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Cambridgeshire County Counci

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

Administrative County of Cambridge

For the Year 1919.

Cambridge:

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HOUSING OF THE WORKING CLASSES.

Cambridge Borough.—During 1919 a form of survey of housing needs was issued to all Local Sanitary Authorities by the Ministry of Health. The estimate furnished by the Town Council was as follows:—

- To meet the unsatisfied demand, 450 to 500 houses at once, and 100 per annum after.
- 2. To replace dwellings unfit for habitation, 141.
- 3. Requiring repair to remedy serious defects, 121.

Dr. Laird states the main action so far taken to be as follows:—

- A site of 17 acres selected in Cherryhinton for 113 houses. The site, lay out and types of houses have been approved by the Ministry.
- 2. A site in Chesterton of 27 acres has been approved by the Housing Commissioner.
- 3. Twenty houses in Stanley Road are in course of erection.

It is also proposed to erect 18 houses in Garlic Road, Newmarket Road.

As a matter of emergency the Ministry approved of the provision of temporary housing accommodation by the acquisition of the buildings of the First Eastern General Hospital, and their conversion into block dwellings of two, three and four roomed sets. By July, 1920, 134 tenements were in occupation, housing 417 persons. The whole scheme will provide 212 tenements.

During 1919, houses inspected under the Housing Regulations numbered 199, and two Closing Orders were made. Rural Districts.—During 1919 estimates of their housing needs were furnished by all the Rural District Councils to the Ministry of Health. The comments of the County Medical Officer of Health were requested by the Ministry on the returns received, and the paragraphs which follow immediately are based on these returns.

The number of working class houses built in the whole rural area during the four years ending 31st December, 1918, was given as 59, and the number regarded as likely to be built during the next three years by persons other than the Local Authority was estimated to be only 27.

The total number of tenements occupied by an average of more than two persons per room, *i.e.*, overcrowded, was stated to be 875, the number of occupants being 5,870. Based on the total resident population, it would therefore appear that 8.6 per cent. were living under conditions of overcrowding. Owing to the lack of accommodation, very little action has been possible by way of remedy.

The estimate of housing needs during the next three years appears in the following table:—

| | | To meet nsatisfied demand. | houses unfit | | Total. |
|------------|-----|----------------------------|--------------|-----|--------|
| Caxton | | 24 | 26 | 100 | 150 |
| Chesterton | | 242 | 50 | 3 | 292 |
| Linton | | 30 | 32 | 104 | 166 |
| Melbourn | | 30 | 55 | 80 | 198* |
| Newmarket | | 130 | 50 | 60 | 240 |
| Swavesey | * * | 44 | 9 | - | 53 |
| | | | - | - | |
| Total | | 500 | 222 | 344 | 1099 |
| | | - | | | |

^{*} Includes 33 anticipated to be needed to meet the development of new industries.

The number of acres estimated to be required for housing purposes was 217. In Caxton, Chesterton, Melbourn and Swavesey Rural Districts it was proposed to build four houses to the acre, and six houses to the acre in Linton and Newmarket Rural Districts. In all these areas the houses were to contain three bedrooms; the Swavesey scheme included in addition 15 houses with two bedrooms and 8 houses with four. The schemes vary as regards the number of living rooms, but in a considerable majority of the houses it is intended to provide two living rooms with a scullery in addition.

The annual report for the Chesterton Rural District states that sites were selected for 177 houses in 28 parishes, and that sites in 19 parishes had been approved by the Housing Commissioner. Ten houses were in course of erection at Willingham.

The principal items recorded of action taken under the Housing (Inspection of District) Regulations are set out below; details are not available for the Melbourn and Swavesey Rural Districts:—

| Rurai Distri | | T | Represented | d | Remedied |
|--------------|-------------------|------------|---------------------------|----------------------------|-------------------------------|
| | Houses inspected. | Considered | for Closing Orders. | Closing Orders made. | without Closing Orders. |
| Caxton | 88 | 12 | 32 | 4 | 2 |
| Chesterton | 1764 | 65 | 26 | 13 | 39 |
| Linton | 215 | 15 | 2 | _ | 39 |
| Newmarket | 250 | 16 | I | I | 31 |

An additional 13 houses were scheduled for Closing Orders in Chesterton Rural District. In Caxton Rural District one house was rendered habitable after service of a Closing Order, in Linton and Newmarket Rural Districts voluntary demolitions numbered 5 and 1 respectively, and in Melbourn R.D. one Closing Order was made and two houses were closed voluntarily.

Housing of County Council's Employees.—This matter engaged the attention of the Council during the year.

A special Sub-Committee of the Education Committee reported that 23 houses were required for the Head Teachers of Council Schools, and it was resolved that their provision should be spread over a period of three years. Certain sites have been considered and plans prepared for houses which it is proposed to erect in the first year.

The Standing Joint Committee resolved to erect 41 houses for the police, spreading the scheme over a period of five years. Certain sites have been agreed upon, and negotiations for others are proceeding.

An estimate of 65 houses for roadmen was reported to the Roads and Bridges Committee by a Special Sub-Committee, and enquiries were directed to be made whether the Rural District Councils' schemes would include houses which would meet these requirements.

WATER SUPPLY.

Cambridge Borough is supplied by the Cambridge University and Town Waterworks Company, who are expected shortly to commence pumping water from the Chalk at their newly constructed works at Fleam Dyke.

Chesterton Rural.—Of the 37 parishes, 28 have a public water supply. Eight parishes round Cambridge are supplied by the Cambridge University and Town Waterworks Company. Mains have also been extended to the parish of Great Wilbraham, as required by the Company's Act.

Private companies supply water by main to (a) Cottenham and Rampton from the Lower Greensand, and (b) Willingham from a gravel deposit; Madingley has a supply from the Lower Greensand piped to stand-pipes, and Longstanton

All Saints' has a piped supply from a gravel well to public pumps. Sixteen other parishes have public wells supplied chiefly from the Lower Greensand, but partly also from the chalk and gravel, while 9 parishes depend upon private sources.

Action recorded mainly relates to repairs, but the supply at Comberton, where the water is not of satisfactory purity, is under consideration.

Caxton Rural.—The East Hunts. Water Company supply a constant service to five parishes in this District from a well sunk into the Lower Greensand near Bourn. The filter bed for the removal of iron was out of order for a time, but this has been remedied, and the supply is now stated to be satisfactory. The mains have been extended to Papworth Everard for the supply of the Tuberculosis Colony, and the water is available for the use of the parish, the existing well supply being contaminated by surface pollution. Dr. Dudley records action taken in connection with unsatisfactory supplies in the parishes of Little Eversden, Croxton and Hardwick.

Linton Rural.—There is no public piped service and no supply by private company. Fourteen of the 20 parishes have public wells, the water being mainly derived from the Chalk at a considerable depth, in some cases after boring through Boulder Clay. In two parishes filtered pond water is publicly supplied, and in five others pond water is drunk in addition to the provision made by the public wells. Five parishes rely upon private wells.

Melbourn Rural.—There is no public mained service. The District is fortunate in being able to obtain a pure supply in many parishes from the Lower Greensand, which is protected by the overlying Gault Clay, ten parishes being supplied in this manner. There is much waste of water by overflow from this valuable stratum. Four parishes are supplied by

deep wells. One of the parishes which has a deep Chalk supply—Great Chishall—has also a public supply of filtered pond water, which has been liable to vegetable organic pollution.

Newmarket Rural.—In this District there are three public piped supplies derived from the Chalk—(I) for Cheveley and Wood Ditton (proposed extension to Kirtling and Ashley), (2) for Stetchworth (proposed extension to Dullingham), and (3) from the Newmarket Waterworks to a few houses in Wood Ditton and Cheveley parishes. Preliminary works near Ford ham for the supply of Soham from the Chalk were carried out, but their completion has been deferred; there was a recent enquiry by the Ministry in connection with this scheme, which may eventually include Fordham.

