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# REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

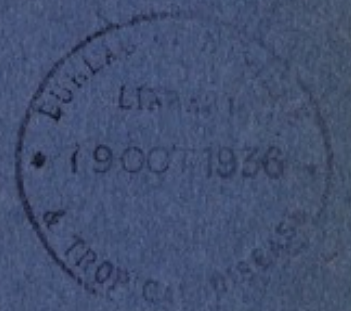
1935.

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**WILLIAM G. SAVAGE,**

B.Sc., M.D. (Lond.), D.P.H.,

County Medical Officer of Health.







Somerset County Council.

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**To the Chairman and Members of the Public Health and Housing Committee,  
Somerset County Council.**

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GENTLEMEN,

I beg to submit my twenty-seventh Annual Report upon the Health Administration of the County. The Ministry of Health has arranged to supply the mortality statistics to each Medical Officer to save separate compilation, and these figures have been adopted in the Tables.

The vital statistics for the year are very satisfactory. The death rate is very low, the tuberculosis death rate again the lowest on record, while the rate of infantile mortality is also the lowest recorded and indeed extraordinarily low.

The report is on similar lines to those of previous years. This year a detailed account has been given of Maternity and Child Welfare work, while fairly full consideration has been given to milk problems.

A large part of my Report is now taken up with details of the Health work undertaken by the County Health Department, but a brief survey is also given of the general sanitary conditions in the County.

Your obedient servant,

Taunton,

W. G. SAVAGE.

*June, 1936.*

## STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres):—1,028,777.

Population (1935):—403,700.

Births:—Total, 5,119; Legitimate, 4,949; Illegitimate, 170; Stillbirths, 235.

Deaths:—Total, 4,896; Urban, 2,269; Rural, 2,627.

Deaths of children under 1 year of age:—205.

Rateable Value:—£2,445,300 (1935).

Sum represented by a penny rate:—£9,158(1934-35); £9,437(1935-36); £9,648(1936-37).

Birth rate:—12.68.

Death rate:—12.13.

Rate of infantile mortality:—40.04.

Percentage of births which were illegitimate:—3.32.

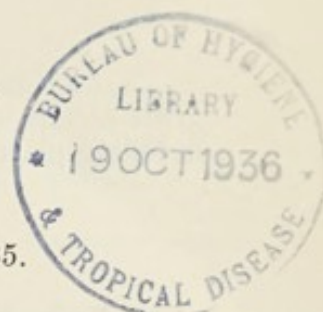
The birth rate is slightly lower than for the previous year, and the birth and death rates are now nearly the same. The population increase is only 200, *i.e.*, nearly stationary.

The death returns are corrected as regards the distribution of deaths to the districts to which they properly belong. To correct the differences of age and sex distribution a standardizing factor has to be used based upon the census figures. So corrected the following figures are obtained:—

				<i>Net Death-rate.</i>	<i>Standardizing Factor.</i>	<i>Standardized Death-rate.</i>
Rural Districts	...	...	...	11.80	0.82	9.68
Urban Districts	...	...	...	12.53	0.82	10.27
Administrative County	...	...	...	12.13	0.82	9.95
England and Wales	...	...	...	11.7	—	11.7

Somerset now contains a high proportion of old people and this is reflected in the difference between the net and standardized death rates. Compared with a population of standard age and sex distribution, which is what the standardized rate permits, it shows a rate of 9.95, which is very low, but above the lowest on record for the County, *i.e.* 9.21.

The causes of death are set out in Tables A. and B. at the end of the Report. Table A. shows that heart diseases are responsible for the largest number of deaths from one single group of causes (1,116 deaths), cancer and other forms of malignant disease the next largest (677 deaths), bronchitis and pneumonia caused 348 deaths, while tuberculosis caused 213 deaths.





As pointed out in previous years, we cannot hope to lower the death rate further to any great extent but must aim at a postponement of the period of death. Table I. shows that this is taking place.

TABLE I.

Proportion of the deaths in each year divided amongst the different age groups.

	Under 1 year.	1—45.	45—65.	65 and over.
1911	12.9	21.0	20.8	45.3
1912	10.6	21.0	23.0	45.4
1913	10.8	23.3	21.0	44.9
1914	9.2	22.0	22.3	46.5
1920	9.7	19.1	22.3	48.9
1921	9.3	18.0	23.1	49.6
1922	6.6	17.3	22.2	53.9
1923	7.0	18.7	23.1	51.2
1924	7.1	17.5	21.8	53.6
1925	6.5	17.0	22.2	54.3
1926	6.9	16.0	22.3	54.8
1927	5.3	15.3	23.5	55.9
1928	5.6	16.6	23.2	54.6
1929	5.2	14.8	22.3	57.7
1930	5.6	15.5	23.4	55.5
1931	5.6	15.1	22.7	56.6
1932	5.3	14.1	23.2	57.4
1933	4.7	13.9	22.3	59.1
1934	4.9	13.3	23.4	58.4
1935	4.2	12.3	23.7	59.8

Only 40 per cent. of the deaths are in persons under 65 years of age.

TABLE II.  
Rural Districts.

YEAR.	Population estimated to middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.	
		Number.	Rate.	Number.	Rate per 1,000 Births registered.	Number	Rate.
1925	231,100	3,735	16.16	183	49.0	2,802	12.12
1926	231,700	3,654	15.77	180	49.26	2,728	11.77
1927	233,000	3,507	15.05	165	47.04	2,891	12.41
1928	235,440	3,615	15.35	155	42.88	2,754	11.70
1929	235,500	3,459	14.69	166	47.99	3,012	12.37
1930	232,040	3,465	14.93	162	46.76	2,747	11.84
1931	230,100	3,442	14.96	181	52.59	3,076	13.37
1932	231,400	3,315	14.32	160	48.27	2,888	12.48
1933	222,801	3,069	13.61	140	45.62	2,851	12.65
1934	222,691	3,204	14.39	146	45.57	2,742	12.31
Averages for years 1925—1934	230,577	3,447	14.9	164	47.5	2,849	12.4
1935	222,600	3,027	13.60	115	37.99	2,627	11.80

Urban Districts.

1925	166,900	2,436	14.60	133	54.60	2,045	12.25
1926	167,800	2,423	14.44	137	56.54	1,902	11.33
1927	168,500	2,262	13.42	100	44.21	2,110	12.52
1928	169,810	2,336	13.76	114	48.80	2,058	12.12
1929	171,060	2,233	13.05	108	48.37	2,240	13.11
1930	172,830	2,340	13.54	104	44.44	1,986	11.50
1931	173,750	2,260	13.01	114	50.44	2,193	12.64
1932	176,700	2,250	12.74	114	50.67	2,239	12.68
1933	180,529	2,105	11.73	105	49.88	2,331	12.99
1934	180,809	2,284	12.63	102	44.66	2,321	12.84
Averages for years 1925—1934	172,869	2,293	13.3	113	49.3	2,143	12.4
1935	181,100	2,092	11.55	90	43.02	2,269	12.53



## GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

This was set out in detail in my Annual Report for 1930 and remains substantially unaltered.

## PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

### Acute Infectious Diseases.

The nine Isolation Hospital areas are set out in my Report for 1930. Progress towards completing the Scheme still continues to be slow.

The Axbridge Isolation Hospital has been enlarged by the addition of a new ward block of 14 beds and extensions to the administrative block. This has enabled the hospital area to comprise all the districts set out in the Scheme. The areas now included are Bridgwater Borough and the eastern part of Bridgwater Rural.

Considerable extensions and a thorough remodernising of the Taunton Isolation Hospital is in hand. Plans have been approved and tenders obtained, and the work will be put in hand in June, 1936. This will enable the Hospital to take in cases from a much wider area than when it was erected.

At Weston-super-Mare a large new administrative block has been erected; also a separate cubicle block of 8 beds.

The plans for the South Somerset Hospital have been approved, but no actual building has yet been commenced.

Plans for the extension of the Shepton Mallet Isolation Hospital are under consideration. It has not been found necessary to enlarge the Paulton Hospital. The arrangements for the cases from Long Ashton, Clevedon and Portishead to go to the Bristol Isolation Hospital have still not been made operative. No extensions are contemplated for the other two hospitals—Minehead and Wincanton.

In view of the fact that Weston-super-Mare is now outside the Scheme and that the buildings at Taunton and South Somerset Hospitals have not yet been erected it has not been possible to put into operation the pooling scheme for nurses and for cases sanctioned by the County Council.

**Small Pox.** I am glad to be able to report that there were no cases of Small-pox during the year in the County.

The 1935 vaccination figures are not yet available, but early in 1936 those for 1934 were reported. Of 5,303 births 1,296 were returned as successfully vaccinated. This gives only 24 per cent. vaccinated, the percentage varying from seven in Norton Radstock and Clutton to fifty in Coker and fifty-five in Langport registration sub-districts.

**Diphtheria.** 287 cases were notified with 16 deaths, a case mortality of 5.6 per cent. The distribution of the cases is shown in Table III. The number of cases was lower than the previous year but the case mortality was higher.

**Scarlet Fever.** The prevalence of this disease was below that for the previous year although 497 cases were notified. There were only three deaths, giving a case mortality of 0.6 per cent.

**Enteric and Paratyphoid Fevers.** Only 11 cases were notified, with one death.

**Encephalitis Lethargica.** Table III. shows that 3 cases were notified while 3 were unnotified. These were distributed through the County and with no epidemic. There were 5 deaths, a case mortality of 83 per cent.

Two cases of Cerebro-spinal Meningitis and 4 cases of acute Poliomyelitis were notified.

**Measles and Whooping Cough.** Neither disease is notifiable so the number of cases is not known. During the year there were 4 deaths from Measles and 5 deaths from Whooping Cough, both much below the average.

Table III. shows that the incidence of notifiable infectious diseases in Somerset during 1935 was very low.



## INFECTIOUS DISEASES.

TABLE III.

	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric and Paratyphoid Fevers.	Puerperal Fever.	Ophthalmia Neonatorum.	Cerebro-spinal Meningitis.	Dysentery.	Malaria.	Pneumonia.	Acute Poliomyelitis.	Encephalitis Lethargica.
<b>URBAN</b>												
Bridgwater	0	19	0	1	0	0	0	0	0	22	0	0
Burnham	0	17	2	0	0	1	0	0	0	3	0	0
Chard	0	1	1	0	0	0	0	0	0	13	0	0
Clevedon	0	3	12	0	0	0	0	0	0	10	0	0
Crewkerne	0	1	6	0	0	0	0	0	0	2	0	0
Frome	0	13	4	0	0	0	0	0	0	1	0	0
Glastonbury	0	3	0	0	0	0	0	0	0	3	1	0
Ilminster	0	2	0	0	0	0	0	0	0	4	0	0
Minehead	0	8	1	0	0	1	0	0	0	0	0	0
Norton-Radstock	0	32	6	0	1	0	0	0	0	23	0	0
Portishead	0	1	20	2	0	0	0	0	0	6	0	0
Shepton Mallet	0	3	4	0	0	0	0	0	0	12	0	0
Street	0	1	0	0	0	0	0	0	0	7	0	0
Taunton	0	15	77	1	1	1	0	1	0	12	1	0
Watchet	0	0	2	0	0	0	0	0	0	0	0	0
Wellington	0	1	1	0	1	0	0	0	0	3	1	0
Wells	0	1	4	0	0	0	0	0	0	1	0	0
Weston-super-Mare	0	29	26	0	1	4	1	0	0	14	0	0
Yeovil	0	1	0	0	1	0	0	0	0	54	0	0
<b>RURAL</b>												
Axbridge	0	48	22	1	1	2	0	0	0	25	0	0
Bathavon	0	61	6	0	2	2	0	0	0	9	0	0
Bridgwater	0	5	2	0	0	2	0	0	0	14	0	0
Chard	0	5	5	0	0	1	1	0	0	15	0	0
Clutton	0	40	5	0	0	1	0	0	0	14	0	0
Dulverton	0	1	0	0	0	0	0	0	0	10	0	0
Frome *	0	10	1	1	1	0	0	0	0	15	0	0
Langport	0	10	2	0	1	0	0	0	0	3	0	0
Long Ashton	0	104	8	1	1	0	0	0	0	18	0	0
Shepton Mallet	0	1	1	0	0	0	0	0	0	8	0	0
Taunton	0	12	18	3	0	1	0	0	0	7	0	1
Wellington	0	2	9	0	1	0	0	0	0	1	0	0
Wells	0	3	13	1	0	0	0	0	0	11	0	0
Williton	0	23	14	0	0	1	0	0	0	4	0	1
Wincanton	0	15	15	0	0	0	0	0	0	24	0	1
Yeovil	0	6	0	0	0	3	0	0	0	14	1	0
Urban Districts	0	151	166	4	5	7	1	1	0	190	3	0
Rural Districts	0	346	121	7	7	13	1	0	0	192	1	3
Administrative County	0	497	287	11	12	20	2	1	0	382	4	3

\* One case of Polio-Encephalitis.



### VENEREAL DISEASES.

The attendances of Somerset cases at the different clinics for the year 1935 were as follows:—

Clinic.	New cases 1935	Attend- ances. 1935	NEW CASES.				ATTENDANCES.		
			1932.	1933.	1934.	Increase or decrease during 1935.	1933.	1934.	Increase or decrease during 1935.
Bath .....	9	219	16	11	17	- 8	319	663	- 444
Bristol .....	56	754	54	63	72	- 16	885	797	- 43
Taunton .....	86	1,115	74	58	88	- 2	814	972	+ 143
Yeovil .....	45	539	64	60	59	- 14	768	819	- 280
Bridgwater .....	33	842	33	50	55	- 22	880	1,100	- 258
Frome .....	22	383	4	11	23	- 1	203	259	+ 124
Glastonbury .....	28	352	5	19	19	+ 9	137	351	+ 1
Minehead .....	23	287	23	14	22	+ 1	145	225	+ 62
Weston-super-Mare .....	54	1,056	41	37	44	+ 10	811	1,198	- 142
All Clinics	356	5,547	314	323	349	- 43	4,962	6,384	- 837

The figures show a decline in new cases (43) and in total attendances (837). This is not confined to any one clinic but is common to all, except Glastonbury, Minehead and Weston-super-Mare. Bath, Bristol, Yeovil and Bridgwater were the clinics mainly affected. It is not easy to deduce whether this is a decline in usage or a diminution in prevalence.

Medical Practitioners in the County qualified to receive supplies of arsenobenzol compounds can obtain them free of charge on request to the County Medical Officer. Only 23 Medical Practitioners are on this free list.

Bacteriological work in connection with venereal diseases is arranged for either in connection with Bristol University Laboratory or at the County Health Laboratory.

During the year the following samples were examined:—

Samples.	For Medical Officers of Clinics.	For Medical Practitioners.	Total.
Wasserman ...	339	257	596
Gonococcus ...	686	73	759
Spirochetes ...	1	0	1
Fixation and other tests ...	110	2	112
	1,136	332	1,468



## TUBERCULOSIS.

The chief event of the year as regards Tuberculosis was the opening of the Chard Sanatorium. The building itself was appropriated from the Public Assistance Committee, being their Infirmary, a building quite separate from the old Public Assistance Institution. Although this was built only a few years previously it required a good deal of internal adaptation to fit it for tuberculosis cases. An up-to-date X-ray apparatus was installed, also a disinfecting apparatus. A new nurses' block had to be built. The accommodation provided consists of two wards of 10 beds each on the ground floor for advanced pulmonary tuberculosis cases, originally intended for males and females but subsequently altered for females only, Wincanton being kept for men only. The first floor contains 28 beds arranged in two wards of 10 beds each, two of 3 beds each and two of 1 bed each, all reserved for non-pulmonary tuberculosis, mostly adults. Previously the County Council had no accommodation for adult non-pulmonary cases.

The institution was opened in April, 1935, and at the end of the year contained 38 patients. The Hospital is medically staffed by Dr. Pascall, one of the Tuberculosis Officers acting as visiting doctor responsible for the administration, the services of a local doctor for emergencies and Dr. Forrester Brown acting as consultant and surgeon for the orthopædic cases.

TABLE IV.

