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General
~~Med. Officer~~
Paul

Gloucestershire County Council.

25TH OCTOBER, 1926.



ANNUAL REPORT

OF

The Medical Officer of Health

FOR THE

ADMINISTRATIVE COUNTY OF GLOUCESTER

FOR 1925.

Annual

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SHIRE HALL, GLOUCESTER,

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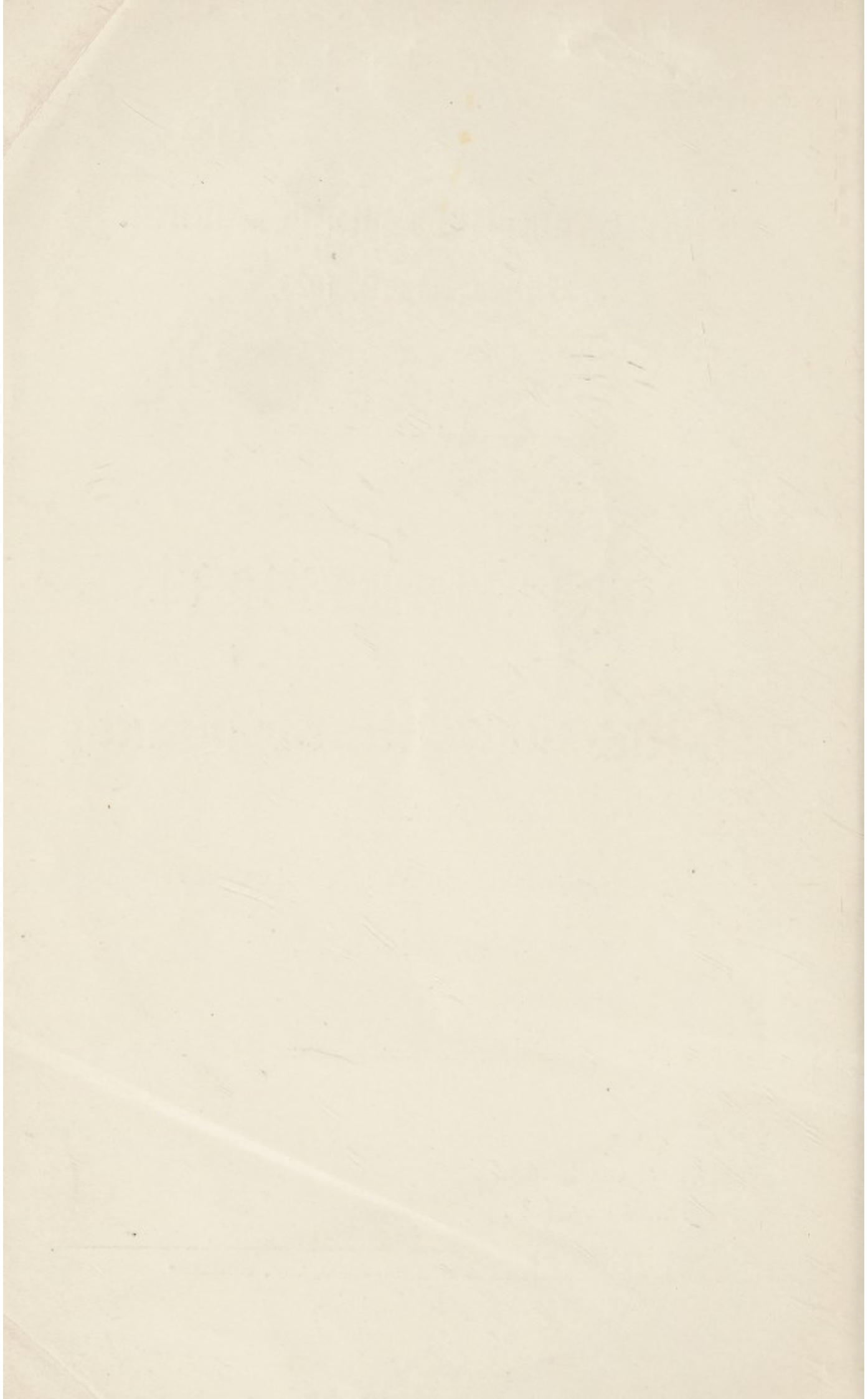
9TH AUGUST, 1926.

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Gloucestershire County Council.

ANNUAL REPORT, 1925.

HEALTH DEPARTMENT,
SHIRE HALL,

GLOUCESTER,

9th August, 1926.

*To the Chairman and Members of the
Public Health and Housing Committee.*

GENTLEMEN,

I beg to lay before you my 24th Annual Report, which includes two unusual sections. One of these on "Existing Health Services" has been so included as at a time when reform of poor law and sanitary administration is prominently under consideration, some such comprehensive statement appears to be necessary in order that a well-balanced conclusion may be reached.

The second is an analysis of the statistics for the ten years 1911-20, and a general comparison with those for 1901-10. From this it will be seen that even for so extended a period in a limited area, it has been scarcely practicable to make any general observations, and this should be a lesson against drawing conclusions from small figures obtained in a short period.

There was some increase in the prevalence of infectious disease, but not to a serious extent, and there was a complete absence of small-pox. Necessary

accommodation for these cases in Coleford U.D. and West Dean R.D. has not yet been found, but it is to be hoped the solution is not far off.

Progress of work under the scheme for the Extension of Medical Services has been most encouraging, as will be seen from the table given on page 41. Other matters in the Report are largely of a routine character but I would emphasize the importance I attach to the influence of the District Nurse in the homes, to which I refer on page 50. To the County Nursing Association much credit is due for the manner in which they have so largely covered the County with District Nurses, and it is to be hoped that before long no part will be without that assistance.

I have the honour to remain,

Your obedient servant,

J. MIDDLETON MARTIN,

County Medical Officer of Health.

HEALTH SERVICES.

At a time when the Ministry of Health desire a "Survey Report," it would appear to be useful to include as concise a statement as possible of the Health Services available in a County Area. These embrace far more activities than those of Local Authorities alone, and include much valuable work undertaken by voluntary agencies. The table that follows is arranged to show—

1. The existing agencies and the services provided by each, and
2. The services under conditions and groups with the agencies by which each service is given.

SCHEME OF EXISTING HEALTH SERVICES.

INDEX.

I.—HEALTH AGENCIES.

1. OFFICIAL.
 - A. County Council—Nine Committees.
 - B. Local Sanitary Authorities.
 - C. National Health Insurance.
 - D. Boards of Guardians.
 - E. Ministry of Health.
 - F. Ministry of Pensions.
2. UNOFFICIAL.
 - A. District Nurses.
 - B. Medical Practitioners.
 - C. Dentists.
 - D. Hospitals and Homes.
 - E. Various Voluntary Societies.

II.—SERVICES FOR CERTAIN CONDITIONS AND GROUPS.

1. GENERAL ILLNESS.
2. SPECIAL DISEASES AND CONDITIONS.
 - A. Infectious Diseases.
 - B. Crippling Defects.
 - C. Dental Diseases.
 - D. Blindness.
 - E. Mental Diseases.

3. SPECIAL GROUPS.

- A. Mothers and infants.
- B. School children.
- C. Insured persons.
- D. Boarded-out children.
- E. Poor Law Persons.
- F. War Pensioners.

4. BACTERIOLOGICAL AND PATHOLOGICAL WORK.

5. ENVIRONMENTAL CONDITIONS.

- A. Personal Cleanliness.
- B. Home Conditions.
- C. Housing.
- D. Water Supply.
- E. Refuse Disposal.
- F. Rivers Pollution.
- G. General.

III.—FOODS AND DRUGS.

IV.—GENERAL HEALTH MEASURES AND PROPAGANDA.

I.—HEALTH AGENCIES.

1.—OFFICIAL.

A. COUNTY COUNCIL.

a. *Public Health Committee.*

- | | |
|---------------------------|-------------------------------|
| Supervisory Functions ... | Water Supply. |
| | Sewage Disposal. |
| | Infectious Diseases. |
| | Isolation Hospitals. |
| Executive Functions ... | Venereal Diseases. |
| | Care of the Blind. |
| | Health Propaganda. |
| | Rivers Pollution. |
| | Sale of Tuberculous Milk. |
| | Bacteriological Examinations. |

b. *Maternity and Child Welfare Committee.*

- Supervision of Certified Midwives.
- Provision of Medical help for Certified Midwives.
- Provision of Milk for Mothers and Infants.
- Special treatment for confinements, including In-patient.
- Treatment of certain defects of Infants, including In-patient.
- Health visiting in homes by Nurses.

c. Tuberculosis Committee.

Oversight of domiciliary treatment of insured persons.
 Treatment of patients at Dispensary.
 " " " in Sanatorium.
 " " " at Isolation Hospitals.
 Treatment of surgical cases in Hospitals.
 Provision of extra nourishment.
 Health visiting in homes by Nurses.
 Provision of Shelters.

d. Education Committee.

Medical Examination of School Children.
 Dental Examination of School Children.
 Examination of Children by Nurses for minor ailments and pediculosis.
 Treatment of certain defects, especially defective vision, ear and throat trouble, minor defects, orthopædic defects.
 Dental treatment.

e. Mental Deficiency Committee.

Examination of patients with mental deficiency.
 Visitation of houses by nurses.
 Provision of Institutional accommodation.

f. Asylums Committee.

Provision of accommodation for lunatics.

g. Diseases of Animals Committee.

Examination and destruction of tuberculous Cattle.

h. Agricultural Committee.

Grading of Milk.
 Tuberculous milk.

i. Medical Services Committee.

Gloucestershire Scheme for Extension of Medical Services for the
 • Co-ordination of Public and Private Treatment: primarily for treatment at the public expense of:—

- (a) School children.
- (b) Infants and children under school age.
- (c) Tubercular and pre-tubercular persons.

Out Stations	...	...	Cottage Hospitals, Tuberculosis dispensaries and special buildings.
Officers	...	...	District Nurses. Medical Officer (local medical practitioners). Surgeons of General Hospitals.
Openings	...	...	Once a week at a fixed time for Medical Officer. As required for intermediate treatment by nurse. As required for visits of ophthalmic surgeon. As required for visits of ear and throat surgeon. As required for visits of orthopædic surgeon.
Cottage Hospitals	...	...	Operative and in-patient treatment by ear and throat surgeon.
General Hospitals	...	...	Operative and In-patient treatment by ear and throat surgeon.
Special Hospitals	...	...	Orthopædic ..
Sanatorium	...	...	Especially for pre-tubercular children : surgical cases of tuberculosis.
Children's Hospitals.			
Orthopædic Hospitals.			

j. Council.

Examination of Foods and Drugs.

B.—LOCAL SANITARY AUTHORITIES.

(a) *District Councils.*

All matters affecting health environment, including—

Housing	...	...	...	Inspection of existing houses. Disinfection. Provision of new houses.
Inspection of common lodging-houses.				
Disposal of refuse.				
„ „ sewage.				
Infectious diseases	...	...	...	Enquiries and investigations. Isolation, in hospitals.
Isolation Hospitals	...	...	...	Provision of.
Food supplies	...	...	...	Inspection of all Foods for human consumption, including meat.
Water Supply	...	...	...	Certificates for new houses (in rural districts). Survey of houses and their supplies. Provision of public supplies.

C.—NATIONAL HEALTH INSURANCE.

Insurance Committee and Approved Societies.

Sickness benefits for insured persons:
 Medical " " "
 Maternity Benefit. " " "

D.—POOR LAW.

Boards of Guardians.

Relief of the necessitous.
 Provision of medical attendance in
 houses: Infirmary.
 Care of poor law lunatics and mentally
 defective.
 Accommodation for homeless poor.
 Provision of vaccination for small pox.

E.—MINISTRY OF HEALTH.

Pension schemes—
 Old Age.
 Widows and Orphans.
 Blind.

F.—MINISTRY OF PENSIONS AND LOCAL COMMITTEES.

Care of pensionable ex-service men and
 their dependents.

2.—UNOFFICIAL.

A.—DISTRICT NURSES.

District Nursing Work.
 Midwifery Services.
 Health Visiting in Homes.
 Mothers and Infants.
 Tuberculous persons.
 School Children.
 Examination of Children at schools.

B.—MEDICAL PRACTITIONERS.

Medical attendance on—
 Private patients.
 Insured persons.
 Poor Law patients.

C.—DENTISTS.

Private Practice.

D.—HOSPITALS.

General.
 Special.
 Cottage.

E.—VARIOUS VOLUNTARY SOCIETIES AND AGENCIES.

(a) *Red Cross Society.*Nursing Detachments.
Ambulances.(b) *Order of St. John of Jerusalem.*Nursing Detachments.
Ambulance Service.(c) *Railway and Police Ambulance Services.*(d) *Voluntary and Private Homes.*Nursing Homes.
Mental „(e) *Various Societies.*Voluntary Associations for Blind.
Cripples' Aid.
National Society for Prevention of
Cruelty to Children.
Charity Organisation Society.
Surgical Aid Society.
&c., &c.

II.—SERVICES FOR CERTAIN CONDITIONS AND GROUPS.

I.—TREATMENT OF ILLNESS.

A.—MEDICAL PRACTITIONERS.

... Private Medical attendant.
Panel Practitioners—Insured persons
Poor Law Medical Officers—Poor Law
Patients.
Club Doctor—Club Patients.

B.—NURSES.

... Private.
District.

C.—NURSING HOMES

... ..

D.—HOSPITALS

... Large General Hospitals.
Cottage Hospitals.
Special „
Poor Law Infirmaries.
Infectious Diseases Hospitals.
Asylum and Mental Homes.

E.—SANATORIUM FOR TUBERCULOSIS

F.—DENTISTS.

G.—AMBULANCES

... Red Cross.
St. John of Jerusalem.
Police.
Railway.
District Councils (Infectious Diseases).

H.—BACTERIOLOGICAL AND PATHOLOGICAL EXAMINATIONS.

Hospitals.
County Council—Certain bacteriological examinations.

2.—SPECIAL DISEASES AND CONDITIONS.

A.—INFECTIOUS DISEASES.

(a) *General (Scarlet Fever, Diphtheria, Small pox, etc.)*

Medical Practitioners.		
District Councils	...	Notification. Enquiries. Supply of anti-toxin. Provision of nursing. Isolation in Hospitals. Disinfection. Vaccination.
Boards of Guardians	...	Vaccination for Small pox.
County Council	...	Supervisory in general. Bacteriological examinations. Visitation of Infants with measles and whooping cough by nurses. Treatment of Tuberculosis. ,, ,, Venereal diseases.

(b) *Tuberculosis.*

Medical Practitioners.
Hospitals and other voluntary agencies.
District Nurses.
Boards of Guardians—Poor Law Patients.
County Council—(Joint Committee for Tuberculosis):
Provision of Tuberculosis Officers.
Examination of patients, suspected cases, and contacts at Dispensaries.
Consultation with Medical Practitioners.
In-patient treatment of—
Advanced cases in Sanatorium and Hospitals.
Early cases in Sanatorium.
Surgical cases in Hospitals.
Pre-tubercular children in Sanatorium.
Visitation of homes by nurses.
Provision of shelters at homes.
Extra nourishment.
Bacteriological examinations.
Tuberculosis in milk (Public Health Committee).
Tuberculous Cattle (Agricultural Committee).
Propaganda.
District Councils—
Notification.
Conditions of housing.
Disinfection.