Of other parishes than those above mentioned, four have public wells bored into the Lower Greensand, and in one a similar well at Lode, belonging to the County Council, is available for public use. Two parishes have wells in the Boulder Clay, and the remaining parishes derive their supply from wells in the Chalk at various depths, most of them provided by the District Council.

Swavesey Rural.—The East Hunts. Water Company supply Swavesey and some houses in Conington and Fen Drayton from their well in the Lower Greensand. Lolworth is supplied from a private well in this stratum.

DRAINAGE, SEWERAGE AND REFUSE DISPOSAL.

No work of importance is recorded as having been carried out in any of the sanitary districts during the year.

Closet Accommodation.—Cambridge Borough is on the water carriage system; in the rural area this method of disposal is only found in connection with the larger houses,

the closets draining to cesspools. Privies or pailclosets are provided for the smaller class of property, and, speaking generally, the old insanitary privies are being replaced by pails, but progress in this direction is not uniformally rapid in the different Rural Districts. While in Chesterton R.D., for example, the pail closet is the type generally in use, in Linton R.D. about 41 per cent. of the houses have privy closets and 45 per cent. have pail closets, and in Newmarket R.D. privies greatly preponderate. It should be practicable for the Local Authorities which have been least progressive in this respect to speed up the process of conversion to the pail system, as has been done in other Districts.

Sewerage and Drainage.—In Cambridge Borough sewage is removed on the partially separate system to the sewage farm in the Chesterton Rural District, where, after sedimentation and land filtration, the effluent is discharged into the Cam.

From what has been said as to closet accommodation in the rural districts it will be gathered that there is little provision in the way of sewers in the villages. Exceptions may be quoted, as at Sawston in the Linton Rural District, and Stetchworth in the Newmarket Rural District, where there are small sewage disposal works. In the larger villages the storm-water drains are utilised as sewers for slop waters. Elsewhere excreta are disposed of on gardens and allotments.

House Refuse.—In Cambridge Borough there is a system of public scavenging, the refuse being disposed of in the destructor adjoining the sewage pumping station.

In the rural area, refuse is disposed of on garden ground or on allotments. While this may meet the case in the smaller villages, careful consideration is called for by the Local Authority, as pointed out in the report on the Chesterton Rural District, where in the more populous villages waste matter is accumulated on a limited space near the dwellings, some of which are situated in confined areas. Similarly, Dr. Armistead notes that a system of scavenging is needed at Sawston, in the Linton Rural District.

NUISANCES.

As only a few of the annual reports include a detailed statement of the work of the Sanitary Inspectors, no comprehensive statement can be made here. It would be advantageous if a uniform tabular statement were in use, shewing in concise form the work done by the Sanitary Inspectors for the safeguarding of the health of the public, and the preservation of the amenities of their daily life. Some suggestion of the volume of this work will be gathered from the following totals:—

Chesterton R.D., 2,602 inspections.

Linton R.D., 1,115 inspections, 126 nuisances abated. Caxton and Arrington R.D., 470 inspections.

Swavesey R.D., 320 inspections.

Newmarket R.D., 1225 inspections, 166 nuisances abated.

CONTROL OF FOOD SUPPLIES.

Cambridge.—Dr. Laird reports that 1,379 inspections were made of the 25 slaughter houses, 12 defects detected being remedied. Of these premises, 13 are described as being in good or fairly good condition. Most of the slaughtering is done in 12 slaughter houses, and in 1919 amounted to 27,147 cattle, sheep, pigs and calves. Almost one quarter of the cattle, nearly all the sheep, and about 90 per cent. of the calves were slaughtered in the "Government" slaughterhouse, while half of the pigs were killed on the premises of one firm.

Dr. Laird emphasises the advantage to the public of centralising slaughtering in a public slaughter-house. The experience gained during the War shews that it facilitates inspection, and gives reasonable assurance that only sound meat is used for food—a practical impossibility under the old system. The amount of meat condemned in 1919 exceeded 173 cwts. Other foods condemned, comprising fish, fruit and vegetables, butter and bacon, exceeded 151 cwt.; 134 rabbits and 96 chickens were also condemned.

Dr. Laird also comments on such common sources of contamination by handling and distribution of food as exposure in open shops and conveyance in open vehicles in an uncovered condition. He expresses the opinion that "cleanliness in these matters is largely a matter of education, and if the public desire it they must be prepared not only to demand it but also to pay for it." The attention of the County Council was drawn to this point several years ago, more especially in connection with butchers' shops in the rural area, and an advisory pamphlet was circulated to butchers in the rural districts.

The Cambridge report also contains statistics which shew that 170 visits were paid to 68 registered bakehouses, 119 visits to the premises of 23 cowkeepers, and 106 visits to the dairies and milkshops of 59 purveyors on the register. Information is given regarding the remedy of defects found.

Rural Area.—The reports on the Rural Districts indicate that premises concerned in the supply of food were duly inspected during the year, though precise figures are not given in all cases.

Slaughterhouses are reported to have been duly inspected in all the districts. Dr. Armistead notes, for example, that 15 inspections were made of the seven premises in the Linton Rural District, which he describes as fairly satisfactory.

Dr. Coombes states that in the Chesterton Rural District "much less slaughtering has been carried on recently, owing to the food restrictions and the increased percentage of frozen meat. Over 30 per cent. of the population purchase their meat outside the district."

Unsound food recorded to have been seized and condemned was as follows:—Caxton, two tubercular carcases; Linton, 23½ lbs. of bacon; and Melbourn, two forequarters of beef and about 2 cwt. of dates. No seizures are recorded for the other rural districts. Bakehouses and premises for the production and sale of milk were inspected in all districts, the use of one dairyman's premises in the Chesterton Rural District being discontinued as unsatisfactory. In this District also, one-third of the bakehouses are said to be of good modern construction, half fair, and one-sixth old and somewhat unsatisfactory, the use of seven such premises being discontinued on these grounds. No underground bakehouses are recorded in the Rural Districts.

SALE OF FOOD AND DRUGS ACTS.

Rural Area.—In this area the Acts continue to be administered by the County Police. The total number of samples taken and reported upon by the Public Analyst was 127 (105 in 1918), of which 85 were taken formally and 42 informally. The principal samples taken were:—Milk 95, margarine 7, and lard 6. Nineteen other articles were sampled, the number of samples of no article exceeding three.

Of the 127 samples analysed, 8, or 6.3 per cent., proved not to be genuine, compared with 11.4 per cent. in 1918, 3.4 in 1917, 5.2 in 1916, 1.2 in 1915, and 5.1 per cent. in 1914. Of the 95 milk samples, 22 were taken informally, and of these 4 proved not to be genuine, 3 shewing deficiency of milk fat to the extent of 26, 16 and 13 per cent. respectively (a sub-

sequent formal sample from the second source of supply proved to be genuine), and one shewing evidence of 14 per cent. of added water.

Four of the 73 formal samples of fresh milk proved not to be genuine, the action taken being as follows:—

- Contained 21 per cent. added water. Fined £5 including costs.
- 2. Contained 5 per cent. added water. Fined £5 including costs.
- 3. Contained II per cent. added water. Fined £I and 20/6 costs.
 - 4. Deficiency of 10 per cent. of milk fat. Case dismissed.

The total fines inflicted during the year amounted to £11, with 20/6 added costs.

Cambridge Borough.—Samples taken for analysis numbered 128 (109 in 1918), including 8 informal samples. The principal items were milk 77, ground ginger 7, and white pepper 5. Of the 38 other articles sampled, the number of samples in no case exceeded four.

The percentage of non-genuine samples—3 in number (all milk)—was 2.3, compared with 6.4 in 1918, 9.7 in 1916 and 1917, 8.4 in 1915, and 7.8 in 1914. The suggestion is made in Dr. Laird's report that the very remarkable drop in the number of adulterated milk samples may be due to the fact that it has paid better to sell milk than to make butter, in consequence of which there is practically no abstraction of milk fat, and no need to keep up the bulk of the supply by watering.