Year.	Phthisis Death rates.			Other Tuberculous Diseases			Tuberculosis Death-rate.	Deaths in a population of 406,000.	
	Rural.	Urban.	County.	Rural.	Urban.	County.	County.	Phthisis.	All Tuberculosis
1901	0.88	0.84	0.871	0.18	0.23	0.202	1.073	354	435
1902	0.86	0.89	0.877	0.20	0.19	0.201	1.078	356	437
1903	0.94	0.76	0.879	0.19	0.34	0.251	1.130	357	459
1904	0.99	0.97	0.989	0.20	0.34	0.255	1.244	402	505
1905	0.90	0.91	0.905	0.14	0.18	0.162	1.067	367	433
1906	0.90	0.86	0.890	0.13	0.37	0.221	1.111	361	451
1907	0.83	0.85	0.842	0.24	0.26	0.253	1.095	341	445
1908	0.91	0.93	0.922	0.24	0.31	0.274	1.196	375	485
1909	0.82	0.85	0.833	0.24	0.27	0.255	1.088	338	441
1910	0.98	0.78	0.912	0.16	0.24	0.197	1.109	371	451
1911	0.83	0.76	0.804	0.15	0.39	0.240	1.044	327	424
1912	0.69	0.90	0.778	0.17	0.20	0.191	0.970	315	394
1913	0.74	0.67	0.721	0.15	0.30	0.239	0.960	293	389
1914	0.86	0.79	0.833	0.21	0.26	0.232	1.065	338	432
1915	0.84	1.13	0.960	0.18	0.23	0.201	1.160	389	471
1916	0.75	0.97	0.838	0.16	0.25	0.194	1.032	340	418
1917	0.90	1.05	0.962	0.18	0.21	0.191	1.153	390	468
1918	1.09	1.30	1.180	0.21	0.24	0.225	1.403	479	569
1919	0.85	0.90	0.871	0.21	0.22	0.212	1.083	355	439
1920	0.65	0.93	0.765	0.14	0.27	0.196	0.961	310	390
1921	0.63	0.76	0.685	0.16	0.30	0.220	0.904	278	367
1922	0.75	0.78	0.761	0.18	0.18	0.180	0.941	309	382
1923	0.65	0.76	0.696	0.19	0.22	0.206	0.902	282	366
1924	0.60	0.74	0.656	0.15	0.13	0.140	0.797	267	324
1925	0.61	0.73	0.659	0.12	0.14	0.126	0.784	268	319
1926	0.53	0.54	0.533	0.13	0.14	0.138	0.671	217	273
1927	0.55	0.64	0.586	0.13	0.13	0.130	0.716	237	290
1928	0.59	0.71	0.639	0.08	0.16	0.113	0.753	259	306
1929	0.55	0.65	0.593	0.11	0.14	0.121	0.714	240	289
1930	0.54	0.52	0.532	0.09	0.09	0.091	0.623	216	253
1931	0.45	0.65	0.533	0.14	0.12	0.131	0.664	216	270
1932	0.50	0.62	0.554	0.12	0.10	0.115	0.671	225	272
1933	0.44	0.51	0.472	0.14	0.09	0.118	0.590	192	240
1934	0.38	0.48	0.426	0.12	0.09	0.106	0.533	173	216
1935	0.39	0.49	0.433	0.11	0.08	0.094	0.528	176	214

The tuberculosis death rate is lower than for any previous year.

The actual results achieved are more clearly seen when the figures are calculated on a standard population of 406,000 (last column) which is nearly the Administrative County population. This column shows that as many as 240 fewer persons died from tuberculosis in the County in 1935 than would have been the case 30 years ago with the same population. Compared with an average figure of 454 deaths for a five year period 30 years ago the decline represents a reduction of 53 per cent.



The following figures show the deaths and notifications since 1917:—

TABLE V.

Year.	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Deaths.	393	480	388	358	350	366	354	317	312	268	287	305	290	253	268	273	239	215	213
*Notifi- cations.	1036	949	922	860	882	732	707	701	769	729	703	713	605	640	585	565	479	511	459

\*These are primary cases only and do not include institutional cases.  
Of the 213 deaths from tuberculosis, 30 were not notified.

TABLE VI.

New cases of tuberculosis and deaths from the disease in the County during 1935.

Age Periods.	New cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M	F.	M.	F.	M.	F.	M.	F.
0—1	0	0	1	0	0	0	1	0
1—5	0	6	8	12	0	2	3	8
5—10	9	5	16	11	0	0	2	0
10—15	6	5	6	9				
15—20	10	17	5	7	8	16	0	1
20—25	24	36	4	4				
25—35	47	54	4	11	32	36	5	8
35—45	22	25	5	5				
45—55	29	12	2	0	47	16	6	2
55—65	18	10	0	0				
65 and upwards	7	5	2	0	10	8	2	0
Totals	172	175	53	59	97	78	19	19



TABLE VII.  
Tuberculosis Notifications and Deaths.

URBAN DISTRICTS.	Number of primary cases notified.		Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.	RURAL DISTRICTS.	Number of primary cases notified.		Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.
	Pulm.	Non-Pulm.				Pulm.	Non-Pulm.		
Bridgwater .....	15	10	20	6	Axbridge .....	22	5	8	5
Burnham .....	8	3	2	0	Bathavon .....	18	4	10	2
Chard .....	2	0	1	0	Bridgwater .....	6	3	3	3
Clevedon .....	8	0	3	0	Chard .....	9	3	4	1
Crewkerne .....	5	0	0	0	Clutton .....	8	4	6	0
Frome .....	7	1	6	2	Dulverton .....	5	2	2	0
Glastonbury .....	4	3	3	0	Frome .....	5	1	2	1
Ilminster .....	4	0	1	0	Langport .....	21	5	12	2
Minehead .....	7	0	1	1	Long Ashton .....	15	3	7	1
Norton-Radstock .....	9	4	1	0	Shepton Mallet .....	7	3	2	0
Portishead .....	8	0	0	0	Taunton .....	11	4	4	2
Shepton Mallet .....	5	1	1	0	Wellington .....	5	3	4	0
Street .....	1	1	1	1	Wells .....	6	4	2	2
Taunton .....	23	11	11	0	Williton .....	13	1	8	1
Watchet .....	0	2	2	0	Wincanton .....	10	3	6	0
Wellington .....	5	0	2	2	Yeovil .....	14	8	7	4
Wells .....	7	0	6	0					
Weston-s-Mare .....	31	12	17	1					
Yeovil .....	23	8	10	1					
<b>Totals</b>	<b>172</b>	<b>56</b>	<b>88</b>	<b>14</b>	<b>Totals</b>	<b>175</b>	<b>56</b>	<b>87</b>	<b>24</b>

Sanatorium or Hospital treatment was given to 307 cases. In addition many open-air shelters were provided, those in actual use on December 31st, 1935, being 71. The number of shelters available is 80. Milk, for a period of six or eight weeks, was provided for 67 cases, Dental treatment for 1 case, X-Ray examinations for 84.

Treatment by the use of artificial pneumothorax has been extended and the cases dealt with are shewn in the following table:—

	At Dispensary or home of patient.		At Institutions.	Total.
Primary inductions ... ..	...	0	30	30
Refills ... ..	...	122	508	630

The X-Ray work at Quantock Sanatorium consisted of 7 films taken and 532 screening of cases.

Unused buildings at Quantock Sanatorium were again utilised during 1935 as a Summer Camp. Children were selected who were predisposed to tuberculosis on account of general debility or undernourishment, with special attention to those from homes in which there was an active case of tuberculosis. Of such children, 40 girls and 40 boys, for three weeks and four weeks respectively, were given treatment under open-air conditions and on the lines of a holiday camp. The increase in weight and marked improvement in general health which resulted was again satisfactory. This work must be regarded as an important piece of tuberculosis preventive work. The Staff utilised was almost entirely voluntary.



During the year the use of the Mantoux test to judge infection with the tubercle bacillus was continued. The following two tables give the actual figures. The results obtained are of considerable value, chiefly in prognosis but to some extent in connection with treatment.

Contacts of a				Other Cases. Result.		Total.
T.B. + Case. Result.		T.B. - Case. Result.				
+	-	+	-	+	-	
58	15	36	64	63	135	371

## AGE GROUPS.

0-11		12-15		Over 15		Total
Result		Result		Result		
+	-	+	-	+	-	
106	162	37	39	14	13	371

TABLE VIII.

All cases under treatment. Complete results as regards working capacity.

All years, (1912-1935).		Cured.	Working.	Not Working.	Dead.	Lost sight of or Removed.	Total cases.
Men	Cases	1,090	346	252	1,574	655	3,917
	Percentage	28	9	6	40	17	
Women	Cases	1,207	499	266	1,388	728	4,088
	Percentage	29	12	7	34	18	
Children	Cases	1,867	394	104	192	467	3,024
	Percentage	62	13	4	6	15	
Un- Classified	Cases	0	0	0	124	229	353
	Percentage	0	0	0	35	65	
Total	Cases	4,164	1,239	622	3,278	2,079	11,382
	Percentage	37	11	5	29	18	



TABLE IX.  
Admissions to Sanatoria during 1935.

Sanatorium.	Men.	Women.	Children.	Total.
Quantock	62	61	—	123
Chard	18	52	2	72
Taunton	19	13	—	32
Wincanton	16	6	—	22
Compton Bishop	—	—	45	45
Alton Hospital	—	—	5	5
Bath Ortho. Hospital	—	—	7	7
Sea-Bathing Hospital, Margate	1	—	—	1
	116	132	59	307

TABLE X.  
Cases treated through the County Dispensaries.

Dispensary.	Persons treated at Dispensaries during 1935.		Under treatment at Dispensaries Dec. 31st, 1935.		Total Dispensary Attendances 1935.	Total Persons examined 1935.
	Insured.	Uninsured.	Insured.	Uninsured.		
Bath (County)	5	21	2	6	247	108
Bridgwater	29	121	4	28	782	244
Bristol	3	34	2	7	292	97
Chard	4	8	4	2	138	84
Clevedon	18	126	5	18	413	116
Frome	2	27	0	13	187	78
Glastonbury	8	23	2	3	195	101
Langport	16	31	9	23	280	125
Minehead	34	84	34	74	620	240
Radstock	11	77	9	28	424	132
Shepton Mallet	6	27	2	11	176	71
Taunton	22	236	9	78	914	439
Wellington	30	65	4	22	299	115
Weston-super-Mare	15	71	10	48	798	299
Wincanton	2	15	1	6	172	70
Yeovil	32	68	9	19	804	315
	237	1,034	106	386		
	1,271		492		6,741	2,634



TABLE XI.

Table showing the work of the Dispensaries during the Year 1935.

DIAGNOSIS.	PULMONARY.		NON-PULMONARY		TOTAL.		GRAND TOTAL.						
	Adults.	Children.	Adults.	Children.	Adults.	Children.							
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.							
A.—NEW CASES examined during the year (excluding contacts)—													
(a) Definitely tuberculous .. ..	106	113	8	7	5	19	22	23	111	132	30	30	303
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	3	2	1	1	7
(c) Non-tuberculous .. ..	—	—	—	—	—	—	—	—	156	184	115	130	585
B.—CONTACTS examined during the year—													
(a) Definitely tuberculous .. ..	6	3	2	4	—	—	—	1	6	3	2	5	16
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Non-tuberculous .. ..	—	—	—	—	—	—	—	—	45	94	137	146	422
C.—CASES written off the Dispensary Register as—													
(a) Recovered .. ..	41	67	26	23	8	9	17	12	49	76	43	35	203
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) .. ..	—	—	—	—	—	—	—	—	207	284	259	280	1,030
D.—NUMBER OF CASES on Dispensary Register on December 31st—													
(a) Definitely tuberculous .. ..	559	693	125	106	39	72	148	118	598	765	273	224	1,860
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	3	2	1	1	7
1. Number of cases on Dispensary Register on January 1st ..	1,985		2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years .. ..								17		
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of "	74		4. Cases written off during the year as Dead (all causes) .. ..								161		
5. Number of attendances at the Dispensary (including Contacts)	6,741		6. Number of Insured Persons under Domiciliary Treatment on the 31st December .. ..								65		
7. Number of consultations with medical practitioners— (a) Personal .. .. (b) Other .. ..	577 1,651		8. Number of visits by Tuberculosis Officers to homes (including personal consultations) .. ..								937		
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes .. ..	12,853		10. Number of— (a) Specimens of sputum, etc., examined .. .. (b) X-ray examinations made in connexion with Dispensary work ..								464 84		
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above .. ..	1		12. Number of "T.B. plus" cases on Dispensary Register on December 31st .. ..								485		



**Compton Bishop Children's Home.** This valuable institution was opened in October, 1917, for 19 beds and enlarged in 1919 for 29 beds and in 1928 to take 33 children. It has always been run very economically and the results of the treatment have been most satisfactory. The average duration of stay is about 7 months.

The condition of all definite cases discharged up to the end of 1935, excluding 53 children found non-tuberculous and 23 who stayed less than a month, is as follows:—

	No.	Percentage.
Cured ... ..	330	59.0
Arrested (working or at school)	94	16.8
Arrested—Not working ... ..	2	0.4
Not Arrested—Working ... ..	60	10.8
Not Arrested—Not Working ... ..	10	1.9
Lost sight of ... ..	42	7.5
Dead—of tuberculosis ... 16	21	3.6
„ —other conditions ... 2		
„ —not ascertained ... 3		
	<hr/> 559 <hr/>	

Excluding the few lost sight of cases, 80 per cent. are perfectly well; 13.5 per cent. are in the group “Not arrested,” but many of these are well and will be cured; only 3.6 per cent. subsequently died and of these tuberculosis only accounted for 2.7 per cent.

**Quantock Sanatorium.** Condition of all definite cases discharged from Quantock Sanatorium, from the opening in June, 1925, until 31st December, 1935:—

	Cases.	Percentage.
Cured ... ..	239	18.6
Arrested and Working ... ..	245	19.0
Arrested and Not Working ... ..	29	2.3
Not Arrested but Working ... ..	211	16.4
Not Arrested and Not Working...	112	8.7
Lost sight of and Left County ...	192	14.9
Dead ... ..	261	20.3
	<hr/> 1,289 <hr/>	

NOTE.—Some of the cases are not admitted as curative cases but as advanced cases sent in to prevent home infection. This accounts for almost all the “dead” group.

The expression “arrested” has a technical meaning, and is only applied to cases free from any symptoms for at least two years. Many in the “non-arrested” group are apparently quite well, but the two years’ period has not elapsed.

Dr. Short, County Tuberculosis Officer, has drawn up the following remarks dealing with the treatment given under the County Council scheme and the results obtained.

### **Tuberculosis Officer's Clinical Report for 1935.**

The year 1935 was a busy one, chiefly because the doctors practising in the County call upon the services of the Tuberculosis Officers more than ever before for consultations in cases of difficulty.

It is with gratitude that I can record further steady progress in all the main divisions of the tuberculosis work. On the preventive side, the number of new notifications was the lowest ever recorded—a very healthy sign.

On the pulmonary tuberculosis side, the number of cases found at the Dispensaries to be definite tuberculosis was again less than last year, and the wave of sudden, acute cases which developed early in the year has died down. The increased facilities for artificial pneumothorax have helped considerably, especially in reducing the infectivity of the severe type of case.

On the non-pulmonary side, the opening of Chard Sanatorium has met a long felt need and much useful, important and difficult work has already been accomplished there.

Again it has been possible to write off more than 200 cases as "Cured", after 5 or more years' treatment and careful observation, and only one case had to be restored to the Register after being removed from it in a previous year.

The Voluntary Care Committee members and helpers have again rendered valuable service all through the year.

The new cases seen numbered 1,350, and were classified as follows:—

PULMONARY TUBERCULOSIS.	T.B. Negative	...	...	119	
	T.B. Positive Stage 1	...	...	24	
	T.B. Positive Stage 2	...	...	85	
	T.B. Positive Stage 3	...	...	37	
				<hr/>	265
NON-PULMONARY TUBERCULOSIS.	Bones and Joints	...	...	20	
	Abdominal	...	...	18	
	Other Organs	...	...	1	
	Peripheral Glands	...	...	32	
				<hr/>	71
Not Tuberculous	...	...	...	...	1,007
Diagnosis not completed on 31st December, 1935	...	...	...	...	7
				<hr/>	1,350
				<hr/>	

L. J. SHORT.



**Quantock Sanatorium.** The Medical Superintendent, Dr. V. C. Martyn, has furnished the following Report:—

The Sanatorium has been open for the reception of 68 cases (33 males and 35 females) throughout the year 1935. During this time 123 cases have been admitted, of whom 62 were males and 61 females. 122 patients were discharged, 55 males and 67 females. 10 cases were not tuberculosis. The average stay for female patients was 209 days and for male patients 192 days. This is an average of about 29 weeks for each patient. No patient left the Sanatorium against medical advice.

