[Report 1921] / Medical Officer of Health, Salop / Shropshire County Council.

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COUNTY COUNCIL OF SALOP.

ANNUAL REPORT

of the

County Medical Officer of Health

for the year 1921.

JAMES WHEATLEY, M.D., D.P.H.

SHREWSBURY.
February, 1923.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH AND HOUSING COMMITTEE OF THE SALOP COUNTY COUNCIL.

GENTLEMEN,

I have the honour to present my Annual Report for 1921.

The Maternity and Child Welfare, Tuberculosis and Venereal Disease Schemes are being maintained, but not extended.

Continued financial stringency has not only prevented the carrying out of any extensive sanitary schemes, but has also much impeded the ordinary routine work of improvement and repair.

Under such circumstances the energies of those responsible for public health should be turned to the most important and at the same time the most economical of all public health work, viz., the education of the public in the laws of healthy living. Recent research has resulted in knowledge of the utmost importance to the growth and development of the human race, and it behoves every sanitary authority to see that this knowledge is placed at the disposal of the people in a practical and convincing manner.

The training of all nurses in hygiene based on physiology would prove a most important step in the education of the public, particularly in rural districts.

I would call particular attention to the sections on Education in Health, Alcohol and Public Health, and Prevention of Dental Caries, as I feel certain that it is now on these lines that the greatest improvement can be effected and at least cost.

I am, Gentlemen,

Your obedient Servant,

JAMES WHEATLEY.

PUBLIC HEALTH DEPARTMENT,
COUNTY BUILDINGS, SHREWSBURY,
December, 1922.

GENERAL STATISTICS.

Population.—The Population of the Administrative County in 1901 was 239,783, in 1911, 246,307, and in 1921, 242,959.

The Registrar-General's estimate of the civil population of the combined Urban and Rural Districts for 1921 is 242,528. This is used for calculating all death-rates and birth-rates.

POPULATION OF THE URBAN AND RURAL DISTRICTS.

URBAN DISTRICTS.	Census population 1921	Population at middle of 1921 as estimated by Registrar-General.
Bishop's Castle M.B.	1268	1273
Bridgnorth M.B. ..	5143	5130
Church Stretton ..	1671	1461
Dawley	7386	7450
Ellesmere	1831	1846
Ludlow M.B. ..	5677	5630
Market Drayton ..	4710	4692
Newport	3056	3082
Oakengates	11349	11540
Oswestry M.B. ..	9790	9820
Shrewsbury M.B. ..	31013	31030
Wellington	8148	8140
Wem	2176	2196
Wenlock M.B. ..	13712	13800
Whitchurch ..	5656	5600

RURAL DISTRICTS.	Census population 1921	Population at middle of 1921 as estimated by Registrar-General.
Atcham	21978	21960
Bridgnorth ..	8569	8470
Burford	1268	1260
Chirbury ..	3193	3233
Church Stretton	4516	4440
Cleobury Mortimer	7297	7280
Clun	6243	6200
Drayton	7156	7140
Ellesmere ..	8008	7970
Ludlow	8980	8870
Newport ..	5747	5780
Oswestry	16313	16300
Shifnal	7666*	7620
Teme	1649	1641
Wellington ..	11207	11150
Wem	8572	8520
Whitchurch ..	2011	2004

* To this number must be added the population of the Staffordshire parishes of Blymhill and Weston administered by the Shifnal Rural District Council. The population at the 1921 census was 689, making a total of 8355.

Marriages.—The number of marriages in the Registration County for 1921 was 2,050, compared with 2,440 in 1920, 2,387 in 1919, 1,718 in 1918, 1,496 in 1917, 1,641 in 1916, and 2,02 in 1915. The rates for 1916 and 1917 were abnormally low.

Births and Deaths.—The total number of births in the Administrative County was 5,31 giving a birth-rate of 21.88.

The number of deaths, after making corrections for non-residents dying in the County an persons belonging to the County dying outside, was 3,000.

The death-rate was 12.34, compared with 12.30 in 1920, 14.91 in 1919, 17.18 in 191 14.12 in 1917, and 14.26 in 1916.

