall.

ALDRIDGE U.D.—The reconstruction of Goscote sewage disposal works was commenced in May, 1934, and is still in progress.

WALSALL C.B.—*Goscote Joint Sewage Works.*—As mentioned above, a new sewage works is being built at Goscote to deal with approximately 600 acres in the area of the County Borough and also a considerable portion of the Aldridge Urban District, together with the sewage from the Shelfield and High Heath area of Brownhills Urban District. The work is well in hand and it is hoped to complete this by the end of the year. When constructed these works will take the place of three small sewage works within the area.

Storm Water.—An additional experimental tank has been constructed at Little Bloxwich so as to give storm water rough settlement treatment before it enters the watercourse and so minimise possible pollution.

Bescot Sewage Works.—It is hoped to submit a definite scheme for the extension of the above works to the Ministry of Health for approval during 1935.

WILLENHALL U.D.—During the year 800 yards of new sewers have been constructed in the area. Included in this is a sewer crossing under the canal at Knights Bridge which will enable the property in Coppice Lane (at present draining to cesspools) to be connected to the sewerage system. The remainder are extensions to enable building developments to proceed in the Moseley Road area.

DARLASTON U.D.—Work was commenced in August on the extensions necessary to the sewage works, consisting of two percolating filters and two humus tanks. In the scheme in course of

construction provision is being made to return the supernatant water discharged from the existing sedimentation and septic tanks to join the incoming sewage for re-treatment, instead of being discharged on to the old flooded irrigation area. This will obviate what was formerly a source of pollution to the stream.

TIPTON.—*Sewage Disposal Works.*—A scheme for the provision of tanks for primary and secondary sludge digestion was approved of by the Ministry of Health. The work was commenced in September, 1934, and it is hoped to complete this early in 1935.

SEDGLEY U.D.—The question of extensions which are required at the Upper Gornal Sewage Works is under consideration by the Urban District Council. These extensions have been found necessary as a result of the rapid housing developments in the neighbourhood.

TAMWORTH JOINT SEWAGE BOARD.—Alterations to the Pumping Station in Lichfield Road are proceeding and are expected to be completed about June, 1935.

RIVER SEVERN WATERSHED.

SEISDON R.D. (Wrottesley Detached).—A Ministry of Health Inquiry has recently been held to consider a scheme for a new works for the detached portion of Wrottesley Parish.

Wombourne.—The drainage scheme for Wombourne which had been held up for financial reasons, has now been re-submitted, with amendments and extensions, to the Ministry of Health, and the area served will include those portions of the parish added since the alteration of boundaries under the Local Government Act, 1929.

Kinver.—The inadequacy of the Kinver sewage works has been the subject of communication between the County Council and the Rural District Council and I understand that a firm of Consulting Engineers has been called in to advise.

BRIERLEY HILL U.D.—The sewage from the Quarry Bank area is dealt with by the Upper Stour Valley Main Drainage Board. That from the remaining part of the area is dealt with at the Council's Round Hill Farm at Whittington. The method of treatment adopted is that of broad irrigation. In view of the increasing volume of sewage the Council have called in a Consulting Engineer to report on the whole question of sewage collection and disposal, and his report is at present under consideration.

SEDGLEY U.D.—Extensions have been found necessary to the sewage works at Gospel End, to deal with the increased population and rapid building developments.

MINISTRY OF HEALTH INQUIRIES.

The following Inquiries were held by the Ministry of Health during the year 1934 into applications for loans in respect of schemes of sewerage and sewage disposal, and water supply :—

| District. | Date of Inquiry. | Amount of Loan. | Purpose. |
|-------------------|------------------|-----------------|--|
| Darlaston U.D. .. | 13.2.34 .. | £12,295 .. | For works of sewage disposal. |
| Leek U.D. .. | 23.2.34 .. | £15,466 .. | For issue of provisional order to authorise sinking of borehole, erection of pumping station, etc. |
| Cannock R.D. .. | 20.3.34 .. | £10,650 .. | For works of sewerage and sewage disposal (Brewood). |
| Newcastle R.D. .. | 10.4.34 .. | £1,175 .. | For works of water supply (Audley). |
| Kidsgrove U.D. .. | 22.8.34 .. | £8,227 .. | For works of sewerage and sewage disposal. |
| | | £3,150 .. | For works of privy conversion. |
| Cheadle R.D. .. | 16.10.34 .. | £5,950 .. | For works of sewerage and sewage disposal (Cheddleton). |
| Leek R.D. .. | 23.10.34 .. | £31,300 .. | For works of sewerage and sewage disposal (Norton-in-the-Moors). |
| Biddulph U.D. .. | 20.11.34 .. | £8,401 .. | For works of water supply. |

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 1934 the County Council have considered applications in respect of twenty-five schemes, three for sewerage and sewage

disposal, and twenty-two for water supplies. In the under-mentioned cases contributions were promised :—

| Sanitary District | Parish | Area |
|---------------------------------------|----------------------------|----------------------------|
| <i>Sewerage and Sewage Disposal :</i> | | |
| Seisdon R.D. | .. Wombourne | .. Wombourne. |
| Stafford R.D. | .. Berkswich | .. Walton. |
| Do. | .. Do. | .. Milford. |
| <i>Water Supplies :</i> | | |
| Cheadle R.D. | .. Alton .. | .. Threapwood. |
| Do. | .. Checkley | .. Hollington. |
| Do. | .. Forsbrook | .. Boundary. |
| Lichfield R.D. | .. Armitage | } Armitage and Longdon. |
| | .. Longdon | |
| Do. | .. Alrewas .. | .. Fradley. |
| Do. | .. Farewell and Chorley | Chorley. |
| Do. | .. Longdon | .. Gentleshaw. |
| Seisdon R.D. | .. Pattingham | .. Pattingham. |
| *Stone R.D. .. | .. Eccleshall | .. Eccleshall. |
| Tutbury R.D. | .. Outwoods | .. Upper Outwoods. |

* A revised scheme was considered in 1935 and the contribution reduced.

With regard to the twelve remaining applications for contributions towards the cost of water supply schemes, consideration of one was deferred, whilst the eleven remaining were refused.

In the following districts contributions were made during 1934 in respect of schemes, sewerage and sewage disposal, which had been considered in previous years :—

| Sanitary District | Scheme |
|-------------------|-------------------------|
| Tettenhall U.D. | .. Tettenhall, 1934–35. |
| Lichfield R.D. .. | .. Burntwood, 1932–33. |
| Do. .. | .. Hammerwich, 1932–33. |
| Do. .. | .. Shenstone, 1932–33. |
| Newcastle R.D. | .. Audley, 1933–34. |

Rural Housing

The problems mentioned in my Report for last year have again exercised the minds of the members of Rural District Councils. One of the deficiencies I mentioned in that Report, that is, the inadequacy of the staff for carrying out housing inspections in many of the districts, has been remedied in some instances, but there are still many areas where the Sanitary Inspector, if he is to carry out his work efficiently, should have the help of an Assistant.

The problem of overcrowding, which is one of the major causes of housing difficulties at the moment, is still under consideration by the Government, and an Overcrowding Bill is now being discussed in Parliament. At the present time no Grant can be obtained from the Government for re-housing persons displaced from an overcrowded house except in an Improvement Area or where the house is also unfit and is to be demolished. Private enterprise meets this need to a small extent only and it is hoped that when the new Bill becomes law the existing conditions will be dealt with energetically by the local Councils. In view of the imminence of this Overcrowding Bill and the extra work which will be laid on Local Authorities on its becoming law, the County Council did not ask Rural District Councils to furnish returns as to the present needs of districts, as they have done in previous years.