Treatment was carried out as in previous years, *i.e.*, by rest, graduated exercise and work, with good plain food under open-air conditions.

**Artificial Pneumothorax.** There were 23 inductions attempted; of these, 9 were either unsuccessful or had to be abandoned, the remainder are, I believe, doing well. There were 354 refills for in-patients and 28 for out-patients, a total of 382. There were also two aspirations and replacements by air. This is, of course, an extremely valuable help in the treatment of tuberculosis in suitable cases. A new feature in the treatment here by artificial pneumothorax has been the comparatively large number of adolescents, boys and girls, 13—15. So far they have responded to treatment well.

**X-Ray.** A new shock-proof up-to-date apparatus has been installed by Messrs. Watson, and is extremely satisfactory. It is proving an invaluable help in diagnosis and in artificial pneumothorax cases. A new Dark Room is being prepared as the Dispensary was quite unsuitable. There were 532 screenings but only 7 films taken, on account of the absence of a suitable dark room.

**Sanocrysin.** Twenty cases have received this treatment but in 6 treatment had to be abandoned. A large proportion have certainly benefited.

Both in and outdoor amusements have been provided as before. During the Winter, Whist Drives, Concerts, Pantomimes, Billiard Matches and Lectures are much appreciated. I should like to thank those ladies and gentlemen who came out to entertain us. The billiard table, which is certainly made great use of, has been re-covered by Messrs. Thurston, the cost being defrayed by the profit from Canteen.

Again I should like to thank Dr. Mecredy, the Matron, Sisters and Nursing Staff, the Engineering Staff and Gardeners, for their loyal co-operation and devoted work for the patients.

#### RESULTS OF TREATMENT.

##### WEIGHTS.

Increase in weights in Kilos. (1 Kilo=2.2 lbs.)					Total.
		1—6	6—12	12 and over.	
Males	...	24	11	5	40
Females	...	29	14	8	51
The average gain in weight of all patients (102) weighed on discharge					= 5.47 kilos.
" " of 44 male patients					= 5.71 "
" " of 58 female patients					= 5.28 "
The average loss in weight of 11 patients weighed on discharge					= 2.03 "

Ten patients were not weighed on discharge. The average gain in weight of 117 patients weighed on discharge during 1934 was 4.73 kilos. In 1935 the average gain in weight of 102 patients was 5.47 kilos, showing an increase of 0.74.

Working capacity of patients on admission and discharge.

		<i>Full Working Capacity</i>		<i>Fit for light work.</i>		<i>Unfit for work.</i>	
		Admission.	Discharge.	Admission.	Discharge.	Admission.	Discharge.
Males	...	0	32 = 64.00%	1	6 = 12.00%	49	12 = 24.00%
Females	...	0	35 = 56.46%	1	13 = 20.96%	61	14 = 22.58%

On admission 98.21 per cent. were unfit for any work. On discharge 59.83 per cent. of all patients were fit for full work; 16.96 per cent. for light work; and 23.21 per cent. were unfit for work.

Classification on admission of patients discharged during 1935.

					Tubercle Bacilli.			
					Positive.		Negative.	
Classification.	M.	F.	Total.	%	M.	F.	M.	F.
Early ...	3	10	13	11.60	1	3	2	7
Intermediate ...	46	48	94	83.93	28	28	18	20
Advanced ...	1	4	5	4.47	1	4	0	0

Complications presented by patients were:—Pleurisy, Laryngitis, Enteritis, Diabetes, Larynx infection, Albuminuria, Hydropneumothorax, Bronchitis, Ischio-rectal Abscess, Heart, Lupus.

### TREATMENT WITH ARTIFICIAL LIGHT.

This work is being carried out under the Tuberculosis, Education and Maternity and Child Welfare Schemes. Four light treatment centres were in use during 1935 and 249 clinics were held. The new cases seen were 60, while the total attendances were 1,480. Of the cases, 17 were tuberculosis. The details are given in my Report for 1935 as School Medical Officer.



TABLE XII.

## QUANTOCK SANATORIUM.

Duration of Treatment and Condition on Discharge.

	Under 3 months.									3—6 months.									6—12 months.									More than 12 months.									Totals.			Grand Totals.
	3 months.			3—6 months.			6—12 months.			More than 12 months.			Totals.			Ch.	F.	M.	Ch.	F.	M.	Ch.	F.	M.	Ch.	F.	M.	Ch.	F.	M.										
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.																M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class TB Minus.	4	3	0	6	12	0	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43									
Quiescent	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									
Not quiescent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Class TB + Group 1.	0	1	0	2	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8									
Quiescent	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1									
Not quiescent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Class TB + Group 2.	0	0	0	8	0	0	7	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28									
Quiescent	2	2	0	2	5	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20									
Not quiescent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Class TB + Group 3.	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2									
Quiescent	3	2	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9									
Not quiescent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
																															112									

In 37 out of 50 men discharged the disease was quiescent = 74.00 per cent. In 44 out of 62 women discharged the disease was quiescent = 70.96 per cent. 15 cases were admitted for observation; 5 were found to be tuberculous and are included in the above figures. The remaining 10 cases were discharged as being non-tuberculous.

## MATERNITY AND CHILD WELFARE.

The County Council scheme is a very complete one, and as it has never been detailed in any of my Annual Reports I am dealing with it in more detail this year.

**The Midwifery Service.** As regards personnel there has been a steady improvement in the midwives judged by their training.

		Bona-fide.	Village Nurse Midwife and Midwifery training only.	2 or 3 year trained.	Queen's Nurses.	Total.
1910	...	104	85	33	17	239
1920	...	27	149	73	28	277
1930	...	6	216	79	31	332
1935	...	1	223	49	63	336

The "bona-fide" midwives, who were mostly untrained, have disappeared and more fully trained women are being employed. Modern views favour restricting midwives to women with longer and better training than the minimum which is now permitted so this tendency is likely to be accelerated.

Midwives are now attending about 58—60 per cent. of the births, *i.e.*, for 1910—39 per cent., 1920—59 per cent., 1930—59 per cent., 1935—57 per cent. The actual number of births attended has diminished, due to the fall in the birth rate.

In this County, thanks to the energetic action of the County Nursing Association and the support given by the County Council, the County is completely covered as regards availability of midwives, the majority being midwives working under associations.

An important feature of the work of the midwives is the supervision exercised. This is carried out by the Inspectors appointed by the County Council, Miss Stewart, Deputy Inspector of Midwives, being responsible for most of the work. During the year 959 effective visits of inspection were made to midwives, representing an average of 3.6 visits to each midwife at work. This is about the average each year. Some midwives require a good many visits, others much fewer.

Even more important than supervision is encouragement and help in their work and much attention is paid to this side. The most important work is done through the visits of the three visiting Inspectors. It is always impressed upon them that this side of their work is even more important than the actual inspection and their advice and explanations are of great help to the midwives. Special lectures and refresher work is also included. During 1934 and 1935, for example, Nurses' Study Circle Courses were given. The three courses in 1934 were at Weston-super-Mare, Minehead and Bath; in 1935 at Yeovil, Taunton and Bridgwater.



Well trained midwives with adequate opportunities to keep their work up to date is a necessary condition for good midwifery and a low maternal mortality rate.

A further important feature in midwifery work is the provision of facilities for medical attendance in difficult cases. It is an obligation under the Rules of the Central Midwives Board to call in medical assistance under certain defined and many undefined conditions. The rules of the Central Midwives Board get more and more complicated, more instructions as regards medical assistance are added, so much so that, in my opinion, the midwife is confused and a timid midwife can find authority for calling in a doctor in practically every case. I am of the opinion that this policy of the Central Midwives Board is far from wise and instead of reducing maternal mortality is likely to increase it. The rules of the Central Midwives Board are too numerous and too restricting. With well trained midwives more general instructions as to when medical assistance is to be called in would be more valuable.

The greater attention to minor but important conditions (such as a ruptured perineum), the easier facilities to obtain medical assistance, the continued multiplication of rules admonishing the midwife to call medical assistance and, probably, a definite increase in more difficult cases of midwifery in part associated with the more numerous first cases, has sent up the calls for medical assistance year by year.

		Percentage calls.	Nett cost to County Council.
1910	...	9.8	—
1920	...	25.9	£555
1930	...	31.7	£638
1935	...	44.8	£935

The County Council early recognised the importance of facilitating medical assistance and started a contributory or insurance scheme in 1918, eight months before the 1918 Act made payment by the Local Sanitary Authority compulsory. This scheme was continued after the Act was passed, although the contribution had to be raised from 2/- to 5/-. Most cases come under this Scheme.

There is, I think, something definitely wrong with a system which requires that persons specially trained to take midwifery cases require in over 4 cases out of 10 the assistance of a medical man. Parturition is a physiological not a pathological condition and if midwives are adequately trained they should not need assistance for a natural process in such a high proportion of cases. Either a natural process has been allowed to become an unnatural one, the training of the midwife is inadequate, or the midwife is so badgered and restricted by precise directions as to calling in medical aid that simply to keep the rules she has to call for medical assistance to this preposterous extent. I believe all three operate.

In improving our midwifery service I look for three amendments. One is a much higher standard of qualification and attainment by midwives, *i.e.*, a longer and more detailed training. Secondly a thorough revision of the rules of the Central Midwives Board giving the midwives general directions as to when medical assistance should be called in and removing the present complicated series of detailed requirements. Thirdly a restriction of midwifery to medical men on a panel containing only those with experience and aptitude for this work. The panel should by no means be consultants only but include those practitioners who by aptitude and experience wish to practise midwifery. The maternal mortality rate is not appreciably different when the percentage of doctors' calls was 10 or under from now when it is over 40.



### Ante-Natal and Post-Natal Work.

Most of the Infant Welfare Centres have now started ante-natal clinics. Those at work in the areas included under the County Council Scheme are Bridgwater and Clevedon, run directly by the County Council, and Crewkerne, East Harptree, Frome, Glastonbury, Pill, Shepton Mallet, Street, Wellington, and Wells, managed by Voluntary Associations.

An important contribution to this work is made by our *Flying Clinics* (see page 30). Ante-natal and post-natal examinations are being more and more sought and given at these clinics. In 1934 the ante- and post-natal examinations were respectively 93 and 43, in 1935 they were 115 and 126. These clinics enable the midwives to feel that they have available medical advice for difficult cases and also for routine cases. Outside these clinics many patients are referred for definite defects (such as albuminuria) to medical practitioners by the midwives, payment being forthcoming under the Midwives Act.

These various arrangements offer reasonably adequate facilities for ante-natal examinations, and are capable of expansion if required.

Arising out of such work it is necessary to have available institutions to which cases can be sent when special treatment is required. Arrangements have been made with four maternity homes in the County to take in cases at the cost of the County Council, when sent for certain special conditions such as abnormality of the mother or suspected difficult confinement or unsuitable or very inaccessible home. The maternity homes at which arrangements have been made for County Council cases are the following:—Bridgwater, Taunton, Wellington and Yeovil, while cases were sent to Bristol General Hospital, Bristol Royal Infirmary, Royal United Hospital, Bath, and several voluntary hospitals in the County.

During the year, 90 applications were received for assisted admissions to a maternity home or hospital. Of these 53 were accepted and 37 refused. The reasons for admission in the 53 accepted cases were:—

Actual or anticipated obstetric difficulty ...	18
Medical complication ... ..	34
Home very insanitary or inaccessible ...	6

(In 5 cases there were 2 difficulties)

The treatment and results were as follows:—

Pre-natal rest and nursing ... ..	23
Medical treatment and nursing ... ..	15
Surgical or obstetric measures ... ..	14

52 mothers made good obstetric recoveries, though 5 remain in poor health. One mother died. 56 healthy babies were born. 5 babies did not survive.

Of the cases refused assisted institutional treatment, a number were difficult border line cases which, if funds were available, would have been included. The need for such accommodation has definitely increased, and more money will have to be spent on these cases in future.

Post-natal work has not so far been much developed in the County. Detailed post-natal examinations, *i.e.*, of the mother after recovery and before she returns to the full activities of daily life, are desirable and can avert subsequent disability and suffering. They should be included as part of the work of the Infant Welfare Clinics but I do not know how far this is the case.



While a good many cases would benefit from treatment and after care in a home or convalescent home there are a few which definitely need such provision if a satisfactory recovery is to be made. Some financial provision should be made for such cases.

**Obstetric Consultants.** A valuable feature in reducing maternal risk during labour and confinement is the provision of Obstetric consultants available to be called in special, difficult cases. Being only consulted in difficult cases it is essential they should have had wide experience and be real experts. In Somerset the approved consultants are Dr. D. C. Rayner (Bristol), Drs. D. A. Mitchell and Graham Campbell (Bath) and Dr. R. S. S. Statham (Cheddar). A consultant to serve the Taunton area is required.

**Maternal Mortality.** This is included in two groups in the Registrar-General's returns and is so included in Tables A. and B. The two groups are "Puerperal Sepsis" and "Other Accidents and Diseases of Pregnancy and Parturition."

The deaths from these causes for each of the last 20 years are shown in the following Table:—

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Puerperal Sepsis ...	7	4	8	6	9	5	2	4	5	10	6	12	14	8	12	11	5	5	9	9
Other Accidents and Diseases of Pregnancy & Parturition	24	17	20	9	21	22	15	13	19	16	15	11	12	13	13	14	19	18	9	10
<b>TOTAL ...</b>	<b>31</b>	<b>21</b>	<b>28</b>	<b>15</b>	<b>30</b>	<b>27</b>	<b>17</b>	<b>17</b>	<b>24</b>	<b>26</b>	<b>21</b>	<b>23</b>	<b>26</b>	<b>21</b>	<b>25</b>	<b>25</b>	<b>24</b>	<b>23</b>	<b>18</b>	<b>19</b>
Rate per 1,000 Births	4.65	3.90	5.14	2.64	3.63	3.60	2.45	2.49	3.69	4.21	3.46	3.83	4.36	3.69	4.31	4.84	4.31	4.45	3.28	3.71

During the year 12 cases of Puerperal Fever and 48 cases of Puerperal Pyrexia were notified. Arrangements have been made with different Hospitals to take in County cases and facilities are offered. During 1935 eight cases were so admitted. The Hospitals with which arrangements have been made are the following:—

Bath Royal United Hospital, Bridgwater Hospital, Bristol Royal Infirmary, Chard Hospital, Minehead Isolation Hospital, Yeovil Hospital.

Inadequate accommodation is available in the Taunton area as the Somerset and Taunton Hospital will not admit these cases. To rectify this bed shortage the proposals for the extension of the Taunton and District Isolation Hospital include the provision of a special block containing 3 beds, separate labour ward, etc., for Puerperal Sepsis cases. These proposals have been approved and the erection will be put in hand during 1936.

The reduction of maternal mortality is only in part a local question since it involves problems of medical training and experience, the training of midwives, and other matters. I do not think any local action beyond what we are now doing is required.



It will be seen from the above account that the County Council provides many and comprehensive arrangements for securing the well being and care of mothers both before and during child birth.

**Care of Infants and Children under School Age.** While Infant Welfare Centres are very useful and capable of doing valuable work the claim, so frequently advanced, that they are the essential and all important feature cannot be accepted. The core and essence of any work must be the supervision and care over this child group exercised in the homes by people trained to do this work. Infant Welfare Centres are really ancillary agencies.

(a) **Visits and advice in the homes.** Most of this work is carried out by district nurses, a smaller part by the whole time Health Visitors. The proportions of births so distributed during 1935 was as follows:—

			Rural.	Urban.	Total.
Whole-time County Staff	...	...	130	290	420
District Nurses	...	...	2,781	1,011	3,792
			<u>2,911</u>	<u>1,301</u>	<u>4,212</u>

The District Nurses have the advantage of being well known to the mothers and so more likely to be listened to, while they are more accessible. On the other hand, the training and experience of most of them is inferior to that of the whole time Health Visitors. To rectify these deficiencies we have now had for several years a regulation that District Nurses without full nursing training are only accepted as Infant Visitors if they submit to and pass an examination held by Officers of the County Health Department. Courses of instruction for these would-be Infant Visitors are given by Dr. Halliday, Miss Lamb, Miss Stewart and others.

In addition, refresher courses are held every year (for particulars see section on Health Propaganda), while the visits of the Inspectors always include talks on these matters as well as inspection of their records.