Year.	Births.	Deaths.	Natural Increase.
1913 ..	5245 ..	3012 ..	2233
1914 ..	5205 ..	3556 ..	1649
1915 ..	4917 ..	3532 ..	1385
1916 ..	4682 ..	3231 ..	1451
1917 ..	4059 ..	3232 ..	827
1918 ..	4283 ..	3702 ..	581
1919 ..	4264 ..	3441 ..	823
1920 ..	5943 ..	2952 ..	2991
1921 ..	5318 ..	3000 ..	2318

CAUSES OF DEATH IN ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1921—URBAN DISTRICTS.

Causes of Death.	Shrewsbury M.B. 02		Bishop's Castle M.B. 04		Bridgnorth M.B. 05		Church Stretton U.D. 06		Dawley U.D. 07		Ellesmere U.D. 14		Ludlow M.B. 15		Newport U.D. 16		Oakengates U.D. 17		Oswestry M.B. 24		Wellington U.D. 25		Wem U.D. 26		Wenlock M.B. 27		Whitchurch U.D. 34		MarketDrayton U.D. 35		Total.	
CIVILIANS ONLY.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	201	181	12	7	30	27	7	5	43	49	15	12	47	43	19	22	85	55	77	60	34	50	20	17	86	96	31	36	35	27	742	687
1 Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
2 Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3 Measles	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	..	3	2	..	..	..	..	6	4
4 Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
5 Whooping Cough	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2	1	..	..	..	..	..	..	1	2	1	3	..	..	5	8
6 Diphtheria	1	2	..	..	..	..	..	..	..	..	..	..	5	6	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	7	10
7 Influenza	7	14	2	..	..	..	..	1	1	..	3	1	..	..	2	1	1	..	1	..	1	..	2	1	..	..	2	..	21	19
8 Encephalitis lethargica	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	1
9 Meningococcal meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
10 Tuberculosis of respiratory system	15	7	..	..	1	1	..	..	2	1	..	1	..	2	1	2	2	4	5	1	1	6	..	2	8	4	2	3	3	..	40	34
11 Other tuberculous diseases	5	3	1	1	..	..	..	..	2	..	..	..	2	1	..	1	1	..	4	..	1	..	..	1	..	2	1	..	..	..	17	9
12 Cancer, malignant disease	19	19	2	1	3	1	..	2	5	4	1	..	8	2	4	3	11	5	6	7	4	6	3	4	6	9	1	4	2	5	77	72
13 Rheumatic fever	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	2
14 Diabetes	4	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	1	1	..	1	..	..	6	6
15 Cerebral haemorrhage, &c.	9	19	..	..	..	2	..	..	4	3	..	1	1	6	1	2	2	3	4	1	3	4	3	1	8	12	1	5	2	4	38	63
16 Heart disease	22	18	..	1	3	5	..	..	7	7	6	1	3	6	1	1	7	7	12	11	2	9	..	2	12	10	6	3	7	5	88	86
17 Arterio-sclerosis	3	3	..	..	..	2	..	..	1	1	..	..	2	1	..	..	9	1	2	5	1	3	..	..	1	4	1	1	..	..	20	21
18 Bronchitis	12	15	3	1	1	3	..	..	3	6	..	1	1	2	4	2	4	5	3	3	3	1	1	3	6	5	1	..	2	2	44	49
19 Pneumonia (all forms)	21	11	..	..	1	1	1	..	2	2	1	2	3	..	2	..	7	4	4	5	3	4	1	1	4	5	2	3	..	1	52	39
20 Other respiratory diseases	2	2	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	1	..	9	3
21 Ulcer of Stomach or duodenum	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	3	3
22 Diarrhoea, &c. (under 2 years	7	3	..	..	2	1	..	..	..	..	..	1	..	..	..	..	1	..	2	1	1	..	1	..	1	1	..	..	..	..	15	7
23 Appendicitis and typhlitis	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	1	1	1	3	..	1	..	..	..	..	..	..	..	..	..	7	4
24 Cirrhosis of liver	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	1	..	1	1	..	1	1	..	8	3
25 Acute and chronic nephritis	4	4	1	2	..	..	..	..	1	..	..	..	2	..	..	..	1	1	5	4	..	1	1	..	1	1	3	..	1	4	20	17
26 Puerperal sepsis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
27 Other accidents and diseases of pregnancy and parturition	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2
28 Congenital debility and malformation, premature birth	20	6	..	..	2	2	..	..	5	4	..	..	5	1	2	1	4	5	3	..	1	5	2	..	1	5	1	2	5	2	51	36
29 Suicide	4	2	..	..	1	..	..	..	..	..	..	2	2	..	..	..	2	..	..	..	2	..	..	..	1	2	..	..	1	..	13	6
30 Other deaths from violence	7	4	1	..	2	1	..	..	2	1	1	..	..	..	1	..	6	2	3	3	1	1	1	..	5	1	3	..	1	..	34	13
31 Other defined diseases	33	37	2	..	8	6	4	3	9	17	3	3	7	11	2	8	16	11	10	14	7	8	6	2	24	27	7	9	6	4	150	160
32 Causes ill-defined or unknown	1	2	..	..	1	2	..	..	..	..	1	..	1	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	6	5
Special causes (included above) Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Polioencephalitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deaths of infants under 1 year: Total	38	17	1	..	5	3	1	..	8	8	2	1	7	4	3	1	13	12	9	6	5	7	4	1	7	8	2	3	6	4	111	75
Illegitimate	3	1	..	..	1	..	..	..	1	..	2	..	4	2	1	1	2	1	1	2	1	..	..	1	..	..	1	..	2	..	19	8
TOTAL BIRTHS	341	323	18	13	61	48	10	11	79	92	21	14	66	67	31	29	130	141	105	98	76	85	23	14	150	139	46	44	62	55	1219	1173
Legitimate	315	311	15	11	56	46	9	9	79	85	17	12	61	59	29	25	121	139	93	90	67	82	23	11	145	133	39	40	50	46	1125	1099
Illegitimate	26	12	3	2	5	2	1	2	..	7	4	2	5	8	2	4	9	2	12	8	9	3	..	3	5	6	7	4	6	9	94	74
POPULATION	31030		1273		5130		1461		7450		1846		5630		3082		11540		9820		8140		2196		13800		5000		4692		112690	