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 14 applications were received, one being withdrawn and three refused, whilst in the remaining ten instances grants were either made or promised, as follows :—

| Rural District. | Parish. | No. of Houses. | Amount of Grant. |
|-----------------|-------------------|----------------|------------------|
| | | | £ |
| Newcastle .. | Tyrley | 2 .. | 200 |
| Seisdon .. | Himley | 1 .. | 80 |
| Do. .. | Kinver | 2 .. | 200 |
| Do. .. | Trysull | 2 .. | 160 |
| Stafford.. | Church Eaton .. | 1 .. | 100 |
| Do. .. | Gnosall | 2 .. | 200 |
| Do. .. | Haughton | 1 .. | 100 |
| Do. .. | High Offley | 1 .. | 100 |
| Do. .. | Ingestre | 2 .. | 200 |
| Do. .. | Norbury | 1 .. | 75 |

Inspection and Supervision of Food

MILK SUPPLY.

In the following tables the number 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, 1934.

| SANITARY AUTHORITY. | No. of Samples Submitted. | Result of Examination. | | T.B. |
|----------------------------|---------------------------|------------------------|-----------------|------|
| | | Cleanliness. | | |
| | | Satisfactory | Unsatisfactory. | |
| URBAN. | | | | |
| *Aldridge | 22 | 18 | 4 | 4 |
| Amblecote | 6 | 4 | 2 | 1 |
| Biddulph | 47 | 43 | 4 | 4 |
| Bilston | 16 | 11 | 5 | 1 |
| §Brierley Hill (Old) | 14 | 11 | 3 | — |
| *Brierley Hill (New) | 34 | 23 | 11 | 3 |
| Brownhills | 11 | 7 | 4 | 2 |
| Cannock | 25 | 19 | 6 | 1 |
| Coseley | 6 | 4 | 2 | 1 |
| Darlaston | 4 | 3 | 1 | — |
| Kidsgrove | 26 | 25 | 1 | 3 |
| Leek | 36 | 29 | 7 | 4 |
| Lichfield | 22 | 16 | 6 | 2 |
| Rowley Regis | 23 | 19 | 4 | — |
| Rugeley | 20 | 18 | 2 | — |
| Sedgley | 15 | 13 | 2 | 3 |
| Stafford | 59 | 48 | 11 | 8 |
| Stone | 20 | 14 | 6 | 1 |
| Tamworth | 26 | 21 | 5 | 4 |
| Tettenhall | 14 | 11 | 3 | 1 |
| Tipton | 6 | 6 | — | — |
| Uttoxeter | 10 | 10 | — | 1 |
| Wednesbury | 2 | 2 | — | — |
| Wednesfield | 6 | 5 | 1 | — |
| Willenhall | 4 | 4 | — | — |
| RURAL. | | | | |
| Cannock | 49 | 42 | 7 | 4 |
| Cheadle | †‡523 | 315 | 197 | 57 |
| §Kingswinford | 4 | 3 | 1 | — |
| Leek | 143 | 115 | 28 | 7 |
| Lichfield | 107 | 85 | 22 | 7 |
| Newcastle | 46 | 37 | 9 | 3 |
| Seisdon | 63 | 52 | 11 | 6 |
| Stafford | 40 | 35 | 5 | 2 |
| §Shifnal (Staffs.) | 1 | 1 | — | — |
| Stone | 25 | 23 | 2 | 2 |
| Tutbury | 55 | 45 | 10 | 5 |
| §Tamworth | 3 | 2 | 1 | — |
| Uttoxeter | 33 | 29 | 4 | 4 |
| §Walsall | 9 | 8 | 1 | 1 |
| Totals | ‡ 1575 | 1176 | 388 | 142 |

§ First quarter only.

† Special Investigation.

* Last three quarters only.

‡ Includes 11 samples not examined bacteriologically.

Certain samples included above were unsatisfactory from a cleanliness standpoint and also contained tubercle bacilli. The total number of unsatisfactory samples was 487, and the results of the tests were as follows:—

| | |
|---|-----|
| Due to Coliform Bacilli | 161 |
| „ Count | 69 |
| „ Coliform Bacilli and Count | 115 |
| „ Coliform Bacilli and presence of tubercle bacilli | 19 |
| „ Count and presence of tubercle bacilli .. | 6 |
| „ Coliform Bacilli, Count, and presence of tubercle bacilli | 18 |
| Tubercle Bacilli only found | 99 |

(Total samples in which Tubercle Bacilli were found, 142.)

SPECIALLY DESIGNATED MILK.

1st January to 31st December, 1934.

| | Total | Satisfac- tory | Unsatisfactory | | | |
|-------------------------------|-------|-------------------|-------------------------------|-----------------|----------------------------------|----------------|
| | | | Due to Coliform Bacilli | Due to Count | Due to Col. Bac. and Count | Due to T.B. |
| “Certified” | 47 | 37 | 8 | 1 | 1 | — |
| “Grade A (T.T.)” | 237 | 196 | 24 | 3 | 14 | 1* |
| “Grade A Pasteurised” | 10 | 10 | — | — | — | — |
| “Grade A” | 1130 | 997 | 49 | 20 | 30 | 40† |
| “Pasteurised” | 131 | 117 | — | 14 | — | 1‡ |
| Totals .. | 1555 | 1357 | 81 | 38 | 45 | 42*†‡ |

* One sample also included under “Coliform Bacilli.”

† Five samples also included under “Coliform Bacilli,” one under “Count”

‡ Also included under “Count.”

(1) CLEANLINESS.

Ordinary Milk.—Of the 1,575 samples mentioned in the preceding table 1,564 were bacteriologically examined, and 1,176 were found to be satisfactory from a cleanliness standpoint, the remaining 388 being unsatisfactory. Of the unsatisfactory samples 334 were produced in the County and 54 outside. The percentage of samples reported clean was 75.2 compared with 76.0 last year.

The names of the producers of the unsatisfactory milks were, as in previous years, reported to the County Farm Institute, and the farmers concerned were communicated with by the Assistant

Director for Agricultural Education, and offered 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 producer resided was communicated with, so that the necessary steps could be taken under the Milk and Dairies Order, 1926.

Specially Designated Milk.—Samples of all graded milks are taken monthly for bacteriological investigation, to ensure that the standard of cleanliness laid down in the Regulations is maintained. This procedure has been altered during 1935 and will be commented on later.

On referring to the table it will be seen that of the 1,555 samples submitted for bacteriological test 164 were unsatisfactory from a cleanliness standpoint.

As regards the unsatisfactory samples of "Certified," "Grade A (T.T.)," and "Grade A" milks, 60 were produced in the County and 90 outside. The sources of production of 14 unsatisfactory samples of "Pasteurised" milks were not known, but only 4 were treated at premises within the County, the remaining 10 coming from outside.

It is very satisfactory to note that the majority of the unsatisfactory samples mentioned above were obtained from milk supplied from sources outside the County and if the percentages were given, results would be very creditable to the milk produced within the County. This is no doubt due to the extensive activities of the Sampling Officer and the County Laboratory in previous years.

(2) TUBERCULOSIS.

Ordinary Milk.—142 samples taken by the Official Sampling Officer during 1934, representing 9% of the total samples, were found to contain tubercle bacilli, and investigations under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, were carried out in 120 cases, the remaining samples being duplicates, with the exception of 13 referred to outside Authorities.