By these various methods we do aim at a good standard of health instruction in the homes by the Infant Visitors.



(b) **Infant Welfare Centres.** At the end of 1935 the Centres in the County, exclusive of those at Yeovil, Taunton and Weston-super-Mare which are outside the County Scheme, so far as I am aware, were:—

Centre.	Day of week opened.	Frequency of Meetings.
Bridgwater	Friday	Every week.
Chard	Friday	1st and 3rd Friday in every month. Doctor 1st Friday.
Chewton Mendip	Wednesday	Wednesday. Twice a month.
Clevedon	Thursday	Every Thursday except 1st in month. Doctor last Thursday each month
Crewkerne	Tuesday	Alternate weeks.
Curry Rivel	Thursday	1st Thursday in each month.
Frome	Tuesday	Every week. Doctor once a month.
Glastonbury	Wednesday	1st and 3rd Wednesday each month. Doctor 1st Wednesday.
Harptree	Tuesday	Alternate weeks.
Kilmersdon	Wednesday	Alternate weeks. Doctor once a month
Long Ashton	Monday	Alternate weeks. Doctor once a month
Minehead	Tuesday	Every week. Doctor 1st Tuesday in every month.
Pill	Wednesday	1st and 3rd Wednesday in every month.
Portishead	Friday	Alternate weeks.
Shepton Mallet	Friday	Twice monthly and also twice monthly ante-natal.
Street	Wednesday	Every week. Doctor alternate weeks.
Wellington	Thursday	Every week. Doctor alternate weeks.
Wells	Tuesday	2nd and 4th Tuesday in every month. also ante-natal 1st Tuesday.
Wraxall	Friday	1st and 3rd Friday in every month Doctor once a month (1st Friday).

Infant Welfare Centres can supply two things not available at home visits. One is medical advice as regards deviations from the normal. This is supplied at all the Centres and is a valuable asset. The other is education to the mothers upon healthy living and infant care apart from advice in individual cases. I cannot regard any Centre as effective unless the quality and extent of the educational influence exerted is real and continuous. The Centres differ considerably as regards their efficiency in this respect.

I have made it a practice every few years, so far as possible, to visit myself every Centre, see how it is carried on and discuss with the workers steps, if any are required, for their improvement. Dr. Halliday also visits each year a number of these Centres. There is no doubt that the effectiveness of the different Centres varies greatly and it is usually possible by friendly advice and help to keep or to restore ineffective Centres to a high state of efficiency. The Health Propaganda section is a material help on the educational side.

The Centre at Bridgwater is the only one for which the County Council is directly responsible, but grants are paid to nearly all the others by the County Council.



A separate ante-natal clinic is held at Clevedon by Dr. Pringle. 11 sessions were held during the year, 7 different cases attended with 10 attendances.

**Bridgwater Infant Welfare Work.** As a County Council Centre this is considered separately. The following gives some particulars of the work.

*Births.* During 1935, the number of births notified in the Borough (including still-births and cases later transferred to other districts) was 368; of these 228 were attended by midwives. A doctor was called in to help the midwife in 88 cases. 10 babies died during the year, a rate of 39.7 deaths per 1,000 births.

<i>Home Visiting.</i>	No. of children on visiting list	...	...	...	...	743
	Total visits paid to infants	...	...	...	...	4,718
	Ante-natal visits paid	...	...	...	...	261
	Total visits paid during 1935	...	...	...	...	4,979

*Milk Grants.* 49 grants were made, at an estimated cost of £101. As far as possible it is made a condition that cases receiving milk attend at the Centre so that the benefit of the grants can be estimated. Were it not for the milk grants a very considerable number of mothers would be unable to breast feed who now do so.

<i>Centre.</i>	Number of individual children who attended the Centre	...	...	490
	Number of individual mothers who attended the Centre	...	...	383
	Average weekly attendance of children (under 1 year)	...	...	45
	Average weekly attendance of children (1 to 5 years)	...	...	60
	Average weekly attendance of mothers	...	...	65
	Total number of attendances (children 1,907; mothers 1,453)	...	...	3,360
	Total number of medical consultations for infants	...	...	538
	Total number of medical consultations for women (excluding ante-natal)	...	...	58

The medical work was carried out by Dr. Halliday.

*Ante-Natal Work.* This was carried on throughout the year both by home visits and by inviting attendance at the Ante-Natal Centre once a month. The total attendances were 95 with 54 women attending. Maternity bags are loaned in suitable cases.

The figures show a considerable decrease, but this does not of necessity mean any falling off in the work of the Centre, because steps are always necessary from time to time to try and keep the Centre for people needing it and discourage its use as a social centre.

The Centre continues to do very valuable work, but this is greatly hindered by very defective premises and during the year under consideration by a shortage of voluntary workers. No Superintendent of the Centre has been found since Mrs. Warry resigned. The educational work is hampered by the unsatisfactory arrangements for the toddlers. They mostly have to be with the mothers during talks and it is then very difficult to get and to retain the attention of the mothers.

A new building for this work is urgently needed and it is hoped it will be available early in 1937.



(c) **Treatment and supervision of abnormal children.** These are dealt with in various ways. It is the duty of the Infant Visitors to report all infants not progressing properly and those with definite abnormalities. Many are seen by Dr. Halliday, and the appropriate treatment advised, some are seen by other members of the Staff, a few are referred to Infant Welfare Centres. A certain number have been seen by the County Oculist, as squint cases, and the appropriate treatment given. It is not contemplated to give treatment out of County funds, but the aim is that all children not progressing properly should come under review at the Health Department with the object that adequate treatment, if treatment is necessary, should be advised.

615 reports were received, including a few from doctors or through the Orthopaedic Centres. They include a miscellaneous series of conditions and no scientific classification is possible. They have been grouped under the headings shewn in the table which gives an idea of the conditions to be dealt with.

TABLE XIII.

CONDITION.	No. re-reported.	ACTION TAKEN				RESULT				
		Seen at Flying Clinics.	Extra Nourishment.	Treatment by County.	Treated Privately or at local I.W.C.	Improved.	Still under Treatment & 'recent'	Not Improved.	Moved.	Died
Malnutrition .. ..	117	72	105	5 (a) 1 (d) 4 (f) 1 (e)	10	59	55	2	—	1
Rickets { early	36	28	29	1 (a)	2	19	13	—	1	—
	with deformity	39	3	3 (c)† 39 (c)†	7	—	—	—	—	—
Debility .. ..	74	39	60	12 (a)	10	44	29	—	—	1
Catarrhal .. ..	47	37	44	2 (d) 1 (f)	5	20	26	—	1	—
Minor Postural Defects ..	61	39	17	17 (c)†	13	29	13	1	—	1
Orthopaedic .. ..	53	16	2	51 (c)†	10	—	—	—	1	—
Eye Defects .. .. (squint 70, other 5)	75	24	—	59 (b)†	10	—	—	2	2	—
Tonsils, Otorrhoea, etc. ..	47	20	8	—	32	33	13	1	—	—
Other defects .. ..	66	34	18	5 (a) 3 (c) 1 (d) 3 (g)	27	—	—	—	—	—
Totals .. ..	615	325	286	208	126	204	151	6	5	3

† Results not entered here.

(a) Mary Stanley Home.

(b) County Oculist.

(c) Orthopaedic Clinic.

(d) Referred to Tuberculosis Clinics.

(e) Public Assistance Nursery.

(f) Institution Treatment.

(g) V.D. Clinic.



The classified headings as before seem each to represent a definite group of cases.

Under mal-nutrition are grouped children who fail to gain weight, and there is a constant supply of these, whose weight remains stationary for months at a time. Most of these are in poor families, *i.e.*, those whose income is well within the scale for free grants. A few are children whose diet is badly balanced, or who do not get sufficient rest, but poverty is also present.

The supply of children with bony rickety deformities remains about the same. In every case a survey of the previous history has been made and in very few has there been evidence of gross wrong feeding or bad hygiene. In many the home has been exceptionally good. The clinical reports frequently note "nutrition good," "teeth good," "chest well developed," in association with severe deformity of the legs. On the other hand, many poorly nourished children fail to show bony deformity.

An important weapon in improving nutrition is the authorisation of the County Council to make Milk Grants. Throughout the year milk was granted to necessitous cases under the Milk (Mothers and Children) Orders of the Ministry of Health. Grants were made to 2,086 cases, at an estimated cost of £712. Last year £653 was spent. The grants are carefully made and supervised, and given as allowances for specific public health purposes. Of the grants made, about 33 per cent. were to expectant mothers, 43 per cent. to nursing mothers, and 24 per cent. to children under five years of age. Great care is taken to prevent abuse and to see that the milk is taken only by the person for whom it is intended.

In addition to the cases in the table, reports were received from Infant Visitors on 92 cases of transitory illness, difficult feeding, etc. These were dealt with by milk grants, advice by letter, or at flying clinics, etc., and usually a further report was received that conditions were now satisfactory. These are not included in the table.

The table shows that many children get treatment with maltoline, oil and malt, etc., or are given treatment through one or more of the various County Schemes. For others it is only necessary to keep them under special observation. The number dealt with through their private doctors is increasing. More children are being referred by doctors to the County Health Visitors or to Infant Visitors for help with extra-nourishment, regulation of diet, etc., while the doctor provides any medical treatment required. It is to be hoped that this friendly co-operation will continue to develop.

**Baby Hospital, Bridgwater.** At the beginning of 1935, there were 8 babies in the ward and during the year 25 were admitted.

The nature of the defects for which the babies were admitted were:—Prematurity 8; congenital debility 1; malnutrition due to mismanagement 4; broncho-pneumonia 2; dyspepsia 2; congenital heart defect 1; gastro-enteritis 4; rickets 1; tetany 1; pyloric stenosis 1.

Of these cases, 2 died within a week, one after a fortnight, and 6 babies were still in the Hospital at the end of the year. Of the remaining 24 cases, 1 with congenital mental defect was discharged not improved and 1 transferred to Bristol for operation (successful). The other 22 were discharged improved, and in nearly all of them our reports show that progress has been maintained. The average length of stay has been 11 weeks. This little ward has been found most beneficial, and great credit is due to the Sister in charge for her devoted care of the individual babies.



**Institutional treatment of children aged 1-5 years.** The Baby Hospital is mainly for children under one year of age and no child over two is admitted.

Arrangements are made for a few children 2-5 years at other homes, and two are available. One is at Wells, and took 9 children; the other is at Batheaston, and 1 child was sent there.

Ten children received treatment for mal-nutrition, in every case associated with some other conditions, as follows:—Chronic bronchial catarrh 3; extreme poverty 3; rickets 1; tuberculosis contact 2; neglect 2; mis-management due to over-anxiety 2; *i.e.*, in 3 cases there were two defects.

All of these had received special attention in their own homes, with grants of extra nourishment, but had not responded. All improved considerably when put in more favourable surroundings. Improvement has been maintained on return home, although most of the homes are particularly poor and difficult. One child is reported less well with onset of colder weather.

These little children take a few weeks to settle down in new surroundings. They begin to show improvement during the second month and this increases, so that the maximum benefit is obtained if they can stay away for three months. There is nearly always a slight set-back on return home. On the whole the benefit to the child, and the educational value to the parents is very satisfactory.

Ten children were treated, of whom 9 improved and one is still under treatment. Of children previously sent to these homes improvement was maintained in 8, while one tubercular child relapsed after return home. The average length of stay for each child was 13 weeks.

**Ophthalmia Neonatorum.** Discharge from the eyes of recently born babies is of great importance since purulent infections, which are usually due to infection with the organism of gonorrhoea, are a frequent cause of blindness if neglected. It is for this reason that midwives are required to send for medical aid in all cases of inflammation of or discharge from the eyes however slight.

Every such case and every case notified by a doctor is followed up and hospital treatment or special nursing facilities offered. Severe cases can only be dealt with adequately by skilled and frequently repeated treatment such as is only obtainable in a hospital or where a nurse is specially detailed to look after the cases.

It is important to ascertain if there is any permanent damage to the eyes so all these notified cases are followed up, with enquiries sometimes extending over months, to obtain particulars of the final eye conditions.

The particulars for 1935 were as follows:—During the year 20 cases were notified. The distribution of the cases is shown in Table III. Under the Public Health (Ophthalmia Neonatorum) Regulations, 1926, six cases were sent to Hospital under the County Council Scheme. All the cases were followed up for long periods, to ascertain if there is any impairment of vision. All cleared up completely.

It is of interest to ascertain to what extent permanent damage has been avoided.

Period.	No. of Notified cases.	Cases with Eye Damage.
1925-1929 (5 yrs.) ...	140	11
1930-1934 (5 yrs.) ...	122	2
1935 ...	20	0



The 11 cases with eye damage in 1925-29 were:—

1925—4 cases of impairment of vision.

1926—1 case with loss of vision in one eye.

1 case with considerable eye damage and another with permanent loss of vision, both being unnotified cases.

1928—1 case with impairment of vision.

1 case with permanent loss of vision in one eye.

1929—In one case extensive damage to one eye.

In one case corneal opacity with some probable loss of vision.

1930—One case with slight impairment of vision.

1933—One case with slight impairment of vision.

These later results are very satisfactory. They show that by determined following up and the provision of adequate treatment the damage has been reduced to negligible proportions. In the last six years the total damage has been two cases with persisting slight impairment of vision.

**Flying Clinics.** To enable these abnormal children to be seen, to give advice to ante-natal cases, and to help and encourage Infant Visitors in their work, the system of special occasional clinics by Dr. Halliday, and other medical members of the Staff, has been continued. This system of "*flying clinics*" is, I believe, the best method for dealing with the medical supervision of maternity and child welfare work in rural areas. It is, in my opinion, neither practicable nor desirable to have a system of small infant welfare centres covering the County, and I regard the system of flying clinics as far superior.

These clinics are not fixed in most instances, but are arranged irregularly as occasion arises and held at any convenient place. The occasion for holding a clinic may be a request from the Infant Visitor for advice for one or more cases, advice for any expectant mother, or our opinion that a local clinic would help to stimulate and assist the nurse-midwife, who is the Infant-Visitor. At the clinic the Infant Visitor presents such of the infants and children under three years, about whom she is not satisfied as to their progress, mothers who seek medical advice for their children, possibly one or more expectant mothers. The Medical Officer also takes the opportunity to discuss the work and any difficulties. The method of procedure varies from the collection of a dozen or more children at the nurse's house, or at a room taken for the purpose, to the visiting of several scattered families in their own homes.

These clinics have the great advantage over ordinary centres that there is a close association between them and the work of the Infant Visitor, also the cases which require supervision are all visited, not merely the children seen whose mothers bring them to the centre. As is well-known one considerable drawback of Infant Welfare Centres is that so often the very cases which should attend do not do so. With our "*flying clinics*" these are visited, if necessary in their homes, and all the circumstances are reviewed.

In quite a number of cases we are finding that the visits are so welcome and helpful that they are repeated at short intervals, and an irregular kind of centre is established. For example, at Banwell Dr. Pringle has developed a clinic which meets monthly. At this centre 97 individual children have attended with a total of 234 attendances. Nine ante-natal cases have been brought forward for examination and advice. It has also been utilised to see 19 children of school age. The local nurse and Infant Visitor was keen and enthusiastic and the medical staff was glad to



co-operate. If the need diminishes this temporary centre will be discontinued and work done elsewhere. These flying clinics have not the advantage of systematic educational talks, but we try and overcome this by our other propaganda work. Combined flying clinic and educational afternoons have been arranged at 5 centres. At most of these help was given by local voluntary workers and tea was provided.

The work done at these Flying Clinics is shown in the following table:—

Medical Officer.	Infant Visitor districts visited.	Sessions held.	Numbers seen.				Total.
			Infants under 2.	Children 2-5.	Ante-natal	Post-Natal and others.	
Dr. H. M. Halliday	89	112	611	365	57	75	1,108
Dr. P. Henderson	35	82	613	453	27	7	1,100
Dr. G. H. Pringle	31	77	388	395	21	32	836
Dr. H. A. Raeburn	13	40	218	241	10	12	481
Totals ..	168	311	1,830	1,454	115	126	3,525

The average number of children seen at each clinic was 10.5. The total number of children examined was 3,284, while in addition 241 mothers were given advice. The ante-natal attendances were 115. This is a further advance on the figures for the previous year, when 307 Flying Clinics were held. Areas are now being more systematically visited where this is shown to be helpful.