CAUSES OF DEATH IN ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1921—RURAL DISTRICTS

Causes of Death.	Atcham R.D. 08		Bridgnorth R.D. 09		Burford R.D. 18		Chirbury R.D. 19		Church Stretton R.D. 28		Cleobury Mortimer R.D. 29		Clun R.D. 38		Drayton R.D. 39		Ellesmere R.D. 48		Ludlow R.D. 49		Newport R.D. 58		Oswestry R.D. 59		Shifnal R.D. 68		Teme R.D. 69		Wellington R.D. 78		Wem R.D. 79		Whitchurch R.D. 88		Total R.D.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
CIVILIANS ONLY.																																		
ALL CAUSES	123	130	54	49	13	5	24	24	30	33	53	40	39	34	43	36	51	45	55	50	42	30	88	106	54	48	11	9	61	75	42	54	11	9	794	777
1 Enteric fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2 Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	3
3 Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	3
4 Scarlet fever	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	2	..	1	..	..	..	..	..	1	..	..	..	..	..	3	5
5 Whooping Cough	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	1	..	..	1	2	..	..	..	..	..	1	..	..	..	..	5	8
6 Diphtheria	1	1	2	1	..	..	..	..	..	1	..	1	..	..	2	..	1	1	5	..	1	..	2	2	2	..	1	..	..	2	2	1	2	..	28	14
7 Influenza	6	3	2	4	..	..	1	..	..	1	1	..	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	3	2
8 Encephalitis lethargica	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9 Meningococcal meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10 Tuberculosis of respiratory system	3	9	2	1	2	1	1	2	1	..	5	5	3	..	2	2	2	3	3	3	1	..	..	4	6	1	1	..	6	4	1	2	..	..	39	37
11 Other tuberculous diseases	2	..	..	2	..	..	..	..	..	..	1	..	1	..	1	..	1	..	1	2	..	1	..	2	..	1	..	..	3	2	..	..	..	..	11	10
12 Cancer, malignant disease	11	8	3	5	..	..	3	4	3	4	2	1	..	5	8	2	2	4	8	4	3	6	7	9	6	5	..	1	6	10	3	6	..	1	69	75
13 Rheumatic fever	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	1	3
14 Diabetes	3	3	..	..	..	..	..	..	..	1	1	3	..	..	..	..	2	1	1	1	..	..	4	1	1	1	..	..	1	1	1	..	..	..	14	12
15 Cerebral haemorrhage, &c.	5	18	3	2	3	..	2	1	3	1	5	..	4	3	1	6	3	2	6	5	6	3	4	5	7	4	1	..	6	5	3	6	2	..	64	61
16 Heart disease	19	24	5	3	1	2	1	6	..	4	4	6	5	4	7	3	15	10	4	12	3	3	10	22	3	11	2	..	6	10	6	10	1	1	92	131
17 Arterio-sclerosis	5	5	3	1	..	..	2	..	1	2	2	..	..	..	..	..	4	1	1	..	4	2	3	4	3	..	..	..	..	1	1	1	..	1	29	16
18 Bronchitis	4	5	4	4	1	..	1	4	3	..	6	3	4	3	1	..	3	2	5	1	1	4	4	2	2	3	1	1	4	8	3	4	2	1	49	47
19 Pneumonia (all forms)	9	1	7	2	1	..	..	..	..	..	1	2	1	..	3	3	4	2	5	3	1	4	7	5	4	1	1	1	1	..	2	..	..	..	7	5
20 Other respiratory diseases	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..	..	1	..	..	1	1	1	1	..	2	..	..	..	..	..	..	..
21 Ulcer of stomach or duodenum	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	5	2
22 Diarrhoea, &c. (under 2 years)	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	..	..	2	2	..	..	..	..	..	..	..	1	..	..	..	..	7	7
23 Appendicitis and typhlitis	..	1	2	3	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	1	..	..	..	..	..	7	7
24 Cirrhosis of liver	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	3	..
25 Acute and chronic nephritis	3	2	1	1	1	..	1	..	..	..	3	..	1	..	..	1	1	3	..	1	..	1	7	6	2	2	..	..	4	1	1	..	..	..	27	18
26 Puerperal sepsis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
27 Other accidents and diseases of pregnancy and parturition	..	2	..	..	..	..	..	1	..	..	..	2	..	2	..	..	..	..	..	2	..	..	..	4	..	1	..	..	..	1	..	1	..	..	..	16
28 Congenital debility and malformation, premature birth	5	7	4	..	..	..	3	2	4	..	4	4	3	2	4	3	1	1	2	1	4	1	6	5	1	1	..	1	3	4	3	2	1	..	48	34
29 Suicide	6	1	2	..	..	..	..	..	1	..	..	1	..	..	1	..	1	..	1	..	2	..	1	..	2	..	..	..	..	..	..	..	..	..	..	17	2
30 Other deaths from violence	5	4	2	3	..	..	3	..	1	2	4	3	1	..	2	1	4	..	3	..	1	..	7	7	4	2	..	..	2	3	..	..	..	..	39	23
31 Other defined diseases	27	33	11	13	2	2	6	5	12	14	10	6	12	12	9	10	6	11	7	13	5	5	17	17	10	13	3	6	14	16	13	17	1	3	165	196
32 Causes ill-defined or unknown	3	1	..	3	..	..	..	..	..	..	1	1	2	1	2	1	..	..	1	..	..	..	2	2	..	1	..	..	..	..	..	..	..	..	11	10
Special causes (included above) :																																				
Poliomyelitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Polioencephalitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deaths of infants under 1 year : Total	12	12	8	3	..	..	4	3	6	2	8	7	4	3	5	4	2	5	4	3	6	4	13	13	1	2	2	1	7	11	7	5	1	..	90	78
Illegitimate	3	2	1	..	..	..	..	..	1	..	2	3	..	..	..	..	..	1	1	..	..	..	2	2	..	..	..	..	2	..	2	..	..	..	14	8
TOTAL BIRTHS	270	225	90	82	9	13	37	39	58	45	95	98	77	58	78	83	94	94	106	94	68	58	188	185	64	80	25	24	128	124	96	95	27	19	1510	1416
Legitimate	253	203	82	80	8	12	36	37	53	40	89	91	72	53	73	73	90	92	94	88	63	52	176	175	61	75	24	23	115	120	88	90	25	18	1402	1322
Illegitimate	17	22	8	2	1	1	1	2	5	5	6	7	5	5	5	10	4	2	12	6	5	6	12	10	3	5	1	1	13	4	8	5	2	1	108	94
POPULATION	21960		8470		1260		3233		4440		7280		6200		7140		7970		8870		5780		16300		7620		1641		11150		8520		2004		129838	

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF SALOP, 1921.