In addition, eight positive samples of ordinary milk were received from Sanitary Inspectors in the County, and three others from unclassified sources. The 11 herds concerned were examined.

Complaints under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, were received from Medical Officers of Health of areas outside the County, where milk produced in Staffordshire is sold, and, as a result, investigations were made in 92 instances.

The following table gives details of the animals dealt with following the veterinary investigations :—

| Samples taken by | Animals Slaughtered | | | | Reported to Separate Authorities for T.B. Ord'r | Died before Positive Result of Test known |
|------------------------------|--------------------------|-------------------|----------------------|-------------|--|--|
| | Under Tuberculosis Order | | | By Owner | | |
| | Ad- vanced | Not Ad- vanced | Not Tuber- culous | | | |
| Official Sampling Officer | 65 | 52 | — | 5 | 1 | 1 |
| Sanitary Inspectors | 9 | 2 | — | — | — | — |
| Outside Authorities | 63 | 35 | — | 5 | — | 1 |
| Totals .. | 137 | 89 | — | 10 | 1 | 2 |

Thirteen representations under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, were made to outside Authorities in respect of milk sent into this County for sale, samples of which taken by the Official Sampling Officer were found to contain tubercle bacilli. These cases were investigated by the Authorities concerned, in 3 instances with negative results. In 9 cases tuberculosis was found, and 10 animals were slaughtered, 5 being in an advanced state, one was not advanced, and information was not supplied as to the state of the disease in the remaining 4. The other representation was in respect of a sample of mixed milk from a large dairy.

In my reports for 1931, 1932, and 1933, particulars were given of investigations carried out as a result of complaints made regarding the presence of tubercle bacilli in bulk milk consigned to certain Boroughs from a large depot in this County. Another complaint was received from the City of Birmingham and a fourth investigation was commenced at the end of December, 1933.

268 official samples were taken on delivery at the dairy concerned and in 35 cases positive results were obtained upon biological examination. Thirty-two of the positive samples represented separate farms within this County, and the herds were subsequently examined by Veterinary Surgeons. As a result, 27 tuberculous animals were slaughtered, 15 being in an advanced state, 10 not advanced, and 2 were disposed of by the owners.

One of the other positives was a sample of bulk milk supplied from a depot in an adjoining County and the matter was therefore referred to the Authority concerned. A report was later received from the County Medical Officer of Health to the effect that 13 animals on 8 farms had been slaughtered under the Tuberculosis Order. With regard to the remaining two positives, these were in respect of individual farms out of the County ; as a result of a

representation made under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, the herds were examined and I am informed that two tuberculous cows, both advanced cases, were slaughtered.

A fifth investigation was commenced in connection with the same Dairy on the 25th June, 1934, as a result of a complaint received from Walsall County Borough with reference to positive reports on samples of the bulk milk. 257 official samples, 225 of which were from separate farms in this County, were taken on delivery at the Dairy and the same were submitted for test with the following results:—

29 samples were reported tuberculous out of 257 taken, *i.e.*, 11·28%.

25 of these tuberculous samples were from separate farms in this County, *i.e.*, 11·11% of the total County samples. An inspection was made by one of the whole-time Veterinary Surgeons at each of the positive sources in this County and particulars of the action taken are as follows:—

| | |
|--|-----|
| Total number of cows examined | 930 |
| Number of cows reported under the Tuberculosis Order, following clinical examination | 13 |
| No. of cows reported under Tuberculosis Order following positive reports on single samples | 25 |

Total 38 *i.e.*, 4·09% of cows examined.

| | |
|---|----------|
| The disease was advanced in | 20 cases |
| The disease was not advanced in | 18 cases |
| The udder was affected in | 30 cases |

Two of the four positive samples of milk received at the dairy from sources outside the County were of bulk milk from a dairy in an adjoining County. The definite sources of supply could not be stated and the matter was referred to the Local Authority concerned.

The other two positive results were in respect of individual farms and were accordingly referred to the Authority concerned under Section 4 of the Milk and Dairies (Consolidation) Act, 1915; subsequent reports received from the respective County Medical Officers of Health showed that three cows were slaughtered under the Tuberculosis Order.

In addition to the inspections at the 25 farms referred to above, a routine veterinary inspection was carried out at a later date by

the whole-time veterinary staff at 193 of the other farms in this County sending milk to the dairy, with the following results:—

Total No. of cows in the 193 herds, 4730 (4,017 milking, 713 dry)
(Average No. per herd=24·5)

Total No. of cows reported under Tuberculosis Order following:—

| | |
|--|----|
| Clinical examination | 30 |
| Positive reports on single samples | 8 |

Total 38 (*i.e.*, 0·80% of total No. of cows.)

One cow died before slaughter could be effected and of the 37 slaughtered, *post-mortem* examinations showed that:—

| | |
|--|----------|
| the disease was advanced in | 21 cases |
| the disease was not advanced in | 15 cases |
| there was no evidence of tuberculosis in | 1 case |
| the udder was affected in | 12 cases |

No. of herds from which no cows were reported or samples taken, 110.

It should be noted that the figures given with reference to animals dealt with in this County, as a result of inspections following positive samples taken by the Official Sampling Officer in connection with the Special Investigations detailed above, have been included in the table on page 80, but they are recorded separately as a matter of interest. The figures for those animals slaughtered as a result of the 193 routine inspections are not included in this table, for the action was not taken under Section 4 of the Milk and Dairies (Consolidation) Act, 1915.

Specially Designated Milk.—As stated previously, samples of all graded milks are taken monthly for bacteriological investigation, and they are examined specially for tuberculosis quarterly as a routine. Subsequent to a positive result, however, samples are biologically examined monthly until such times as the milk is again negative.

From the table at the beginning of this section of my report it will be seen that 42 of the samples taken by the Official Sampling Officer contained tubercle bacilli, viz., 1 “Grade A (T.T.),” 1 “Pasteurised,” and 40 “Grade A.”

The “Grade A (T.T.)” milk was not produced in this County, and the matter was referred to the appropriate Authority and the Ministry of Health.

With regard to the 1 positive sample of "Pasteurised" milk, this was treated at a large bottling establishment outside the County where the supplies are bulked, and the source of production is not therefore known. Subsequent samples gave negative results.

Of the 40 "Grade A" samples which were found to contain tubercle bacilli, 33 were produced in the County and 7 outside. With regard to the herds within the County, 20 investigations were made at 17 separate farms, the balance of the samples being duplicates.

In addition, 1 positive sample of "Grade A" milk was received from a Veterinary Surgeon in the County.

One investigation was also made on a "Grade A" farm as a result of a complaint from an outside Authority.

The following are particulars of the animals dealt with subsequent to these investigations:—

| Samples taken by | Animals Slaughtered. | | | | Died before Positive Result of Test known |
|---------------------------|--------------------------|-------------------|----------------------|----------|---|
| | Under Tuberculosis Order | | | By Owner | |
| | Ad- vanced | Not Ad- vanced | Not Tuber- culous | | |
| Official Sampling Officer | 7 | 6 | — | 1 | — |
| Sanitary Inspector .. | — | — | — | — | — |
| Outside Authorities .. | — | — | — | — | — |
| Veterinary Surgeon | 1 | — | — | — | — |
| Totals | 8 | 6 | — | 1 | — |

As a result of the usual quarterly veterinary inspections of "Grade A" herds, 2 tuberculous animals were dealt with.