Three samples of milk shewed deficiency in milk fat to the extent of 19, 17 and 7 per cent. respectively. The vendor of the first mentioned sample only was prosecuted, and fined £1, the conviction being quashed at Quarter Sessions

on the ground that the milk was sold as produced by the cow, the case of Hunt. v. Richardson being cited. Representation is being made to the Ministry of Health that this rule, with the wording of Section 6 as to proof to the contrary, will result in the production of milk for quantity and not for quality, although a 3 per cent. minimum of milk fat is very low.

Use of Preservatives.—In both urban and rural areas the Public Analyst examines for preservatives all samples taken under the Sale of Food and Drugs Acts which are likely to contain them. In the rural area, boric acid was found to the extent of 0.40 per cent. in one sample of butter, and in quantities varying from 0.35 to 0.50 per cent. in 5 samples of margarine.

In Cambridge Borough no preservative was found in 78 samples of milk and one of cream. There was no offence under the Public Health (Milk and Cream) Regulations, 1912.

SCHOOLS.

The work of the school medical service is dealt with fully in the Annual Report to the Education Committee.

In common with the rest of the country this County suffered again from influenza, commencing in February. Although in the rural area the outbreak was less extensive and of shorter duration than in the autumn of 1918, it caused much interference with education by necessitating the closure of 89 schools.

Towards the close of the year measles became prevalent, necessitating school closure where the children were poorly protected by previous attack. Many visits were paid to the homes by the nursing staff for enquiry and advice. The total number of home visits paid by them in connection with infectious and contagious disease was 1,615.

The School Medical Staff paid 66 special visits to schools for enquiry into infectious and contagious disease, and, in addition to influenza closures, the School Medical Officer certified for the closure of 40 schools, after consultation, where necessary, with the local Medical Officer of Health. For bacteriological diagnosis of diphtheria 301 swabs were taken, 16 of which shewed evidence of diphtheria.

ISOLATION HOSPITALS.

The admissions to each of the isolation hospitals were as follows:—Cambridge Borough 348 (including 64 military cases), Newmarket Rural (Exning) 52, Chesterton Rural (Oakington) 62, and Melbourn Rural (Royston) 8. The Cambridge Hospital total includes 36 civilian cases from the Rural Districts, and several of the admissions to the Chesterton Rural Hospital were from other sanitary districts.

The annual maintenance grants were approved for payment by the County Council in respect of the hospitals provided by the Cambridge Town Council, and by the Newmarket and Melbourn Rural District Councils. The total grants amounted to £793 12s. 4d.

While the Cambridge Isolation Hospital provides accommodation adequate for the population of the Borough, the provision for the Rural Districts is decidedly inadequate. A conference has been held in the current year between representatives of the County Council and of the Local Sanitary Authorities, at which was discussed the feasibility of accommodating the rural cases in the Cambridge Isolation Hospital, suitably extended, or, alternatively, receiving all rural cases into a separate hospital, centrally situated. These proposals will be considered further.

The position as regards isolation of cases of small-pox remains as in 1918, all the Rural District Councils having

entered into an agreement with the Cambridge Town Council for the admission of cases to the small-pox hospital provided by that Authority, with the exception of the Chesterton Rural District Council, who have no special arrangement for dealing with their cases.

MATERNITY AND CHILD WELFARE.

Two schemes are in operation, one administered by the Town Council for Cambridge Borough, and the other by the County Council for the whole of the rural area of the County.

Cambridge Borough.—Under the Notification of Births Act, 1907, there were notified 876 births, or 97.9 per cent. of the total births registered, against 92.8 per cent. in 1918.

In January, 1919, the two Health Visitors employed by the Association for Maternity and Child Welfare were taken over by the Town Council. They visited 82 per cent. of the infants born in 1919. The following is a record of their home visits:—

| First visits to Infants | | 723 |
|-----------------------------------|------|------|
| Subsequent visits to Infants | | 2123 |
| Visits to children 1—5 years | | 385 |
| First visits to Expectant Mothers | | 73 |
| Subsequent visits to Expectant Mo | ther | s 37 |
| Other Cases | | 131 |
| | | |
| Total | | 3472 |

The four Consultation Centres are provided and managed by the Cambridge Association for Maternity and Child Welfare, the medical and health visiting staff being provided by the Corporation. During the year 2,755 attendances were paid to 717 infants, and 1,082 attendances to 380 children aged one to five years. In addition to other functions, these Centres distributed 6,404 lbs. of dried milk during the year, at prices varying with the financial position of the recipients, the total sum expended by the Town Council for this purpose being £129 13s. 4d.

Arrangements have now been made for an ante-natal clinic at Addenbrooke's Hospital, and for the provision of hospital beds when required. The Council have also approved a scheme of dental treatment.

There are four home helps on the register, and the Town Council are prepared to pay a retaining fee to each of 15 home helps who shall have undergone a recognised course of training. This work is being taken up by V.A.Ds., who, it is hoped, will form the nucleus of a voluntary body of home helps, whose services will be available in times of emergency.

Rural Districts.—During the year 1,128 notifications were received under the Notification of Births Acts, the number of births registered as having occurred within the same period being 1,100. After deducting 25 duplicates and 30 stillbirths, the number of live births notified was 1,073, or 97.5 per cent. of the total registered, a proportion which compares very favourably with 90 per cent. in 1918.

The proportion of notifications by medical practitioners (684) slightly increased to 60.6 per cent. from 60 per cent. in 1918, notifications by midwives (348) decreasing from 33 to 30.8 per cent., and those by relatives increasing from 7 to 8.5 per cent. In addition, the Health Visitors and Workhouse Masters reported 59 infants for visitation purposes. The interchange of complete monthly lists of registered and notified births with the Registrars continues.

Home visitation by the staffs of the County and District Nursing Associations was continued for advice with regard to expectant mothers, infants and young children up to school age. During the year first visits were paid to 299 expectant mothers and 972 infants, the average number of visits being 4.5 to each expectant mother, against 3.4 in 1918, and 8.1 to each infant, against 7.4 in 1918.

Total visits paid were as follows:-

| Expectant Mothers. County Health Visitors 294 District Nurses 1040 | | Up to School Age. 7228 4042 | Total. 12250 8240 |
|---|------|--------------------------------------|-------------------|
| Total for 1919 1334 ,, ,, 1918 724 | 7886 | 11270 | 20490 |
| | 7077 | 9237 | 17035 |

These figures indicate the very substantial increase of 20 per cent. in home visitation over the record for 1918, an advance to which both the Central and District Nursing Staffs contributed. This is a very satisfactory feature, when it is borne in mind that in a scattered rural area home visitation has largely to be relied upon for instruction and advice. A noteworthy feature is that the number of expectant mothers visited was greater by nearly 50 per cent. than in the previous year.

Under regulations issued in 1918 by the Local Government Board and by the Food Controller, fresh milk was supplied to expectant and nursing mothers, infants or children under five years in 49 families, and dried milk to 34 families. The total number of families thus assisted was 83, compared with 54 in 1918. All cases are the subject of careful enquiry before a certificate is issued, and a portion of the cost is contributed by the parents, where this can reasonably be required.

During the year one mother was sent to a convalescent home after confinement, and four expectant mothers and 16 infants and young children were treated at Addenbrooke's Hospital under the Council's scheme. One mother was admitted for confinement, and it may be noted here that in the current year greater advantage has been taken of the Council's provision for confinement in the wards of the Hospital.

The Council's scheme now includes the provision of home helps, and it is expected that several will be at work at an early date. The Council will also encourage the voluntary organisation of Child Welfare Centres by annual grants in aid; two centres are now affiliated and others are being organised. The opening of the Ely Diocesan Association's Home for fatherless children with their mothers has been unavoidably deferred, but the Association expect shortly to commence work, and the Council are prepared to maintain suitable cases in the Home. The question of making a capital grant is also under consideration.