Apart from these Clinics, a number of individual children under 5 years old are referred to the County Medical Officers, to be seen either at the schools, after or between medical inspections, or visited by them at their homes when they are in the area on school work. In one way and another a material proportion of these abnormal infants obtain medical attention and the necessary treatment.

The total number of children now included on our registers as under special observation at the end of 1935 as "abnormal" is 1,071.

A number of other activities are related to the Maternity and Child Welfare work.

**Birth Control.** This is conducted along the restricted lines authorised by the Public Health Committee. Applications for the most part go direct to Dr. Halliday. During the year 29 applications were received, of which 27 were seen and advised personally by Dr. Halliday; 1 was advised by another Medical Officer; 1 was referred to other clinics.

**Nursing and Maternity Homes.** At the end of the year the number of homes on the Register was 37. They are all visited from time to time by Dr. Halliday, Miss Stewart or myself to see that the premises are in order and the requirements of the County Council complied with as regards management.



This work is of considerable importance. Before any home is Registered an application has to be made to the County Council. The home is then visited and such questions as the accommodation provided, the proposed staff, the precautions against fire, the equipment, and the classes of patients to be admitted are carefully considered. Most of the homes are quite small, as seen from the following statement, as regards authorised accommodation.

Not more than 2 beds	...	...	...	6
" " " 4 "	...	...	...	4
" " " 6 "	...	...	...	7
" " " 8 "	...	...	...	8
More than 8 beds	...	...	...	12

Those with more than 8 beds are the Freshford Cottage Hospital, Butleigh Hospital, Wellington Maternity Home, Mary Stanley Home Bridgwater, and nursing homes at Bridgwater, Taunton, Wells, Weston-super-Mare, Keynsham, Clevedon, South Petherton and Batheaston.

Careful discrimination has to be exercised over the kinds of cases admitted. Some are fully equipped nursing homes with operation theatre and facilities for dealing with acute surgical cases. Others are Maternity Homes entirely or in the main. Another group comprises homes kept by people with nursing experience which are only suitable for, and only intended to be utilised for, chronic and aged cases which need care and minding. Such homes serve a very useful purpose and obviously a much lower standard of staffing and equipment can be accepted in these cases. This being the case care has to be exercised that only this type of case is admitted and invariably this is made a condition of the registration, with the proviso that should the owner wish to vary subsequently the conditions it is always open to make a new application when a fresh inspection would be made and the whole thing reconsidered.

The homes may be classified from this point of view as follows:—

All classes of cases, including maternity...	11
" " " " excluding "	0
Maternity only	7
Maternity and chronic cases	6
Chronic cases only	12
Defective children	1

The homes are by no means uniformly distributed over the County but are mostly in a few selected places. Their locations are as follows:—Bridgwater 5, Burnham 3, Chard 1, Clevedon 3, Minehead 2, Portishead 1, Taunton 2, Wellington 1, Wells 1, Weston-super-Mare 11, Batheaston 1, Swainswick 1, Freshford 1, Keynsham 1, Wiveliscombe 1, Butleigh 1, South Petherton 1.

**Part I., Children Act, 1908.** Since April, 1930, the supervision of children under seven maintained for reward, apart from their parents, has been transferred to the County Council and is administered by the Public Health Committee. All the Health Visitors have been appointed as Infant Life Protection Visitors, and this work has been organised in the County Health Department.

The passing of the Children and Young Persons Act, 1932, made a number of alterations as regards details, but has not affected the general principles of administration. For example, the age has been raised from 7 to 9 years, so more children are included and for a longer period, earlier notices of taking a child under the Act have to be given, while certain exemptions from supervision are removed.



The children on our Register, at the end of 1935, number 228, and as regards methods of payment, may be grouped as follows:—

Weekly payments in	...	...	...	...	...	212
Single lump sum payment	...	...	...	...	...	4
Otherwise paid for (mostly monthly or irregularly)	...	...	...	...	...	12
						<u>228</u>

Those for whom a lump sum has been paid require and receive special supervision.

The number of foster mothers with one child only is 111; with two children—24; with three children—5; with four children—3; with over four children—2.

The foster mothers who run a regular baby home are therefore few and those with over four infants are one at Taunton with 33 at the end of 1935 (authorised for 35) and one at Bridgwater with 9 (authorised for 12).

TABLE XIV.  
DEATHS UNDER 1 YEAR OLD.

URBAN.							RURAL.						
	Under 1 week.	1—4 weeks (inclusive)	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.		Under 1 week.	1—4 weeks (inclusive).	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.
Bridgwater	7	1	8	0	2	10	Axbridge	2	2	4	2	2	8
Burnham	2	0	2	1	0	3	Bathavon	10	4	14	1	2	17
Chard	2	1	3	0	0	3	Bridgwater	4	3	7	1	3	11
Clevedon	3	2	5	0	0	5	Chard	0	2	2	1	0	3
Crewkerne	0	1	1	1	0	2	Clutton	6	0	6	1	5	12
Frome	1	1	2	1	1	4	Dulverton	3	1	4	0	1	5
Glastonbury	0	0	0	1	1	2	Frome	4	1	5	3	0	8
Ilminster	0	0	0	0	0	0	Langport	1	1	2	0	1	3
Minehead	2	1	3	1	0	4	Long Ashton	7	0	7	2	1	10
Norton-Radstock	2	1	3	0	1	4	Shepton Mallet	2	1	3	2	1	6
Portishead	0	1	1	0	0	1	Taunton	4	2	6	2	1	9
Shepton Mallet	0	1	1	1	1	3	Wellington	1	0	1	2	1	4
Street	0	0	0	1	0	1	Wells	4	0	4	0	0	4
Taunton	7	3	10	4	2	16	Williton	2	1	3	1	0	4
Watchet	0	1	1	0	0	1	Wincanton	5	0	5	3	0	8
Wellington	3	1	4	1	1	6	Yeovil	2	0	2	1	0	3
Wells	2	3	5	0	0	5							
Weston-super-Mare	9	4	13	0	1	14							
Yeovil	2	0	2	3	1	6							
Totals	42	22	64	15	11	90	Totals	57	18	75	22	18	115

**Rate of Infantile Mortality.** This is the number of deaths under one year of age per 1,000 births. It is a particularly reliable statistical figure since the births are accurately known and therefore the figure is definite, unlike, for example, the death rate which is affected by calculations as to population and which has to be corrected for various disturbing factors.

These rates for 1901-1913 were respectively 98.8 (1901), 96.5, 87.6, 94.7, 83.0, 85.5, 86.5, 80.8, 80.6, 68.1, 86.0, 68.3, 70.3 (1913). For 1914 and subsequently they are shown in the following table:—

TABLE XV.  
ADMINISTRATIVE COUNTY.

Year.	Rate of Infantile Mortality.	Deaths per 1,000 Births.		
		To end of first week.	First week to end of first month.	Second month to end of year.
1914 ...	65.3	22.2	10.4	32.6
1915 ...	76.81	22.7	11.6	42.5
1916 ...	59.95	—	—	—
1917 ...	71.95	—	—	—
1918 ...	59.44	—	—	—
1919 ...	66.06	23.2	11.5	31.4
1920 ...	54.34	18.8	11.0	24.5
1921 ...	55.96	21.2	12.1	22.7
1922 ...	48.14	17.5	11.3	19.4
1923 ...	45.89	18.8	6.6	20.5
1924 ...	53.81	20.0	9.2	24.6
1925 ...	51.21	20.0	8.7	22.5
1926 ...	52.16	18.0	12.2	22.0
1927 ...	45.94	18.5	7.0	20.4
1928 ...	45.20	17.0	6.6	21.5
1929 ...	48.14	19.4	7.9	20.8
1930 ...	45.82	22.0	7.4	16.3
1931 ...	51.74	20.5	10.5	20.7
1932 ...	49.24	21.7	8.8	18.7
1933 ...	47.35	21.7	6.7	18.9
1934 ...	45.19	20.1	8.5	16.4

As regards the rate itself there has been a regular and, allowing for small natural fluctuations, a fairly uniform decline, *i.e.*, for the last few years it is in the 45-50 region, a few years earlier in the 50-60 region and before that well above 70. This is an extraordinary achievement, not of course peculiar to Somerset but shared by the whole country, but not to an equal extent.



Table XV. shows more than this, as it gives the monthly periods of the deaths. The deaths from birth to the end of the first week show no definite decline. For the most part these are due to pre-natal factors and in a good many instances the lives are not saveable and in many not desirable that they should be saved. Better pre-natal care may prevent a few of these deaths. Between the first week and the end of the first month there is evidence of a small saving but most of the decrease is from the second month to the end of the year, the deaths being roughly halved.

### ORTHOPÆDIC SCHEME.

The County Scheme and the results of working during 1935 are described in considerable detail in my Report for 1935 as School Medical Officer.

The new cases seen and dealt with through the Clinics were as follows:—

#### Cases seen at the Clinics.

Tuberculosis of bones and joints ... ..	* 7
Spastic and other paralysis conditions ... ..	13
Infantile paralysis (poliomyelitis) ... ..	18
Osteo-myelitis ... ..	2
Congenital dislocation of the hip ... ..	4
Club foot ... ..	16
Other congenital deformities ... ..	19
Torticollis ... ..	13
Diseases and injuries of the toes ... ..	20
Scoliosis ... ..	13
Postural deformities:—	
General defects of posture ... ..	23
Flat foot (often with other postural deformities) ... ..	53
Knock knees (many old rickets) ... ..	39
Bow-legs ... ..	48
	<hr/>
	163
Rickets (not specially postural) ... ..	5
Injuries and accidents ... ..	12
Other defects and deformities ... ..	33
	<hr/>
	338
	<hr/>

The number of new cases seen is 15 less than in the previous year.

Great attention is paid to the prevention of crippling defects along the lines of the prevention of postural defects and their treatment in the very early stages, rickets prevention, and the prompt treatment of poliomyelitis before the paralysis has affected muscle utility or, when affected, to restore to use as completely as possible. Considerable steps are also in operation to reduce tubercular infections of bones and joints from human sources but not much is done to reduce bovine infections. The latter is mainly a national question and large scale measures are necessary.



### HEALTH PROPAGANDA.

As in previous years, a great deal of work was done, most of it by Miss Lamb, B.Sc., the County Lecturer, but a good deal indirectly in various ways.

The Health Exhibition has been improved as regards the exhibits, while arrangements for using the trailer to carry it about have been completed and made effective. Fourteen centres had a visit from the full Health Exhibition. These were at Swainswick, Winsham, Hinton St. George, Writhlington, Exton, Horsington, Middlezoy, Chard, Misterton, Bath and West Show, Durston, North Newton, Puckington, and Woolavington. The success of these Exhibitions depends a great deal upon the co-operation obtained locally, and the need for advertising it well beforehand. The best evenings were obtained when the school or other local organisation took over part of the management. At Chard the Exhibition was a whole-day one in conjunction with the Infant Welfare Centre and District Nursing Association. The local committee worked hard and the day was a great success, while valuable assistance was given by outside organisations, *i.e.*, the Milk Publicity Council and the Cine-Motor Van of the Health and Cleanliness Council. In addition, the physical training department in elementary schools organised an exhibit on "Movement."

Many addresses were given at Infant Welfare Centres and thirty-four Centres were visited. Miss Lamb records her experience that when the talks were part of a sequence held every meeting the mothers listened well, but with casual talks the mothers found it extremely difficult to concentrate and listen. Much greater success is obtained when steps are taken to exclude all the toddlers and if possible the babies from the lecture room, which is done in a number of Centres and could be done in all with a little firmness, and is a most important practical consideration. Centres at which these talks were given were the following:—Bridgwater, Beckington, Crewkerne, Clevedon, Chewton Mendip, East Coker, East Harptree, Frome, Kilmersdon, Portishead, Shepton Mallet, Wellington, and Roadwater. In addition, five talks were given at Flying Clinics.

I have to record also a considerable increase in the number of talks to Women's Institutes, where there was a definite demand for lectures, particularly on "Nutrition." Thirty-five meetings were attended and addresses given; the average time of each lecture being about forty minutes.

A further eight lectures were given to various societies in villages during the year.

The nurses are still eager to attend Study Circle Courses and these were continued during 1935, three centres being held. A new and quite different type of syllabus was arranged, with outside speakers wherever possible. The meetings were held at Yeovil with an average attendance of nineteen; Taunton, average attendance thirteen; and Bridgwater, average attendance fourteen. Books were supplied by the County Library and the College of Nursing, and the epidiascope was used at four out of each six lectures.

Great attention continues to be paid to the school side of propaganda work. Many lectures were given to teachers, while as part of the work eighty-five different schools were visited and either talks given or health teaching in the schools discussed. Two education tours were carried out by the Dental Board in the schools, the arrangements being made by Miss Lamb.

Owing to lack of time no Parents' Classes were held during the year, but we hope to continue this work in 1936. Lectures were given by Miss Lamb at two meetings of Tuberculosis Care Committees, and various committees expressed their wish to have more of such talks. In addition, addresses were given at the annual meetings by other members of the County Health Department.



Lectures and coaching to the pupil-midwives at the Mary Stanley Home are now a regular feature of the work, and twelve were given by Miss Lamb and as many by Dr. Halliday and other Health Department officers. The syllabus was simplified and their lecture note-books were corrected after each lecture, which was a great help as many of these pupils are very inexperienced at taking notes.

The health journal "Better Health" has been continued throughout the year, and in addition to the ordinary health matters it always contains an article specially written by one of the County Staff with special reference to conditions in Somerset. Care is taken to supply it only to persons likely to be interested, and despite this restriction its circulation reaches nearly three thousand copies a month.

In addition to work specifically undertaken by Miss Lamb, a great deal of health propaganda work is performed by the County Health Department as part of its ordinary work. This especially applies to tuberculosis, infant welfare work and some aspects of school hygiene. This is always going on, while in addition there is a considerable sale or free distribution of health literature.

Propaganda work is carried out by many voluntary bodies, and special mention may be made of that of the Somerset Rural Community Council. Single lectures were given in eight places and help was given to the County Propaganda Officer in arranging six other lectures. Sixteen villages were visited by the Health and Cleanliness Cinemotor Van, with excellent attendances. The Council also arranged a Conference in October, followed by a residential school course in January, to encourage interest in the Keeping-fit movement. This was very successful, and from it leaders can now be supplied for classes in many villages.

Health Propaganda work has now been carried on for a good many years, and I am satisfied that it is one of the best activities of the County Health Department. As regards value for money it is also one of the cheapest. One has only to consider the figures, available from various sources, as to the immense amount of sickness and ill-health, not measurable by death rates, which takes place to realise that an effective Public Health Department must make strenuous efforts in this direction. Only some of this mass of ill-health is removable by improvements in environment conditions often carried out at great cost. A much larger proportion is due to ill-health, due to lack of knowledge of how to avoid it and due to a lack of knowledge of healthy living. This can only be overcome by continued and steady efforts to supply what is lacking. Our experience shows that there is a great demand for this knowledge and for our services. Miss Lamb reports to this effect and that meetings are being better and better attended, the usual feature being a packed house.

The removal of the offices to Taunton has enabled us to make better provision for housing the extensive and valuable collection we now possess for this health teaching, and it is hoped to provide something of the nature of a permanent exhibition so that others who want some of this material loaned to them can see readily what to select and so that it shall be kept in proper condition. In addition, an epidiascope has been purchased and has been found of very great value. The demand is so great that we need to go further, and a portable projector to enable health films to be shown is also required.

Miss Lamb, B.Sc., has been Health Propaganda Officer for six years and it is with great regret I mention her resignation at the end of 1935. Her work has been of high quality and she has brought knowledge, untiring enthusiasm and great energy to bear throughout this period and with great benefit to the inhabitants of Somerset. Sound health propaganda requires just the right person to make it a success and Miss Lamb's work has been invaluable.



### Mental Treatment Act, 1930.

Under the Act out-patient clinics have been established as set out below, while, by arrangement, the Mental Deficiency Acts Committee Inspectors are available to visit the homes and link them up with the Mental Hospitals.

Place of Clinic.	Started.	Medical Officer.	No. of sessions.	Somerset cases seen.	Av.attendance per session.
Taunton and Somerset Hospital.	April, 1931	Dr. S. M. Coleman	24	33	7
Shepton Mallet and District Hospital.	April, 1931	Dr. A. Darlington	24	14	1.3
Weston-super-Mare Hospital.	December, 1932	Dr. J. McGarvey	24	11	2
Yeovil and District Hospital.	February, 1933	Dr. T. A. Danby	25	31	6

These clinics can be and are very useful, and it is regrettable that they are not used for a very much larger number of cases and with a broader appeal as regards the types of cases sent for consultation. They show a slight increase in the number of cases seen, the increase being mainly at the Taunton Clinic.