Of the 7 positive samples of "Grade A" milk produced outside the County, 5 were in respect of one farm. Representations to the Authorities concerned were made under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, and, as a result, 2 animals were slaughtered under the Tuberculosis Order, in one instance the state of the disease being advanced, whilst as regards the other 1 information as to the state of the disease was not given.

(3) GENERAL.

From the foregoing it will be seen that, as a result of action taken under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, in connection with milk produced within the County:—

- (a) 241 cows were dealt with under the Tuberculosis Order, the disease being in an advanced state in 145 of these, *i.e.*, 60·2%.
- (b) 11 tuberculous animals were slaughtered by owners.
- (c) 2 tuberculous animals died prior to positive results of tests.

It will also be observed that, in addition, 2 tuberculous animals were dealt with following the quarterly examinations of "Grade A" herds.

It should be noted that although the complaints received under this Section were slightly fewer than during the previous year, the total number of cows slaughtered under the Tuberculosis Order, 1925, as a result of these investigations was increased by 40 and the percentage of cows found to be in an advanced state of the disease reduced by over 10%. The whole-time staff undertook all investigations under Section 4 of the Act towards the end of June, and full details of their work are given in a later part of the report.

The County Veterinary Officer, Mr. F. A. Davidson, joined the County staff on the 5th March and the six Assistant Veterinary Officers commenced duties during August and September. During the first few weeks they completed inspections of all herds supplying the dairy previously referred to under the Special Investigations. In addition, they dealt with 17 complaints from outside Authorities and as a result 15 cows were slaughtered on clinical examination and 5 as the result of positive samples. Fifteen cows were found on *post-mortem* examination to have tuberculous udders, and the results of 9 incompleated cases were carried over for inclusion in the report given below for the last quarter of the year.

The first series of routine inspections of all registered herds within the County was commenced about October and details of the work completed during this quarter by the Veterinary staff are given below.

It should be noted that the particulars of cows slaughtered as a result of the routine examinations have not been included in the table on page 80, but details of cows slaughtered as a result of the investigations carried out under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, namely, 17 in

the September quarter and 77 in the December quarter investigated by the whole-time veterinary staff have been given in this table. As regards the table following, the details given of cows slaughtered under the Tuberculosis Order, 1925, refer only to those discovered by the Veterinary Officers as a result of inspections of the herds and do not include animals dealt with following reports by owners and others. These latter were investigated by the part-time Veterinary Officers up to the 31st December.

The number of herds visited and cows examined during the quarter is very satisfactory in view of the fact that the majority of the registers of dairy herds supplied by the Registration Authorities were found to be very inaccurate.

WORK CARRIED OUT BY WHOLE-TIME VETERINARY STAFF FOR DECEMBER QUARTER, 1934, UNDER THE MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

MILK AND DAIRIES ORDER, 1926.
TUBERCULOSIS ORDER, 1925.

| | FIGURES IN RESPECT OF COMPLETED CASES ONLY | | | | | | | | | | | | |
|---|--|---------------|------|-------|---------------------------------|------------------------------------|----------------------------------|---------------|--|-------------------------|---------------|--|--|
| | Herds examined | Cows examined | | | Average number of cows per herd | Cases incomplete at 31st Dec, 1934 | Cases complete at 31st Dec, 1934 | Cows examined | TUBERCULOUS ANIMALS (except under "Not affected" Column) | | | | |
| | | In-milk | Dry | Total | | | | | Slaughtered under T.B. Order by Staffs. C.C. | No. of animals affected | | Repd. to separate Authorities for T.B. Order | Sold for slaughter by owner or cow died before reports on samples. |
| | | | | | | | | | | Adv. T.B. | Not Adv. T.B. | | |
| Routine Inspections | 2296 | 31499 | 6622 | 38121 | 162 | 2134 | 34422 | 112 | 107 | 2 | 65 | 2 | 5 |
| Section 4 Cases (Reports of T.B. in bulk milk.) | 77 | 1654 | 341 | 1995 | 27 | 50 | 1269 | 33 | 23 | — | 47 | — | 4 |
| | 2373 | 33153 | 6963 | 40116 | 189 | 2184 | 35691 | 145 | 130 | 2 | (112) | 2 | 9 |

Total 277
Total 288

It will be noted from the above that information regarding *tuberculous animals* is given in respect of cases completed at 31st December, 1934. Details of the 189 cases which were then incomplete will be carried forward and included in the next report.

I give below particulars of the licences which have been granted for the production of graded milks, from which it is satisfactory to find that their popularity continues to be maintained.

At the end of 1933 the following licences were in force in this County:—3 for “Certified,” 5 for “Grade A (T.T.),” and 80 for “Grade A” milks. On the 31st December, 1934, there were 3 “Certified” licences, 4 “Grade A (T.T.)” licences, one having been relinquished and cancelled when the farmer left the premises in March, and 77 “Grade A” licences. With regard to the “Grade A” licences, 4 new ones were issued during the year, 6 were discontinued, and 1 was withdrawn.

CHEMICAL EXAMINATION.

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 2,020 samples were submitted, 1,831 of which were found to be genuine and 189 adulterated or below standard.

(1) MILK.

During the year 1,457 samples of ordinary milk were chemically examined and 163 were found to be unsatisfactory.

One hundred and eight samples of specially designated milks were chemically examined, and 1 “Grade A” and 1 “Pasteurised” milks were found to be below standard.

The following samples were also examined:—53 sterilised milks, 10 condensed milks, and 2 skimmed milks. They were all found to be satisfactory except 6 samples of sterilised milk.

Action taken.—Of the 163 unsatisfactory samples of ordinary milk, 22 were “appeal to cow” samples and 26 were informal and no action could be taken. In 27 cases, representing 40 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. Thirty-three prosecutions were instituted in respect of 45 samples, 20 for added water, one in respect of added preservative, and 24 for fat deficiency. Twenty-four 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. The Farm Institute, Rodbaston, was asked to give assistance in respect of 6 samples from one producer.

As regards the graded milk, cautions were issued in respect of one pasteurised sample and six sterilised samples, and one “Grade A” informal sample was adulterated.

In total, 27 retailers or producers were cautioned and 33 proceedings were instituted. Fines amounting to £176 with £77 8s. 6d. costs were imposed.

(2) GENERAL ARTICLES OF FOOD.

The following informal samples were found to be adulterated :—

- 1 Chocolate Confectionery.
- 1 Tinned Cream.
- 2 Dripping.
- 2 Black Currant Jam.
- 2 Raspberry Jam.
- 2 Marmalade.
- 1 Calomel Ointment.
- 2 Sausage.
- 1 Whisky.

Cautions were issued in respect of the following samples :—

- 1 Raspberry Jam.
- 1 Marmalade.
- 2 Sausage.

Prevention of, and Control over, Infectious Disease

Following on the survey of Isolation Hospital accommodation made under Section 63 of the Local Government Act, 1929, the County Council submitted to the Ministry of Health a scheme whereby the County Council should provide the hospital accommodation for the three areas of the County, replacing the arrangements made by District Councils. This scheme, however, has had to be abandoned owing to legal difficulties, and another scheme has been prepared under which the Local Authorities, either themselves or in combination, provide a minimum number of beds for the treatment of infectious disease. Conferences have been held subsequently in three centres of the County, with the Local Authorities, on this matter, and we are now waiting to hear the proposals of the Local Authorities.