(c) *Venereal Diseases.*

Medical Practitioners } All stages.
 Hospitals }
 County Council—
 Early and communicable stages.
 Special sessions at General Hospitals.
 Asylums—
 Nervous sequelæ.

B.—CRIPPLING DEFECTS—Orthopædics.

Medical Practitioners.
 Hospitals.
 District Nurses.
 County Council—Medical Services Committee—
 General Hospitals and a few cases in special hospitals.
 Supervision and treatment at out-stations.
 Orthopædic nurse and district nurses in homes.
 Provision of special appliances.
 Cripples Aid Societies.

C.—DENTAL TREATMENT.

Dentists.
 Education Committee—
 Inspection and treatment of children in certain age groups
 at schools.
 Maternity and Child Welfare Committees—
 Pregnant and nursing mothers.

D.—BLINDNESS.

County Council—
 Education Committee—Training and Education.
 Public Health Committee (through County Association for
 the Blind).
 County Association for Blind. General help, including assistance
 of home workers.
 Ministry of Health—Pensions.

E.—MENTAL DISEASE.

Medical Practitioners.
 Boards of Guardians—lunatics and mentally defective.
 Mental Deficiency Committee—Supervision in homes by nurses.
 Institutional accommodation.
 Education Committee—Educable children of 7—16 years.
 County Council—Provision of Asylum.

3.—SPECIAL GROUPS.

A.—MOTHERS AND INFANTS.

Nurses and Midwives.
 Medical Practitioners.
 Children's Hospitals.
 General Hospitals.
 Maternity and Child Welfare Authorities,
 in Boroughs—the Corporations,
 in other parts—County Council Maternity and Child Welfare
 Committee :—

Inspection of Midwives.
 Provision „ „
 Medical assistance for Midwives.
 Health Visiting by Nurses—
 County Health Superintendent.
 District Nurses.
 Institutional provision for confinements.
 Hospital treatment of Infants, including
 orthopædic.
 Allowances of milk.

Maternity and Child Welfare Centres.

B.—SCHOOL CHILDREN.

Medical Practitioners.
 Nurses.
 Children's Hospitals.
 General Hospitals.
 County Council—Education Committee—
 Medical Inspection.
 Following up children with defects.
 Managers.
 Children's Care Committee.
 Nurses.
 Treatment—Medical Practitioners
 Hospitals.
 County Council—under Treatment Scheme.
 Hospitals—General.
 Special.
 Out Stations—Medical Officers.
 Nurses.
 Homes—District Nurses.
 Dental Inspection and Treatment—
 Dentists.
 County Council—
 Minor ailments, including pediculosis.
 Examination by nurses.
 Following up.
 Treatment.

C.—INSURED PERSONS.

Insurance Committees and Approved Societies :
 Panel Medical Practitioners.
 Special Services of limited range.

D.—BOARDED-OUT CHILDREN.

Boards of Guardians—
 Receive notifications and arrange inspection.
 County Council—
 Visitation by Health Visitors for certain Boards of Guardians.

E.—POOR LAW PERSONS.

Medical attendance at home.
 Extra nourishment.
 In-patient treatment in Poor Law Infirmaries.

Maintenance of lunatics in } Infirmaries.
 } Asylums.

Maintenance of mentally defective in } Infirmaries.
 } Special institutions.

F.—WAR PENSIONERS.

Pensions and treatment of defects attributable to or aggravated
 by War service.

4.—BACTERIOLOGICAL AND PATHOLOGICAL WORK.

General Hospitals—Bacteriological and Pathological Examinations
 Various Public and Private Laboratories.
 County Council—Certain Bacteriological Examinations at Bristol
 University and at local hospitals.

5.—ENVIRONMENTAL CONDITIONS.

A.—PERSONAL CLEANLINESS.

Individuals.
 School Children—Parents.
 Examination of heads, etc., by Education
 Committee.

B.—HOME CONDITIONS.

Insanitary—Improvements by Householders.
 Improvements by Landlords.
 Inspection by District Councils.
 Disinfection—District Councils.

C.—HOUSING.

Landlords.
 Employers—Provision of new and repair of old.
 Works.
 Estates.
 Local Authorities.

- District Councils—
 - Inspection of existing, and necessary action.
 - Provision of new—
 - Housing Schemes.
 - Subsidies to private persons.
- County Council—
 - In default of District Councils.

D.—WATER SUPPLY.

- Owners of Houses.
- District Council for Public Supplies.

E.—REFUSE DISPOSAL.

- (a) *House refuse*—
 - Householders.
 - District Councils by scavenging.
- (b) *Sewage*—
 - Householders.
 - District Councils by Schemes of sewerage.

F.—RIVERS POLLUTION.

- Inspection by County Council.

III.—FOODS AND DRUGS.

- District Council—
 - Examination of foodstuffs, including meat.
 - Destruction of unsound foods.
 - Prevention of sale of tuberculous milk.
- County Council—
 - Chemical examination of foods and drugs.
 - Destruction of tuberculous cattle.
 - Prevention of sale of tuberculous milk.

IV.—GENERAL HEALTH MEASURES AND PROPAGANDA.

- District Council through the Medical Officer of Health and Sanitary Inspector.
- County Council—
 - Supervisory.
 - Propaganda—
 - Tuberculosis.
 - Venereal Diseases.
 - Prevention of blindness.
 - General.
- Voluntary agencies—
 - British Social Hygiene Council and its branches.
 - Other Local Societies.

It has been endeavoured to make this statement complete, but it is probable that there are omissions. Information as to any additions which should be made will be welcomed.

From the table it will be clearly evident that there is possibility of overlapping in many directions, and it is, therefore, satisfactory that the whole question of Local Government is now under consideration by a Royal Commission. In respect of two of the branches of Health Services, Health Insurance and Poor Law, changes in administration have already been proposed by Royal Commissions.

In Gloucestershire, efforts are made to avoid overlapping and the close co-operation arranged with voluntary agencies is particularly helpful in this respect.

PUBLIC HEALTH LEGISLATION.

During 1925 various Acts of Parliament were passed and Departmental Orders issued which show the tendency of public health administration at the present time. Amongst those affecting the powers of County Councils are :—

INFECTIOUS DISEASES.

General—Provision of Hospital Accommodation under Section 2 Public Health (Prevention and Treatment of Disease) Act 1913—by Section 61 (1) of the Public Health Act 1925 the Ministry of Health is clearly empowered to invest County Councils with the necessary authority.

TUBERCULOSIS.

- (1) Removal of infective cases—Section 62 of the Public Health Act 1925 gives power for the compulsory removal of pulmonary cases under certain conditions.
- (2) Infective persons engaged in food production—Under Order 1925 No. 757 local sanitary authorities are empowered to require a person suffering from tuberculosis of the respiratory tract to discontinue employment in connection with milk, and persons who know themselves to be suffering must not enter upon such employment.
- (3) Tuberculous Cattle—The Ministry of Agriculture and Fisheries has issued a new Order (13th July, 1925) on the lines of the 1914 Order aiming at the elimination of tuberculous cows and cattle.
- (4) Tuberculous Milk—The County Councils are empowered by Sections 3, 4 and 5 of the Milk and Dairies (Consolidation) Act 1915 to prevent the sale of tuberculous milk.

MILK AND DAIRIES.

The Ministry of Health has issued an Order (1925 No. 704) declaring that the Milk and Dairies (Consolidation) Act 1915 would come into operation on 1st September, 1925. The chief matters affecting the County Council are :—

- (a) Carrying out such duties set out in Section 1 as may be placed on them by the Regulations of the Ministry of Health.
- (b) Powers to stop the sale of tuberculous milk (*see above*).
- (c) Sampling milk on sale or in course of transit for sale (Section 8).

PRESERVATIVES IN FOOD.

The Order—1925 No. 775—is one of a series which have been issued as to measures aiming at the purity of food. The use of preservatives is prohibited except with respect to named substances in connection with certain foodstuffs included in a schedule to the Order.

HOUSING ACT 1925.

The Housing Act of 1925 is—in the main—a consolidation of the permanent laws relating to housing, the temporary measures of recent Acts as to the encouragement of building being left outstanding.

PUBLIC HEALTH ACT 1925.

This is not a Consolidation Act, but largely one giving to local authorities generally additional powers which have been obtained in various areas by special Acts. The powers with respect to streets, certain sanitary provisions, verminous premises, etc., and water courses (Parts ii to v) come into effect in any area only on adoption; the remaining parts are in operation automatically. Four matters particularly of interest to County Councils are :—

1. The power of the Ministry of Health to authorise the provision of hospitals by County Councils under Section 2 of Public Health (Prevention of Diseases) Act 1913 is specifically set out (Section 61).
2. Compulsory removal of open cases of tuberculosis. Powers are given to County Councils and local authorities to remove cases under specified conditions (Section 62).
3. *Blind*. County Councils are empowered to treat persons with a view to the prevention of blindness (Section 66).
4. *Propaganda*. County Councils and other authorities are authorised to undertake general Public Health Propaganda (Section 67).

GENERAL.

In respect of all the above there are some matters for which the District Councils are primarily responsible, but the County Council may be called upon to act in default, e.g. registration and supervision of milk producers and sellers under the Milk and Dairies (Consolidation) Act 1915, the inspection and provision of houses under the various Housing Acts consolidated by the Act of 1925.

ALTERATIONS IN SANITARY AREAS AND STAFF.

Of recent years there have been but few changes in the areas of sanitary districts, but during 1925 two were arranged. To one, an extension of the boundaries of the Tetbury Urban District to include an urban part of the Rural District, effect was given on 1st April, 1925; by this alteration the population of the urban district was enlarged by about 550. The other, the formation of Mangotsfield in the Warmley R.D. as a separate Urban District under an Order of the County Council, is not yet operative.

Dr. Payne resigned the appointment of Medical Officer of Health for the Coleford Urban District, which he had held for 15 years, at the end of 1925, and automatically under the West Gloucestershire United Districts (Medical Officer of Health) Order 1912 that district is now included in the Combined District. Dr. MacMahon, who had held the similar appointment in the Northleach R.D. for the same period, resigned almost simultaneously, and the position in that district is now held temporarily by Dr. Adams, Medical Officer of Health for the East Gloucestershire United Districts, until the future re-arrangement of areas is decided.

So far as information is available, the changes in the appointment of Sanitary Inspector during 1925 were:—

Gloucester R.D.—Mr. G. H. Rawling succeeded Mr. R. C. Riches.
Northleach R.D.—Mr. S. A. Green succeeded Mr. E. Hampshire.
Tewkesbury R.D.—Mr. E. F. Brading succeeded Mr. W. E. Hancock.

VITAL STATISTICS FOR 1925.

POPULATION.

The population for 1925 as estimated by the Registrar-General shows a decrease, on 1924, of 600. In urban districts he estimates an increase of 361, the total decrease being due to a large reduction in the population of the rural districts as follows:—

	1923.	1924.	1925.
Urban Districts	99,826	100,900	101,261
Rural Districts	231,984	233,500	232,739
Administrative County ...	331,810	334,400	334,000

The mean natural increase for 1924 and 1925 was 1,900, so that on this estimate there was excess of emigration over immigration to the extent of 2,500 persons during the year.

BIRTHS.

The birth rate for 1925 was about the same as in 1924. As will be seen from the following table the fall in urban districts has been continuous from 1921 but in rural districts was slightly checked in 1925 :—

	1925	1924	1923	1922	1921	1916- 1920	1911- 1915	1906- 1910	1901- 1905
Urban	15.1	15.5	17.0	17.1	18.8	16.7	18.1	20.8	22.3
Rural	17.4	17.2	18.4	19.1	20.3	17.9	19.8	22.4	24.6
Administrative County	16.7	16.6	18.0	18.5	19.9	17.6	19.3	21.8	23.8
England and Wales	18.3	18.8	19.7	20.6	22.4	20.1	23.6	26.3	28.2

DEATHS.

The total death rates for 1925 and preceding years are :—

	1925	1924	1923	1922	1921	1916- 1920	1911- 1915	1906- 1910	1901- 1905
Urban	13.9	13.7	12.5	14.7	13.0	15.1	14.2	14.1	14.6
Rural	11.7	12.0	11.3	12.8	11.6	14.1	13.0	12.9	13.8
Administrative County	12.4	12.5	11.7	13.4	12.0	14.4	13.4	13.3	14.1
England and Wales	12.2	12.2	11.6	12.9	12.1	13.7	13.8	14.4	16.0

INFANTILE MORTALITY.

There was a slight rise from 54 in 1924 to 56 in 1925, but there are grounds for thinking that as the full value of maternity and child welfare activities is realised the fall shown in the following table will not only be maintained but increased.

	1925	1924	1923	1922	1921	1916- 1920	1911- 1915	1906- 1910	1901- 1905	1896- 1900
Urban	54	62	51	66	63	69	87	95.5	111	—
Rural	57	50	46	51	59	66	77	75	92.5	—
Administrative County	56	54	48	55	60	67	80	81	98	113
England and Wales	75	75	69	77	83	90	110	117	138	156

As regards the possibilities of the future there is little to add to the observations in previous reports, but the need of skilled advice for midwives on ante-natal work from a doctor with special experience, may be emphasised.

ANALYSIS OF THE STATISTICS FOR THE TEN YEARS 1911—1920.

In 1915 an enquiry into the geographical distribution of the diseases given as the causes of death, based on the statistics for the decennium 1901-10 was made, and the following general conclusions were drawn so far as this County is concerned :—

1. *General Death Rate.* It cannot be said that low elevations, even with an impervious subsoil, are necessarily productive of high death rates or that converse conditions result.
2. *Pulmonary Tuberculosis.* (a) The conditions favouring a high general death rate would appear to be in the main the same as those favouring a high tuberculosis rate.
 - (b) The death rate in agricultural districts tends to be low.
 - (c) Within certain limits moderate elevations appear to be unfavourable to the development of pulmonary tuberculosis, though low rates are found in low-lying localities and vice versa.
 - (d) Towns in situations which would appear to be favourable to a low death rate have a high rate, and this fact is associated with bad housing conditions.
 - (e) Certain industrial rural districts have more or less high rates.
3. *Other Tubercular Diseases.* There is a general tendency for the curves and rates for pulmonary and other forms of tuberculosis to follow one another, but there are divergencies which require explanation.
4. *Bronchitis.* (a) Exposure appears to favour a low rather than a high death rate, and sheltered positions a high rather than a low rate.
 - (b) The rate in rural districts is slightly higher than in urban districts.
5. *Pneumonia—All Forms.* (a) The curves, rates and general areas affected tend to be the converse to those for bronchitis.
 - (b) The rate in urban districts is higher than in rural districts

6. *Cancer*. The present enquiry enables no conclusion to be drawn.
7. *Influenza*. This is more an illness of rural than urban districts.
8. *Diphtheria*. The death rate is very slightly higher in rural than in urban districts. The rates were highest in the Forest of Dean and the neighbourhood of Bristol.
9. *Measles*. The mortality is twice as great in urban as in rural districts, and highest in the Forest of Dean and in the neighbourhood of Bristol.
10. *Whooping-cough*. The death rate is approximately the same in rural and urban districts.
11. *Diarrhœa*. The apparent association of high rates with high rates for measles, and, in some cases, diphtheria and whooping cough and also with high infantile mortality, indicates that the main factor in connection with these groups is lack of care in the management of children.
12. *Puerperal Conditions*. The mining area of the Forest of Dean has the highest rate, but with it are associated agricultural areas in which difficulty in securing medical help is a factor.