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS.										AGGREGATE OF RURAL DISTRICTS.									
		All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES	M	742	111	26	17	21	34	61	173	150	149	794	90	16	10	22	32	72	203	153	196
	F	687	75	17	13	21	18	55	127	149	212	777	78	14	14	23	34	82	133	173	226
1 Enteric Fever	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
2 Small-pox	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3 Measles	M	6	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	4	2	2	..	..	..	..	..	..	..	3	1	1	1	..	..	..	..	..	..
4 Scarlet Fever	M	2	..	..	1	..	1	..	..	..	..	3	..	..	..	2	1	..	..	..	..
	F	2	..	..	..	2	..	..	..	..	..	3	..	..	..	3	..	..	..	..	..
5 Whooping Cough	M	5	3	1	1	..	..	..	..	..	..	3	2	1	..	..	..	..	..	..	..
	F	8	3	2	2	1	..	..	..	..	..	5	4	..	1	..	..	..	..	..	..
6 Diphtheria	M	7	..	1	2	3	1	..	..	..	..	5	..	..	1	4	..	..	..	..	..
	F	10	..	..	2	7	1	..	..	..	..	8	1	1	2	4	..	..	..	..	..
7 Influenza	M	21	4	..	..	..	..	3	5	4	5	28	..	..	2	..	..	2	7	12	5
	F	19	1	..	..	1	..	1	6	2	8	14	..	..	1	1	1	1	5	2	3
8 Encephalitis lethargica	M	2	..	..	..	1	1	..	..	..	..	5	..	..	..	1	..	2	2	..	..
	F	1	..	..	..	..	..	1	..	..	..	2	..	..	..	..	1	..	1	..	..
9 Meningococcal meningitis	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10 Tuberculosis of respiratory system	M	40	..	..	..	..	6	12	22	..	..	39	..	1	1	..	9	20	8	..	..
	F	34	..	1	..	2	7	14	9	1	..	37	..	..	..	..	12	19	5	1	..
11 Other tuberculous diseases	M	17	2	1	1	4	4	3	1	1	..	11	2	2	1	1	..	3	2	..	..
	F	9	..	2	1	2	..	3	1	..	..	10	2	..	1	..	2	2	3	..	..
12 Cancer, malignant disease	M	77	..	..	..	..	..	9	33	25	10	69	..	..	..	..	..	..	32	20	17
	F	72	..	..	..	1	..	3	33	24	11	75	..	..	..	..	1	5	30	24	15
13 Rheumatic fever	M	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..	..
	F	2	..	..	..	..	..	2	..	..	..	3	..	..	..	1	1	..	1	..	..
14 Diabetes	M	6	..	..	..	..	1	..	1	3	1	14	..	..	..	1	2	3	5	2	1
	F	6	..	..	..	..	..	1	3	2	..	12	..	..	..	1	1	..	5	4	1
15 Cerebral haemorrhage, &c.	M	38	..	..	..	..	..	2	7	17	12	64	..	..	..	..	..	1	15	14	34
	F	63	..	..	..	..	..	..	12	26	25	61	..	..	..	..	..	..	10	20	31
16 Heart disease	M	88	..	..	..	..	1	5	16	34	32	92	..	..	..	..	1	8	22	27	34