MIDWIVES ACT.

To facilitate the working of the Maternity and Child Welfare scheme of the Borough of Cambridge certain powers and duties are delegated to the Town Council. The services of the County Council's Inspector of Midwives are utilised for inspection purposes.

During the year 139 routine visits of inspection were paid to midwives by the Inspector—21 in Cambridge Borough and 118 in the rural area. Special enquiries were also made from time to time as occasion arose, the number of such enquiries being approximately 30. Two enquiries were made into cases of alleged unregistered practice, but in both cases the woman proved to be acting as a maternity nurse under medical supervision.

One untrained midwife was reported to the Central Midwives Board for infringement of the Rules, and after due enquiry her name was removed from the Roll. Another untrained woman was warned that further infringement of the Rules would result in report to the Central Midwives Board.

The following is the number of women who notified their intention to practise in the years specified:—

| | | | Trained. | Untrained. | Total. |
|----------|------|------|----------|------------|--------|
| January, | 1906 | | 24 | 42 | 66 |
| ,, | 1919 | | 34 | 9 | 43 |
| ,, | 1920 | | 45 | 6 | 51 |

Of the 51 midwives who notified in January, 1920, 13 reside in Cambridge (all trained) and 38 (32 trained, 6 untrained) live in the rural area. Including notifications received after January, there were 64 women (55 trained, 9 untrained) practising in the Administrative County during 1919. Since 1906, when the administration of the Act commenced, notifications from untrained women have decreased by 86 per cent. During the same period the number of trained midwives notifying has almost doubled, owing to the formation of District Nursing Associations, encouraged by financial assistance from the County Council.

This assistance is given in two forms—grants for training of midwives, and annual grants in aid of new District Nursing Associations, who employ a Nurse-midwife. The training grants, formerly made by the Higher Education Committee, are now made through the Midwives Act Committee under the provisions of the Midwives Act, 1918. During the year the Committee approved applications for 7 training grants, 5 at the instance of the County Nursing Association, and 2 on application by other Nursing Associations. In each case an undertaking must be given that the candidate will practise

in the County as a midwife or maternity nurse for not less than three years.

To encourage the provision of midwives in un-nursed parishes, the County Council make annual grants, as mentioned above, towards the expenses of newly formed District Nursing Associations which employ Nurse-midwives who will render midwifery or maternity nursing services. During the year two new Associations were formed through the instrumentality of the County Nursing Association, and nurses were at work in six new parishes at the end of the year. Other Associations were being organised to start work in 1920. Speaking approximately, trained midwives were available by January last in parishes with an aggregate population of 50,000, while parishes with an aggregate population of 20,000 were without a trained midwife. This number has been reduced during the current year.

Under the scheme of grants made direct by the Ministry of Health to District Nursing Associations for midwifery and maternity services, the County Nursing Association distributed £238 for services rendered during the year ended March 31st, 1920.

Apart from intention to practise and change of address, notifications received from midwives numbered 128, against 136 in 1918, and 114 in 1917. They comprised medical help for mother 76, for infant 28, still-birth 9, laying out the dead 7, liability to be a source of infection 3, and artificial feeding 5. No notification was received of the death of mother or infant before the arrival of a doctor. No cases of puerperal septicæmia were notified by midwives as having occurred in their practices, and the cases of inflamed eyes in the newly born enquired into proved slight.

VENEREAL DISEASES.

The County Council's scheme for the diagnosis and treatment of venereal diseases has been in operation since January, 1917.

Addenbrooke's Hospital have been given in previous annual reports, and these arrangements were continued during 1919. Any person is entitled to receive treatment free of charge, and can obtain particulars as to hours of attendance by application to the County or District Medical Officers of Health.

The work done at the treatment centre during 1919 is summarised in the following tables:—

TABLE I.

| | Male. | Female. | Total. |
|--------------------------|-------|---------|--------|
| Under treatment on | | | |
| January 1st, 1919 | 20 | 28 | 48 |
| New patients during 1919 | 161 | 124 | 285 |
| Total under treatment | 181 | 152 | 333 |
| Venereal Disease | 147 | 125 | 272 |
| Not Venereal Disease | 34 | 27 | 61 |
| Left without completing | | | |
| treatment | 59 | 26 | 85 |
| Completed treatment | 77 | 39 | 116 |
| Transferred to other | | | |
| Treatment Centres | 3 | . 3 | 6 |
| Under treatment at end | | | |
| of year | 74 | 52 | 126 |
| Total out-patient | | | |
| attendances | 1029 | 858 | 1887 |
| Aggregate "in-patient | | | |
| days" | 857 | 916 | 1773 |
| | | | |

TABLE II.

| | Cambs. | Counties. | Total. |
|-------------------------|--------|-----------|--------|
| New out-patients during | | | |
| 1919 | 164 | 114 | 278 |
| Total out-patient | | | |
| attendances | 1167 | 720 | 1887 |
| Aggregate in-patient | | | |
| days | 892 | 881 | 1773 |
| Doses of salvarsan | | | |
| substitutes | 388 | 350 | 738 |

The total work done at the Centre, including patients from other Counties, shewed a marked increase on that recorded for 1918. The new out-patients and the aggregate in-patient days were almost doubled, while total out-patient attendances increased by 71 per cent. A large increase is also recorded in the work relating to patients from this County, as is shewn by the following figures:—

CAMBRIDGESHIRE PATIENTS.

| | | | Increase |
|------------------------------------|------|------|-----------|
| | 1918 | 1919 | per cent. |
| New out-patients Total out-patient | 92 | 164 | 78 |
| attendances | 805 | 1167 | 45 |
| Aggregate in-patient days | 624 | 892 | 43 |

These figures may mean one of two things, either that there was an increase in the prevalence of venereal disease, or that the centre is more widely known, and its facilities are more freely sought.

The proportion of Cambridgeshire new patients who proved not to be suffering from venereal disease was 15 per cent. After deducting such patients, the proportion of patients from all areas who ceased to attend before completing

their course of treatment was 30 per cent. It is to such persons, who, knowing their condition and failing to complete their treatment, endanger the health of others, that the proposals as to notification contained in the Bill drafted by the National Council for Combating Venereal Disease relate.

Laboratory Diagnosis.—Under the Council's scheme specimens are examined free of charge to medical practitioners and their patients at the University Laboratories. During the year 329 specimens were tested by the Wassermann reaction for syphilis, and 451 were submitted for bacteriological examination, compared with 224 and 228 respectively in 1918. Of Wassermann specimens 213, and of bacteriological specimens 369 were sent from the treatment centre.

Propaganda.—The Cambridgeshire Branch of the National Council, subsidised by the County Council, continued its useful propaganda work during the year. Special attention was again directed to impressing on parents and teachers the importance both of sex education and moral teaching, meetings for parents being arranged in various schools, both in Cambridge and in the rural district. A special campaign was arranged in the rural area, public meetings for women being organised and addressed by a woman organiser from the National Council. The Cambridge Trades and Labour Council was also addressed by the Medical Officer of Health for Cambridge. Altogether 20 meetings were held, and nearly 10,000 leaflets distributed at the various meetings.

The propaganda film, "The End of the Road," was shewn on 12 occasions in Cambridge, and was preceded by short introductory addresses by various medical practitioners. Some 10,000 people are estimated to have attended.

METHODS OF CONTROL OF TUBERCULOSIS.

The County Council continued to provide supervision in the homes, dispensary treatment and sanatorium accommodation for tubercular persons, whether insured or uninsured, and including ex-service men. The Insurance Committee have hitherto handed to the Council certain sums in respect of the insured section of the community, but under the provisions of the National Insurance Act, 1919, they will cease to be concerned with the provision of institutional services as indicated above.

Dispensary and Homes.—The following figures indicate the volume of work undertaken at or in connection with the Tuberculosis Dispensary (I, Camden Place, Regent Street, Cambridge), including visitation in the homes of the patients for supervision and advice. The staff are not responsible for medical treatment in the homes.