As a general result, it was concluded that the most important factor appeared to be the circumstances of the home, i.e. immediate as opposed to more remote environment.

At the same time it was said that the results from that limited survey were disappointing, but it was hoped that the notes would be a foundation for further analysis when statistics for a longer period were available.

The death rates for the succeeding decennium (1911-20) have now been worked out on the same lines, and also additional information in the distribution of certain non-fatal illnesses and conditions discovered during the examination of children in attendance at the elementary schools, conducted during the same ten years. The comparative figures (taking the total for the County as 100) are set out for each cause and condition for the respective districts in detailed tables; also, maps have been coloured on a uniform plan readily showing not only whether the rate for any area is above or below the average, but also, approximately, the degree of departure from the average.

Even this short period has given evidence of the tendency towards the delay in the time of death as will be seen from the following table of the percentage of total deaths occurring at certain age groups :—

				1901—10.	1911—20.
Under 1 year	...	...	...	15.0	10.2
1—5 years	...	...	...	6.0	4.4
5—15 „	...	...	...	3.1	3.5
15—25 „	...	...	...	4.0	4.4
25—65 „	...	...	...	29.2	31.8
Over 65 „	...	...	...	42.8	45.7

It will be noticed that there has been a very marked fall in the proportion of deaths under 5 years of age, and that while there has been increase in the proportion in all other age groups the most marked rises are in the two oldest groups.

The detailed tables and maps have been carefully examined, and, as a result of such examination, a summary table has been prepared to bring out the general distribution of the different conditions in the county.

Some of the maps show a more or less equal incidence—with comparatively little departure from the mean—of conditions over the whole county, while most exhibit wide divergencies from the average. But even among the former, particular localities stand out as having a very high or very low rate for any one condition. Amongst the flat or more or less uniform maps are those for birth and total death rates, infantile mortality, marasmus, bronchitis, and pneumonia among death rates and for “nutrition below normal,” enlarged tonsils and adenoids, and vision amongst conditions found in school children. Exceptional results standing out on these maps are :—

- (1) High birth rate in all the areas west of Severn.
- (2) High infantile mortality in Cheltenham, Nailsworth, the environs of Bristol, Coleford U.D., and Newent R.D.
- (3) The mortality among infants attributed to marasmus or general weakness generally shows not much departure from the mean, but the rate is exceptionally high in Nailsworth U.D. and the Forest of Dean, and similarly low in two or three rural districts, such as Peabworth and Tetbury.

These general results are also noticed, with the exception of such a small area as Nailsworth U.D., where the possible errors due to few numbers are great, in the previous decennium (1901-10). The question it is desired should be answered in such cases is, "What is the reason of the observed differences?" The question, unfortunately, can be answered but incompletely, even for the most favourable examples. Were the correct answers available we should have gone a long way towards the solution of the cause of illness, and at best all that can be claimed for the present enquiry is that certain suggestive distributions have been noted and that correlated with the results of similar enquiries some conclusions may be reached as to avoidable circumstances which favour certain illnesses and conditions, and the converse.

The condition showing a geographical distribution in a most striking manner is enlargement of the thyroid gland amongst school children, particularly amongst girls shortly before leaving school, the examination being conducted most generally at about 13 years of age. For this condition there is a belt of very high incidence, following the Cotswold Hills from the north-east of the County to the outskirts of Bristol, with parallel bands of low incidence following the Severn, and very low incidence on the west of the Severn. In these areas there are two very curious exceptions in that one—West Dean R.D.—in the area of lowest incidence has a high rate and Stow-on-the-Wold R.D. in the area of high incidence has a very low rate. According to different theories accounting for this condition the cause is hard water, hard water plus faecal contamination, deficiency of iodine in the soil and water derived from it. On the Cotswolds water is obtained locally from springs, wells, &c., the general character of which is hard, but there is no reason to assume more possibilities of pollution here than exist in other places. Over a large part of the Chipping Sodbury R.D., the supply is obtained from the West Gloucestershire Water Co., which also supplies Kingswood U.D. and Warmley R.D., both of them areas of low incidence. The local waters in the Severn Valley are generally very hard, saline in character and contain considerable organic matter, and yet here the incidence is low. On the west of the Severn the most striking fact is the exceptionally high rate for West Dean, which surrounds an urban district of almost identical interests and circumstances with the very low rate general on this side of the County. Probably the chief difference between the west and east sides of the Forest is that the latter has a fairly general public water supply of good quality

while the former (West Dean) has only local sources—not infrequently doubtful both in quantity and quality and in many instances rain water storage at the houses. Whether or not these facts are sufficient to account entirely for the difference in incidence of enlargement of the thyroid gland cannot be definitely stated. All these facts, however, offer opportunity for investigation, e.g., analysis of the iodine content of the soils and water supplies, which may possibly elucidate very useful information.

Comparison of the maps for anæmia and “nutrition below normal” is of interest. It is true that in estimating the latter due weight should be given to the blood state, but it was scarcely to be expected that the distribution of high and low incidence of these conditions would accord as they do. Marked exceptions are Kingswood and East Dean, Gloucester, Lydney and Pebworth R.D. (poor nutrition but low anæmia), and Marston Sicca, Newent and Tewkesbury R.D. (good nutrition but high anæmia). Three of the five districts in the former group are largely industrial, and the three in the second group are purely agricultural.

Another interesting comparison is between the maps for bronchitis and pneumonia, which tend to be the reverse of one another; there are exceptions, such as Coleford and Kingswood Urban and Gloucester R.D. with high rates, and Westbury U. and Campden and Cheltenham R.D. with low rates, for both conditions. In the previous decennium the general conclusion seemed to hold good for Kingswood and Westbury U. and Cheltenham and East Dean R.D., and it would seem possible that experience over a longer period would probably confirm the conclusion now drawn provisionally. The present analysis confirms that made for the previous decennium, when the conclusion was drawn that exposure appeared to favour a low rather than a high death rate, and sheltered positions a high rather than a low death rate from bronchitis; the converse would hold with respect to pneumonia.

When the maps for pneumonia and influenza are compared strong resemblance is observed, as might be anticipated from the close connection between the two conditions.

A comparative study of the two maps for tuberculosis, pulmonary tuberculosis and other forms of tuberculosis is of interest. For both periods and for both conditions the rate in Urban Districts is higher than in Rural Districts, but with this exception, contrary to the provisional conclusion from the 1901–10 records, there appears to be a tendency for the map for pulmonary

tuberculosis to be the converse of that for other forms of tuberculosis; even on the results for 1901-10 it was noted that "there are divergencies which require explanation." Examining the two periods together, the conclusion as to the tendency of areas to have high rates for the pulmonary condition and low rates for other forms of tuberculosis and vice versa appears to be confirmed. This is interesting in view of the opinion, held fairly generally, that a certain immunity from pulmonary tuberculosis is afforded by tubercular disease of glands, bone, skin, &c. Whilst the Tuberculosis Order 1914 of the Board of Agriculture was in operation, a map was prepared to show the incidence of bovine tuberculosis with a view to its comparison with that now under consideration, but work under the Order was stopped by its rescission at too early a period for any useful information to be afforded.

The summaries of the results of the nurses' inspections of children's heads for pediculosis have also been kept under the same grouping, and it is somewhat curious to see that the worst areas are the purely agricultural districts in the north, north-east and centre of the County, together with the industrial areas of mid-Gloucester and the outskirts of Bristol; the urban areas of Cirencester and Coleford have also high rates. On the other hand, the conditions are most satisfactory in the Forest of Dean, where the main industry is coal mining, and there is little female labour outside the homes and in the agricultural areas in the south of the County.

It was hoped that by including in the range of the enquiry the vital statistics for two decennia, disturbance due to personal equation of the recorders would be eliminated, but this has not been completely possible, and, though the examination of the school children has been made by several doctors and nurses, it is probable that the effects are still there to a certain extent; on the whole, however, this element is not a serious factor.

There are many conditions which might have been taken into account—housing, age and sex distribution, variety of occupation, subsoil, exposure, &c., and these have been kept in mind as far as practicable in making the above notes. For their full utilization a very elaborate analysis would be required, but for present purposes it seemed preferable to make the survey on general grounds.

It cannot be claimed that the analysis summarised briefly in the above statements has led to useful conclusions, and it may well be asked if such a survey involving considerable trouble is profitable when the results are comparatively so barren. All that can be said is that so far as the statistics for the area of Gloucestershire have been worked out for these two decennia, the evidence is in favour of the following conclusions :—

- (1) Enlargement of the thyroid gland is encouraged under the conditions existing on the Cotswold Hills, including elevation, a limestone subsoil, hard waters with no large public supplies, few general systems of drainage; while the Severn valley, with much the same conditions except low elevation and a clay subsoil, has a lower incidence, and on the west of Severn with largely a carboniferous and sandstone subsoil and varied elevation, the rate is lowest.
- (2) Pediculosis of the head is most prevalent in purely agricultural districts, and in areas where female labour is employed to a considerable extent.
- (3) Within certain limits moderate elevations appear to be unfavourable to the development of pulmonary tuberculosis and towns in situations which would appear to be favourable to a low incidence have a high rate, a circumstance apparently associated with poor housing conditions. While the rate in agricultural districts tends to be low there are rural districts with comparatively high rates, especially those where female labour is employed.
- (4) The distribution of pulmonary tuberculosis tends to be the converse of that for other forms of tuberculosis, thus confirming the conclusion reached on other grounds that a certain immunity from pulmonary tuberculosis is afforded by tubercular disease of glands, &c.
- (5) There appears to be a similar converse relation between the incidence of bronchitis and pneumonia, as if the conditions favouring the one are disadvantageous to the development of the other. Bronchitis seems to be an illness of sheltered rather than exposed conditions, while pneumonia exists more in exposed than sheltered conditions.

- (6) For such diseases and conditions as cancer, organic disease of the heart, nephritis, scarlet fever and diphtheria, defective conditions of the nose and throat, and vision, the distribution appears to be too irregular for conclusions even of the most general character to be drawn.

Even for those conditions—with the exception of enlargement of the thyroid gland—for which tentative conclusions as to geographical distribution have been drawn, it cannot be conclusively stated that they are due to the inherent properties of the different localities—elevation, subsoil, &c. Indeed, there is another possible explanation in the conditions, partly at least, induced by the environment, namely, in those of the homes. As an example may be mentioned the suggestion given in the results obtained by the examination of the 1901–10 statistics that while at moderate elevations pulmonary tuberculosis tended to have a low incidence, at higher positions reached in Gloucestershire there were indications that liability to death from pulmonary tuberculosis increased.

May it not be, for pulmonary tuberculosis and for other conditions, as suggested in the earlier note on Gloucestershire statistics, that the more important factor is the immediate as opposed to the more remote environment, namely, the condition of the home?

MATERNITY AND CHILD WELFARE.

The progress of the work in 1925 is set out briefly in the following paragraphs :—

1. NOTIFICATION OF BIRTHS.

The proportion of births notified within 36 hours of the occurrence has increased fairly steadily from 89.0 per cent. in 1917 to 95.0 per cent. in 1925.

2. PROVISION OF MIDWIVES.

3. MEDICAL ASSISTANCE FOR CERTIFIED MIDWIVES.

Notes under these headings will be found in the Report on the administration of the Midwives Acts on pp. 31—37.

4. HEALTH VISITING.

The steady development in the work is indicated by the following statement :—

				<i>Births referred to Visitors.</i>	<i>First Visits.</i>	<i>Total Visits.</i>
1916 (From 1st April)	...	...	...	1,472	1,857	3,735
1917	...	...	...	3,650	3,320	13,359
1918	...	...	...	4,019	3,461	23,818
1919	...	...	...	4,408	3,799	28,817
1920	...	...	...	5,969	5,552	38,396
1921	...	...	...	5,112	6,291	48,730
1922	...	...	...	5,561	6,725	61,512
1923	...	...	...	5,185	7,245	62,177
1924	...	...	...	5,197	6,078	71,271
1925	...	...	...	4,958	6,268	72,976

The last figure includes 9,044 visits to expectant mothers, a rapidly increasing figure, and a welcome indication of progressive work in one of the directions of great importance at the present time.

5. INFANT PROTECTION VISITING.

This work has for some years been undertaken, on behalf of Boards of Guardians, by the Health Visitors in five Poor Law Unions. Early in 1926 an application was received from the Cirencester Board of Guardians for the services of the Health Visitors, and it is hoped that arrangements will be completed shortly.

6. MEASLES, &C., VISITING.

Valuable assistance is given by District Nurses in many parts of the County both in giving advice to mothers on the general care of the children and also in nursing those who have developed complications, at the very moderate fee of 1s. 3d. per case. During 1925, 1,196 visits were paid to the homes of 232 cases.

7. INSTITUTIONAL PROVISION FOR CONFINEMENTS.

Though the importance of special accommodation being available for cases of difficulty, either on account of the home conditions or of anticipated complications is now well recognised, the number of patients for whom provision was made by the Committee fell from an average of 14 in the four previous years to 9 in 1924. The number increased to 18 in 1925, the average cost per case falling on Maternity and Child Welfare funds being £4 13s. 6d.

8. HOSPITAL TREATMENT FOR INFANTS.

Again no cases were treated in hospital directly under the auspices of the Maternity and Child Welfare Committee, but children under the age of five years are brought under orthopaedic treatment by the Medical Services Committee in rapidly increasing numbers. During 1925 74 children ranging in age from six months to five years were examined, 15 of whom received in-patient treatment at Cheltenham General Hospital. The advantages of the out-stations for the examination of children living at long distances from the General Hospital, by the orthopaedic surgeon are appreciated more and more as time progresses and the work increases.

9. ALLOWANCES OF MILK.

Allowances have been granted since 1918. The grants are much appreciated, and the District Nurses as health visitors appear to exhibit considerable discretion in their recommendations.

10. MATERNITY AND CHILD WELFARE CENTRES.

No centres are maintained by the Committee, but very useful work is undertaken at 23 voluntary centres in the County, and great credit is due to the ladies who devote so much time, energy and money to it. Mention should be made particularly of the Cinderford Mothers' Club and Babies Welcome, which has had a very successful career for 11 years, and which is supported largely by the East Dean Rural District Council. In a farewell report, Dr. G. F. Rigden, to whom much of its success is due, urges the formation of an ante-natal clinic, which is undoubtedly most desirable.

MIDWIVES ACTS, 1902 and 1918.

Twenty-Second Annual Report on Administration.

YEAR 1925.

INTRODUCTION.

The present arrangements for the supervision of the work of certified midwives by the Superintendent of the County Nursing Association and the eight County Health Superintendents have proved very satisfactory during the nine years they have been in operation. One great advantage is that the midwives have at hand someone who is ready to help and advise them in any difficulty.

The development of the midwifery services between 1905 when the Act of 1902 came into full operation and 1925 is briefly indicated in the following table :—

	1905.	1925.
Numbers of practising midwives—		
Trained women	53	229
Untrained „	175	38
	— 228	— 267
Number of parishes—		
(a) with no certified midwife	120	22
(b) with independent midwives only (mostly untrained)	60	28
(c) covered by District Nurse-midwives	174	304
Number of cases attended by certified midwives ...	2,382	3,574
Percentage of total births	31.6	65.0
Number of notices of requiring medical help received from certified midwives	216	891

One very striking feature in this table is the complete reversal of the proportions of trained and untrained midwives. This in itself indicates the improved conditions of midwifery service provided in the County, but it must not be forgotten that the former midwives—the old village nurse—gave of their best and that their great patience had much to commend them, even though they had not the skilled knowledge of the present generation. It is of interest to note that one-quarter of the certified midwives are not practising as such and that of the trained midwives 172 work for Associations and that 57 practise independently.