SMALLPOX.—No case of smallpox was recorded in 1934, 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 considerably more than that for the previous year. There were 2,595 notifications as against 1,249 last year, 2,009 in urban

districts and 586 in rural districts. Six deaths occurred in urban and none in rural districts. The case rate per thousand of the population is 3.61 compared with 3.76 for England and Wales as a whole. The death-rate in the urban districts is 0.01. The prevailing type of the disease was mild.

DIPHTHERIA.—More cases were notified in 1934 than in the previous year, the numbers being 604 as against 383. The increase was in the urban districts where there were 495 cases compared with 267 in 1933. 109 cases were notified in rural districts as against 116 in the previous year. The case rate was 0.84 compared with 1.70 for England and Wales. Thirty-two deaths occurred in urban districts with a death-rate of 0.06 per thousand of the population. Four died in rural districts, which yields a death-rate of 0.02. 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 Sanitary Districts, but in none can it be said to have attained epidemic form.

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, Leek, Rugeley, Stafford, and Tettenhall Urban Districts and the Cannock Rural District. The work undertaken was a continuation of that started in previous years, except in Stafford where it was first commenced in January, 1934.

Full advantage has been taken of the facilities afforded at the County Laboratory for bacteriological investigations and 9,477 specimens were sent by medical practitioners compared with 7,386 in the previous year. This included 58 virulence tests undertaken in special cases.

ENTERIC FEVER.—Four notifications of typhoid fever in urban and none in rural districts were received during the year, compared with the total of 12 in 1933. Two deaths occurred in urban districts. The case rate was 0.00 compared with 0.03 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.—During the year 2 cases were notified, 1 of which was in an urban district. Five 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 58 cases of dysentery were notified. Nine of these were at the Cheddleton Mental Hospital, and 38 cases were notified from the Babies' Hospital at Canwell Hall in the Lichfield Rural District. The following are the districts in which the remaining cases occurred:—Lichfield Urban District, 3; Rowley Regis Urban District, 2; Willenhall Urban District, 1; Cheadle Rural District, 3; Lichfield Rural District, 2.

CEREBRO-SPINAL FEVER.—During the year 8 cases were notified, 7 in urban districts and 1 in a rural district; 6 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 9, and 7 of the fatal cases were not notified.

Twelve specimens of cerebro-spinal fluid were examined in the County Bacteriological Laboratory. Also 11 swabs were examined, and there was one case for typing. 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, diarrhoea, and enteritis are as follows:—

MEASLES.—There were 29 deaths in urban districts with a death-rate of 0.05, and 7 deaths in rural districts with a death-rate of 0.04. 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 2,868 cases of measles and 165 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 455,900 out of 718,650 for the Administrative County, and consequently there must have been many more cases.

WHOOPIING COUGH.—In 1934 there were 41 deaths in urban districts with a death-rate of 0.08 and 11 deaths in rural districts with a death-rate of 0.06. The deaths occurred in 13 of the urban districts, only 7 of the rural districts were affected. The school teachers in the County Elementary Education Area reported 982 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.—57 deaths occurred in urban districts with a death-rate of 6·3 per thousand live births, and 7 in rural districts with a death-rate of 2·4 per thousand births in children under 2 years of age. The cases occurred in 18 of the urban districts and in 7 of the rural districts.

INFLUENZA.—In 1934 there were 110 deaths in urban and 29 in rural districts, a noticeable decrease from the previous year when there were 296 deaths in urban and 128 in rural districts.

The number of cases of Notifiable Infectious Diseases with the deaths, in the Administrative County during 1934, are as follows :—

| Diseases. | Notifications. | | Deaths. | | † Cases admitted to Hospital. |
|---------------------------------|----------------|--------|---------|--------|-------------------------------|
| | Urban. | Rural. | Urban. | Rural. | |
| Small-pox | — | — | — | — | — |
| Scarlet Fever | 2009 | 586 | 6 | — | 1590 |
| Diphtheria | 495 | 109 | 32 | 4 | 493 |
| Enteric Fever | 4 | — | 2 | — | 3 |
| Puerperal Fever.. .. . | 26 | 12 | 21 | 7 | 26 |
| „ Pyrexia | 66 | 16 | | | |
| Erysipelas | 255 | 69 | * | * | 18 |
| Cerebro-Spinal Fever | 7 | 1 | 8 | 1 | 2 |
| Poliomyelitis | 2 | 1 | 1 | — | — |
| Pneumonia | 976 | 233 | 445 | 125 | 73 |
| Encephalitis Lethargica | 1 | 1 | 4 | 1 | — |
| Dysentery | 6 | 52 | * | * | 47 |

* 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 11 years. One hundred and seventy-six out of the total of 210 notified in 1934 were not severe, and, as will be noted from the table, 208 were completely cured. In two cases the vision was impaired, the conditions being gonorrhœal infection and corneal ulcer respectively. Only 20 cases were in-patients in hospital, 4 were treated in the out-patient department, and the others received treatment at home.

| | CASES | | | | Vision un- impaired | Vision impaired | Total Blind- ness | Deaths |
|------|----------|---------|------------|-------------|------------------------|--------------------|-------------------------|--------|
| | Notified | TREATED | | In Hospital | | | | |
| | | At home | In-patient | | | | | |
| 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 | — | — |

* 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, 1933, where it is seen that out of 9,949 children born during the year, in whom vaccination was possible, only 29·3% were subsequently protected against smallpox.

Tuberculosis

At the end of the year there were 6,708 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. |
| 6708 | 2417 | 2283 | 4700 | 1063 | 945 | 2008 |

This indicates that there is one case of tuberculosis in every 107 persons, or just 9·3 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 438 persons died from pulmonary tuberculosis, giving a death-rate of 0·61 per thousand of the population, whilst 93 deaths occurred from other forms of tuberculosis with a death-rate of 0·13.

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—..... | — | — | 4 | 4 | — | — | 3 | 4 |
| 1—..... | 10 | 3 | 25 | 18 | 3 | — | 11 | 15 |
| 5—..... | 28 | 15 | 29 | 28 | 2 | 8 | 17 | 8 |
| 10—..... | 17 | 20 | 17 | 30 | | | | |
| 15—..... | 38 | 47 | 9 | 3 | 33 | 60 | 5 | 6 |
| 20—..... | 54 | 89 | 5 | 10 | | | | |
| 25—..... | 86 | 105 | 9 | 8 | 60 | 55 | 4 | 3 |
| 35—..... | 82 | 51 | 7 | 3 | 56 | 28 | 2 | 4 |
| 45—..... | 61 | 28 | 6 | 3 | 46 | 26 | 3 | 1 |
| 55—..... | 34 | 14 | 3 | 1 | 38 | 8 | 3 | 2 |
| 65and upwards..... | 12 | 7 | — | 2 | 11 | 4 | 1 | 1 |
| Totals..... | 422 | 379 | 114 | 110 | 249 | 189 | 49 | 44 |

In the General Tables at the end of the Report, the death-rates for each sanitary district during 1934 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 show 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 | | | | |
| 1400 | 1106 | 1194 | 1017 | 1021 | 1129 | 1074 | 1011 | 929 | | | | |

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 96 cases as against 103 last year that had come to their knowledge in various ways not having been previously notified. It was found that 57 had died without being formally notified under the Regulations, 33 were taken from the death returns of the local Registrars, and 19 were transferable deaths sent by the Registrar-General, that is to say, the death occurred outside the district where the person usually resided. Five 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 9.32; 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.

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, amongst 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 32.7% of the cases reviewed in the Joint Committee's area in 1934. 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 |

W. D. CARRUTHERS,

County Medical Officer of Health.