 Cases examined or treated at or in connection with the Dispensary:—

| | | | | 1918. | 1919. |
|----------------|---------|----------|-----------|-------|-------|
| New cases | | | | 496 | 519 |
| Old " | | | | 372 | 446 |
| | | | | - | |
| | | | | 868 | 1065 |
| | | | | , | |
| 2. Visits of | Patient | s to Dis | spensary: | _ | |
| | | | | 1918. | 1919. |
| Insured Person | ons | | | 784 | 516 |
| School Childs | ren | | | 418 | 462 |
| Other Uninsu | ired Pe | ersons | | 305 | 314 |
| | | | | | - |
| | | | | 1507 | 1292 |
| | | | | - | |

3. Visits to Homes:-

| (a) By | Tubercu | losis | Officer:— |
|--------|---------|-------|-----------|
|--------|---------|-------|-----------|

| (a) Dy | 1 110010 | 110313 |)),,,,,, | | |
|--------------|----------|----------|------------|--------|--------|
| | | | Borough. | Rural. | Total. |
| Insured | | | 87 | 386 | 473 |
| School Chile | dren | | 12 | 96 | 108 |
| Other Unin | sured | | 26 | 222 | 248 |
| | Total | 1919 | 125 | 704 | 829 |
| | ,, | 1918 | 74 | 1685 | 1759 |
| | | | 775-7 | | |
| (b) By | Dispens | sary Ni | urses:— | | |
| Insured | | | 791 | 423 | 1214 |
| Uninsured | | | 482 | 403 | 885 |
| | Total | 1919 | 1273 | 826 | 2099 |
| | , ,, | 1918 | 1185 | 777 | 1962 |
| (c) By | General | Nursi | ng Staff:- | | |
| Insured | | | _ | 315 | 315 |
| Uninsured | | | - | . 358 | 358 |
| | Total | 1919 | | 673 | 673 |
| | ,, | 1918 | - | 626 | 626 |
| Grand total | home v | isits :— | | | |
| 1919 | | | 1398 | 2203 | 3601 |
| 1918 | | | 1259 | 3088 | 4347 |

Specimens of sputum examined bacteriologically numbered 115 (128 in 1918), the tubercle bacillus being found in 16 specimens. X-rays examinations numbered 15 (55 in 1918).

Shelters.—Twelve additional open-air shelters, with bedding outfits, were purchased, bringing the number acquired up to 99. A few worn-out shelters have been disposed of.

Sanatorium Accommodation.—The provision made by the County Council is for both insured and uninsured persons, including children. Accommodation is found for ex-service men, but the whole cost is defrayed by the Treasury where the disease is attributable to or aggravated by military service.

In part consideration of their financial contribution, the Insurance Committee are entitled to the continued occupation of 8 beds by insured persons, but in actual practice this is considerably exceeded, accommodation being found for all insured persons with regard to whom application is made. The following table shews that in addition to 55 ex-service men, 54 insured persons (31 men and 23 women), 28 uninsured adults (12 men, 16 women) and 39 children were admitted to Sanatoria during the year. The total of 176 new admissions in 1919 shews a considerable increase on the corresponding total of 104 for the previous year.

| | | In Sanat. Jan. 1st. | Admitted. | Discharged. | Total reated. |
|------------|---------|------------------------|-----------|-------------|---------------|
| Men: | | | | | |
| Ex-Service | | 10 | 55 | 41 | 65 |
| Insured Ci | vilians | 10 | 31 | 17 | 41 |
| Uninsured | " | 4 | 12 | 12 | 16 |
| Women: | | | | | |
| Insured | | 8 | 23 | 20 | 31 |
| Uninsured | | 4 | 16 | 17 | 20 |
| Children | | 5 | 39 | 21 . | 44 |
| m . 1 | | - | | | - |
| Total | 1919 | 41 | 176 | 128* | 217 |
| ,, | 1918 | 31 | 104 | 94 | 135 |
| | | - | - | | |

^{*} Includes 2 deaths.

The institutions to which patients were sent in 1919 were as follows:—

| | | Male | | | |
|--------------------|----------|------------|--------|-----------|-------|
| Ex-S | Service. | Civilians. | Women. | Children. | Total |
| Cambs. T. Colony | 55 | 42 | - | I | 98 |
| Bramblewood | - | _ | 19 | 2 | 21 |
| Holt (Children's) | _ | | _ | 14 | 14 |
| Maltings Farm | _ | _ | 12 | - | 12 |
| Hunstanton | _ | _ | _ | 3 | 3 |
| Ipswich | - | - | 7 | _ | 7 |
| Brompton Hospital | I | - | - | - | I |
| Alexandra Hospital | - | _ | - | I | I |
| Treloar's, Alton | _ | _ | - | 4 | 4 |
| Oak Bank | - | _ | _ | 12 | 12 |
| Victoria Home, | | | | 6 | |
| Margate | - 2 | | - | I | I |
| Nottingham | I | _ | | _ | I |
| S.E. Hospital | I | - | - | _ | I |
| | 58 | 42 | 38 | 38 | 176 |

The County Council obtain practically all the accommodation for their male adult patients, in all stages of pulmonary tuberculosis, at the Cambridgeshire Tuberculosis Colony, Papworth Everard. Some cases of tubercular disease of the bones are also admitted.

Apart from Addenbrooke's Hospital, where cases requiring surgical interference are admitted, vacancies for women and children have been obtained outside the County, as will be seen from the above table. The total provision for both sexes, in addition to demobilised men, was 30 beds, increased in April, 1919, to 40 beds. This was further increased during the year to 70 beds, and the Council have now, in the current year, resolved to make provision for the continuous occupation

of 100 beds for men, women and children, ex-Service men being also accommodated without limitation as to numbers.

The number of beds actually reserved is 58, made up as follows:—Papworth Colony 30, Bramblewood 10, Oak Bank 10, Holt Sanatorium for Children 8. An increase in the reserved accommodation is now being negotiated. The special difficulty is in providing accommodation for advanced pulmonary cases in women and children, and for bone cases.

Cambridgeshire Tuberculosis Colony — This institution for male patients has now completed its second year of work. It is not under the management of the County Council, who, however, reserve beds for practically all their male patients for whom accommodation is sought.

During the year 136 ex-Service men and 61 civilians were admitted, the total of 197 being an increase of 77 on the admissions in 1918. The accommodation provided includes 24 hospital beds for cases of considerable disease, 8 surgical beds, 28 sanatorium beds for observation of new cases and those requiring treatment and rest, and 60 colony beds. There are now 22 cottages attached to the Colony, and in 1919 there were 14 ex-patients resident in the village settlement, or 42 persons, including their wives and families. In addition there are 18 beds in the Institutional Hostel at St. Peter's House.

Extension of the workshops in the Colony allows for the training of from 90 to 100 patients. The training provided includes carpentry and joinery, cabinet making, boot making and repairing, tailoring, portmanteau and attache case making, printing, hand-made jewellery, poultry farming and horticulture.

Cambridgeshire Tuberculosis After-Care Association.—
This Association, of which the Tuberculosis Officer is Hon

Medical Officer, assists tuberculous persons who have received sanatorium or other treatment, and especially members of Approved Societies or Friendly Societies, by supplementing their income, obtaining suitable employment and other forms of assistance. The principle underlying the work of the Association is the subsidising of such persons while doing work as part of their treatment, financial grants being paid equivalent to the sickness benefit forfeited. In this way a sufficient food supply is assured, and the patient is relieved of the prejudicial influence of mental anxiety.

The annual report for 1919 shewed a reduction in the cases dealt with during the year, 18 in number, against 38 in 1918. The explanation given is that most of the male applicants were ex-soldiers in receipt of full pensions, and not in need of assistance. Altogether £125 10s. was paid in grants, an increase of over £30 on the previous year. A small workroom was started to provide occupation in needlework for tubercular women.