PROVISION OF MIDWIVES.

The following table sets out the position of the County at the end of 1925 :—

<i>Midwifery Services by District Nurses.</i>	<i>No. of D.N.A.</i>	<i>Parishes.</i>	<i>Area.</i>	<i>Population.</i>
D.N.A. affiliated with C.N.A. ...	116	296	636,099	282,150
„ affiliated with other C.N.A. ...	4	4	6,033	1,284
„ not affiliated	4	4	11,701	3,285
	124	304	653,833	286,719
Independent Midwives		28	75,467	31,926
No certified Midwife	1	22	55,788	10,701
<i>Administrative County</i>	125	354	785,088	329,346

The steady work of the County Nursing Association has improved the position of the County year by year, but as the unprovided parishes diminish the greater is the difficulty of forming suitable areas for a nurse-midwife. One District Nursing Association was re-started, covering three parishes in the neighbourhood of Cirencester—the North Cerney District Nursing Association—and five unprovided parishes were added to the areas of existing District Nursing Associations; one Association (Staple Hill) dis-affiliated with the County Nursing Association. That Association is still endeavouring to make suitable combinations of the remaining parishes and funds obtained from a large bazaar held in Cheltenham towards the end of the year will be very helpful in training women for the work; unfortunately, it does not appear to be easy to induce young women of the right type to come forward for training, though—on the whole—the County Association has been fairly successful.

KING EDWARD VII. MEMORIAL NURSES.

The two emergency nurses partly maintained by an annual grant of £75 from King Edward VII. Memorial Fund are very useful in relieving in districts temporarily without a nurse midwife. In 1925 the nurses did 175 weeks emergency duty for district nurse-midwives who were ill, when posts were temporarily vacant, and during holidays of the district nurse-midwives.

WORKHOUSE MIDWIVES.

There was no change in 1925 in the number of certified midwives employed in the Workhouse infirmaries in the County, 14 being employed in 10 of the 13 Institutions.

UNCERTIFIED WOMEN ACTING AS MIDWIVES.

It is very rarely indeed now that it is found that uncertified women have taken cases without a doctor. During 1925 reports concerning only five were received and on enquiries being made it was found that in two cases the doctor engaged was not sent for in good time, in two cases the doctor engaged was unable to reach the house in time for the confinement, and in one case

the woman acted in emergency owing to an accident to the midwife engaged. Suitable warning letters are sent to the women where such appear to be necessary and a register is kept of all cases for future reference.

PROPORTION OF BIRTHS ATTENDED BY CERTIFIED MIDWIVES.

The total number of births registered in 1925 was 5,575, 12 more than in 1924; the number of confinements attended by certified midwives was 3,574, 86 less than in 1924, the proportion being 64.1 per cent. 39 of the total 306 midwives attended no cases during 1925 and the remaining 276 took about 13 cases each, approximately the same figure as in previous years.

NOTICES RECEIVED UNDER THE RULES OF THE CENTRAL MIDWIVES BOARD.

The following table gives a summary of the notices received in 1925 and previous years :—

	Average		1921.		1922.		1923.		1924.		1925.	
	1916-20.											
Confinements attended by Midwives ...	3,447		4,101		3,896		3,735		3,660		3,574	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Med. help mother	432	12.5	622	15.2	636	16.3	671	18.0	645	17.6	725	20.3
" baby ...	105	3.0	145	3.5	146	3.75	140	3.7	145	4.0	166	4.65
Still-births ...	71	2.1	72	1.8	85	2.2	75	2.0	71	1.9	65	1.8
Death of mother	2	.06	2	.05	0	—	0	—	5	.1	6	.17
" baby ...	11	.3	11	.3	8	.2	14	.4	22	.6	24	.7
Artificial feeding	(32)		49	1.2	61	1.6	43	1.2	38	1.0	41	1.1
Total ...	621	18.0	901	22.0	936	24.0	943	25.2	926	25.2	1,027	28.7
No. of practising midwives ...	272		286		299		306		317		306	
Further notices received	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Change of address	116	42.6	148	51.7	104	34.8	84	27.4	131	41.3	105	34.4
Laying out dead	21	7.7	27	9.4	29	9.7	31	10.1	26	8.2	28	9.2
Source of infection	10	3.7	12	4.2	11	3.7	19	6.2	20	6.3	31	10.1
Average cases per midwife ...	13		14		13		12		12		12	

There is a very distinct tendency in the direction of seeking medical help more freely : between 1918 and 1925 the proportion of instances has increased from 11.4 per cent. to 20.3 per cent. The individual conditions showing most marked increase so far as the mother is concerned are rupture of the perineum, from 2.3 per cent. to 5.2 per cent., and hæmorrhage before or after the confinement from 0.7 per cent. to 1.5 per cent. This appears to indicate that now importance is attached by the midwives to slighter departures from the normal than formerly, with the results that patients come under medical observation at an earlier stage, and this gives opportunity for earlier treatment. The same fact is noticed with respect to the baby, the proportion of cases rising in the same period (1918 to 1925) from 3.1 per cent. to 4.65 per cent.

STILL-BIRTHS.

The number of children still-born was 65, 1.8 per cent. of total births, the lowest figure recorded in any year except 1920 and 1921, when it was almost exactly the same. From the enquiries made

- 9 children were born before the arrival of the midwife.
- 28 " " " macerated.
- 13 were specially difficult cases, medical help being sought in 8.
- 3 were deformed children.

The cases are discussed with the midwives concerned with a view not only to ascertaining the facts of each but also to see if there is anything in the method of practice which might be improved.

DEATHS.

Under the revised rules certified midwives are required to notify *all* cases of the death of mother or baby, whether a doctor has also been in attendance or not. The numbers so notified in 1925 were—deaths of mothers 6, and of babies 24. 2 deaths of mothers were not formally notified, making a total of 8; enquiries were made in each case and, shortly summarised, the results are :—

1. Mrs. H. 36 years ... Post-partum hæmorrhage after delivery before the arrival of the nurse-midwife, who was called too late.
(8th pregnancy)
2. Mrs. S. 38 years ... Post-partum hæmorrhage. Child born hour before nurse-midwife called.
(7th pregnancy)
3. Mrs. P. 38 years ... Ante-natal advice declined and refusal to have treatment for large goitre. Severe hæmorrhage followed second stage, and placenta adherent, anæsthetic administered for removal, but patient died suddenly shortly after coming round.
4. Mrs. L. ... Ante-partum hæmorrhage in emergency case. Considerable loss before, but none after birth. Placenta expressed by doctor. Feverish from day after birth, and death on 6th day.
(9th pregnancy)
5. Mrs. P. 29 years ... Careful ante-natal work was undertaken by the nurse-midwife: the urine was examined on four occasions with negative results and the patient appeared in excellent health throughout. At labour she had 20—25 fits and died undelivered.
(primipara)
6. Mrs. A. Doctor's help sought for post-partum hæmorrhage. Placenta adherent and second doctor called. Patient died in about 3 hours.
7. Mrs. G. 26 years ... Profuse hæmorrhage for short time 10 minutes after birth of child, long distance from doctor, who arrived 40 minutes later. Patient died from shock following hæmorrhage. Previously warned by doctors that a second pregnancy following first soon would probably be serious for her.
(2nd pregnancy)
8. Mrs. B. ... Medical help was sought by the midwife for delay. The child was delivered by forceps with difficulty and the placenta was adherent. She died on the 12th day of enteritis and heart failure.
(primipara)

SUSPENSIONS FOR DISINFECTION, ETC.

The necessity for formal suspension arises but seldom, information that disinfection has been carried out generally arriving with the notice of having been in contact with a possible source of infection; the number of notices in 1925 was 31.

REPORTS TO CENTRAL MIDWIVES BOARD.

The usual routine reports, including the names, addresses and other particulars of 306 midwives giving notice of intention to practise in this County were sent to the Central Midwives Board.

INSPECTIONS, SPECIAL REPORTS, ETC.

The Inspectors of Midwives include the Superintendent of the County Nursing Association, her Assistant and the County Health Superintendents. During 1925 they paid 902 visits to 272 midwives, an average of over three visits to each ; some were seen only once or twice, but in other cases where it seemed desirable more frequent visits were made, three being seen as often as 8 times and one 9 times. Of the 34 midwives who gave notice of intention to practise in this County during 1925 and who were not seen, 20 reside over the borders of the County in other areas, 10 were in the County for very short periods, 2 others were seen (Superintendent of Home and Matron of Workhouse), though not formally inspected, and the remaining two practised only occasionally. Special visits of enquiry were paid on 33 occasions.

The standard of work appears to be rising slowly but gradually and one of the most useful functions of the Inspectors is to encourage and stimulate the midwives whom they visit. Especially is this the case with respect to ante-natal work and during the last year or two there has been steady development in this direction ; special forms of record of this work have been drafted, and are found by the midwives to be helpful and are kept with increasing care. A useful commencement has been made, but in order that the women in the County may have advantage of benefiting from the developments of this side of midwifery the assistance of a Maternity and Child Welfare Medical Officer with special experience is essential.

WELFARE OF THE BLIND.

The County Association for the Blind administers the scheme approved by the County Council, and is fortunate in having for its Chairman the Rev. R. H. M. Bouth, who is Chairman of the

County Public Health Committee. The Association presented the following report for 1925-6 :—

GENERAL.—The number of Blind on the Register (April, 1926) is 599, and 69 additional cases are under observation as threatened with trouble. Since April, 1925, 105 new cases, 42 deaths and 18 removals have been notified. These numbers do not include Gloucester City, where the Blind are well cared for by the City Association, in connection with the Corporation, and where a separate report is issued. Additional support from the County Council has been given to enable a more adequate sum to be passed on to the Cheltenham Workshops for augmentation of wages of employees. Satisfactory arrangements have been made with the National Institute for the Blind by which all the money (nett) raised by the N.I.B. in the County is to be used for the benefit of the Gloucestershire Blind. We are grateful for help received from Gardner's Trust for the Blind, and Gyde's Trustees (in respect of children), and also from officials of Boards of Guardians, with whom we co-operate for the benefit of cases already under their care. Pensions have been obtained from the Royal Blind Pensions Society, and Clothworkers' and Hetherington's Charities by nine needy cases. Much valuable help is received from the Cheltenham Workshops and from the Bristol Institution.

The visiting and teaching of the Blind in their homes is carried on by about 50 District Representatives and Visitors, and by the Home Teachers, but better organisation in this way is still needed. It is hoped that it will soon be possible to extend the Home Teaching service, the importance of which cannot be over-estimated. It should be noted that almost all the workers of the Association are voluntary.

NECESSITOUS BLIND.—Temporary weekly grants have been given to 40 needy cases during the year, and it is hoped that the list of recipients may shortly be increased. As a rule these grants are only given while awaiting more permanent help. We still help to support a woman at the Devonport Home for Blind, and we have arranged recently for the admission of a man there. About 90 cases have been helped in special needs, and gifts of warm clothing (almost all made by blind workers who are paid for the work) given to about 50 needy or aged blind.

PREVENTION OF BLINDNESS.—Several persons with defective sight have been helped to obtain treatment, glasses, etc.

TRAINING AND HOME TEACHING.—Thirteen children (including boys and girls up to 21) from the county are now at Westbury-on-Trym School; one girl at Chorley Wood College (training with a view to teaching the Blind); one little boy at the Ellen Terry Home, and one girl at Edgbaston. The baby who was at Sunshine House has now been moved on to Westbury, being five years old. A girl of 22 who was training at the Bristol Workshops has now completed her training and is registered as a Home Worker; a woman, recently losing her sight, has now been taken there. A man has been at Bristol for a short trial period and is now being passed on to Plymouth (residential institution). One man is training at Leatherhead, and three have completed their training at Cheltenham and are now passed as wage-earners. A girl leaving Westbury on completion of her training has been taken at the Cheltenham Workshops.

The work of the Cheltenham Home Teacher has been much extended over the north part of the county, and she now has about 200 blind under her care. Much help is given locally by those interested in the Cheltenham Blind, but more visitors are still needed.

The Blind in the Forest of Dean area are still well cared for by a part-time Visitor, as are also those in the neighbourhood of Bristol, the latter by a special arrangement with the Bristol Institution.

The three "Braille Social Clubs," at Charfield, Cirencester and Cheltenham continue their work, and are much appreciated. Many thanks are due to those who kindly help with these Clubs and in other ways, and we should be grateful for still more helpers.

Braille Reading and Writing Tests have been held with the object of raising the standard of the Braillists. The Reading Circle continues, as does also the Magazine Circulation Scheme.

Special "Parties" have been given in connection with the Clubs, in addition to a large gathering at Stroud in the summer, where nearly 100 blind were entertained.

The Blind living near Bristol have been welcomed at a Club in the City, and to various social gatherings, by the kindness of the Bristol Committee.

Where possible, the Blind have been encouraged and helped to attend educational lectures, but owing to distance this is not easy to arrange.

A few of our blind girls are joining a "Post Guide" Company with girls in other counties, and hope to derive pleasure and benefit from the scheme.

EMPLOYMENT.—The Association pays augmentation of wages to 22 employees at the Cheltenham Workshops. The registered Home Workers, supervised and helped by the Bristol Institution by arrangement with the Association, now number 14, the number having unfortunately decreased owing to illness, etc. It is hoped that the list may be increased again shortly. One Home Worker, making the fifteenth, works under the National Library for Blind, which supplies Braille and Moon books free to so many of our blind readers. The Association helps the Home Workers to dispose of their goods, and also helps other less skilled workers with materials, orders for work, etc.

Sales or stalls of "Blind" work have been held at Cirencester, Cherington, Woodchester, Much Marcle, Newent and Charfield. It is hoped that all interested in the welfare of the local blind will buy the goods made by blind workers, whenever possible.

BALANCE SHEET—APRIL 1st, 1925, TO MARCH 31st, 1926.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance in hand, April 1st, 1925	75	17 0	Administration (Registration, Printing, Hon. Sec.'s Postage and Travelling, etc.)	100	10 8
Grants per Western Counties Association	149	0 0	Augmentation of Wages in Institution	270	0 0
Grant from Glos. County Council	820	0 0	Help for Necessitous Blind	483	8 7
Grant from Ministry of Health (<i>re</i> Home Teaching)	78	0 0	Training, Home Teaching, Employment, etc.	473	7 4
Grant from Gardner's Trust (<i>re</i> special case)	35	0 0	Balance in hand	42	18 1
Grant from Gyde's Trustees (<i>re</i> children)	51	0 0			
Grants from National Institute for Blind (including two special cases)	75	0 0			
Donations, Sales, etc.	86	7 8			
	<u>£1370</u>	<u>4 8</u>		<u>£1370</u>	<u>4 8</u>

Holloway, Malmesbury,
May 26th, 1926.

Audited and found correct,
D. R. M. GLADWIN.

It would not be possible for the Association to help the blind persons in the County to the extent that they do were it not for the personal work of many voluntary helpers and for the further moneys forthcoming from other sources.

SCHEME FOR THE EXTENSION OF MEDICAL SERVICES.