	F	86	..	..	..	1	3	5	20	24	33	131	..	..	..	..	3	7	22	46	53
17 Arterio-sclerosis	M	20	..	..	..	..	..	..	4	5	11	29	..	..	..	..	..	..	7	3	19
	F	21	..	..	..	..	..	..	2	6	13	16	..	..	..	..	..	..	1	7	8
18 Bronchitis	M	44	8	1	..	..	3	..	14	8	10	49	6	4	1	..	..	2	4	12	20
	F	49	2	1	1	..	..	..	5	13	27	47	8	2	..	..	..	..	2	14	21
19 Pneumonia (all forms)	M	52	11	5	3	5	2	8	7	4	7	46	4	5	..	..	4	4	15	13	1
	F	39	10	5	3	..	..	5	6	5	5	27	3	4	1	..	1	7	4	2	5
20 Other respiratory diseases	M	9	5	..	..	..	..	..	1	1	2	7	..	..	..	..	..	..	2	4	1
	F	3	1	..	..	..	..	..	..	..	2	5	..	1	..	2	..	1	..	..	1
21 Ulcer of stomach or duodenum	M	3	..	..	..	..	1	1	1	..	..	5	..	..	..	..	..	1	3	..	1
	F	3	..	..	..	..	..	1	..	1	1	2	..	..	..	..	..	1	..	1	..
22 Diarrhoea, &c.	M	26	9	6	..	..	..	1	2	4	4	18	5	..	2	1	..	1	5	4	..
	F	18	7	..	..	..	1	1	1	5	3	16	7	..	2	..	..	2	2	2	1
23 Appendicitis and typhlitis	M	7	1	..	..	..	2	1	2	1	..	7	..	..	..	2	1	2	2	..	..
	F	4	..	..	..	..	1	2	..	..	1	7	..	..	..	3	..	4	..	..	..
24 Cirrhosis of liver	M	8	..	..	..	..	..	..	5	3	..	5	..	..	..	..	..	..	5	..	..
	F	3	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..
25 Acute and chronic nephritis	M	20	..	..	..	2	1	..	7	8	2	27	1	..	..	..	..	2	9	9	6
	F	17	..	..	..	..	1	2	2	7	5	18	..	..	1	..	..	3	6	7	1
26 Puerperal sepsis	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..
27 Other accidents and diseases of pregnancy and parturition	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F	2	..	..	..	..	..	2	..	..	..	16	..	..	..	..	2	14	..	..	..
28 Congenital debility and malformation, premature birth	M	51	50	1	..	..	..	..	..	..	..	48	48	..	..	..	..	..	..	..	..
	F	36	36	..	..	..	..	..	..	..	..	34	34	..	..	..	..	..	..	..	..
29 Suicide	M	13	..	..	..	..	1	1	9	1	1	17	..	..	..	..	..	5	10	2	..
	F	6	..	..	..	..	..	4	1	1	..	2	..	..	..	..	..	..	2	..	..
30 Other deaths from violence	M	34	2	3	4	3	5	6	5	3	3	39	..	..	1	4	6	8	14	5	1
	F	13	2	..	1	..	1	..	3	2	4	25	2	2	2	3	4	2	2	3	5
31 Other defined diseases	M	139	15	2	4	3	4	8	27	28	48	152	22	2	1	6	6	7	29	24	55
	F	149	11	4	2	4	3	7	21	24	73	187	16	3	2	5	4	11	27	38	81
32 Causes ill-defined or unknown	M	6	1	..	..	..	..	1	4	..	..	11	..	1	..	..	1	1	5	2	1
	F	5	..	..	..	..	..	..	1	4	..	10	..	..	..	..	1	2	5	2	..