## WATER SUPPLIES.

In my last Annual Report I discussed in detail the unsatisfied needs of all the parishes in Rural Areas and gave an account of the different grants which were made during the year by the County Council.

The year 1935 has again been a year of great progress and many large and important schemes have been put in hand, and some have been completed during the year but others have only been approved and the scheme authorised. When these large schemes have been completed it will be possible and helpful to again set out in detail the water position and enumerate the parishes still left with inadequate water supplies. These I hope will be comparatively few.

As mentioned last year, the transfer of water charges from a parochial to a district basis is a great advance in securing an adequately watered district, although it is not feasible, or at least not easy, to arrange this basis in every district. The position in the different rural districts at the end of 1935 was as follows:—

### Areas on a District Basis.

Rural District.					Estimated Deficiency		Grants payable by C.C.
					1935-36.	Future.	1935-36.
					£	£	$\frac{1}{2}$ deficiency.
							£
Bridgwater	...	...	...	...	2,973	3,149	991
Chard	...	...	...	...	1,106	1,191	368
Clutton	...	...	...	...	1,137	2,918	379
Dulverton	...	...	...	...	376	275	125
Langport	...	...	...	...	1,247	1,214	416
Wellington (still under consideration)					—	463	—
Taunton	...	...	...	...	776	2,476	259
Wincanton	...	...	...	...	4,588	3,926	1,529
Yeovil	...	...	...	...	3,100	3,882	1,033
					<u>£15,303</u>	<u>£19,494</u>	<u>£5,100</u>

### Areas on a Parochial Basis.

Axbridge	...	...	...	At present parochial, but this Authority is promoting a private Bill to make the Rural District Council the water authority for the whole area.
Bathavon	...	...	}	In these districts the numerous areas supplied by water companies or private persons makes a district scheme difficult.
Long Ashton	...	...		
Williton	...	...		
Shepton Mallet	...	...	}	No great difficulties in the way of a general district scheme.
Wells	...	...		
Frome	...	...		

The extent to which the County is being adequately supplied with water is shown from the following particulars, which give the schemes for which grants have been authorised by the County Council during the year. The figures in brackets give the estimated cost.



<i>Bathavon</i>	...	...	Peasedown St. John (£10,172).
<i>Bridgwater Rural</i>	...	...	Small extension in Chilton Polden (£250).
<i>Chard Rural</i>	...	...	Part of Chard Parish (£7,000).
<i>Clutton</i>	...	...	Chew Valley Scheme for 14 parishes (£66,100).
<i>Langport</i>	...	...	Amended schemes for Barrington, Beercrocombe, Curry Mallet, Curry Rivel, Drayton, Fivehead, Isle Abbots, Isle Brewers, Puckington (£25,273).
<i>Long Ashton</i>	...	...	Kenn (£1,600).
<i>Shepton Mallet Rural</i>	...	...	Batcombe (£2,020).
<i>Taunton Rural</i>	...	...	Lydeard St. Lawrence and Combe Florey (£9,200), Ruishton, Thornfalcon, Creech St. Michael, West Monkton, Cheddon Fitzpaine (£10,230), Norton Fitzwarren (£2,080).
<i>Wincanton</i>	...	...	Augmentation of Bruton supply (£1,600), extensions to Penselwood supply (£1,814), augmentation of Queen Camel supply (£1,100), augmentation at Charlton Musgrove (£175).
<i>Yeovil Rural</i>	...	...	Brymton and Lufton (estimated cost £2,375), Chilthorne Domer and part of Yeovil Without (£7,065), extension of Ash and Long Load supply (£320).

The above only refers to schemes approved for grant, but a great many extensions and a few additional supplies have been put in hand during the year. Particulars of these will be given in my report for next year.

### RIVER POLLUTION AND SEWAGE DISPOSAL.

The year was noticeable for another very dry summer which materially affected the volume of water in the rivers and markedly aggravated any river pollution which took place. In consequence very great attention was paid to all rivers in the County. Owing to the appointment of Mr. W. Dewhurst as County Sanitary Inspector from May 1st it has been possible to devote much time to river pollution problems. Apart from dealing with cases of pollution as they arise, steps have been taken to make a survey of all the rivers with careful records of all possible sources of contamination. Such a survey takes a great deal of time but considerable progress was made during the year and it is hoped to have it completed in 1936.

Cases of serious river pollution were much fewer during the year, in spite of the dry weather, than in the previous year. The alterations to the Taunton sewage works were completed and in consequence a much better effluent is being turned into the river and a serious source of heavy pollution removed.

The only extensive pollution was into the Tone at Wellington. In 1934 the Wellington sewage works had broken down, being worn out, and in the early part of 1935 a complete scheme of renovation, estimated to cost £9,250, was adopted and the new construction work was started in the spring. Naturally during the reconstruction a very poor effluent was being turned into the river Tone. This, however, was not the main factor in the gross pollution which resulted in May. The cause of this was the heavy discharge of whey and other milky fluids from a newly constructed milk factory at Wellington, which at the time was dealing with an average of 10,000



gallons of milk per day. In spite of my warning in the previous October both to the Directors of the factory and to the officials of the Urban District Council, no steps had been taken to keep out these very prejudicial liquids from the sewers. The natural result followed that the existing defective works were rendered practically useless so that an unpurified and very bad effluent was poured daily into the river.

The state of the river became very bad, and the County Council promptly started legal proceedings against the Wellington Urban District Council who were the offenders legally responsible. These were only suspended and later withdrawn on very stringent conditions, designed to stop any further pollution, being agreed to by both the Urban District Council and the owners of the milk factory.

In addition to the above, numerous minor cases of pollution were dealt with and in most cases the causes of contamination were removed. None of them were sufficiently important to require legal intervention.

During the year the County Council made grants towards sewage disposal schemes for five areas. These were Milborne Port, Sparkford, Kingsbury Episcopi, Coleford (Kilmersdon parish) and Ansford. All the grants were made on a parochial basis. The usual procedure was followed of making the grants on a basis of 25% of the nett annual loan charges and subject to the rural district council making a contribution at least equivalent to that of the County Council. Three applications were refused as not needing financial assistance. One of these has been carried out, and the other two are under consideration by the Rural District Council. A number of other sewage schemes were under consideration at the end of the year.

Improvements or renovations to existing sewage works have also been dealt with by several urban authorities, including Taunton and Wellington as above mentioned.

Most of the existing sewage works have been visited during the year and numerous samples collected. Those found working inefficiently are followed up with a view to the works being put in a satisfactory condition.

During the year a survey was made by Mr. Dewhurst and myself as regards the existing methods of sewage disposal in Yeovil Rural District, each parish being visited and separately considered. In view of the powers of the County Council to make grants to assist schemes it is desirable that the Public Health Committee should have an idea of the problem as it affects the whole County and the ultimate financial burdens likely to be involved. Yeovil Rural was selected as a typical example and also because the Rural District Council had specifically raised the question. The results of the survey were put before the Water Supplies and Sewage Disposal Sub-Committee in September. It is obviously unnecessary for every parish to have a sewage scheme, and indeed if proper care was taken to deal with the drainage from each house on the attached gardens, schemes in many parishes are unlikely ever to be required. A good many parishes, either from their size or because of the bad arrangements which have been allowed to be made in the past do require schemes and it is of great value to have these definite surveys. Further surveys will be made in 1936.



## ADMINISTRATION OF THE HOUSING ACTS.

The following shows the housing construction since 1921:—

Year.	Urban.	Rural.	Total.
1921	493	685	1178
1922	395	637	1032
1923	279	375	654
1924	432	551	983
1925	581	812	1393
1926	974	1217	2191
1927	1393	1442	2835
1928	960	718	1678
1929	857	1070	1927
1930	887	833	1720
1931	654	837	1491
1932	746	724	1470
1933	1070	1035	2105
1934	1450	940	2390
1935	1525	1061	2586

The figures show that the number of new houses constructed is the highest in the table except for 1927. Table XVI. shows for 1935 that 2,160 or 83.5% of them were built by private enterprise without any State assistance. This is far in excess of any immigration needs or to account for national increases of population and is one sign of the great change which is taking place in housing habits.

It will be seen that while most extensive in the towns there was also widespread building in the rural areas, mainly however in the neighbourhood of towns in the Axbridge, Bathavon, Long Ashton, and Yeovil rural districts.

The Housing Act, 1935, is mainly concerned with overcrowding and makes it the duty of each local authority to cause an inspection to be made with a view to ascertaining what dwelling houses in its district are overcrowded and to take steps to provide additional houses to abate the overcrowding. Exchequer contributions are available for this purpose.

The only other State subsidy is for so called slum clearance but it applies equally to single unfit houses. Table XVII. shows that 960 houses are reported as unfit, while in 313 cases demolition orders have been made. These figures are very considerably below those sent to the County Council last year and show that a great many houses remain to be dealt with. They also disclose considerable differences in the different districts. The present time offers special opportunities to get rid of all unfit and worn-out houses and to replace them by new houses at a comparatively low rent, as can be done with the aid of the subsidy.



TABLE XVI.

NUMBER OF NEW HOUSES ERECTED DURING THE YEAR

AREA.	With State assistance.		Otherwise	Total.
	By the Local Authority.	By other bodies or persons.		
RURAL.				
AXBRIDGE .....	22	0	118	140
BATHAVON .....	0	0	178	178
BRIDGWATER .....	4	0	72	76
CHARD .....	6	0	12	18
CLUTTON .....	0	0	50	50
DULVERTON .....	4	0	17	21
FROME .....	30	0	12	42
LANGPORT .....	5	0	25	30
LONG ASHTON .....	28	0	120	148
SHEPTON MALLET .....	24	0	41	65
TAUNTON .....	20	0	40	60
WELLINGTON .....	0	0	16	16
WELLS .....	0	0	32	32
WILLITON .....	12	0	39	51
WINCANTON .....	8	0	20	28
YEOVIL .....	26	0	80	106
All Rural Areas	189	0	872	1061
URBAN.				
BRIDGWATER .....	0	0	59	59
BURNHAM .....	0	0	30	30
CHARD .....	0	0	15	15
CLEVEDON .....	15	0	84	99
CREWKERNE .....	0	0	15	15
FROME .....	0	0	29	29
GLASTONBURY .....	*25	0	22	47
ILMINSTER .....	8	0	4	12
MINEHEAD .....	0	0	52	52
NORTON-RADSTOCK .....	50	0	80	130
PORTISHEAD .....	0	0	11	11
SHEPTON MALLET .....	0	0	10	10
STREET .....	0	0	35	35
TAUNTON .....	14	0	193	207
WATCHET .....	6	0	13	19
WELLINGTON .....	0	0	11	11
WELLS .....	0	0	58	58
WESTON-S-MARE .....	*106	0	381	487
YEOVIL .....	13	0	186	199
All Urban Areas	237	0	1288	1525
County	426	0	2160	2586

\*Without State assistance.

TABLE XVII.

## HOUSING INSPECTIONS.

Area.	Houses inspected for housing defects.	Houses specially inspected under Housing Acts.	Number found unfit.	Number defective but not unfit.	Demolition Orders made.
<b>RURAL.</b>					
AXBRIDGE .....	289	0	61	228	23
BATHAVON .....	220	90	55	44	0
BRIDGWATER .....	1160	0	84	1116	6
CHARD .....	272	146	47	139	14
CLUTTON .....	195	102	16	31	6
DULVERTON .....	363	116	11	151	7
FROME .....	185	47	20	27	30
LANGPORT .....	502	373	18	230	14
LONG ASHTON .....	165	163	41	77	37
SHEPTON MALLET .....	91	86	15	33	4
TAUNTON .....	402	326	3	156	0
WELLINGTON .....	161	130	47	60	9
WELLS .....	209	170	4	90	1
WILLITON .....	63	27	0	6	8
WINCANTON .....	690	690	210	480	48
YEOVIL .....	774	83	15	61	9
All Rural Areas	5,741	2,549	647	2,929	216
<b>URBAN.</b>					
BRIDGWATER .....	195	41	8	182	11
BURNHAM .....	29	0	3	9	3
CHARD .....	61	30	0	33	0
CLEVEDON .....	237	37	15	4	7
CREWKERNE .....	34	34	7	22	0
FROME .....	261	211	28	179	0
GLASTONBURY .....	32	0	0	22	8
ILMINSTER .....	132	118	1	49	0
MINEHEAD .....	101	9	4	25	0
NORTON- RADSTOCK .....	308	0	22	68	48
PORTISHEAD .....	107	0	0	0	0
SHEPTON MALLET .....	49	21	7	0	7
STREET .....	79	0	0	78	0
TAUNTON .....	486	230	188	118	1
WATCHET .....	96	96	0	0	0
WELLINGTON .....	132	61	2	84	4
WELLS .....	55	0	0	28	0
WESTON-S-MARE .....	605	227	14	34	2
YEOVIL .....	112	86	14	52	6
All Urban Areas	3,111	1,201	313	987	97
County	8,852	3,750	960	3,916	313



### Housing (Rural Workers) Acts, 1926 and 1931.

During the year ended 31st December, 1935, grants were authorised by the County Council under these Acts in respect of 99 dwellings, amounting to £9,205, in the following areas:—

District.	No. of Dwellings.	Amount.
<i>Rural.</i>		£
Axbridge ... ..	1	100
Chard ... ..	8	732
Langport ... ..	18	1,799
Long Ashton ... ..	3	300
Shepton Mallet ... ..	5	500
Wellington ... ..	2	200
Wells ... ..	1	100
Williton ... ..	1	100
Wincanton ... ..	54	4,948
Yeovil ... ..	6	426
	<hr/> 99	<hr/> £9,205
	<hr/>	<hr/>

More than half the applications refer to houses in the Wincanton Rural District.

The total grants authorised under the Acts to the 31st December, 1935, amounted to £34,782 9s. 4d. in respect of 386 dwellings. Of these, grants amounting to £20,888 13s. 4d. in respect of 233 dwellings were paid prior to that date, and in the remaining cases the works were not completed or the grants were not accepted by the applicants. Grants amounting to £805 have been repaid by the applicants.

Since April, 1934, Bridgwater Rural District Council has been a separate Authority under the Acts, and grants were made by that Council in ten cases since that date and to the end of 1935.

## SUPERVISION OVER THE FOOD SUPPLY.

A. **Slaughter Houses and Meat Supervision.** The Public Health (Meat) Regulations, 1924, came into operation April 1st, 1925. Theoretically these regulations should enable every animal slaughtered for human food to be inspected and passed or rejected for human consumption. In practice this does not by any means occur, although the regulations mark a considerable advance in the control over meat.

The number of slaughter houses shows a decline of 6 but no advance towards the ideal of Public Abattoirs and the abolition of the private slaughter house.

TABLE XVIII.  
SLAUGHTER HOUSES.

Sanitary Area. (Urban).	Licensed.	Registered.	Total.	Sanitary Area. (Rural).	Licensed.	Registered.	Total.
Bridgwater .....	4	10	14	Axbridge .....	14	7	21
Burnham .....	8	1	9	Bathavon .....	6	16	22
Chard .....	4	2	6	Bridgwater .....	15	6	21
Clevedon .....	—	—	P	Chard .....	12	15	27
Crewkerne .....	0	3	3	Clutton .....	8	14	22
Frome .....	1	7	8	Dulverton .....	7	2	9
Glastonbury .....	2	4	6	Frome .....	12	0	12
Ilminster .....	2	3	5	Langport .....	13	2	15
Minehead .....	—	—	P	Long Ashton .....	2	8	10
Norton-Radstock .....	4	4	8	Shepton Mallet .....	12	0	12
Portishead .....	2	2	4	Taunton .....	33	0	33
Shepton Mallet .....	4	2	6	Wellington .....	8	0	8
Street .....	0	5	5	Wells .....	16	2	18
Taunton .....	4	7	11	Williton .....	9	6	15
Watchet .....	1	5	6	Wincanton .....	4	17	21
Wellington .....	2	7	9	Yeovil .....	28	0	28
Wells .....	4	5	9				
Weston-super-Mare .....	—	—	P				
Yeovil .....	10	0	10	Total	199	95	294
Total	52	67	119	County Total	251	162	413

P = Public Slaughter-house.



TABLE XIX.