September, 1935.

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. | | | | | | | Typhoid and Paratyphoid Fevers. | Scarlet Fever. | Whooping Cough. | Diphtheria | Diarrhoea, &c. (under 5 years) | Tuberculosis of Respiratory System. | Other Tuberculous Diseases. | Cancer, Malignant Disease. | Bronchitis. | Pneumonia (all forms). | Other Respiratory Diseases. | Cirrhosis of Liver. | Acute and Chronic Nephritis. | Congenital Debility and Malformation, Premature Birth |
|------------------|--|--|-----------------------------|--|---|---|--|---|------------------------|----------|--------|----------------|-----------------|------------|--------------------------------|---------------------------------|----------------|-----------------|------------|--------------------------------|-------------------------------------|-----------------------------|----------------------------|-------------|------------------------|-----------------------------|---------------------|------------------------------|---|
| | Census, 1931 of areas as constituted after changes in Boundary | Estimated to middle of 1934 of areas as constituted after changes in boundary. | | | | | | | Per 1000 of population | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | Smallpox. | Measles. | Mumps. | Scarlet Fever. | Whooping Cough. | Diphtheria | Diarrhoea, &c. (under 5 years) | | | | | | | | | | | | | | |
| Aldridge | 14,446 | 15,506 | 1.7 | 16.7 | 1.12 | 9.7 | 11.0 | 57 | .. | .. | .. | 0.17 | .. | .. | .. | .. | .. | .. | 0.51 | 0.17 | 1.89 | 0.17 | 0.34 | .. | .. | 0.08 | 0.86 | | |
| Amblecote | 3,099 | 3,050 | 4.6 | 11.5 | 0.98 | 7.5 | 7.3 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.33 | .. | 0.98 | 0.65 | 0.33 | .. | .. | 0.65 | .. | | |
| Biddulph | 8,990 | 9,153 | 1.4 | 17.5 | 0.89 | 9.4 | 10.5 | 44 | 0.11 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6.3 | .. | 1.78 | 0.22 | 0.55 | 0.33 | 0.11 | 0.33 | 0.67 | | |
| Bilston | 31,221 | 31,708 | 17.0 | 19.9 | 0.92 | 11.0 | 13.4 | 49 | .. | .. | .. | 0.16 | .. | .. | .. | .. | .. | .. | 9.5 | 0.98 | 0.12 | 0.85 | 0.54 | 1.36 | .. | 0.50 | 0.54 | | |
| Brierley Hill .. | 44,671 | 44,830 | 7.6 | 15.9 | 1.12 | 9.7 | 10.9 | 46 | 0.02 | .. | 0.05 | 0.05 | 0.10 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 4.8 | 0.61 | 0.05 | 1.63 | 0.48 | 0.61 | 0.13 | 0.25 | 0.35 | | |
| Brownhills | 18,368 | 18,860 | 3.0 | 15.7 | 0.69 | 10.2 | 11.8 | 71 | .. | .. | .. | 0.10 | .. | .. | .. | .. | .. | .. | 10.1 | 0.26 | 0.26 | 1.32 | 0.69 | 0.58 | 0.16 | 0.42 | 0.79 | | |
| Cannock | 35,300 | 35,862 | 4.4 | 18.2 | 0.81 | 10.0 | 11.1 | 83 | .. | .. | .. | 0.03 | 0.03 | .. | 0.05 | 0.05 | 0.05 | 0.05 | 10.7 | 0.61 | 0.05 | 1.40 | 0.25 | 0.61 | 0.08 | 0.22 | 0.89 | | |
| Coseley | 25,137 | 26,060 | 7.9 | 17.7 | 0.57 | 10.3 | 11.9 | 41 | .. | .. | .. | 0.11 | 0.04 | 0.19 | 0.04 | 0.04 | 0.04 | 6.5 | 0.92 | .. | 1.15 | 0.42 | 0.77 | 0.07 | .. | 0.11 | 0.34 | | |
| Darlaston | 20,053 | 20,089 | 13.1 | 17.1 | 0.85 | 10.1 | 12.5 | 52 | .. | .. | .. | 0.05 | .. | .. | .. | .. | .. | .. | .. | 0.85 | 0.15 | 1.15 | 0.80 | 0.95 | 0.05 | 0.30 | 0.70 | | |
| Kidsgrove | 14,940 | 14,800 | 3.6 | 18.4 | 0.88 | 10.8 | 12.4 | 48 | .. | .. | .. | 0.07 | .. | .. | .. | .. | .. | .. | .. | 0.54 | 0.27 | 1.48 | 0.27 | 1.21 | 0.34 | 0.20 | 0.61 | | |
| Leek | 19,442 | 19,554 | 4.5 | 14.9 | 0.31 | 11.0 | 11.4 | 24 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.52 | 0.05 | 1.19 | 0.15 | 0.41 | 0.05 | 0.31 | 0.36 | | |
| Lichfield | 8,574 | 8,590 | 2.4 | 17.0 | 0.58 | 13.4 | 11.5 | 55 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.46 | 0.23 | 1.86 | 0.11 | 0.46 | 0.35 | 0.46 | 0.70 | | |
| Newcastle | 54,739 | 58,720 | 6.6 | 16.7 | 0.88 | 11.4 | 12.7 | 82 | .. | .. | .. | 0.24 | 0.02 | 0.10 | 0.07 | 0.07 | 0.07 | 8.1 | 0.54 | 0.17 | 1.19 | 0.54 | 0.97 | 0.10 | 0.02 | 0.36 | 0.68 | | |