	Birth-rates.			Death-rates.		
	Urban Districts.	Rural Districts.	Whole County.	Urban Districts.	Rural Districts.	Whole County.
1912	22.2	21.5	21.8	13.8	12.5	13.1
1913	21.4	20.8	21.1	12.7	11.6	12.1
1914	21.01	20.76	20.88	15.11	13.52	14.26
1915	19.61	19.72	19.67	16.09	14.41	15.19
1916	19.39	18.51	18.99	14.99	13.63	14.26
1917	17.14	16.19	16.63	14.31	13.93	14.12
1918	17.15	18.24	17.73	18.25	16.25	17.18
1919	17.69	17.77	17.73	15.40	14.48	14.91
1920	26.02	23.59	24.73	12.64	12.00	12.30
1921	21.22	22.45	21.88	12.68	12.09	12.34

Illegitimate Births.

Year.	Number of Illegitimate Births.	Percentage of Total Births.
1913 ..	325 ..	6.0
1914 ..	341 ..	6.6
1915 ..	290 ..	5.9
1916 ..	287 ..	6.1
1917 ..	281 ..	6.9
1918 ..	350 ..	8.2
1919 ..	338 ..	7.9
1920 ..	448 ..	7.5
1921 ..	370 ..	6.9

For the purpose under consideration 1914 was a pre-war year. The table shows a decrease of illegitimate births up to 1917 ; an increase up to a maximum in 1920, followed by a considerable decrease in 1921.