A statement of the work and the expenditure is set out in Table V at the end of this Report. From this it will be seen that in respect of every item there has been steady progress, and, further, that as the scheme develops so does it become more economical in working. The total results for 1925 are here briefly compared with those for 1922, the first complete year :—

	1922.		1925.	
	s.	d.	s.	d.
Total cost, per total attendance	15	6	7	11½
Medical Officers, per attendance at out-station ...	4	3½	2	0½
Specialist services, cost of examination per case ...	12	0	8	8½

The present position is set out in the following paragraphs, and a consideration of the progress has encouraged the Medical Services Committee to contemplate enlarging the scope of the work gradually as opportunity offers, particularly at further Cottage Hospitals.

The Out-Stations opened up to 4th May, 1926, and the dates on which they were started are :—

23 May, 1921	...	Almondsbury Memorial Hospital.
25 " "	...	Berkeley Hospital.
30 " "	...	Thornbury Tuberculosis Dispensary.
31 " "	...	Tewkesbury Rural Hospital.
1 June, "	...	Cirencester Memorial Hospital.
3 " "	...	Chipping Sodbury Cottage Hospital. (Opened as a Hospital 14th October, 1920.)
7 " "	...	Cinderford Institute.
12 Oct., "	...	Chipping Campden Out-Station (New building).
21 Nov., 1924	...	Fairford Cottage Hospital.
26 " 1925	...	Soundwell Road Out-Station, Kingswood (New building).
4 May, 1926	...	Moreton-in-the-Marsh Cottage Hospital.

In addition to these places, it has been arranged that the Surgeons of the respective Hospitals shall visit Gwy House Hospital, Chepstow (first operations by Dr. Thompson, 16th August, 1922) and Winchcombe Cottage Hospital (8th December, 1924).

By these arrangements probably between one-third and one-half of the County may be taken as covered.

From the experience which has been gained in the course of the past five years, the original proposals for the whole County have been revised, and it would appear that reasonable facilities would be provided by the following arrangements :—

	<i>Now used.</i>	<i>Suggested additions.</i>
General Hospitals	3	—
Cottage Hospitals	7	5
Tuberculosis Dispensaries	2	—
New buildings	2	4
Simple Centres in Agricultural Districts	—	13

The work done at the respective Out-Stations and three General Hospitals from the times of their opening is summarised very briefly below :—

<i>Out-Station.</i>	ATTENDANCES.				
	1921-2	1922. (3 quarters).	1923.	1924.	1925.
Almondsbury	275	189	545	700	808
Chipping Sodbury	125	349	611	551	452
Thornbury	291	282	570	901	896
Soundwell	—	—	—	—	74
Berkeley	36	129	432	1,115	1,062
Chepstow	—	2	10	13	12
Cinderford	344	519	762	1,032	1,073
Chipping Campden	147	365	744	995	779
Cirencester	82	286	841	810	1,218
Fairford	—	—	—	10	200
Tewkesbury	137	264	512	470	542
Winchcombe	—	—	—	5	4
Total Out-Stations	1,437	2,385	5,027	6,602	7,120
Hospitals	161	127	318	803	1,135
GRAND TOTAL	1,598	2,512	5,345	7,405	8,255

Though the above statement shows that very useful work has been done in the County, even more important than the steady increase in numbers is the effective and harmonious working of all the persons, committees and bodies co-operating in the scheme. It has demonstrated conclusively that a scheme of treatment, providing for all parts of a County area, can be arranged with existing medical agencies at not only very reasonable cost, but also on very efficient lines.

ORTHOPÆDIC DEFECTS.—The following statement is an extract from a report to the Medical Services Committee on 4th April, 1925 :—

Up to November 1922 the only orthopædic work undertaken on behalf of the County Council was that done by the Joint Committee for Tuberculosis for certain surgical cases of tuberculosis. For this branch of the work that Committee have retained ten beds at the Cheltenham General Hospital for about ten years. In November 1922 the School Attendance and Medical Inspection Sub-Committee accepted responsibility for the maintenance of one case at the Shropshire Orthopædic Hospital at Oswestry and in the following month agreed to contribute towards the cost of appliances for a second case, handing them over to the Medical Services Committee in September 1923. In December 1923 the Medical Services Committee reported to the County Council that, while not undertaking generally this class of case as a whole, they had decided to become responsible for the maintenance of certain exceptional cases brought to their notice at the Cheltenham General Hospital, Hereford Orthopædic Clinic and Shropshire Orthopædic Hospital. During the year ended 31st March, 1924, eight cases were treated. For the year 1924-25 provision was made in the estimates for the treatment of a considerably larger number and up to 31st December, 1924, 77 had been under the observation of an orthopædic surgeon, the majority under Mr. J. S. Robinson, the Orthopædic Surgeon at the Cheltenham General Hospital. Many of these cases are of a prolonged character and require skilled supervision for many months, even though they may not necessarily be in a special hospital for the whole period of treatment; the necessity of such supervision and the steady increase in the numbers requiring it has raised naturally consideration of the future policy, and a comprehensive memorandum on the matter has been desired.

Precise information as to the dimensions of the problem is not available, but it may be said generally that the more thoroughly it is attacked, the smaller it will become.

There is in this County a considerable accumulation of cases requiring active treatment. These have gradually been collected amongst school children for the past 15 or 16 years and a pool was immediately available as soon as orthopædic treatment was authorised; for some time early cases amongst infants were not presented, but in the past few months the great majority of the cases laid before the Committee were excellent from the point of view of treatment, many amongst children under 5 years of age. The numbers of cases (within the groups for which local authorities can provide) on the orthopædic register at the present time are:—

		<i>Tubercular.</i>				<i>Non-tubercular.</i>			<i>Grand Total.</i>
		<i>Under 5 yrs.</i>	<i>5-14.</i>	<i>Over 14 yrs.</i>	<i>Total.</i>	<i>Under 5 yrs.</i>	<i>5-14.</i>	<i>Total.</i>	
Spine and Ribs	M.	1	1	25	27	—	7	7	34
	F.	—	2	32	34	1	17	18	52
Legs	M.	2	14	70	86	29	39	68	154
	F.	2	10	55	67	20	48	68	135
Shoulder and Arm	M.	—	1	13	14	6	6	12	26
	F.	—	2	9	11	3	2	5	16
Other localities (incl. infantile paralysis and rickets) ...	M.	—	—	2	2	8	17	25	27
	F.	—	1	3	4	3	19	22	26
TOTAL		5	31	209	245	70	155	225	470

The attitude of the Ministry of Health and Board of Education towards this matter is set out in letters dated 15th December, 1924, and 3rd December, 1924, respectively :—

1. Appreciation is expressed that a satisfactory beginning had been made.
2. It was desired that visits of the Orthopædic Surgeon to Out-Stations should be increased with a view to a survey of all crippled children.
3. Treatment and after-care should be given at the Out-Stations and an orthopædic nurse should be appointed for the purpose.
4. Additional in-patient accommodation should be provided.

At the present stage of the work the most urgent matter is provision for effective supervision of the cases already under treatment, and for this purpose the orthopædic nurse recommended under 3 is urgently required. She must be a nurse who has had special training in this highly technical branch of work : she would attend at Out-Stations at the times of Mr. Robinson's visits and work under his directions. She would visit the various Out-Stations systematically between his visits and carry out intermediate treatment—adjusting splints, renewing splints, examining special appliances (boots, calipers, etc.) to see that they are in order, and—possibly—visit some cases at home. She would have the assistance of the Out-Station Nurses and of the District Nurses for cases in their homes.

It is essential, too, at this stage, that the general policy for the future should be considered, as on this depend the lines on which the work shall be developed gradually. Under present arrangements, ten beds are retained at the Cheltenham General Hospital for surgical tuberculosis, many of the cases being of an orthopædic character. For non-tuberculous cases accommodation has been provided in the same Hospital, as beds were available. A few cases have also had surgical treatment in the Cirencester Memorial Hospital, and the Committee have contributed towards the cost of the treatment of a few cases in orthopædic hospitals outside the County ; special hospitals available are Oswestry (Shropshire), Wingfield (Oxfordshire), Forbes Fraser (Bath), Hereford Orthopædic Clinic and Hospitals in Bristol. In these various ways, up to 21st January, 1925, authority had been given for the treatment of 41 cases (out of 77 examined) for varying periods, but these form only a proportion of the cases requiring it and, especially with respect to the tuberculosis patients, there is difficulty in giving the prolonged in-patient treatment required in many instances. This difficulty has been considered by the Joint Committee for Tuberculosis, and a suggestion has been made that it might be met by making special provision for orthopædic cases, due to tuberculosis as well as to other causes, at Standish House. In view of this mutual difficulty there would appear to be advantages in the matter having consideration jointly by the Medical Services Committee and the Joint Committee for Tuberculosis.

As regards hospital treatment, the courses open would appear to be as follows :—

1. To make arrangements with one or more of the existing orthopædic hospitals to take all our cases.

This course has some advantages, including the utilisation of existing facilities, but the patients would be taken considerable distances from their homes and the trouble of arranging convalescent and intermediate treatment would not be overcome.

2. To continue the present arrangement for the active treatment of cases at the Cheltenham General Hospital, and to provide residential accommodation for intermediate treatment at Standish House, which is our most urgent requirement.
3. To arrange an orthopædic section at Standish House, where all the work would be undertaken.

The second course appears to have the following advantages :—

1. It involves no considerable capital expenditure at the present time.
2. All cases would be under the supervision of the same Orthopædic Surgeon throughout.
3. Removal from the Hospital to the convalescent block and vice versa can be readily arranged as each case requires it.
4. After discharge to their homes the patients would be under the observation of the same Surgeon at the Out-Stations, to which splints and apparatus stored at Standish House could be sent.
5. If it should be decided eventually that it would be advantageous to undertake all the treatment at Standish House, the necessary additions could be readily effected without interruption of the work.
6. The cost of maintenance at Standish House is less than that in the Cheltenham General Hospital, and thereby a larger number of cases could be treated for the same amount of money.

It is understood from the interview with the Medical Inspector of the Ministry of Health and Board of Education at the time of her visit to this County in October 1924 that such an arrangement as that outlined would probably be regarded by the Departments concerned as the most satisfactory in the circumstances of this County.

It is recommended :—

1. That an orthopædic nurse should be appointed as soon as practicable to visit the Out-Stations periodically—
 - (a) at the times of the visits of the Orthopædic Surgeon, to assist him and receive his instructions on the cases.
 - (b) to supervise cases and give any intermediate treatment required—adjusting and renewing splints.
 - (c) to examine appliances supplied by the Committee for cases.
2. That the Joint Committee for Tuberculosis be invited to consider the practicability of providing a block for intermediate in-patient treatment of patients in the periods when active surgical treatment is not required.

The Ministry of Health and Board of Education were consulted as to these proposals, which, it was understood, had their general approval.

An orthopædic nurse (Miss Johnson) commenced work on 1st November, 1925, but soon resigned her appointment, and she was succeeded by Miss Rodenhurst, who took over the duties on 22nd March, 1926. She has reviewed many of the cases in their homes, and will attend regular clinics both with the orthopædic surgeon and intermediately at the Out-Stations.

Plans for an orthopædic block at Standish House were prepared, but unfortunately it proved that, owing to its constitution, the Joint Committee for Tuberculosis could not legally maintain other than tuberculous cases. In view of this, the increased accommodation at Standish will be provided for tuberculous cases only. For the time being, however, limited provision for non-tubercular cases will be found in the six beds arranged to be taken at the Cheltenham General Hospital but a scheme is on foot for the construction of a hospital for crippled children, which it is hoped will be worked in relation to the County arrangements.

INFECTIOUS DISEASE.

Again the County remained free from any case of small-pox, but there was greater prevalence of scarlet fever and diphtheria. Generally, however, there has been considerably lower incidence of all infectious diseases than at the beginning of the century.

SMALL-POX.

Though no case occurred, Medical Officers of Health are still on the look out for the disease and desire consultation from time to time on doubtful cases.

SCARLET FEVER.

The number of cases in 1925 (756) was almost equal to that in 1923 (787), but the crests of the waves do not reach the height they did even ten to twenty years ago, when double these numbers were reported. The mildness of the type now generally seen is a matter of common observation, but, as will be observed in the following table, owing to there being as many as five deaths in 1925, the average fatality rose slightly from .42 per 100 cases to .66.

	1925	1924	1923	1920-1922	1917-1919	1914-1916	1911-1913	1908-1910	1905-1907	1902-1904	1899-1901	1896-1898
Cases	756	477	783	528	293	1152	999	648	689	1216	1079	1045
Deaths	5	2	8	5	1	14	11	7	9	22	21	21
Hospital Cases ...	437	240	388	218	—	—	—	—	—	—	—	—
Case Fatality ...	.66	.42	1.02	.88	.46	1.24	1.07	1.08	1.26	1.84	1.98	1.98
Death-rate per 1,000	.01	.01	.01	—	—	—	—	—	—	—	—	—
England and Wales												
Death-rate per 1,000	.03	.02	.03	—	—	—	—	—	—	—	—	—

The areas chiefly affected were Stroud R.D. (248 cases) and U.D. (110 cases); in no other area were 50 cases reported.

DIPHTHERIA.

There was also increased prevalence of diphtheria, as will be seen in the following table:—

	1925	1924	1923	1920-1922	1917-1919	1914-1916	1911-1913	1908-1910	1905-1907	1902-1904	1899-1901	1896-1898
Cases	319	243	180	384	273	476	406	479	595	374	387	301
Deaths	24	19	15	31	29	64	27	44	51	38	52	65
Hospital Cases ...	216	149	92	212	—	—	—	—	—	—	—	—
Case Fatality ...	7.5	7.8	8.3	8.0	10.6	13.5	6.6	9.25	8.5	10.1	13.5	21.7
Death-rate per 1,000	.07	.06	.05	—	—	—	—	—	—	—	—	—
England and Wales												
Death-rate per 1,000	.07	.06	.07	—	—	—	—	—	—	—	—	—

As in respect of scarlet fever, the Stroud R.D. was the area especially affected, 86 cases being reported. The only other area in which over 30 were notified was Cheltenham M.B. with 42 cases. The type was again mild, and the case fatality (7.5 per cent.) was almost as low as it has ever been.

ENTERIC FEVER.

In common with the rest of the country this is now becoming a rare disease, and of the cases that occur most appear to be of the variety known as para-typhoid, mainly due to eating foods inoculated with the specific organism. The fall in the incidence is well brought out in the following table:—

	1925	1924	1923	1920- 1922	1917- 1919	1914- 1916	1911- 1913	1908- 1910	1905- 1907	1902- 1904	1899- 1901	1896- 1898
Cases	29	36	89	28	41	41	51	49	65	7	141	88
Deaths	7	2	9	3	7	9	6	9	9	10	23	18
Hospital Cases ...	7	10	32	14	12	14	18	19	23	18	—	—
Case Fatality ...	24.2	5.6	10.1	10.9	17.9	23.0	11.8	19.2	13.8	13.	16.1	20.9
Death-rate per 1,000	.02	.006	.03	—	—	—	—	—	—	—	—	—
England and Wales Death-rate per 1,000	.01	.01	.01	—	—	—	—	—	—	—	—	—

Of the 29 cases, 15 occurred in the Gloucester R.D., in which is the County Asylum, from which most of the cases are reported. The remaining 14 cases were scattered over eight districts. Nearly one quarter of the persons attacked died.

OPHTHALMIA NEONATORUM.

There was a slight increase in the number of cases reported from 16 in each of the two previous years to 21. They were distributed over 14 districts and, so far as information is available, no impairment of vision resulted.