## MILK PRODUCERS AND DISTRIBUTORS.

Sanitary Area. (Urban).	Producers.	Distributors.			Sanitary Area. (Rural).	Producers.	Distributors.		
		Also Producers.	Not Producers.	Total.			Also Producers.	Not Producers.	Total.
Bridgwater	19	10	55	65	Axbridge	734	63	13	76
Burnham	31	7	22	29	Bathavon	266	87	25	112
Chard	7	3	11	14	Bridgwater	769	190	17	207
Clevedon	27	11	13	24	Chard	550	58	2	60
Crewkerne	10	8	4	12	Clutton	471	131	29	160
Frome	16	12	22	34	Dulverton	128	128	0	128
Glastonbury	62	12	6	18	Frome	422	80	0	80
Ilminster	9	7	8	15	Langport	425	111	2	113
Minehead	9	9	1	10	Long Ashton	424	63	42	105
Norton-Radstock	30	12	16	28	Shepton Mallet	350	61	1	62
Portishead	10	4	14	18	Taunton	442	40	79	119
Shepton Mallet	27	6	5	11	Wellington	177	61	2	63
Street	20	12	5	17	Wells	496	129	11	140
Taunton	12	30*	35	65	Williton	303	43	5	48
Watchet	5	3	7	10	Wincanton	531	35	6	41
Wellington	25	11	14	25	Yeovil	465	46	6	52
Wells	6	3	7	10					
Weston-super-Mare	30	15	91	106					
Yeovil	18	4	29	33					
					Total	6,953	1,326	240	1,566
Total	373	179	365	544	County Total	7,326	1,505	605	2,110

\* 21 of these are producers outside the Borough.



**B. Milk Supply.** Table XIX. gives the number of producers and distributors registered.

The health problems arising out of the milk supply are complicated. On the chemical side attention has to be paid to the chemical composition of milk and to the detection and prevention of adulteration, which is so extremely easy with a liquid like milk. On this side we are greatly hampered by the unsatisfactory legal position, which has remained unchanged since 1901 although material chemical advances in the detection of adulteration have been made, and although there is now available a vast body of information as to variations in the chemical composition of milk under different conditions not known in 1901. In spite of many complaints, reports and deputations nothing is done to put this matter on a better basis.

On the bacteriological side, the aim is a cleanly collected and cleanly distributed milk which is free from the risk of spreading disease. The two problems are not the same for a milk supply may be clean but far from safe.

Hitherto the chief instruments in obtaining a clean milk supply have been the operation of the Milk and Dairies Order, 1926, and education work along the lines of Clean Milk Demonstrations and competitions. Both have done good but no one with experience can claim that their effectiveness in attaining the objects in view has been other than poor.

A third method has now been introduced which is likely to be much more effective, *i.e.*, paying a higher price for a better article. It has always been a legitimate grievance of milk producers that a cleaner milk supply, a matter of trouble and money to achieve, only fetched the same price as milk collected under poor and dirty conditions. It is true that by obtaining a Grade A licence a clean milk supply could attain to a designation which was an assurance of a better milk but it had the drawback that the only extra money obtainable was through selling the milk at a higher price, which was frequently not attainable, owing to the prevailing ignorance as to the importance of bacterial quality for milk.

The "Accredited Herd" Scheme of the Milk Marketing Board removes this disability as the extra 1d. per gallon is independent of sales. The milk has to be of Grade A standard, and indeed the necessary condition is the taking out of a Grade A licence from the County Council. A bacteriological standard and a standard of attainment at the cowshed and dairy are both required and it is necessary that the latter should be such as will enable the former to be attained and maintained without undue difficulty. The policy of the Milk Committee has therefore throughout been to require certain essentials to clean milk production (such as steam sterilization) while not being particular as to matters unessential for this purpose. The aim has been not only to encourage producers to get on the Grade A register but, by a satisfactory initial standard of requirement to enable them to keep on the register without difficulty. This policy involved a rather slow rate of increase, but is in my opinion the only sound one. The rate of growth has been regular, *i.e.*, rising from 36 on May 1st by a steady increase to 229 licences at the end of the year, while it has not been necessary to remove any names from the register.

The extra work has been very considerable, the heaviest work falling upon Miss Taylor. By a valuable co-operation with the Agricultural Instruction Department it has been arranged that Miss Taylor, Dairying Superintendent at Cannington, should be available for the inspections and reports leading up to the granting of a Grade A licence. Miss Taylor and I carried out some initial inspections together and arrived at a satisfactory basis of requirement. Her wide experience of Clean Milk production, her acquaintance with the points of view of agriculture, together with her energy and zeal and appreciation and agreement with my own views has made her the ideal person to do this work and she has been most successful. Mr. W. D. Hay has also been very helpful towards the work so that a useful scheme of co-operation has been attained.



Proposals were under consideration at the end of the year to assist producers by help from the County Council towards the cost of the considerable veterinary expenses.

The scheme, with any modifications, is likely to grow and as such exert a material influence on the clean milk problem. At the same time it is important to realise the limitations of the scheme. Its intention is to lead to the production of a clean milk supply but it does not produce a safe milk supply. The risks of conveying tubercle bacilli in the milk are slightly reduced by the veterinary inspection but that is all, and some of the other risks from infective organisms, such as those associated with contagious abortion, septic sore throat, acute infections like diphtheria and scarlet fever, are not materially affected. The chief danger is the risk of spreading tuberculosis and that is dealt with separately below. One side development of the Accredited Herd Scheme is that it has led to a definite increase in the number of Grade A (t.t.) milk licences. This is a valuable milk supply, one safe from the risk of conveying the tubercle bacillus and with the other risks reduced.

The following shows the figures at the end of the years referred to:—

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Certified Milk ... ..	4	3	6	4	4	4	4	5	5	6	6
Grade A (tuberculin tested)	5	7	9	8	6	6	6	8	8	11	32
Grade A ... ..	4	6	11	12	14	14	13	10	9	8	229

**Pasteurised Milk.** This is also a grade of milk under the Milk (Special Designations) Order, 1923. A lot of milk is trade pasteurised and for this the conditions are not defined and therefore there is no guarantee that the milk is made safe. Milk sold as "Pasteurised Milk" under licence, on the other hand, has to be heat tested under conditions which ensure the destruction of pathogenic bacteria including the tubercle bacillus. This destruction is a scientifically fully ascertained fact but of course implies that the requirements are carried out and the plant efficient. The importance of adequate supervision is great and during the year I gave an illustrated lecture to the Medical Officers of Health and Sanitary Inspectors in the County dealing with all the points necessary for supervision.

At the end of the year there were 23 plants operating in the County producing pasteurised milk, while milk from several firms outside the County were distributing this milk in the County.

The only milk supplies which are safe from the risk of conveying tuberculosis are Certified, Grade A (t.t.), Attested and Pasteurised. Any steps to increase tuberculous free herds are important.

**The elimination of bovine tuberculosis.** The elimination of tuberculosis from our dairy cattle is a matter of great importance to the industry for three reasons:—

(a) *The losses to the stock keeper from tuberculosis in his herd.* These losses are very material and various calculations have been made as to the annual loss in Great Britain per year from this cause and the figures vary from £750,000 to £2,000,000.

(b) *The danger to man.* The bovine strain of the tubercle bacillus has characters which distinguish it from the human strain but unfortunately both equally affect man. The strains having different characters it is possible in any individual case, when the bacillus is isolated, to indicate the source from which derived, *i.e.*, whether the infection was of bovine origin (that is, from milk or milk products) or of human origin. We know, for example, that for children three-quarters of the cases of cervical gland tuberculosis are bovine in origin, that of the "abdominal" type three-quarters are bovine, that about one-fifth of the bone and joint tuberculosis



cases are bovine and that all but 1 to 2 per cent. of lung cases are human. We can in fact calculate fairly accurately the proportion of tuberculosis deaths of bovine origin. It is a reasonably accurate calculation that about 6% of *all* deaths from tuberculosis are due to the bovine type of bacillus and that about 2,000 deaths each year are from this cause and that a great many more than twice this number of infections with the bovine bacillus occur yearly. It is important to emphasise these are definite calculations based on the fact that we can determine by bacteriology the type of infection in any case where it is possible to isolate the bacillus. The danger is a proved one and explains why the medical profession is nearly unanimous in its concern to avoid this danger.

(c) *The failure to expand the sale of liquid milk.* It is obvious from the facts just quoted that the medical profession must continue to discredit the use of raw milk from ordinary herds, and undoubtedly this has a detrimental effect on milk consumption since it is impossible to extend materially the sale of a discredited article. No extension of cleanliness methods without the removal of the risk of tubercular infection (without mentioning other infections) will make raw milk acceptable.

The milk producing community have most to gain from the provision of a clean, safe milk supply and I am always surprised that it does not appreciate its supreme economic importance and become its strongest advocate.

It is worth pointing out that none of the measures available, apart from the complete eradication of the tubercular cow, do more than touch the fringe of the problem. For instance, examining mixed milk for the tubercle bacillus merely tells us that on the particular date the sample was collected the milk was free from tubercle bacilli. It does not and cannot provide evidence that that milk supply is safe from the risk of conveying this bacillus, since fresh additions are constantly being made to the herd.

Routine veterinary inspections of cows, if it is confined to clinical examinations, even with the help of bacteriological sampling, is even less helpful since clinical examination cannot detect all these infective cases. It is of little or no value as a preventive measure and is a very costly method for achieving very little of benefit.

The Tuberculosis Order merely gets rid of a few infective animals after they have done much of the harm to the rest of the herd they are likely to do and, with udder cases, after they have infected the milk supply for a long time.

The only effective measure is obtaining a herd completely free from tuberculosis and taking steps to keep it free. This can only be achieved by the use of tuberculin testing and with adequate veterinary supervision in its usage.

I consider Somerset a particularly favourable area for steps to extend the number of tuberculosis free herds because our figures (see Table XX) show a much lower incidence than for the country generally. While some herds will show a high percentage of infection, even above the 40% estimated as true for the country generally, others will show a very low incidence and the clearing of them should be comparatively easy.

With the present legislative position there are three ways to obtain herds free from tuberculosis:—

- (a) Tuberculin testing and elimination of "reactors" as a private matter and without any financial assistance.



(b) Take steps to free the herd and obtain a designated licence for Grade A (t.t.) milk.

(c) Come under the "Attested Herd" scheme of the Board of Agriculture.

It will be noted that Grade A and Accredited milks are not included. These are clean but not safe milks and coming under these grades does nothing to reduce the incidence of tuberculosis in the herd.

The "Attested Herd" Scheme at present throws too much initial expense and trouble upon the owners before they come into it, so that scarcely anyone will take up the scheme. The proposal of the Milk Committee appointed by the County Council to give free veterinary help and tuberculin in these preliminary stages is an important help and in my opinion is the best form that assistance can take.

From the Public Health, equally with the Agricultural, aspects I should like to see extensive use made of these facilities so that a nucleus, ever enlarging, of herds free from tuberculosis and registered under the Attested Herd Scheme comes into being. Milk from these herds could be accepted as safe from the risk of spreading tuberculosis and if cleanliness methods (such as included under Grade A) were adopted the milk could be recommended as a safe, clean milk supply. The bonuses for Accredited and for Attested milk would then both be available.

During the year the chief advances in obtaining a safe milk supply have been the considerable increase in the number of pasteurisation licences issued and the wide usage of pasteurised milk in schools, and the increase from 11 to 32 in the number of Grade A (tuberculin tested) licences. These are but small advances compared to the problem to be faced.

The work of sampling herds for tubercle bacilli has been continued. It is valuable educational work and one of the few steps which can be taken under the Milk Acts but it does not do anything to solve the main problem.

During the year 476 samples of mixed milk, collected at the cowsheds, were examined for tubercle bacilli. Virulent tubercle bacilli were found in 14, a percentage of 2.94.

Except for one year, this percentage keeps very constant, the percentage figures for previous years being: 2.2 (1926); 2.18 (1927); 2.2 (1928); 2.67 (1929); 2.32 (1930); 2.2 (1931); 5.7 (1932); 2.8 (1933); 3.15 (1934).

In addition to these 14 cases, reports on milk derived from Somerset, but found to be tuberculous by outside authorities, have been received in 14 cases, *i.e.*, 7 from Bristol City, 5 from London County Council, 1 from Lambeth Borough and 1 from Monmouthshire County Council. In addition, a positive result was obtained at Yeovil from examinations by the Medical Officer of Health.

Of the 14 positive herds from samples examined in the County Laboratory in 10 the County Veterinary Surgeon found a cow with a tuberculous udder, in 7 of these at the first examination, while in 3 the herd had to be sampled in groups and the affected animal slowly detected. Of the 4 failures, in one bulk samples from groups gave a positive result in one group but the cows were not properly identified and as this happened between the changes of whole time Veterinary Surgeons the case was not fully followed up. In the 3 other cases the samples from groups of cows were all negative so we had no clue as to the source of the bacilli, while no cows were sold between sampling and the first examination.



Of the 15 cases reported from outside, in 4 the milk was derived from depôts where it was all mixed and impossible to identify and so no action could be taken. It is really useless collecting these samples. In one case the milk collected in London possibly came from 3 farms, 2 in Somerset, one in Dorset. A veterinary inspection and milk sampling gave negative results from the 2 Somerset farms but a cow with a tuberculous udder was removed from the Dorset herd. Of the remaining 10 herds, in 4 a tuberculous cow was detected, in 2 cases by direct examination and in 2 only after the examination of samples from groups of cows. Of the 6 negative cases, in 5 veterinary inspection and a fresh sample from all the cows failed to show any tuberculosis or tubercle bacilli but in 4 of these herds a cow or cows were removed from the herd and slaughtered between sampling and the veterinary visit. In the sixth case no suspicious animal could be found or traced. The percentage of successes is always lower for these outside samples which are collected from churns in course of delivery. This I should expect, as such sampling is more unreliable than our method of sampling the whole herd at the source.

The following table shows the examinations for the seven years 1929-35:—

TABLE XX.  
SAMPLES COLLECTED OVER 7 YEARS (1929-1935).

Area.	Samples.	Milk containing tubercle bacilli.	Percentage positive.
*Axbridge	282	12	4.3
Bathavon	126	5	4.0
Bridgwater	168	0	—
Chard	161	3	1.9
Clutton	136	2	1.5
Dulverton	39	0	—
Frome	93	7	7.5
Langport	169	4	2.4
Long Ashton	166	9	5.4
Shepton Mallet	132	7	5.3
Taunton	140	6	4.3
Wellington	52	0	—
Wells	158	4	2.5
Williton	85	0	—
Wincanton	158	8	5.1
Yeovil	138	3	2.2
*Includes Weston-super-Mare.	2,203	70	3.2

While the total is considerable, the figures for the individual districts are too small to serve as a reliable index of the incidence of tubercle bacilli in the different areas. The variations do show that the presence of infective tuberculous cows, and so doubtless the prevalence of bovine tuberculosis, varies considerably in different areas. In general the figures suggest a higher incidence on the eastern side and in the neighbourhood of Bristol, Bath and Frome than on the western side in Dulverton, Williton and Wellington.



C. **Administration of the Sale of Foods and Drugs Acts.** During the year 1,040 samples were examined. Of these, 17 were submitted by private individuals and Medical Officers of Health, and 15 were "Appeal to Cow" samples. The following Table shows the nature of the 1,008 samples submitted by the police, excluding the 15 "Appeal to Cow" samples.

TABLE XXI.

Article.	Number examined.	Number genuine.	Number adulterated.	Per cent adulterated.
Dairy Products—Milk	514	495	19	3.7
Cream and Canned Cream	33	33	0	0
Cheese	12	12	0	0
Butter	44	43	1	2.3
Condensed Milk	21	21	0	0
Dried Milk	6	6	0	0
Edible Fats	28	28	0	0
Cereals	30	30	0	0
Meat and Fish Products	28	28	0	0
Tea, Coffee, Cocoa	18	18	0	0
Condiments	29	29	0	0
Sugar Products	22	22	0	0
Miscellaneous Groceries	71	71	0	0
Beer, Spirits and Wine	101	99	2	2.0
Drugs	51	50	1	2.0
Total	1,008	985	23	2.1

The samples adulterated, as shown in the Table, were mostly milk, the adulteration of other products being very few. 19 milk samples were reported as adulterated. No legal proceedings were taken in 18; a conviction was obtained in the remaining case. The legal position as regards chemical milk adulteration remains very unsatisfactory. A caution was given in the other four cases of adulteration.