MENTAL DEFICIENCY ACT.

During the year 30 new cases were considered by the Committee for the Care of the Mentally Defective. Of these, 12 were notified as "neglected" (10 by the Cambridgeshire Voluntary Association, and 2 from private sources), 10 by Local Education Authorities (Cambridge 3, County 7), 4 by the Board of Control (3 Poor Law, 1 Prison), 1 each by the Borough and County Police respectively as charged with an offence, and one from a private source for action under the Council's permissive powers. Of the Local Education Authorities' cases, 7 were notified as "ineducable," 2 as about to leave a special school at the age of 16, and one as a moral imbecile.

| The foregoing cases | were dea | lt with | as foll | ows :- | - 1 |
|-----------------------|------------|---------|----------|--------|-----|
| Certified Institution | on petit | ion | | | 13 |
| " | under O | rder of | Court | | 2 |
| ,, ,, | under p | ermiss | sive pov | vers | I |
| Guardianship on pet | ition | | | | I |
| Supervision by Volu | ntary As | sociat | ion | | 5 |
| Order for Guardians | hip not e | xecute | ed | | I |
| Fulbourn Mental Ho | ospital | | | | I |
| Responsibility not a | ccepted | | | | I |
| Insufficient evidence | e of defec | t | | | 5 |
| | | | | | - |
| | | | | | 30 |
| | | | | | - |

In addition to the foregoing, of two cases reconsidered during the year one was sent to a certified Institution under Order, and one was placed under the supervision of the Voluntary Association. Of defectives in institutions, 3 died during the year, I was transferred to a State Institution and I to a mental hospital, and I was discharged to her home.

During the year the Enquiry Officer, Mr. Leybourn, resumed duty on demobilisation. Joint arrangements with the Voluntary Association as to staff, which continued to the end of the year, have since been terminated, and Mr. Leybourn now acts solely for the County Council, the Voluntary Association appointing their own Enquiry Officer. The Association, in consideration of a financial grant, continue to assist the Council by undertaking supervision of defective persons in their homes, escort to Institutions, and assistance in finding places of safety. They also assist in ascertainment, and by reporting to the Statutory Committee when defectives appear subject to be dealt with under the Mental Deficiency Act.

From the commencement of the administration of the Act to the end of the year, 158 persons had been brought

to the notice of the Local Control Authority. Of these, 42 have been placed under the supervision of the Voluntary Association, 63 have been sent to institutions (57 on petition, 2 under Order of Court, I to State Institution, and 3 under permissive powers), and 3 have been placed under Guardianship. Nine of the defectives thus dealt with have died (7 in institutions and 2 under supervision). Three defectives have been discharged from certified institutions to their homes, 2 transferred to mental hospitals, and 2 to State Institutions for violent defectives.

In addition to dealing with cases brought to their notice as subject to be dealt with under the conditions defined in the Mental Deficiency Act, the further duty devolves upon the Local Control Authority of ascertainment of all defective persons within their area. Exclusive of children, with whose care the Local Education Authorities are charged, and of defectives for whose care provision has already been made under the Mental Deficiency Act, 178 defective persons had been ascertained by the end of the year, the principal sources of information being the Voluntary Association and school medical records. / Certain of these defectives will require institutional care or training at an early date, while others will be in need of similar provision when their home circumstances change in course of time, or when they become chargeable to the Poor Law Authorities, or are convicted of offences.

The County Council has no institution of its own for the reception and care of the mentally defective, but has relied upon existing institutions elsewhere. It is now extremely difficult to secure the necessary accommodation, and the Council has been requested by the Board of Control to prepare an institutional scheme. Many houses have been inspected with a view to purchase and necessary adaptation, but no decision has yet been arrived at. The matter is one of

undoubted urgency if adequate provision is to be made for the care and control of this helpless section of the community, who constitute a danger to the national health and economic efficiency.

VITAL STATISTICS AND INCIDENCE OF INFECTIOUS DISEASE.

Population.—The Registrar-General has furnished two estimates of the population for 1919:—(a) for calculation of the death rate, an estimate of the civilian population, based mainly on the rationing returns to the Ministry of Food, and (b) for calculation of the birth rate, an estimate of the total population, including all non-civilians enlisted from this County, whether serving at home or abroad. The figures for this County are as follows:—

| | For Birth | For Death |
|-------------------------------|----------------|-----------|
| Population. | Rate. | Rate. |
| County of Cambridge | 131470 | 126207 |
| Cambridge Borough | 60261 | 57849 |
| Aggregate of Rural District | s 71209 | 68358 |
| Change from 1918:— | | |
| County of Cambridge | +2015 | +10670 |
| Cambridge Borough | +2018 | +5868 |
| Aggregate of Rural District | s - 3 | +4802 |
| Populations of Individual Rur | al Districts:— | |
| Chesterton | 23396 | 22460 |
| Caxton and Arrington | 7090 | 6806 |
| Linton | 9446 | 9068 |
| Melbourn | 8086 | 7762 |
| Newmarket | 20751 | 19920 |
| Swavesey | 2440 | 2342 |
| | | - |
| | 71209 | 68358 |

Birth Rate.—The statistics for 1919 furnished by the Registrar-General are as follows:—

| | | Birth rate | |
|-----------------------|---------|------------------|--|
| | Births. | per 1000 living. | |
| Administrative County | 1994 | 15.2 | |
| Cambridge Borough | 894 | 14.8 | |
| Rural Districts | 1100 | 15.4 | |

The following figures shew the decline in births since 1914, the last year uninfluenced by the War:—

| | | Numb | Number of Births. | | | Birth Rate. | | |
|---------|--------|--------|-------------------|--------|--|-------------|--------|--------|
| | | Boro.' | Rural. | Total. | | Boro.' | Rural. | Total. |
| 1914 | | 996 | 1393 | 2389 | | 17.4 | 19.1 | 18.3 |
| 1915 | | 997 | 1315 | 2312 | | 17.4 | 18.9 | 17.7 |
| 1916 | | 991 | 1259 | 2250 | | 17.4 | 17.5 | 17.5 |
| 1917 | | 741 | 1010 | 1751 | | 12.7 | 14.2 | 13.5 |
| 1918 | | 821 | 1064 | 1885 | | 14.0 | 14.9 | 14.5 |
| 1919 | • • | 894 | 1100 | 1994 | | 14.8 | 15.4 | 15.2 |
| Declin | e from | | | | | | | |
| 1914 to | 1919. | 102 | 293 | 395 | | 2.6 | 3.7 | 3.1 |

It will be seen that the heavy drop in the birth rate was followed by a progressive recovery in the whole County in 1918 and 1919, but at a more rapid rate in Cambridge than in the rural area. The increase of nett births on the figures for 1918 was 109 for the whole County, 73 for Cambridge Borough and 36 for the rural area. The rates for the Rural Districts, from highest to lowest were:—Linton, 16.1 (152 births); Melbourn, 15.9 (129); Newmarket, 15.5 (322); Chesterton, 15.3 (358); Caxton and Arrington, 14.9 (106); Swavesey, 13.5 (33).

There were 174 illegitimate births in the Administrative County, 77 in Cambridge, 97 in the Rural Districts, compared with 63 in Cambridge, 96 in the Rural Districts, and 159 total in 1918. Calculated as a percentage of total births,

the proportion of illegitimate births was 8.6 in Cambridge, 8.8 in the rural area, and 8.7 in the Administrative County, against 7.7, 9.0 and 8.4 per cent, respectively in 1918. The increase of illegitimacy in 1919 was therefore confined to Cambridge.

The proportion of illegitimate to total births fell in both urban and rural areas in the early part of the War, but has since risen to a higher level than in 1914. In that year the rural rate was much lower than the urban (5.6 per cent. compared with 7.2), but they are now approximately equal.

The proportion of still-births notified to total births registered was as follows:—

Borough of Cambridge 29 still-births, or 3.2 per cent.