TUBERCULOSIS.

The table of known cases year by year has been continued, but it will not, in future, have the same value owing to the operation of the removal of names from registers in accordance with Circular 549 of the 22nd December, 1924, of the Ministry of Health. Twenty-one were so removed during 1925.

	PULMONARY.				NON-PULMONARY.			
	<i>Known cases in county during year.</i>	<i>Deaths.</i>	<i>Death rate.</i>	<i>Survivors.</i>	<i>Known cases in county during year.</i>	<i>Deaths.</i>	<i>Death rate.</i>	<i>Survivors.</i>
1913	493	41	8.3	452	121	13	10.7	108
1914	977	209	21.4	768	223	25	11.2	198
1915	1,242	214	17.2	1,028	307	36	11.7	271
1916	1,459	345	23.6	1,114	368	50	13.6	318
1917	1,490	242	16.2	1,248	381	35	9.2	346
1918	1,685	260	15.4	1,425	408	27	6.6	381
1919	1,686	234	13.9	1,452	428	39	9.1	389
1920	1,736	211	12.2	1,525	423	25	5.9	398
1921	1,784	190	10.6	1,594	442	25	5.65	417
1922	1,923	248	12.9	1,675	463	29	6.3	434
1923	1,954	191	9.8	1,763	573	51	8.9	522
1924	1,978	237	12.0	1,741	584	33	5.65	551
1925	1,995	240	12.0	1,755	595	28	4.7	567

It was interesting that we appeared to have reached the stage when the proportion of persons presenting at any time symptoms which might be attributed to tuberculosis had become fairly stationary, about 6 per cent. with pulmonary signs and slightly under 2 per cent. with tuberculosis of other parts of the body. This is of interest in view of the now generally accepted opinion that few persons escape infection with tuberculosis early in life. It would therefore appear that an illness due to tuberculosis is occasioned by some condition breaking down the natural resistance of the body, somewhat of the nature of an accident, and that the decline in the incidence of fatal tuberculosis is largely due to the improved standard of living, as is held generally. Thus, in Gloucestershire, the following fall in the death rate is recorded :—

		Death due to	
		Pulmonary tuberculosis.	Other forms of tuberculosis.
1901—1910	...	.86	.31
1911—1920	...	.83	.23
1921—5	...	.70	.19

That is, for every 100 deaths in the first period there were only 81 from pulmonary tuberculosis and 61 from other forms of tuberculosis in the last period.

It is very difficult—if not impossible—under present conditions to avoid infection with the tubercle bacillus (bovine or human), and that in the very early days of life, but what can be done is to offer opportunity of increasing the resistance of young children, and so stimulate it that the individuals may escape with but slight and even undetected injury. This is the main object of the desire to enlarge our accommodation for children at the tuberculosis institution, and it is unfortunate that now it is necessary to notify them so that they may have the advantage of it.

A.—DISPENSARIES.

The cases for treatment at the various institutions (Standish House and tuberculosis blocks at two Isolation Hospitals) are selected by the Tuberculosis Officers from patients seen at the Dispensaries. The large amount of work done at them is shown in the following statement of progress of the tuberculosis scheme :

	<i>New Cases reported.*</i>			<i>Work of Dispensaries.</i>		
	<i>Pulmonary.</i>	<i>Other forms.</i>	<i>Total.</i>	<i>New Cases.</i>	<i>Persons seen.</i>	<i>Attendances.</i>
1915...	542	137	679	921	?	4,741
1916...	476	116	592	749	?	3,743
1917...	417	80	497	734	1,216	4,069
1918...	456	65	521	879	1,483	5,211
1919...	403	57	460	693*	1,218	5,233
1920...	388	65	453	639*	1,193	5,005
1921...	337	58	395	620	1,311	5,346
1922...	373	63	436	557	1,318	5,553
1923...	345	127	472	597	1,288	5,886
1924...	315	112	427	513	1,485	6,465
1925...	332	68	400	718	1,597	5,883

*Excluding City.

Patients are also seen in greatly increasing numbers at the Out-Stations, and these form valuable centres for persons who necessarily live at considerable distances from the few tuberculosis dispensaries available.

B.—SHELTERS.

The number during 1925 was 110; 51 of these were transferred for the use of new cases during 1925. The use of three shelters was given up owing to their having got beyond repair. Many of them were obtained ten to twelve years ago, and, considering that they are exposed to all weathers, and fairly frequent removal, they have served their purpose well.

C.—RESIDENTIAL INSTITUTIONS.

The beds available in 1925 and the admissions of County cases to them, year by year, are set out in the following table:—

	<i>Beds available.</i>			<i>Admissions.</i>						
				1919	1920	1921	1922	1923	1924	1925
1. <i>Early cases</i> in both sexes and advanced cases among males										
Standish House	...	...	100	133†	135†	102†	170	178	130	136
				$\left. \begin{array}{l} \text{M. } 74 \\ \text{F. } 26 \end{array} \right\}$						
2. <i>Advanced cases</i> in City and Stroud Isolation Hospitals	38			69	78	97	80	59	84	72
3. <i>Surgical cases.</i>										
Cheltenham General Hospital	10			23	34	23	14	24	25	16
4. <i>Children.</i>										
(a) Alexandra Home	...	—		33	24	21	25	17	—	—
(b) Standish House	...	78		—	—	—	40	68	93	89

† For these years, the Sanatorium was Cranham Lodge.

D.—HOME VISITS BY NURSES.

Valuable as is the work undertaken in other directions, there can be no doubt but that from the preventive point of view the visitation of homes by nurses affords the most fruitful opportunities. These are not fully realised under existing conditions, but the nurses' efforts are increasingly useful and will become more and more valuable as the present nurses gain riper experience and as the standard of the district nurse rises. The advantage is not limited to this disease alone, for important as is the tuberculosis factor, home conditions have far wider influences which affect the health and welfare of the inmates generally. Indeed, it may be said that home environment, in the broadest sense of the word, is one of the most important factors in public health, and, with tuberculosis as an example, the nurse has exceptional opportunity of laying the foundation of healthy life by helping to secure satisfactory conditions in every home in the County. Some indication of the increasing amount of work done by the nurses at the homes of tuberculosis patients is given in the following table :—

<i>Visits.</i>		<i>Visits.</i>	
1917	... 4,578	1921	... 7,822
1918	... 5,904	1922	... 9,507
1919	... 6,243	1923	... 9,618
1920	... 7,185	1924	... 10,296
		1925	... 9,705

VENEREAL DISEASES.

Again there was a slight increase in the number of new cases. The favourable view of the increase is not that there has been a real increase in venereal infection, but that persons are more willing to take advantage of the very limited facilities for treatment, and this opinion is confirmed by the fact that, while there was a total increase of 15 in persons first seen, the number of cases which were regarded as not being venereal in character increased by 21.

NEW CASES.

	<i>Syphilis.</i>	<i>Soft</i>	<i>Gonor-</i>	<i>Not</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Attend-</i>	<i>In-patient</i>	<i>Specimens</i>
	<i>Chancre.</i>	<i>rhœa.</i>	<i>Venereal.</i>					<i>ances.</i>	<i>days.</i>	<i>examined</i>
1917	31	2	15	13	61*	25*	36*	258*	524*	75*
1918	77	7	77	58	219	135*	76*	1,090	662	214*
1919	125	16	143	68	352	264*	74*	2,729	1,549	249*
1920	192	7	159	64	422	280*	134*	3,982	1,035	527*
1921	103	6	87	91	287	175*	65*	3,292	1,083	484*
1922	94	3	77	51	225	110†	50†	2,727	810	422*
1923	80	2	72	76	230	89†	75†	3,322	654	632*
1924	82	5	100	80	267	148†	92†	3,655	716	697*
1925	87	—	94	101	282	138*	121*	3,729	876	986*

* Excluding Bristol Hospitals.

† Excluding Bristol and Gloucester Hospitals.

The table shows further that the treatment is becoming more systematic in that the attendances, in-patient days and specimens examined are all more numerous.

BACTERIOLOGICAL AND PATHOLOGICAL WORK.

One stage in the development of this work has been reached in that the Gloucestershire Royal Infirmary are now examining specimens from all the northern part of the County. Work in the north-eastern area will be taken over by the Cheltenham General Hospital when their laboratory has been enlarged. There has not, however, so far, been arranged any extension in the range of the service. That should, in the interest of the public health, follow on the lines set out by Professor Walker Hall in a very useful pamphlet which he drew up a few years since. Particularly desirable are general arrangements for the examination of specimens for cancer with a view to its detection at a stage when treatment can be given usefully.

All the specimens enumerated in the following table were examined at the Bristol University Laboratory :—

	<i>Diphtheria.</i>	<i>Enteric Fever.</i>	<i>Tuber- culosis.</i>	<i>Cerebro-spinal Fever.</i>	<i>Others.</i>	<i>Total.</i>
1905-14 yearly average	1,553	49	207	—	—	1,809
1915	1,713	31	369	6	—	2,119
1916	721	32	348	1	—	1,102
1917	716	57	523	8	—	1,304
1918	687	35	517	6	—	1,245
1919	506	20	569	2	8	1,105
1920	1,352	29	692	2	6	2,081
1921	2,465	37	804	—	2	3,308
1922	1,459	35	1,108	3	—	2,605
1923	682	112	1,347	5	—	2,146
1924	1,215	84	1,822	4	—	3,125
1925	4,106	38	2,286	1	—	6,431

As will be seen, the number of specimens was more than double that in 1924. This was mainly due to the increase in swabs for diphtheria, coincident with extra prevalence of the disease in 1925. The average number of swabs per case—rather over 10—shows that much work was done in examining contacts or in taking clearing specimens or both, and is evidence of the advantage of the arrangements with the laboratories.

There has also been a steady and very large growth in the use made of the facilities for the examination of sputum for tuberculosis. Year by year since 1918 the numbers have steadily increased from 517 to 2,286. The great majority of these specimens are taken at the Dispensaries and Tuberculosis Institution.

ISOLATION HOSPITALS.

Speaking generally, the arrangements in the County are much as they were, but effect was given during 1925 to the improvements mentioned in my last Report. Thus cases of diphtheria from Tetbury were sent to the Hospitals at Cirencester and Stroud ; of scarlet fever and diphtheria from Kingswood and one of diphtheria from Thornbury R.D. to the Warmley Isolation Hospital. A further development in 1925 was the closing of the Winchcombe Isolation Hospital on arrangements being made with the Trustees of the Delancey Hospital at Cheltenham. That Hospital is now taking cases not only from the three Cheltenham Districts, but also from Northleach, Stow-on-the-Wold and Winchcombe R.D. Other examples of a similar tendency are the throwing open of the Cirencester Hospital to Tetbury cases, the Warmley Hospital to Kingswood cases, the Stroud Hospital to Wheatenhurst cases, and of the City Hospital to cases from the Gloucester and Newent Rural Districts. Such arrangements show the effect of improved transit and the advantages of making existing hospitals serve wider areas than hitherto, and are rightly urged by Dr. Rhind for adoption in the southern end of the county, more particularly with reference to the Chipping Sodbury and Thornbury R.D., which are without satisfactory arrangements for the care of cases requiring isolation.

Similar proposals have been made in respect of the Coleford Urban and West Dean Rural Districts, but the solution of their difficulties is not yet an accomplished fact.

HOUSING ACCOMMODATION.

There was even greater activity in the provision of houses during 1925 than in 1924, as shown in the following table :—

			Under Schemes.	Privately.	Total.
1919 ...	...	...	—	53	53
1920 ...	...	...	98	74	172
1921 ...	...	...	865	171	1,036
1922 ...	...	...	637	188	825
1923 ...	...	...	12	380	392
1924 ...	...	...	92	516	608
1925 ...	...	...	165*	718*	883*
Total	...	...	1,869	2,100	3,969

(* These figures are exclusive of the Stow-on-the-Wold U.D. and West Dean R.D., for which no returns have been received).

Excluding 1919 and 1920, when the general position was far from normal, the average number of houses built each year was 750, rather more than twice the pre-war average. Even so, the deficiency of housing is very far from being met adequately. The estimated requirements in November 1919 were 6,400 houses and at the low pre-war rate of about 350 new houses a year, the total required by the end of 1925 would have been 8,500. The actual number erected (excluding the above two districts) was 3,969, leaving an accumulated deficiency of 4,531. Even with this met, it would not necessarily mean that the amount of accommodation could be regarded as sufficient, for the pre-war standard was admittedly low and improvement was then being pressed.

The numbers of new houses in the several districts are set out in Table IV at the end of this report, and from this it will be seen that the improvement so far made in the County as a whole is in great measure due to the energy displayed in certain districts among which may be specially mentioned Cirencester U. and R.D., Nailsworth U.D., Cheltenham R.D., Chipping Sodbury R.D., Dursley R.D., Gloucester R.D., Lydney R.D., Pebworth R.D., Stroud R.D., Thornbury R.D., West Dean R.D. There are, however, areas in which very little has been done. In Kingswood U.D., of which special mention was made, some progress was made in 1924 and more in 1925, but the needs are very far from being met.

The circumstances of the Forest of Dean are especially difficult, but while the West Dean R.D. Council erected 222 houses of the 400 estimated to be required, the East Dean R.D. Council have built only ten (and those in 1924) of the 305 reported in 1919 to be required.

Information as to the conditions under which the houses have been built is not complete, but rather less than half were erected by Councils under municipal schemes. The most encouraging indication is the steady increase in the number of houses built privately from 53 in 1919 to 718 in 1925. This enterprise has been largely stimulated by the needs of owner-occupiers and by the opportunity of obtaining subsidies. In some districts only the bare grant of the Government £75 has been made available, but in others an equal amount has been added from rates, making a total of £150 per house. The exact proportion of houses built privately with the assistance of the subsidy is not available, but that it is very large is shown by such cases as that of Stroud U.D.

(5 out of 9), Cirencester U.D. (49 out of 53), Chipping Sodbury R.D. (118 out of 133), East Dean R.D. (20 out of 32), Warmley R.D. (60 out of 70). It would, therefore, seem that, given time and a continuance of financial assistance, the needs of the community so far as new houses are concerned will gradually be met.

Even more useful in some ways than the provision of new houses is the renovation and enlargement of existing houses. Sections have been included in recent Housing Acts which have, however, for one reason and another not been effective in securing the general renovation of property. The importance of this aspect of the question has been urged in several of these reports, particularly in 1921 and 1922, and in those reports mention was made of the fact that when cottages were costing about £1,000 each, two tumbledown cottages had been bought in Suffolk, and, by a total expenditure of £742 on the two, had been converted into good convenient dwellings, or £371 per cottage. In December 1921, a special memorandum on the repair of cottages was issued by the Public Health Committee.

It is very satisfactory that this matter of repair has been taken up so practically by the Government. Grants for repairs will shortly be available, and that the Minister of Health should have made the announcement at a public meeting in Stanway is particularly happy, for it was Sir Philip Stott, of Stanton Court, who provided the means for the restoration of the Suffolk cottages. Used effectively, this new stimulus to improved housing should be most valuable, and accommodation that would otherwise be lost by decay should be saved. As mentioned by Dr. Rhind, one difficulty in agricultural areas is proper separation of the sexes as children grow up, owing to so many cottages having only two bedrooms, and in their re-conditioning the need of a third bedroom should have consideration. Under the circumstances under which families have to live at present, it is somewhat remarkable that the moral conditions are no worse than they are.