TABLE I.

BIRTH-RATES AND DEATH-RATES IN SANITARY DISTRICTS FOR 1921.

Urban Districts.	Birth-rates.	Death-rates.	Rural Districts.	Birth-rates.	Death-rates.
Bishop's Castle	24.3	14.9	Atcham	22.5	11.5
Bridgnorth	21.2	11.1	Bridgnorth	20.3	12.1
Church Stretton	14.4	8.2	Burford	17.4	14.3
Dawley	22.9	12.3	Chirbury	23.5	14.8
Market Drayton	24.9	13.2	Church Stretton	23.2	14.1
Ellesmere	18.9	14.6	Cleobury Mortimer ..	26.5	12.7
Ludlow	23.6	15.9	Clun	21.7	11.7
Newport	19.4	13.3	Drayton	22.5	11.0
Oakengates	23.4	12.1	Ellesmere	23.5	12.0
Oswestry	20.6	13.9	Ludlow	22.5	11.8
Shrewsbury	21.4	12.3	Newport	21.8	12.4
Wellington	19.7	10.3	Oswestry	22.8	11.9
Wem	16.8	16.8	Shifnal	18.9	13.3
Wenlock	20.9	13.1	Teme	29.8	12.1
Whitchurch	16.0	11.9	Wellington	22.6	12.2
			Wem	22.4	11.2
			Whitchurch	22.9	9.8
TOTAL	21.22	12.68	TOTAL	22.45	12.09

The high birth-rates that have been noticed for years in the districts of Dawley and Oakengates have disappeared. Cleobury Mortimer which has had a consistently high rate for a number of years, is still the highest in the County, with the exception of the small district of Teme, which is too small to be of any significance for a single year.

INFANT MORTALITY.

TABLE II.

Comparisons of Infantile Deaths for Periods of Years.

	Average annual numbers for years			Percentage decrease of numbers in		Numbers for years	
	1905—1909	1910—1914	1915—1919	second period compared with first period.	third period compared with second period.	1920	1921
Births	5955	5427	4441	8.8	18.1	5943	5318
Deaths from all causes under one year ..	561	444	335	20.8	24.5	395	354
Deaths from—							
Measles and Whooping Cough	34	22	19	35.3	13.6	24	15
Influenza	..	..	11	..	..	1	5
Other Infectious Diseases	5	1	.8	80.0	20.0	0	1
Tuberculous Diseases	19	12	5.8	36.8	51.6	12	6
Convulsions and Meningitis (not tuberculous)	60	42	..	30.0	..	..	..
Bronchitis	46	33	30.6	28.2	7.2	37	24
Pneumonia	65	43	34	33.8	20.9	40	28
Diarrhoea, Enteritis and Gastritis ..	61	52	18.6	14.7	64.2	27	28
Premature Birth, congenital defects and malformations ..	128	119	..	7.0	..	..	..
Atrophy, Debility and Marasmus	96	74	..	22.9	..	..	..

TABLE III.

Average of the Annual Infantile Mortality for the Sanitary Districts for the Periods 1901—1906, 1907—1914, 1915—1919, and the Rates for 1920 and 1921.