TABLE XXII.

The number of samples analysed and the number adulterated during the past 15 years.

	Year.	Number examined.	Number adulterated.	Percentage adulterated.
Somerset	1921	1,084	67	6.2
"	1922	1,075	50	4.65
"	1923	1,049	40	3.8
"	1924	1,045	48	4.6
"	1925	1,042	37	3.5
"	1926	1,044	29	2.8
"	1927	1,067	39	3.6
"	1928	1,043	25	2.4
"	1929	1,038	23	2.2
"	1930	1,033	30	2.9
"	1931	997	32	3.2
"	1932	1,013	22	2.2
"	1933	1,034	40	3.9
"	1934	1,024	22	2.15
"	1935	1,008	23	2.1
England and Wales	1934	140,583	7,451	5.3

## PUBLIC HEALTH LABORATORY.

The year is noteworthy for the fact that the Laboratory was removed in August from the very inadequate and unsatisfactory premises at Weston-super-Mare to the County Offices at Taunton. The new Laboratory is spacious, well equipped and provided with all the necessary conveniences. So far as one can estimate the needs of the future it should be adequate in size for all future chemical and bacteriological laboratory needs. Work was carried out in the old laboratories under a very material handicap and the present premises and equipment make the work easier to manage, an important point in view of the continued extensions in the work being done.

The Laboratory continues to be extensively made use of by the different Local Authorities for the examination of water supplies, sewage samples, diagnosis of infectious cases, etc. It is also very valuable in connection with Tuberculosis, School Work, Venereal Diseases and other work directly under the County Council.

During the past year 13,296 samples have been examined (excluding all food and drug samples) as follows:—

Drinking Water—						
Bacteriological examinations ... ..						702
Chemical analyses ... ..						48
Sewage, sewage effluents, rivers and streams ... ..						98
Swabs for diphtheria bacilli ... ..						8,522
Sputum for tubercle bacilli ... ..						1,330
Blood for typhoid, paratyphoid, etc. ... ..						60
Hairs and skin for ringworm... ..						81
Specimens for venereal disease ... ..						759
Urine for tubercle bacilli, B. coli, sugar, albumin, casts, etc. ... ..						154
Faeces for typhoid and dysentery ... ..						61
Milk for tubercle bacilli ... ..						612
Milk for bacteriological examination (general) ... ..						63
Milk—Grade A. ... ..						433
Milk—Grade A (T.T.), Certified and Pasteurised ... ..						231
Other specimens ... ..						142
Total						<u>13,296</u>

Of the 8,522 swabs examined, 1,123 showed the presence of diphtheria bacilli; of the 1,330 specimens of sputum, 353 contained tubercle bacilli; of the 60 specimens of blood, 6 gave a positive Widal reaction; of the 81 specimens of hair, 25 contained ringworm fungi; and of the 759 specimens for venereal disease, 106 contained gonococci.



TABLE A.

Causes of, and Ages at Death during the Year 1935.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.								
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and up-wards.
Typhoid and paratyphoid fevers	1	0	0	0	0	0	0	1	0
Measles	4	2	0	1	1	0	0	0	0
Scarlet Fever	3	1	0	1	1	0	0	0	0
Whooping Cough	5	2	1	2	0	0	0	0	0
Diphtheria	16	1	1	3	8	1	0	2	0
Influenza	95	1	0	1	4	2	13	24	50
Encephalitis Lethargica	5	0	0	0	0	0	4	1	0
Cerebro-spinal fever	1	0	0	1	0	0	0	0	0
Tuberculosis of respiratory system	175	0	1	1	0	24	68	63	18
Other Tuberculous Diseases	38	1	4	7	2	1	13	8	2
Syphilis	10	2	0	0	0	0	1	6	1
General paralysis of the insane, tabes dorsalis	10	0	0	0	0	1	2	7	0
Cancer, Malignant Disease	677	0	0	1	1	2	36	233	404
Diabetes	82	0	0	0	2	0	4	24	52
Cerebral Haemorrhage, etc.	312	0	0	0	0	1	6	62	243
Heart Disease	1116	0	0	0	5	7	29	238	837
Aneurysm	17	0	0	0	0	1	0	10	6
Other circulatory diseases	288	2	0	0	0	0	2	58	226
Bronchitis	157	7	1	2	1	0	3	28	115
Pneumonia (all forms)	191	19	5	5	7	6	20	50	79
Other Respiratory Diseases	53	0	0	0	0	2	4	12	35
Peptic Ulcer	51	0	0	0	0	0	6	27	18
Diarrhoea, etc.	26	5	1	1	0	1	2	6	10
Appendicitis	28	0	0	0	1	2	5	6	14
Cirrhosis of Liver	17	0	0	0	0	0	0	10	7
Other diseases of liver, etc.	35	0	0	0	0	0	2	9	24
Other digestive diseases	98	4	1	2	2	5	9	27	48
Acute and Chronic Nephritis	214	0	0	0	3	1	11	47	152
Puerperal Sepsis	9	0	0	0	0	3	6	0	0
Other Puerperal causes	10	0	0	0	0	1	9	0	0
Congenital Debility, Premature Birth, Malformations, etc.	143	138	2	0	0	2	1	0	0
Senility	321	0	0	0	0	0	0	1	320
Suicide	48	0	0	0	0	3	14	24	7
Other violence	179	6	2	4	9	28	30	54	46
Other defined diseases	452	14	6	11	15	25	54	119	208
Diseases ill-defined or unknown	9	0	0	0	0	0	0	2	7
	4896	205	25	43	62	119	354	1159	2929



TABLE B.

Causes of Death at all Ages in each District during the Year 1935.

## RURAL DISTRICTS.

## URBAN DISTRICTS.

CAUSES OF DEATH.	AXBRIDGE.	BATHAVON.	BRIDGWATER.	CHARD.	CLUTTON.	DULVERTON.	FROME.	LANGPORT.	LONG ASHTON	SHEPTON MALLET.	TAUNTON.	WELLINGTON.	WELLS.	WILLITON.	WINCANTON.	YEovil.	TOTAL RURAL DISTRICTS.	BRIDGWATER.	BURNHAM.	CHARD.	CLEDON.	CREWKERNE.	FROME.	GLASTONBURY.	ILMINSTER.	MINEHEAD.*	NORTON-RADSTOCK.	PORTISHEAD.	SHEPTON MALLET.	STREET.	TAUNTON.	WATCHET.	WELLINGTON.	WELLS.	WESTON-SUPER-MARE.	YEovil.	TOTAL URBAN DISTRICTS.	COUNTY TOTAL.		
Typhoid & Paratyphoid Fevers	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Measles ... ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4		
Scarlet Fever ... ..	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3		
Whooping Cough ... ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5		
Diphtheria ... ..	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4	0	1	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	1	4	0	12	16	
Influenza ... ..	5	5	6	4	1	1	1	2	2	1	6	1	3	2	2	9	51	23	3	3	2	2	0	0	0	0	0	0	0	0	0	4	0	0	1	4	0	15	44	95
Encephalitis Lethargica ... ..	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	5	
Cerebro Spinal Fever ... ..	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Tuberculosis of respiratory system ... ..	8	10	3	4	6	2	2	12	7	2	4	4	2	8	6	7	87	20	2	1	3	0	6	3	1	1	1	0	1	1	11	2	2	6	17	10	88	175		
Other Tuberculous Diseases ... ..	5	2	3	1	0	0	1	2	1	0	2	0	2	1	0	4	24	6	0	0	0	0	2	0	0	1	0	0	0	1	0	0	2	0	1	1	14	38		
Syphilis ... ..	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	1	5	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	5	10		
General paralysis of the insane	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	0	6	10		
tabes dorsalis ... ..	32	45	24	25	27	6	11	27	26	16	32	14	15	19	33	20	372	21	16	14	10	9	23	7	3	11	19	10	6	4	41	6	8	8	61	28	305	677		
Cancer, Malignant Disease ... ..	2	5	5	2	1	0	1	2	6	1	2	0	2	3	4	3	39	5	3	0	1	0	4	3	0	2	0	1	1	1	3	1	0	1	11	6	43	82		
Diabetes ... ..	13	24	12	10	7	4	11	13	14	7	10	4	7	16	19	15	186	13	3	2	6	4	9	4	2	5	5	1	2	6	21	2	10	3	24	4	126	312		
Cerebral Haemorrhage, etc. ... ..	62	55	41	31	51	10	29	41	47	25	32	14	31	29	45	45	588	40	24	17	22	6	29	20	8	24	27	14	7	10	78	6	25	22	94	55	528	1116		
Heart Disease ... ..	0	1	2	0	1	0	0	1	1	0	0	1	0	0	1	0	8	1	2	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	1	2	9	17		
Aneurysm ... ..	10	9	19	5	10	2	3	11	17	10	11	9	9	6	12	7	150	17	8	4	5	2	7	3	3	11	12	4	5	0	15	1	3	5	16	17	138	288		
Bronchitis ... ..	6	6	4	6	13	3	1	4	1	4	10	1	3	8	7	3	80	11	1	0	0	4	4	5	0	2	9	1	1	1	13	0	3	2	10	10	77	157		
Pneumonia (all forms) ... ..	6	12	5	8	9	5	4	5	12	6	5	4	4	14	8	1	108	10	3	3	4	2	2	1	2	1	2	2	1	14	1	2	0	20	11	83	191			
Other Respiratory Diseases ... ..	3	1	0	1	3	1	1	3	1	5	4	1	0	2	4	4	34	5	0	0	1	0	1	1	0	0	0	0	2	1	4	0	0	2	0	2	19	53		
Peptic Ulcer ... ..	2	3	2	1	3	0	1	4	1	1	4	0	1	2	2	3	30	0	1	1	2	0	0	2	1	1	0	1	1	0	3	0	2	1	4	1	21	51		
Diarrhoea, etc. (under 2 years) ... ..	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	4	6		
Appendicitis ... ..	0	1	1	1	0	0	0	2	0	1	1	0	0	1	2	1	11	3	0	0	0	0	0	0	1	1	2	0	0	1	3	0	1	0	4	1	17	28		
Cirrhosis of Liver ... ..	1	2	0	0	0	0	1	1	0	0	0	0	1	2	0	0	8	0	1	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	3	1	9	17		
Other diseases of liver ... ..	1	1	4	0	0	0	0	0	2	2	1	2	1	1	1	0	16	2	1	0	2	1	0	3	0	0	0	1	0	1	1	0	0	1	4	2	19	35		
Other digestive diseases ... ..	8	3	5	4	3	1	1	5	5	0	5	5	3	4	5	7	64	7	2	1	2	1	4	0	1	4	0	0	0	1	8	2	2	0	15	4	54	118		
Acute and Chronic Nephritis... ..	10	17	12	8	7	1	3	10	9	8	3	1	3	5	7	9	113	6	5	4	10	2	9	2	0	2	7	3	2	7	18	0	2	5	12	5	101	214		
Puerperal Sepsis ... ..	0	1	0	1	1	0	0	0	1	1	0	1	0	0	0	1	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	9	
Other puerperal causes ... ..	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	1	5	0	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	0	1	5	10		
Congenital Debility, Premature Birth, Malformations, etc. ... ..	5	13	7	4	6	4	4	2	8	3	7	1	4	3	5	2	78	7	3	3	4	1	2	0	0	3	3	0	1	1	11	1	6	3	12	4	65	143		
Senility ... ..	16	3	19	12	8	0	7	24	11	5	10	5	6	21	14	22	183	20	6	7	15	6	17	1	0	4	2	1	3	1	11	4	4	2	21	13	138	321		
Suicide ... ..	2	1	1	0	0	2	1	1	3	0	1	4	3	2	1	0	22	3	3	0	2	2	2	1	0	1	0	0	1	0	5	0	0	3	3	26	48			
Other violence ... ..	17	10	7	4	10	4	3	6	6	5	11	3	4	5	6	4	105	8	5	3	7	0	2	0	0	2	4	2	2	3	13	2	2	2	12	5	74	179		
Other defined diseases ... ..	19	26	16	10	18	4	13	13	11	13	16	9	12	12	19	19	230	26	8	6	14	3	8	4	15	11	5	4	5	33	4	16	7	34	15	222	452			
Causes ill-defined or unknown ... ..	2	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	9			
All causes ... ..	238	258	200	144	186	51	102	191	195	116	182	84	116	170	205	189	2627	235	101	69	115	45	136	63	26	94	105	49	44	50	329	33	90	71	397	217	2269	4896		



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TABLE C.

Table showing, for each Rural District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area. Acres.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population. (Mid-Year)	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
RURAL :—									
1. AXBRIDGE	90,551	331	238	8	22,430	14.76	10.61	8.28	24.2
2. BATHAVON	46,276	308	258	17	22,820	13.50	11.31	9.50	55.2
3. BRIDGWATER	86,769	222	200	11	16,520	13.44	12.11	9.32	49.5
4. CHARD	54,600	142	144	4	11,200	12.68	12.86	10.55	28.2
5. CLUTTON	42,641	240	186	12	15,760	15.23	11.80	10.15	50.0
6. DULVERTON	78,980	63	51	5	4,484	14.05	11.37	9.78	79.4
7. FROME	51,718	130	102	9	9,575	13.58	10.65	8.84	69.2
8. LANGPORT	59,407	162	191	3	12,350	13.12	15.47	11.91	18.5
9. LONG ASHTON	46,515	253	195	10	19,590	12.91	9.95	8.76	39.5
10. SHEPTON MALLET	47,777	142	116	5	9,968	14.25	11.64	9.54	35.2
11. TAUNTON	70,682	196	182	9	16,770	11.69	10.85	8.57	45.1
12. WELLINGTON	37,911	107	84	4	7,335	14.59	11.45	9.05	37.4
13. WELLS	57,175	140	116	4	9,428	14.85	12.30	9.96	28.6
14. WILLITON	97,364	162	170	4	11,980	13.52	14.19	11.07	24.7
15. WINCANTON	64,540	214	205	7	15,870	13.48	12.92	10.72	32.7
16. YEOVIL	53,495	215	189	3	16,520	13.01	11.44	9.72	14.0
Totals of Rural Population	986,401	3,027	2,627	115	222,600	13.60	11.80	9.68	38.0



TABLE D.

Table showing, for each Urban District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population. (Mid-Year)	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
URBAN :—	Acres.								
1. BRIDGWATER	1,677	252	235	10	17,840	14.13	13.17	11.59	39.7
2. BURNHAM	2,246	90	101	3	7,848	11.47	12.87	9.14	33.3
3. CHARD	1,030	48	69	3	4,427	10.84	15.59	12.00	62.5
4. CLEVEDON	3,296	73	115	6	7,628	9.57	15.08	9.50	82.2
5. CREWKERNE	1,291	38	45	1	3,535	10.75	12.73	10.57	26.3
6. FROME	1,194	113	136	4	10,350	10.92	13.14	10.38	35.4
7. GLASTONBURY	5,019	56	63	2	4,550	12.31	13.85	12.19	35.7
8. ILMINSTER	531	21	26	0	2,282	9.20	11.39	9.68	0.0
9. MINEHEAD	2,816	68	94	4	6,139	11.08	15.31	11.79	58.8
10. NORTON- RADSTOCK	3,370	147	105	4	11,150	13.18	9.42	8.95	27.2
11. PORTISHEAD	911	48	49	1	3,854	12.45	12.71	10.30	20.8
12. SHEPTON MALLET	2,278	59	44	2	4,324	13.64	10.18	8.45	33.9
13. STREET	3,069	42	50	2	4,454	9.43	11.23	9.99	47.6
14. TAUNTON	2,428	344	329	16	26,790	12.84	12.28	10.68	46.5
15. WATCHET	493	26	33	1	2,114	12.30	15.61	12.33	38.5
16. WELLINGTON	2,211	84	90	6	6,757	12.43	13.32	9.99	71.4
17. WELLS	1,336	51	71	4	5,408	9.43	13.13	9.85	78.4
18. WESTON-S-MARE	4,923	309	397	14	32,490	9.51	12.22	9.29	45.3
19. YEOVIL	2,257	223	217	7	19,160	11.64	11.33	11.67	31.4
Totals of Urban Population	42,376	2,092	2,269	90	181,100	11.55	12.53	10.27	43.0
Administrative County	1,028,777	5,119	4,896	205	403,700	12.68	12.13	9.95	40.0
England and Wales, 1935		.....	.....	.....	.....	14.7	11.7	11.7	57