WATER SUPPLY.

Very considerable parts of the County and nearly all the larger centres of population have been provided with satisfactory supplies of water by owners, private persons, water companies and local authorities. The chief water companies are the West Gloucestershire Water Company supplying a large area in the south

of the County, the Stroud Water Company covering several parishes in the Stroud R.D., supplying Nailsworth U.D., and supplementing the supply in Stroud U.D., and the Bristol, Mitcheldean and Tidenham Water Companies, each supplying one parish in the County. Some sixty villages have been supplied by owners; for eight urban districts, and about sixty villages water has been provided by local authorities. There are, however, two urban districts (Awre and Westbury-on-Severn) and about 160 parishes without any organised supply. It does not necessarily follow that the conditions in this large number of places are very bad or their needs very urgent, but there must be few in which combined action would not greatly improve the amenities of the different localities at comparatively small cost, and probably provide the inhabitants with a supply of water to facilitate cleanliness. Where every drop of water has to be pumped by hand or carried long distances there is bound to be economy in its use, and in not a few instances as a result infrequent washing of the body. In various reports have been given lists of places in which from time to time the matter of water supply has risen acutely, but, as with other desirable improvements, the financial position has proved a serious stumbling block. In a few instances, however, since the war supplies have been provided or improved. For example, a new bore hole, &c., at Cirencester, supplemental source at Chipping Campden, improvement at Aldsworth, supply for Tredington, deepening of well supplying Dursley, supply of Ruardean Hill, new pumping plant at Lydney, supply for Dorsington and for Slad. In 1925 a loan of £6,300 was sanctioned for the supply of Mickleton, arrangements were agreed for Ruardean, and a loan of £4,469 for increased storage at Lydney was approved. The area in which municipal effort has been most active is the East Dean R.D., where by steady work the mains of the undertaking have covered or shortly will do so practically the whole of the district. Other areas to which attention has been specially directed, and in which there now appears to be probability of satisfactory solutions being found are Newnham U.D., Bibury and Withington in the Northleach R.D., and parts of Tetbury Upton (formerly in Tetbury R.D., and now included in the U.D.).

Progress has also been made towards finding a supply for Coleford U.D., and West Dean R.D., the most urgent case and the one of widest extent in the County; boring has commenced at Upper Redbrook, and it is hoped that a sufficient supply of water will be found.

SUPERVISION OF PLACES WHERE FOOD IS PREPARED.

The supervision of these places in county areas with a view to the protection of the food of the community is a problem which cannot be said to have been fully solved. Thus in the 22 rural districts in Gloucestershire there are about 270 slaughter houses, 2,590 dairies and milkshops, and 300 bakehouses. In but few of these areas is there more than one sanitary inspector who is responsible not only for this work but also for many other duties, including housing inspection. The difficulty of effective supervision applies especially to slaughter houses, where inspection is particularly required at the time of occasional slaughtering, and it is a physical impossibility for one man who is engaged in a large number of branches of other work. Some idea of the volume of work in efficient meat inspection is given by the numbers of visits to slaughter houses in a place like Cheltenham, where the meat inspectors paid 3,182 visits to 11 slaughter houses. Weekly killings alone would entail 52 visits to each slaughter house, or over 14,000 a year to the 270 places in the 22 rural districts. In a few areas special inspectors have been appointed, but in the others the general sanitary officers have carried on as well as they can. It would appear that the most hopeful direction in the long run is for the officers concerned to secure the confidence and co-operation of the persons concerned, and in Dr. Rhind's areas on the issue of the new meat regulations conferences of butchers were arranged. It would be too optimistic to assume that in this way the distribution of unsound meat could be absolutely avoided, but the alternative is the appointment of a considerably increased number of inspectors.

Something on these lines has been attempted generally with respect to milk by the clean milking demonstrations given in 1924, and by the competitions arranged by the Agricultural Committee, but much more might be done.

EXAMINATION OF FOODS AND DRUGS.

The numbers of samples examined year by year are set out in table below. Exclusive of milk, comparatively little adulteration is found, and in 1925 this was limited to five foodstuffs. These five were—

Butter—One sample contained a slight excess of water.
Malt vinegar—One sample was adulterated with at least 90 per cent. of artificial vinegar.

Sponge Cakes, Sausage—One sample of each of these contained boric acid in higher quantity than was necessary or desirable.

Skim milk—One sample adulterated with water and annatto.

Samples examined 1908—1925.

(Figures in brackets are the numbers found adulterated).

	1908-21.		1922.		1923.		1924.		1925.	
	Samples.	Per-centage adul-terated.	Samples.	Per-centage adul-terated.	Samples.	Per-centage adul-terated.	Samples.	Per-centage adul-terated.	Samples.	Per-centage adul-terated.
Spirits of Nitre...	37 (8)	21.6	4	—	4 (1)	25.0	2 (2)	100.0	—	—
Rum ...	57 (9)	15.7	—	—	—	—	—	—	—	—
Cocoa ...	90 (13)	14.4	7	—	21	—	—	—	1	—
Brandy ...	61 (8)	13.1	—	—	—	—	—	—	—	—
Milk ...	2,155 (251)	11.6	302 (18)	6.0	223 (23)	10.3	350 (26)	7.4	456 (54)	11.8
Mustard ...	85 (9)	10.6	—	—	2	—	3	—	2	—
Whiskey ...	363 (36)	9.9	—	—	—	—	—	—	—	—
Gin ...	175 (15)	8.6	—	—	—	—	—	—	—	—
Beer ...	97 (4)	4.1	—	—	2	—	—	—	—	—
Camphorated Oil ...	74 (3)	4.1	6	—	6	—	1	—	—	—
Butter ...	1,032 (13)	1.3	26	—	15 (1)	6.7	22 (1)	4.5	15 (1)	6.0
Coffee ...	321 (2)	.6	16	—	12	—	7	—	7	—
Sugar ...	269 (1)	.4	5	—	—	—	1	—	—	—
Total ...	4,816 (372)	—	366 (18)	—	285 (25)	—	386 (29)	—	481 (55)	—
Other Foodstuffs ...	1,515	—	95	—	80 (1)	—	61 (1)	—	60 (4)	—
Other Alcoholic Drinks ...	5	—	—	—	—	—	—	—	—	—
Non-alcoholic Drinks ...	67	—	—	—	—	—	—	—	—	—
Other Drugs ...	182	—	6	—	4	—	3	—	1	—
Total ...	1,769	—	101	—	84 (1)	—	64 (1)	—	61 (4)	—
Grand Total ...	6,585 (372)	5.7	467 (18)	3.9	369 (26)	7.0	450 (30)	—	542 (59)	—

Again, attention was concentrated on fresh milk, 456 samples (out of a total of 542) being taken : 54 or 11.8 per cent. were found to be adulterated. The degree of adulteration ranged from small quantities of added water and slight abstraction of fat up to 34.7 per cent. of added water and deficiency of 35.3 per cent. of fat. Proceedings were taken in 32 cases and fines and costs were imposed to the amount of £157. Reporting on 10th January, 1925, the County Analyst said : "The quality of the milk, as revealed by the samples submitted, is very good, the average fat (for the previous quarter) being 4.28 per cent., the non-fatty solids 8.91 per cent., making total solids 13.19 per cent. I should like to call particular attention to these figures. The fat is 1.28 per cent.

“ above the minimum standard laid down by the Board of Agriculture and the non-fatty solids .41 per cent. above the standard.”

From the large proportion of sophisticated samples, it is evident that sustained attention must be given to milk supplies if the community is to be given food of good chemical quality.

SEWERAGE AND SEWAGE DISPOSAL.

There have been no considerable works of construction in any part of the County since the war, except very useful extension of the Cheltenham Sewage Disposal Works, but minor improvements have been effected in various parts. For example, the Chipping Sodbury R.D.C. took over the Yate Sewage Disposal Works in 1922 and made them more generally available for that area. Recently the Gloucester R.D.C. have extended the system of sewers in the North-End Drainage Area (1924), and propose to enlarge their treatment area; improvements at the disposal works at Wickwar in the Chipping Sodbury R.D. (1925); extension of sewers in the East Dean R.D.; the sewerage of Amberley in the Stroud R.D. (1924). The financial position has doubtless prevented work in other parts which is very desirable, particularly in the nine places mentioned in my last Report.

As regards most of them the position appears to be the same, but some action has been taken with respect to a few places. Thus, the Campden R.D.C. have asked an engineer to report on the conditions at Chipping Campden, and the Medical Officer of Health was preparing reports on Chipping Sodbury and Thornbury. If these and other places are to be maintained in a condition which can be regarded as satisfactory, some action either by way of constructive works or effective prevention of minor trouble must be taken.

The most general trouble, especially in rural areas, is the form of closet in common use: this is of the most primitive type, being merely a hole in the ground covered with a seat, known as the privy vault. Mention has been made in report after report as to the disadvantages and dangers of such accumulations of putrid matter, but the efforts of the sanitary officers to effect the replacement of the privies by a satisfactory type of closet seem to secure little support from the community, and the progress of replacement is disappointingly slow.

RIVERS POLLUTION.

The survey of the Severn for dissolved oxygen content, from its source to Cardiff was carried out on 10th June, 1925, by various observers, and the results were summarised by Dr. E. C. Jee, Technical Adviser to the Ministry of Agriculture and Fisheries.

About the same time observations were also taken on tributaries of the Severn, including the Avon and its branches, and the Frome in the Stroud Valley.

While in certain parts the Severn was found to be in a state of partial de-oxygenation, e.g., in Montgomeryshire, Shropshire, round Gloucester and in the estuary, for long stretches, especially in Worcestershire and Gloucestershire high super-saturation was observed.

Certain tributaries were also examined, and the waters of the Warwickshire Avon and the Frome in the Stroud Valley, were found generally in a partially de-oxygenated condition.

The reports on the surveys have been considered at conferences of representatives of the authorities concerned at Worcester, Shrewsbury and Warwick, and unanimous resolutions in favour of continuing the work were passed. The results, so far as the Severn is concerned, were not regarded as unsatisfactory, but to ascertain completely the exact significance of the findings further investigation is needed, and a survey of the River Severn was fixed for 1st September, 1926, and another of the Avon in the middle of July 1926.

The test employed in the survey has been used in the examination of certain streams and sewage effluents reaching them. While the results do not give absolute data, they are of value in yielding indication of comparative conditions, and are to that extent very useful. It is hoped that opportunity will be offered for employing the test more generally and enabling useful information to be given to local authorities on the manner in which sewage disposal works are fulfilling their function.

The attention of the authorities concerned was particularly drawn during 1925 to pollution of streams in the Stroud Urban and Chipping Campden, Chipping Sodbury, Dursley and Thornbury Rural Districts, and in each case the matter is still under

consideration. Whilst in some instances the pollution may not now be gross in amount, unless measures are taken effectively to remedy the trouble, it may readily grow and become a serious nuisance. For this reason attention should be given to the fouling of ditches, often used as sewers especially in the north and north-east of the County; if the discharge of sewage to the ditches is steadily prevented, it will postpone, if not completely remove, the necessity of sewerage schemes in small places.

REFUSE DISPOSAL.

There appear to have been very few additions during the last few years to the places in which there is systematic collection of house refuse, though this is one of the items in community life in which combined action makes for economy. Probably with a little ingenuity, there is little trouble in disposing of all such waste material by fire or burial, but unfortunately unsightly heaps of refuse near houses are far too common. The Chipping Sodbury and Thornbury R.D., on the advice of Dr. Rhind, the Medical Officer of Health, have adopted a useful course by inducing many of the Parish Councils in their areas to arrange communal tips where householders may deposit their refuse. Another useful procedure adopted in some parts is the covering of the rubbish as deposited with nine inches of soil.

1925.

TABLE I.—RATES, &c.

DISTRICTS.	Estimated Population.	BIRTHS.					DEATHS.					
		Legitimate.	Illegitimate.	Total.	% Illegitimate.	Birth Rate.	Total.		Under one year.			
							No.	Rate.	Legitimate.	Illegitimate.	Total.	Infantile Mortality.
URBAN :												
Awre	1,189	18	1	19	5.3	16.0	15	12.6	1	-	1	53
Charlton Kings	4,351	71	3	74	4.1	17.0	67	15.4	2	1	3	40.5
Cheltenham	48,770	665	43	708	6.1	14.5	735	15.1	36	6	42	59
Cirencester	7,484	104	4	108	3.7	14.5	100	13.4	4	-	4	37
Coleford	2,841	45	3	48	6.25	16.9	40	14.1	2	-	2	42
Kingswood	13,730	209	5	214	2.3	15.6	163	11.9	11	-	11	51
Nailsworth	3,259	39	-	39	-	12.0	42	12.9	3	-	3	77
Newnham	1,220	18	1	19	5.3	15.6	14	11.5	1	1	2	105
Stow-on-the-Wold	1,176	20	2	22	9.1	18.7	15	12.7	-	1	1	45
Stroud	8,577	123	4	127	3.2	14.8	122	14.2	10	1	11	87
Tetbury (area altered)	2,024	34	1	35	2.9	17.3	24	11.8	2	-	2	57
Tewkesbury	4,777	88	6	94	6.4	19.7	50	10.5	1	-	1	11
Westbury-on-Severn	1,863	24	4	28	14.3	15.0	26	13.95	-	-	-	-
Total Urban Districts	101,261	1,458	77	1,535	5.0	15.1	1,413	13.9	73	10	83	54
RURAL :												
Campden	5,364	81	2	83	3.4	15.5	61	11.4	2	-	2	24
Cheltenham	5,335	93	2	95	2.1	17.8	76	14.2	6	-	6	63
Chipping Sodbury	22,010	379	14	393	3.6	17.8	276	12.5	18	2	20	51
Cirencester	11,950	210	10	220	4.5	18.4	135	11.3	4	1	5	23
Dursley	12,700	216	11	227	4.8	17.9	154	12.1	8	4	12	53
East Dean	21,450	453	21	473	4.4	22.0	260	12.1	27	3	30	63
Faringdon	1,021	12	1	13	7.7	12.7	8	7.8	-	-	-	-
Gloucester	13,270	188	4	192	2.1	14.5	125	9.4	12	-	12	62.5
Lydney	10,140	175	9	184	4.9	18.1	117	11.5	8	2	10	54
Marston Sicca	1,677	25	3	28	10.7	16.7	19	11.3	2	-	2	71
Newent	6,598	112	4	116	3.4	17.6	77	11.7	9	1	10	86
Northleach	7,424	138	3	141	2.1	19.0	103	13.9	6	-	6	43
Pebworth	3,277	62	2	64	3.1	19.5	40	12.2	3	-	3	47
Stow-on-the-Wold	6,126	98	6	104	5.8	17.0	65	10.6	4	-	4	38
Stroud	28,310	389	14	403	3.5	14.2	350	12.3	18	3	21	52
Tetbury	3,060	52	1	53	1.9	17.3	40	13.1	1	-	1	19
Tewkesbury	4,556	67	1	68	1.5	14.9	54	11.8	2	1	3	44
Thornbury	18,900	308	16	324	4.9	17.1	221	11.7	13	2	15	46
Warmley	19,460	289	11	300	3.7	15.4	224	11.5	24	1	25	83
West Dean	15,060	288	20	308	6.5	20.4	174	11.5	31	-	31	101
Wheatenhurst	6,247	102	6	108	5.6	17.3	64	10.3	5	1	6	56
Winchcombe	8,804	134	9	143	6.4	16.3	93	10.6	5	2	7	49
Total Rural Districts	232,895	3,870	170	4,040	4.2	17.4	2,736	11.7	208	23	231	57
Administrative County	334,000	5,328	247	5,575	4.4	16.7	4,149	12.4	281	33	314	56

URBAN

Year	Population	Area	Density
1900	1,000,000	100	10,000
1910	1,500,000	120	12,500
1920	2,000,000	140	14,300
1930	2,500,000	160	15,600
1940	3,000,000	180	16,700
1950	3,500,000	200	17,500
1960	4,000,000	220	18,200
1970	4,500,000	240	18,800
1980	5,000,000	260	19,200
1990	5,500,000	280	19,600
2000	6,000,000	300	20,000
2010	6,500,000	320	20,300
2020	7,000,000	340	20,600

RURAL

Year	Population	Area	Density
1900	1,000,000	100	10,000
1910	1,500,000	120	12,500
1920	2,000,000	140	14,300
1930	2,500,000	160	15,600
1940	3,000,000	180	16,700
1950	3,500,000	200	17,500
1960	4,000,000	220	18,200
1970	4,500,000	240	18,800
1980	5,000,000	260	19,200
1990	5,500,000	280	19,600
2000	6,000,000	300	20,000
2010	6,500,000	320	20,300
2020	7,000,000	340	20,600

TABLE III. (A)—URBAN DISTRICTS.