| 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 Hemorrhage, &c. | Heart Disease. | Aneurysm | Other Circulatory Diseases. | Bronchitis. | Pneumonia (all forms). | Other Respiratory Diseases. | Peptic Ulcer. | Diarthra, &c. (under 2 years). | Appendicitis. | Cirrhosis of Liver. | Other Diseases of Liver, &c. | Other Digestive Diseases. | Acute and Chronic Nephritis. | Puerperal Sepsis. | Other Puerperal Causes. | Con genital De bility, Premature Birth, Malformation, &c. | Senility. | Suicide. | Other Violence. | Other Defined Diseases. | Causes ill-defined or unknown. | |
|------------------|--------------|---------------|-------------------------|----------------------|-----------|---------------------------------|----------|----------------|-----------------|-------------|------------|--------------------------|-----------------------|-------------------------------------|-----------------------------|-----------|--|----------------------------|-----------|--------------------------|----------------|----------|-----------------------------|-------------|------------------------|-----------------------------|---------------|--------------------------------|---------------|---------------------|------------------------------|---------------------------|------------------------------|-------------------|-------------------------|---|-----------|----------|-----------------|-------------------------|--------------------------------|----|
| Rowley Regis | 655 | 23 | 442 | 40 | .. | .. | 1 | 1 | 2 | 6 | 6 | .. | 3 | 42 | 3 | 2 | .. | 64 | 6 | 24 | 75 | .. | 16 | 30 | 31 | 6 | 3 | 2 | 7 | .. | .. | 7 | 9 | .. | 1 | 24 | 12 | 10 | 11 | 38 | 1 | |
| Rugeley | 128 | 10 | 72 | 5 | .. | .. | .. | .. | .. | .. | 3 | .. | .. | 2 | 1 | .. | .. | 5 | .. | 3 | 15 | .. | 8 | 2 | 2 | 3 | 2 | 2 | .. | .. | 2 | 2 | 5 | .. | .. | 1 | 3 | 1 | 8 | 4 | .. | |
| Sedgley | 281 | 10 | 193 | 13 | .. | .. | .. | .. | 2 | 1 | 5 | .. | .. | 13 | 3 | 1 | .. | 21 | 1 | 16 | 48 | .. | 6 | 5 | 15 | 5 | 5 | 1 | 1 | .. | .. | 3 | .. | 1 | 6 | 18 | 1 | 5 | 14 | .. | | |
| Stafford | 394 | 20 | 333 | 20 | .. | .. | .. | .. | .. | 2 | 2 | .. | .. | 23 | 3 | 1 | 2 | 42 | 6 | 20 | 77 | 3 | 16 | 14 | 24 | 3 | 3 | 2 | 1 | 3 | 2 | 1 | 4 | 6 | .. | 2 | 14 | 19 | 5 | 8 | 28 | .. |
| Stone | 79 | 7 | 75 | 3 | .. | .. | .. | .. | .. | 1 | 1 | .. | .. | 4 | 1 | .. | .. | 9 | 1 | 2 | 22 | 1 | 9 | 1 | 4 | 1 | 1 | .. | .. | .. | .. | 2 | 2 | .. | .. | 1 | .. | 2 | 1 | 8 | .. | |
| Tamworth | 173 | 8 | 143 | 15 | .. | .. | .. | .. | .. | 4 | .. | .. | 1 | 9 | 2 | .. | .. | 19 | 2 | 5 | 23 | 1 | 7 | 5 | 13 | .. | .. | 1 | 1 | .. | 1 | .. | 5 | .. | 1 | 10 | 10 | 4 | 9 | 9 | .. | |
| Tettenhall | 76 | 4 | 62 | .. | .. | .. | .. | .. | .. | .. | 2 | .. | .. | .. | .. | .. | .. | 10 | 2 | 3 | 17 | .. | 5 | .. | 2 | 2 | 2 | 1 | .. | .. | .. | .. | .. | 3 | .. | .. | 1 | .. | 2 | 11 | 1 | |
| Tipton | 734 | 28 | 418 | 49 | .. | .. | 6 | 1 | 9 | 6 | 12 | .. | .. | 29 | 3 | .. | .. | 46 | 7 | 18 | 62 | 1 | 7 | 18 | 34 | 3 | 5 | 3 | 5 | 2 | .. | .. | 5 | 7 | 2 | 2 | 29 | 44 | 1 | 17 | 34 | .. |
| Uttoxeter | 84 | 4 | 84 | 9 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4 | .. | .. | .. | 7 | 1 | 5 | 28 | .. | 3 | 1 | 9 | 1 | 1 | .. | .. | .. | 3 | 1 | 1 | 1 | .. | 3 | 5 | 1 | .. | 8 | .. | |
| Wednesbury .. | 605 | 25 | 355 | 38 | .. | .. | .. | .. | .. | 1 | 14 | .. | .. | 20 | 6 | 1 | .. | 40 | 2 | 18 | 68 | 3 | 12 | 10 | 28 | 1 | 4 | 8 | 2 | .. | 1 | 6 | 9 | 1 | 1 | 20 | 19 | 4 | 19 | 37 | .. | |
| Wednesfield .. | 179 | 10 | 93 | 11 | .. | .. | .. | .. | 1 | .. | .. | .. | .. | 12 | .. | .. | .. | 11 | .. | 4 | 19 | .. | 1 | 4 | 10 | 1 | 2 | 1 | 1 | .. | 2 | 1 | .. | 2 | 1 | 5 | 7 | 1 | 1 | 7 | .. | |
| Willenhall | 538 | 17 | 313 | 31 | .. | .. | .. | .. | 1 | 4 | 6 | .. | .. | 14 | 5 | .. | 2 | 37 | 4 | 15 | 59 | .. | 20 | 9 | 37 | 3 | 5 | 4 | .. | 1 | 7 | 5 | 3 | 1 | 22 | 15 | 2 | 19 | 13 | .. | | |
| Totals | 9010 | 413 | 5716 | 533 | .. | 229 | 6 | 41 | 32 | 110 | 4 | 8 | 358 | 62 | 13 | 10 | 702 | 79 | 320 | 1118 | 11 | 244 | 230 | 445 | 66 | 41 | 57 | 38 | 10 | 21 | 119 | 144 | 21 | 23 | 314 | 271 | 57 | 230 | 475 | 5 | | |