Rural Area 31 ,, ,, 2.8 ,, Whole County 60 ,, ,, 3.0 · · ,,

These percentages are slightly higher than those of the previous year.

Death-Rate from all Causes.—The statistics relate to the civilian population only. After allowing for deaths away from the usual place of residence, the nett death-rate for the whole County was 12.7 per 1,000, against 15.6 in 1918. The rates for the urban and rural areas were 11.2 and 13.9 respectively, decreases of 3.6 and 2.4 per 1,000 on the mortality for 1918. The death-rate for Cambridge was 2.6 below that for the Great Towns (13.8); there are again no figures available for rural England and Wales with which the statistics of the rural area of the County may be compared.

The total deaths from all causes in the whole County were 1,604 (Cambridge 648, Rural 956), being 201 less than in 1918, the year of excessive influenza mortality. In spite of the recurrence of influenza in the spring of 1919, the corrected death-rate is lower than that for any of the preceding 10 years. While the influenza death-rate was still much above

the average, there was a large reduction in deaths from pulmonary tuberculosis, some decline in deaths from pneumonia, and a decided increase in deaths from violence and suicide.

Infant Mortality.—The number of deaths under one year, 118 (urban 45, rural 73), was identical with that in 1918, being in the proportion of 59 deaths per 1,000 births. This compares very favourably with the average rate of 73 during the preceding 10 years. The corresponding rate for Cambridge was 50, against 93 for the Great Towns, and that for the rural area was 66 per 1,000 births.

After allowing for the increased number of births as compared with 1918, the only outstanding feature of the year was a decrease in deaths due to congenital debility and wasting diseases. Deaths from the infections, including pneumonia and diarrhoea, shewed but little change.

The mortality among illegitimate infants, compared with that among legitimate infants, is shewn by the following statement of deaths (approximate) per 1,000 births:—

| | Legitimate. | Illegitimate. |
|-------------------|-------------|---------------|
| Cambridge Borough | 43 | 130 |
| Rural Districts | 58 | 155 |
| Whole County | 51 | 143 |

It will thus be seen that the death-rate among illegitimate infants was practically treble that of the legitimate. The actual numbers of deaths of illegitimate infants were 10 in Cambridge Borough and 15 in the Rural Districts.

Infectious Diseases.—An unsatisfactory feature was the considerably increased prevalence of scarlet fever and diphtheria. Measles also was prevalent, though, fortunately, the mortality was low, and the recrudescence of the influenza epidemic again caused an abnormal loss of life, though much less than that resulting from the outbreak of 1918. On the

other hand there were very few cases of enteric fever and no deaths, and there was little loss of life from diarrhoeal diseases and from puerperal fever. There was a large reduction in the mortality from pulmonary tuberculosis, and the reduction in the mortality rate from cancer which was noted in 1918 was maintained during 1919.

Small-pox.—No case of small-pox was notified as having occurred in the Administrative County, but persons who have been in contact with cases elsewhere have required supervision. As the addresses given regarding persons coming into the district are not always correct they may escape supervision, and in the present circumstances of neglect of vaccination, this is a source of much anxiety to the administrative staffs. Dr. Armistead estimates that about half the children born in the Linton and Newmarket Rural Districts in recent years are unvaccinated, while statistics furnished to Dr. Laird by the Vaccination Officer for the Old Borough of Cambridge for the first half of 1919, show that, after excluding those who died unvaccinated, the proportion of infants successfully vaccinated was only 27.58 per cent. Dr. Laird points out that while 60 per cent. of boys attending the Perse Boys' School are unvaccinated, the parents of candidates for free places readily agree to vaccination, evidence of which is a condition of this privilege, a striking commentary on conscientious objection.

Scarlet Fever.—Notifications increased from 84 in 1918 to 211 in 1919, there being greater prevalence both in Cambridge, where there were 69 cases notified, and in the rural area, where notifications numbered 142. The principal incidence was in Cambridge, the Chesterton Rural District (73 cases) and the Linton Rural District (41 cases).

The number of cases removed to Isolation Hospitals was 148, or 70 per cent. of the total notifications. The numbers actually removed in the different Sanitary Districts

were as follows:—Cambridge 51 (69 notified), Caxton R.D. 2 (3), Chesterton R.D. 58 (73), Linton R.D. 3 (41), Melbourn R.D. 8 (7), Newmarket R.D. 14 (16), and Swavesey R.D. 2 (2). These figures include civilian cases only.

The poor record of the Linton Rural District is note-worthy, only 3 cases out of 41 being removed, and there can be little doubt that the policy of allowing cases to remain in their homes accounts for the fact that as many as 37 cases occurred in one parish (Sawston). In the Chesterton Rural District, on the other hand, it is interesting to note that from 1910 to 1914, when 51 per cent. of the cases were removed to hospital, the number of notifications was 719, while from 1915 to 1919, when the higher proportion of 64 per cent. were removed, the total notifications did not exceed 220.

There were 6 deaths from scarlet fever—2 in Cambridge (0.03 per 1,000), 4 in the rural area (0.06 per 1,000), the mortality rate for the whole County being 0.05 per 1,000 living. The proportion of fatal to total cases was 2.8 per cent.

Diphtheria.—The incidence in 1919 was almost double that in 1918, viz., 200 notified cases against 101 in 1918. The greatest prevalence was in Cambridge, where there were 121 notified cases, the rural cases numbering 79. The number of deaths was practically doubled also, viz., 15, against 7 in 1918, yielding a mortality rate for the whole County of 0.12 per 1,000 living, slightly below that for England and Wales (0.13). The rate for Cambridge was 0.14, identical with that for Great Towns, while that for the Rural Districts was 0.05 per 1,000, practically one-third of that for Cambridge.

Removals to Isolation Hospitals numbered 169, or 84.5 per cent. of the total notifications. The numbers actually removed in the different Sanitary Districts were:—Cambridge 108 (121 cases), Caxton R.D. 12 (15), Chesterton

R.D. 12 (18), Linton R.D. 1 (5), Newmarket R.D. 37 (39), Swavesey R.D. 1 (1), and Melbourn R.D. none (1).

In Caxton Rural District 10 out of 15 cases occurred in one parish (Papworth Everard). These were promptly removed to hospital following upon a joint investigation by the District and County Medical Officers of Health, and the outbreak was arrested. In Newmarket Rural District all but 3 of the 39 cases occurred in two parishes, in one of which, Burwell, there was delay in notification and opposition to hospital isolation. In Chesterton Rural District report occurs the note that whereas there were 211 notified cases of diphtheria in the five years 1910 to 1914, when only 18 per cent. of the cases were removed to hospital, the number of notifications declined to 78 in the five years 1915 to 1919, when hospital isolation was practised to the extent of 61 per cent. of removals.

Enteric Fever.—Only 4 civilian cases were notified, against 11 in 1918, and no deaths were recorded. There were no cases notified in Cambridge. The one case notified in Caxton Rural District was attributed to the pollution of a well by privy contents. One case was notified in Swavesey Rural District and two in Newmarket Rural District, one of which was removed to hospital. It is noted that in the Chesterton Rural District there have only been 9 cases during the last five years, compared with 29 during the five years 1910 to 1914.

Erysipelas.—There were 43 notified cases, against 44 in 1918, the sickness rate being 0.34 per 1,000 of the population. There were 2 deaths, both in the rural area.

Puerperal Fever.—Only one case was notified, in the Linton Rural District, but as three deaths were recorded, there was failure to notify at least two cases. Of the three deaths, two occurred in Cambridge and one in the Rural Districts, yielding mortality rates of 0.03 per 1,000 living

for Cambridge, 0.01 for the rural area, and 0.02 for the whole County. Apart from puerperal fever, only one death was attributed to child birth.