1925.

L.G.B.—TABLE III—CAUSES OF AND AGES AT DEATH.

CAUSES OF DEATH.	All Ages	AGES AT DEATH									URBAN DISTRICTS												
		Under 1 year	1—2 years	2—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65—75 years	75 and over	Awre	Charlton Kings	Cheltenham	Cirencester	Coleford	Kingswood	Nailsworth	Newnham	Stow-on-the-Wold	Stroud	Tetbury	Tewkesbury	Westbury-on-Savern
1. Enteric Fever	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
2. Small Pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Measles	16	2	3	7	4	...	...	...	...	...	...	3	...	11	...	...	...	...	...	2	...	...
4. Scarlet Fever... ..	3	...	...	1	2	...	...	...	...	...	...	1	1	...	2	...	...	1	...	1	...	...
5. Whooping Cough	4	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Diphtheria	8	...	1	...	5	2	...	...	...	...	...	1	...	2	1	2	...	...	1	1	...	...
7. Influenza	39	...	...	...	2	1	5	9	9	13	...	22	6	...	6	...	...	...	4	...	1	...
8. Encephalitis Lethargica	3	...	...	...	1	2	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	...
9. Meningococcal Meningitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Tuberculosis of Respiratory System	89	1	3	25	38	17	3	2	...	1	49	6	4	17	2	1	...	5	...	2	2
11. Other Tuberculous Diseases	17	...	2	3	2	3	5	2	...	...	...	9	3	...	2	...	1	1	...	...	...	1
12. Cancer, malignant disease	172	...	...	...	...	10	57	68	37	1	12	14	14	4	15	6	2	1	15	3	4	1
13. Rheumatic Fever	3	...	...	...	2	...	...	1	...	...	...	1	1	...	1	...	...	...	...	...	...	...
14. Diabetes	17	...	...	...	...	1	5	6	5	2	1	9	1	...	1	...	...	...	1	...	1	1
15. Cerebral Haemorrhage, etc.	102	...	...	...	...	1	25	34	42	1	4	58	7	3	6	3	1	2	8	3	6	...
16. Heart Disease	210	...	...	...	1	15	55	66	73	2	13	102	16	7	18	8	2	4	22	4	10	2
17. Arterio-sclerosis	65	...	...	...	...	...	7	15	43	...	8	36	2	3	4	2	1	1	4	...	3	1
18. Bronchitis	76	10	...	1	...	1	6	14	44	1	...	35	8	4	13	4	1	1	4	2	3	...	
19. Pneumonia (all forms)	73	7	3	6	2	5	12	10	9	19	...	3	39	4	3	10	1	...	1	6	2	3	1
20. Other respiratory diseases	20	...	...	...	...	...	5	8	7	1	...	6	2	1	1	2	...	...	4	...	3	...
21. Ulcer of stomach or duodenum	7	...	...	...	...	...	3	3	1	...	2	5	...	...	...	...	...	...	...	...	...	...
22. Diarrhoea, &c.	5	4	1	...	...	...	...	...	...	...	...	2	1	...	1	1	...	...	...	...	...	...
23. Appendicitis and Typhlitis... ..	14	...	1	1	1	1	3	4	3	...	...	10	1	1	1	...	...	...	...	...	...	1
24. Cirrhosis of liver	5	...	...	...	...	1	4	...	...	...	2	2	...	...	1	...	...	...	...	...	...	...
25. Acute and chronic nephritis	42	...	...	...	1	1	15	14	11	1	2	22	5	...	4	2	...	...	3	2	...	1
26. Puerperal sepsis	2	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...
27. Other accidents and diseases of pregnancy and parturition	4	...	...	...	1	3	...	...	...	...	...	2	...	...	1	...	...	...	...	...	1	...
28. Congenital debility and malformation, premature birth	43	43	...	...	...	...	...	...	...	1	2	22	1	1	3	...	2	1	9	1	...	...
29. Suicide	17	...	...	...	2	5	8	1	1	...	...	10	...	1	1	...	...	...	4	...	...	1
30. Other deaths from violence	37	...	1	3	...	2	14	7	3	7	1	5	14	2	2	5	...	...	3	1	4	...
31. Other defined diseases	314	14	1	5	10	5	26	37	60	156	3	11	176	19	6	35	9	...	3	26	3	9	14
32. Causes ill-defined or unknown	5	1	1	...	1	...	2	...	...	1	...	3	...	...	1	...	...	...	...	...	...	...
Total	1,413	83	15	29	35	52	143	279	316	461	15	67	735	100	40	163	42	14	15	122	24	50	26

TABLE III. (B)—RURAL DISTRICTS.

1925.

L.G.B. TABLE III.—CAUSES OF AND AGES AT DEATH.

CAUSES OF DEATH.	All Ages	Under 1 year	1—2 years	2—5 years	5—15 years	15—25 years	25—45 years	45—65 years	65—75 years	75 and over	Campden	Cheltenham	Chipping Sodbury	Cirencester	Dursley	East Dean	Faringdon	Gloucester	Lydney	Marston Sheeps	Newent	Northleach	Pebworth	Stow-on-the-Wold	Stroud	Tetbury	Tewkesbury	Thornbury	Warmley	West Dean	Westonhurst	Witchcombe	
	1. Enteric Fever	6	2	4	1	...	3	1	1
2. Small Pox
3. Measles	16	6	2	7	1	...	...	...	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...
4. Scarlet Fever... ..	2	1	...	1
5. Whooping Cough	22	14	7	...	...	...	...	...	...	...	...	...	...	2	2	2	...	1	...	...	3	2	...	...	...	...	...	1	1	6	1	1
6. Diphtheria	16	...	10	4	1	...	1	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	1
7. Influenza	97	5	...	2	3	3	8	22	27	27	1	2	15	2	9	4	1	4	2	1	2	4	3	4	16	...	3	9	6	5	3	1	
8. Encephalitis Lethargica	4	...	1	...	...	2	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
9. Meningococcal Meningitis	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
10. Tuberculosis of Respiratory System	149	1	1	1	6	31	67	32	9	1	3	6	12	3	7	12	...	10	10	...	6	5	2	1	19	5	1	10	18	11	6	2	
11. Other Tuberculous Diseases	35	2	2	4	6	11	8	2	...	...	1	1	1	1	...	1	...	3	1	1	...	1	1	5	1	...	2	8	5	1	1	
12. Cancer, Malignant Disease	339	1	...	...	...	1	20	135	101	81	7	17	26	21	22	33	...	14	14	1	14	7	9	8	48	6	6	26	23	12	6	19
13. Rheumatic Fever	7	...	...	1	2	2	2	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	3	...	...	1	6	2	1	1
14. Diabetes	24	...	...	...	...	2	2	7	7	6	...	...	1	...	1	1	...	1	3	1	...	2	...	...	3	...	...	1	6	2	1	1
15. Cerebral Haemorrhage	191	...	...	...	...	2	36	66	87	5	4	16	9	23	19	1	13	7	...	3	7	3	4	25	2	4	17	11	6	6	6	6
16. Heart Disease	429	...	...	...	1	4	12	101	137	174	8	8	41	31	28	38	...	8	17	2	19	20	3	17	57	1	10	47	34	21	9	10
17. Arterio-sclerosis	140	...	...	...	...	1	15	49	75	8	3	25	5	7	8	...	4	6	...	5	4	4	6	9	2	4	14	10	3	7	6	6
18. Bronchitis	168	16	2	3	...	2	...	17	43	85	4	2	23	9	6	23	2	10	4	1	2	4	1	2	18	4	2	12	17	18	1	3	
19. Pneumonia (all forms)	133	27	15	3	10	4	15	21	16	22	...	6	16	2	7	16	...	7	9	2	6	3	1	2	8	1	3	7	13	21	3	...	
20. Other Respiratory Diseases	35	4	1	1	1	1	1	9	9	8	2	1	6	3	1	7	...	1	...	...	...	1	...	2	1	...	...	2	1	...	...	2
21. Ulcer of Stomach or Duodenum	17	...	...	...	...	3	7	4	3	...	1	1	...	...	1	...	...	1	4	...	...	1	...	...	...	...	...	5	2	...	...	...
22. Diarrhoea, &c.	15	10	5	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	1	...	...	...	2	1	1	2	...
23. Appendicitis and Typhlitis... ..	17	...	...	...	2	6	5	2	1	1	...	...	2	1	...	4	...	2	1	...	...	...	...	1	...	...	...	2	1	1	1	2
24. Cirrhosis of liver	6	...	...	...	...	4	1	1	1	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1
25. Acute and Chronic Nephritis	80	...	...	1	1	2	6	29	20	21	3	3	11	5	1	7	...	4	2	...	2	1	1	3	9	3	3	7	6	2	3	4
26. Puerperal sepsis	8	...	...	...	...	3	5	...	...	...	...	...	2	...	...	1	...	...	...	...	...	1	...	...	...	...	...	2	1	...	...	...
27. Other accidents and diseases of pregnancy and parturition	11	...	...	...	...	11	...	...	...	...	...	...	1	1	...	1	...	...	...	...	1	...	1	...	2	...	...	1	1	2	...	...
28. Congenital debility and malformation, premature birth	110	107	...	...	1	...	1	1	...	...	2	14	2	6	11	...	5	6	2	5	4	1	2	9	1	3	10	10	12	2	3	...
29. Suicide	24	...	...	...	...	3	6	9	4	2	...	...	2	1	1	3	1	1	1	...	...	2	...	1	4	...	1	2	2	2	...	...
30. Other deaths from violence	90	4	1	4	8	15	11	23	7	17	2	1	10	3	5	8	...	6	3	...	...	3	1	1	15	2	2	13	4	5	2	4
31. Other defined diseases	532	38	3	11	10	18	42	99	95	216	13	19	42	33	24	54	3	29	26	7	8	31	8	10	72	11	10	35	33	29	12	23	
32. Causes ill-defined or unknown	11	1	...	...	1	1	...	4	3	1	...	...	...	...	...	2	...	...	1	1	...	...	...	5	1	1	...	...	...	...	...	...
Total	2,736	231	44	43	64	113	232	582	599	828	61	76	276	135	154	290	8	125	117	19	77	103	40	65	350	40	54	221	224	174	64	93	

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HOUSING. TABLE IV.

(Figures in brackets are numbers of houses erected under Schemes.)

	No. of houses proposed in Schemes	HOUSES ERECTED								Total	Under Schemes	Private-ly
		1919	1920	1921	1922	1923	1924	1925				
URBAN :												
Awre	26	—	2	—	2	1	—	—	5	—	5	
Charlton Kings	40	—	—	16 (14)	10	9	11	8	54	14	40	
Cheltenham	520	2	2	97 (92)	82 (64)	17	64 (40)	80 (44)	344	240	104	
Cirencester	48	—	5	20 (16)	38 (36)	14	32	13	122	52	70	
Coleford	100	—	—	40 (40)	—	2	2	1	45	40	5	
Kingswood	200	1	4 (4)	2	3	—	23 (12)	54 (25)	87	41	46	
Nailsworth	60	—	2	22 (22)	2 (2)	7	7	5	45	24	21	
Newnham	25	—	—	1	—	—	2	—	3	—	3	
Stow-on-the-Wold	25	—	—	25 (25)	—	—	—	—	25	25	—	
Stroud	125	—	—	17 (16)	52 (50)	6	17	9	101	66	35	
Tetbury	30	—	—	12 (12)	—	—	—	—	12	12	—	
Tewkesbury	122	—	—	12 (12)	—	—	—	13 (12)	25	24	1	
Westbury-on-Severn	50	1	—	1	—	1	1	1	5	—	5	
Total U.D.	1,371	4	15 (4)	265 (249)	189 (152)	57	159 (52)	184 (81)	873	538	335	
RURAL :												
Campden	88	—	—	14 (14)	2	3 (2)	3	20 (12)	42	28	14	
Cheltenham	80	2	10 (10)	68 (54)	9	18	29	25	161	64	97	
Chipping Sodbury	471	10	22	123 (88)	40 (40)	34	78	134	441	128	313	
Cirencester	176	4	6 (6)	65 (58)	74 (64)	18	14	53	234	128	106	
Dursley	212	1	15 (15)	75 (62)	89 (87)	9	6	9	204	164	40	
East Dean	305	—	—	—	—	19	33 (10)	32	84	10	74	
Faringdon	—	—	—	2	2	2	—	—	6	—	6	
Gloucester	270	—	19 (19)	38 (34)	36 (18)	28	28	99	248	71	177	
Lydney	106	26	2 (2)	8 (2)	34 (26)	20 (10)	35 (20)	55 (20)	180	80	100	
Marston Sicca	15	—	2	—	6	8	3	5	24	—	24	
Newent	75	—	3	—	—	7	5	3	18	—	18	
Northleach	86	—	—	12 (10)	1	4	7	1	25	10	15	
Pebworth	36	—	26 (26)	8	4	9	4	24 (20)	75	46	29	
Stow-on-the-Wold	71	—	12	16 (16)	39 (31)	4	12	4	87	47	40	
Stroud	217	2	—	66 (50)	45 (22)	95	78	53	339	72	267	
Tetbury	26	—	7	—	—	—	—	2	9	—	9	
Tewkesbury	88	2	10 (10)	28 (22)	12 (10)	6	2	5	65	42	23	
Thornbury	297	—	6 (6)	41 (33)	44 (24)	31	26	63 (8)	211	71	140	
Warmley... ..	343	—	10	54 (38)	22	5	59 (10)	94 (24)	244	72	172	
West Dean	400	1	4	80 (74)	157 (148)	—	9	—	251	222	29	
Wheatenhurst	21	1	—	21 (21)	15 (15)	1	11	9	58	36	22	
Winchcombe	117	—	3	52 (40)	5 (1)	14	7	9	90	40	50	
Total R.D.	3,500	49	157 (94)	771 (616)	636 (485)	335 (12)	449 (40)	699 (84)	3,096	1,331	1,765	
COUNTY												
Schemes	4,871	53	172	1,036	825	392	608	883	3,969	—	—	
Private	—	53	74	171	188	380	516	718	2,100	1,869	2,100	