RURAL—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 Hemorrhage, &c. | Heart Disease. | Aneurysm. | Other Circulatory Diseases. | Bronchitis. | Pneumonia (all forms). | Other Respiratory Diseases. | Peptic Ulcer. | Diarrhoea, &c. (under 2 years). | Appendicitis. | Chirrhosis of Liver. | Other Diseases of Liver, &c. | Other Digestive Diseases. | Acute and Chronic Nephritis. | Puerperal Sepsis. | Other Puerperal Causes. | Congenital Deblity, Premature Birth, Malformation, &c. | Senility. | Suicide. | Other Violence. | Other Defted Diseases. | Causes ill-defined or unknown. | | | |
|-----------------|--------------|---------------|-------------------------|----------------------|-----------|---------------------------------|----------|----------------|-----------------|-------------|------------|--------------------------|-----------------------|-------------------------------------|-----------------------------|-----------|--|----------------------------|-----------------------------------|----------------|-----------|-----------------------------|-------------|------------------------|-----------------------------|---------------|---------------------------------|---------------|----------------------|------------------------------|---------------------------|------------------------------|-------------------|-------------------------|--|-----------|----------|-----------------|------------------------|--------------------------------|----|----|----|
| Cannock..... | 361 | 18 | 219 | 19 | .. | .. | .. | .. | 1 | .. | 4 | .. | .. | 9 | 6 | 1 | .. | 28 | 2 | 16 | 36 | .. | 10 | 10 | 10 | 16 | 2 | 1 | .. | .. | 1 | .. | 4 | 1 | 1 | 1 | 1 | 12 | 27 | 1 | 16 | 13 | .. |
| Cheadle..... | 488 | 14 | 296 | 22 | .. | .. | 1 | 3 | 1 | 4 | 4 | .. | 1 | 15 | 2 | .. | 2 | 40 | 5 | 13 | 50 | 1 | 18 | 16 | 19 | 2 | 4 | .. | 6 | .. | .. | 7 | 12 | 1 | 2 | 16 | 13 | 1 | 10 | 31 | .. | | |
| †Gnosall | 20 | 1 | 18 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | .. | .. | .. | 1 | 1 | 3 | .. | 1 | 3 | .. | 2 | .. | .. | .. | .. | .. | .. | 1 | 2 | .. | 1 | 1 | 1 | 1 | 1 | .. | | |
| †Kingswinford | 110 | 8 | 77 | 6 | .. | .. | .. | 1 | .. | .. | 1 | .. | .. | 7 | 1 | .. | .. | 6 | 3 | 6 | 14 | .. | 3 | 5 | 9 | .. | .. | 1 | 1 | 1 | .. | .. | .. | .. | .. | 1 | 4 | 2 | 8 | 3 | .. | | |
| Leek | 245 | 20 | 185 | 8 | .. | .. | .. | .. | .. | .. | 4 | .. | .. | 11 | 4 | .. | .. | 22 | 2 | 13 | 42 | .. | 13 | 6 | 14 | .. | 1 | 1 | 1 | .. | .. | 8 | 3 | 1 | 1 | 4 | 8 | 1 | 6 | 15 | 3 | | |
| Lichfield | 548 | 17 | 341 | 38 | .. | .. | .. | 2 | 2 | 4 | 4 | 1 | .. | 9 | 8 | .. | .. | 46 | 2 | 24 | 79 | 1 | 9 | 14 | 10 | 5 | 1 | 1 | 4 | .. | 1 | 10 | 13 | 1 | .. | 28 | 7 | 8 | 22 | 29 | .. | | |
| †Mayfield..... | 12 | 1 | 12 | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 | .. | .. | 2 | 1 | 1 | 2 | .. | .. | .. | 2 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 | .. | .. | 1 | .. | | | |
| Newcastle..... | 215 | 13 | 196 | 10 | .. | .. | 3 | .. | 1 | 4 | 4 | .. | .. | 6 | 3 | .. | .. | 21 | 6 | 9 | 53 | .. | 9 | 8 | 14 | .. | 4 | 1 | 3 | 1 | 2 | 4 | 7 | .. | .. | 5 | 9 | 1 | 5 | 16 | 1 | | |
| Seisdon | 210 | 12 | 171 | 11 | .. | .. | 1 | .. | .. | .. | 4 | .. | .. | 5 | 1 | .. | .. | 20 | .. | 9 | 43 | 1 | 8 | 4 | 10 | 2 | .. | .. | 4 | .. | 2 | 5 | 7 | 1 | .. | 6 | 6 | 4 | 11 | 17 | .. | | |
| Stafford..... | 194 | 9 | 139 | 9 | .. | .. | .. | .. | .. | .. | 1 | .. | .. | 4 | .. | 1 | .. | 16 | 1 | 6 | 30 | .. | 9 | 4 | 12 | .. | 1 | .. | 3 | 1 | 2 | 5 | 6 | 1 | .. | 3 | 11 | 2 | 7 | 12 | 1 | | |
| Stone | 171 | 5 | 135 | 11 | .. | .. | .. | 1 | .. | 1 | 1 | .. | .. | 4 | 2 | .. | .. | 16 | 1 | 3 | 37 | .. | 4 | 2 | 10 | .. | .. | .. | 1 | 2 | 1 | 5 | 3 | .. | .. | 8 | 2 | .. | 13 | 19 | .. | | |
| Tutbury..... | 164 | 5 | 104 | 10 | .. | .. | 1 | 1 | .. | 1 | 1 | .. | .. | 6 | .. | .. | .. | 16 | 2 | 7 | 23 | .. | 4 | 4 | 3 | .. | 2 | 1 | .. | .. | 1 | 1 | 2 | 1 | .. | 7 | 13 | 1 | 2 | 5 | .. | | |
| Uttoxeter | 141 | 6 | 99 | 6 | .. | .. | .. | .. | .. | .. | 1 | .. | .. | 1 | 1 | .. | .. | 19 | 2 | 7 | 20 | .. | 10 | 2 | 3 | 1 | .. | 1 | 1 | .. | 1 | 4 | 1 | .. | .. | 3 | 9 | .. | 3 | 7 | 2 | | |
| †Walsall | 62 | 4 | 52 | 4 | .. | .. | 2 | .. | .. | .. | .. | .. | .. | 2 | 1 | .. | .. | 9 | 1 | 8 | 6 | .. | 2 | 3 | 3 | 1 | 2 | .. | .. | .. | 2 | 2 | .. | .. | 3 | 1 | 1 | .. | 3 | .. | | | |
| Totals | 2941 | 133 | 2044 | 156 | .. | .. | 7 | 11 | 4 | 29 | 1 | 1 | 80 | 31 | 2 | 2 | 261 | 28 | 123 | 438 | 3 | 100 | 81 | 125 | 15 | 16 | 7 | 25 | 5 | 9 | 56 | 57 | 7 | 4 | 98 | 113 | 22 | 104 | 172 | 7 | | | |

RURAL

| DISTRICT | Estimated Population in the middle of 1934 for calculating rates | Small-pox | | Scarlet Fever | | Diphtheria | | Enteric Fever | | Puerperal Fever | | Erysipelas | | Pneumonia | | Cerebro-spinal Fever Cases | Pollomyelitis Cases | Encephalitis Lethargica Cases | Puerperal Pyrexia Cases |
|----------------------|--|-----------|------|---------------|------|------------|------|---------------|------|-----------------|------|------------|------|-----------|------|----------------------------|---------------------|-------------------------------|-------------------------|
| | | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate | Cases | Rate | | | | |
| Cannock | 21,041 | .. | .. | 83 | 3.94 | 16 | 0.76 | .. | .. | 1 | 0.05 | 8 | 0.38 | 19 | 0.90 | .. | .. | .. | 3 |
| Cheadle | 29,727 | .. | .. | 130 | 4.37 | 9 | 0.30 | .. | .. | 2 | 0.07 | 22 | 0.74 | 64 | 2.15 | .. | 1 | .. | 4 |
| † Gnosall | 1,177 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 0.85 | .. | .. | .. | .. |
| † Kingswinford | 5,640 | .. | .. | 16 | 2.83 | 3 | 0.53 | .. | .. | .. | .. | 2 | 0.35 | 5 | 0.88 | .. | .. | .. | .. |
| Leek | 15,651 | .. | .. | 52 | 3.32 | 7 | 0.45 | .. | .. | 1 | 0.06 | 7 | 0.45 | 10 | 0.64 | .. | .. | .. | 3 |
| Lichfield | 33,286 | .. | .. | 108 | 3.24 | 23 | 0.69 | .. | .. | 1 | 0.03 | 13 | 0.39 | 50 | 1.50 | .. | .. | .. | .. |
| † Mayfield | 896 | .. | .. | 2 | 2.23 | .. | .. | .. | .. | .. | .. | 1 | 1.11 | .. | .. | .. | .. | .. | .. |
| Newcastle | 16,680 | .. | .. | 45 | 2.70 | 12 | 0.72 | .. | .. | 1 | 0.06 | 2 | 0.12 | 20 | 1.20 | 1 | .. | .. | 3 |
| Seisdon | 14,553 | .. | .. | 64 | 4.40 | 4 | 0.27 | .. | .. | .. | .. | 3 | 0.20 | 14 | 0.96 | .. | .. | .. | .. |
| Stafford | 12,178 | .. | .. | 18 | 1.48 | 5 | 0.41 | .. | .. | 1 | 0.08 | 1 | 0.08 | 16 | 1.31 | .. | .. | 1 | 2 |
| Stone | 11,990 | .. | .. | 44 | 3.67 | 20 | 1.67 | .. | .. | .. | .. | 2 | 0.16 | 17 | 1.42 | .. | .. | .. | 1 |
| Tutbury | 10,484 | .. | .. | 12 | 1.14 | 9 | 0.86 | .. | .. | 2 | 0.19 | 4 | 0.38 | 2 | 0.19 | .. | .. | .. | .. |
| Uttoxeter | 9,153 | .. | .. | 7 | 0.76 | .. | .. | .. | .. | 3 | 0.33 | 3 | 0.33 | 2 | 0.22 | .. | .. | .. | .. |
| † Walsall | 4,000 | .. | .. | 5 | 1.25 | 1 | 0.25 | .. | .. | .. | .. | 1 | 0.25 | 13 | 3.25 | .. | .. | .. | .. |

† The figures for these districts relate only to the first quarter of 1934, as they ceased to exist on 1st April.

Maternity

Particulars relating to the

of the