Diarrhoeal Diseases.—Ten deaths occurred from this cause under two years of age, of which 6 were in Cambridge and 4 in the Rural Districts. The death-rates per 1,000 births were 5.01 for the whole County (England and Wales 9.5), 6.71 for Cambridge (Great Towns 12.24), and only 3.63 for the rural area. The local rates therefore compared favourably with those for the country generally.

Whooping Cough.—This disease, from which there were 17 deaths in 1918, was recorded to have caused 7 deaths in 1919, of which I occurred in Cambridge and 6 in the Rural Districts. The mortality rates were 0.05 for the Administrative County (England and Wales 0.07), 0.02 for Cambridge (Great Towns 0.07) and 0.09 for the rural area.

Measles.—The number of notifications of measles and German measles was 1,163, of which 65 were stated to be German measles and 1,098 true measles. From Cambridge, 772 cases of true measles were notified, and 326 from the Rural Districts. In spite of the large number of notifications the mortality from measles continued low, not more than 5 deaths occurring, 3 in Cambridge and 2 in the Rural Districts. The mortality rates per 1,000 living were 0.04 for the whole County (England and Wales 0.10), 0.05 for Cambridge (Great Towns 0.13), and 0.03 for the Rural Districts. A large number of cases were visited by the Health Visitors in the rural area, and in Cambridge 26 were nursed by District Nurses and 9 were admitted to Hospital where special circumstances existed.

The regulations requiring notification were rescinded as from January 1st, 1920, but a large proportion of the cases are notified by the Head Teachers under arrangements made by the Local Education Authorities, and others are brought to light by the Health Visitors. As measles is not now compulsorily notifiable the public may conclude that it is not a dangerous disease, and it is important that any such impression should be dispelled. It cannot be too strongly emphasised that the deaths caused annually by measles and whooping cough far exceed the loss of life from diphtheria, scarlet fever and enteric fever combined; and further, that the measles and whooping cough mortality can be prevented by proper care and attention.

Acute Poliomyelitis (Infantile Paralysis).—Only two notifications were received, both from Cambridge Borough. The sufferers were males aged 16 and 23 years, and in both cases the attack terminated fatally.

Cerebro-Spinal Meningitis.—Five notifications were received, of which I was from Cambridge, I each from the Caxton and Linton Rural Districts, and two from separate parishes in the Newmarket Rural District. The Cambridge and Caxton cases are reported to have been confirmed bacteriologically. All notified cases recovered. Under Regulations of the Ministry of Health consultant opinion and serum treatment are provided by the County Council when desired by the doctor in attendance.

Encephalitis Lethargica.—One notification was received from Chesterton Rural District.

Malaria.—The number of notifications received was 39, of which 17 were in Cambridge and 22 in the Rural Districts. Where any special note is made in the local reports, it is stated that the cases were imported from abroad. There is no reference in the reports to special measures having been taken by the Local Sanitary Authorities under powers conferred by the Ministry of Health's regulations.

Ophthalmia Neonatorum.—Twenty-three notifications were received, 12 from Cambridge and 11 from the Rural

Districts. There is no special comment in the local reports, but it may be noted that enquiries into cases notified under the Midwives Act as having required medical aid went to shew that the attack was usually mild in degree.

Pulmonary Tuberculosis.—The total number of civilian notifications received (Form A) was 207, or 1.64 per 1,000 of the (death-rate) population, compared with 177 (1.53 per 1,000) in 1918, and 243 (2.09 per 1,000) in 1917. After deducting duplicates, the number of notifications received for the first time was 202, or 1.60 per 1,000, against 170 (1.47 per 1,000) in 1918, and 231 (2.00 per 1,000) in 1917.

There was thus some improvement in notification on the previous year, but the statutory requirement to notify is still far from being satisfactorily complied with. It is of the greatest importance for the success of institutional treatment that it shall be commenced as early as possible, and the need for early notification as a means to that end is obvious.

The number of deaths registered from this cause was 95, against 158 in 1918, and 131 in 1917. The decrease in mortality occurred both in the urban and rural areas. In Cambridge Borough there were 36 deaths, compared with 76 in 1918, the number of deaths registered in the rural area being 59, compared with 79 in the previous year. The mortality rates per 1,000 living were:—Administrative County 0.75 (1.34 in 1918), Cambridge Borough 0.62 (1.46 in 1918), and Rural Districts 0.86 (1.24 in 1918).

These figures shew a remarkable decrease from the rate of mortality which obtained during the War, and especially from that of 1918. Some tubercular patients no doubt died of influenza in 1918, whose deaths would otherwise have occurred from tuberculosis in 1919, so that this reduction in mortality may not be fully maintained in 1920. The

large decrease does, however, favour the view that the increased mortality during the War years was due to temporary social and economic causes, and that the death-rate from pulmonary tuberculosis will decline with the return to more normal conditions.

Tuberculosis of Other Organs.—There were 68 notifications received, compared with 74 in 1918, yielding a notification rate of 0.53 per 1,000. After deducting 4 duplicate notifications, the number of notifications received for the first time was 64, yielding a notification rate of 0.51 per 1,000 of the (death-rate) population. The deaths numbered 28, compared with 14 in 1918. Of these, 18 occurred in Cambridge and 10 in the Rural Districts. The mortality rates per 1,000 living were as follows:—Administrative County 0.22 (0.12 in 1918), Cambridge 0.31 (0.09 in 1918), and Rural Districts 0.14 (0.14 in 1918).

Pneumonia.—Deaths recorded as due to this cause numbered 64, of which 35 belong to Cambridge and 29 to the Rural Districts. The mortality rate for Cambridge was 0.60 per 1,000 living, for the rural area 0.42, and for the whole County 0.50 per 1,000. In spite of the recrudescence of influenza in the spring, mortality from this cause was no higher in Cambridge than in 1916 and 1917, and was much lower in the rural area. The deaths in the rural area especially were much fewer than in any year from 1912 to 1917.

Acute primary pneumonia and acute influenzal pneumonia became notifiable on March 1st, 1919. During the ten months March to December, 23 notifications were received in Cambridge and 60 in the rural area.

Cancer.—There were 195 deaths attributed to cancer, against 177 in 1918. Of these, 83 occurred in Cambridge and 112 in the rural area. The proportion of recorded deaths per 1,000 living was 1.54 in the Administrative County

(1.53 in 1918), 1.43 in Cambridge (1.42 in 1918), and 1.63 in the rural area (1.62 in 1918). The corresponding crude rate for England and Wales for 1918, the latest year for which information is obtainable, was 1.22 per 1,000 living.

The proportion of the population recorded as dying from this cause, which increased steadily over a considerable period up to 1915, remained practically stationary from 1910 to 1917, and shewed an appreciable decline in 1918, which was maintained in 1919. Although there was an increase of 18 deaths on the year 1918, there was practically no increase in the mortality rates, as they were based on a larger population.

Influenza.—Following upon the epidemic of the autumn of 1918 there was a recrudescence of this disease in February, 1919, both in Cambridge and in the rural area. From information received from school sources at least 80 parishes were invaded in 1919, but the outbreak was of shorter duration than in the previous year. The loss of life in the whole County, though much in excess of that in normal years, did not much exceed one quarter of that in 1918. The actual numbers of deaths were 32 in Cambridge, 53 in the rural area, and 85 in the whole County, the corresponding mortality rates being 0.55, 0.77, and 0.67 per 1,000 of the population. The number of deaths in proportion to the population was thus higher in the rural than in the urban area, repeating the experience of 1918.

The large proportion of deaths (55) at ages below 45 was again noticeable compared with those at higher ages (30), a feature of the 1918–19 epidemic, which was not in accordance with previous experience. The great excess of female mortality from this cause which occurred in Cambridge in 1918 was not repeated in 1919. The total number of deaths directly attributed to influenza in both sexes in

1918-1919 was 395. This does not state the loss of life in full, as no doubt a number of the deaths attributed to pneumonia and pulmonary tuberculosis were due to influenza.

FRANK ROBINSON,

County Medical Officer of Health.

County Hall, Cambridge.