Urban Districts.	Average for years			Percentage Increase or decrease in		Rates for 1920	Rates for 1921	Rural Districts.	Average for years			Percentage Increase or decrease in		Rates for 1920	Rates for 1921
	1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.				1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.		
Bishop's Castle ..	86	100	105	+ 16.3	+ 5.0	33	32	Atcham ..	84	77	56	— 8.3	— 27.3	71	48
Bridgnorth ..	106	116	104	+ 9.4	— 10.3	78	73	Bridgnorth ..	87	67	65	— 23.0	— 2.9	73	64
Church Stretton	96	99	67	+ 3.1	— 32.3	85	48	Burford ..	59	68	35	+ 15.2	— 48.5	34	0
Dawley	112	97	77	— 13.4	— 20.6	78	93	Chirbury ..	77	60	51	— 22.1	— 15.0	123	92
Ellesmere ..	103	65	74	— 36.8	+ 13.6	58	86	Church Stretton	97	80	75	— 17.5	— 6.2	76	77
Ludlow ..	113	84	76	— 25.7	— 9.5	85	83	Cleobury Mortimer ..	92	74	72	— 19.6	— 2.7	59	78
Market Drayton	..	..	119	..	..	76	85	Clun	100	72	95	— 28.0	+ 31.9	33	52
Newport ..	117	80	81	— 31.6	+ 1.2	69	66	Drayton ..	115	84	77	— 26.0	— 8.3	25	60
Oakengates ..	138	104	87	— 24.6	— 16.3	58	92	Ellesmere ..	92	84	73	— 8.7	— 13.0	54	37
Oswestry.. ..	102	101	96	— 1.0	— 4.9	54	74	Ludlow ..	91	69	59	— 24.2	— 14.5	81	35
Shrewsbury ..	126	102	74	— 19.0	— 27.4	65	84	Newport ..	106	96	97	— 9.4	+ 1.0	96	79
Wellington ..	114	78	91	— 31.6	+ 16.6	55	74	Oswestry ..	96	87	83	— 9.4	— 4.5	76	70
Wem	93	87	47	— 6.4	— 45.9	102	135	Shifnal	94	76	52	— 19.1	— 31.5	36	21
Wenlock ..	102	85	71	— 16.7	— 16.4	69	52	Teme	127	102	67	— 19.7	— 34.3	54	61
Whitchurch ..	103	104	82	+ 1.0	— 21.1	30	55	Wellington ..	102	83	74	— 18.6	— 16.8	79	71
								Wem	69	67	62	— 3.0	— 7.4	68	63
								Whitchurch ..	61	58	69	— 5.0	+ 18.9	76	22
All Districts ..	112	96	82	— 14.3	— 14.5	65	78	All Districts ..	93	78	69	— 16.1	— 11.5	67	57

The decrease of infant mortality in Urban and Rural Districts as shown in this table is extremely interesting and will afford data for checking our work. The high mortalities appear to follow very often on previous low mortalities and consequently one has to be careful in drawing inferences from single years. The highest rates for 1920 and 1921 were in the Urban District of Wem.

INFECTIOUS DISEASE.

Small-pox.—No case of small-pox was notified during the year. Owing to the largeness of the number of unvaccinated persons in the County, it is quite possible that we shall get a considerable outbreak of the disease the next time a case is introduced, if it is not dealt with promptly and efficiently.

The isolation and treatment of small-pox is now undertaken by the County Council.

Typhoid Fever.—The following remarks appeared in my report for last year:—This disease is now a comparatively rare disease in the County, and the origin of the few cases that do arise is equally obscure. It seems most desirable that every case should be very carefully inquired into, in order to determine its origin and the probable mode of transmission. Like most other infectious diseases, investigation seems to show that cases are spread by direct personal infection, except in those cases where infected food or water have been consumed. The first step should in every case be to get confirmatory diagnosis by means of a blood test. Although this test should not of itself be considered as decisive, a positive result is almost certain, and a negative result is often the starting point for further examination and the discovery of some other disease. It is advisable also to get a blood test of all other members of the household, of any persons brought into intimate household contact with the patient and of any persons in the immediate neighbourhood who have suffered from suspicious symptoms. I have previously advocated that the excreta of the patient should be examined bacteriologically before the patient and the house is declared free from infection.

RETURN OF INFECTIOUS DISEASES FOR THE YEAR 1921.

DISTRICTS.	Population Census 1911	Scarlet Fever.	Diphtheria (including Membranous Croup).	Enteric (Typhoid Fever).	Puerperal Fever.	Erysipelas.	Tuberculosis.		Cerebro-Spinal Fever.	Acute Poliomyelitis.	Ophthalmia Neonatorum.	Encephalitis Lethargica.	Pneumonia.	Malaria.
							Pulmonary.	Other.						
. .. ..	21770	50	46	..	..	6	31	5	..	..	4	2	11	..
.. ..	9125	20	24	..	..	2	14	3	..	..	..	..	7	1
. .. ..	1308	1	2	..	..	..	1	3	..	..	..	..	..	..
.. ..	3304	..	..	..	..	..	5	..	..	..	1	..	..	1
retton ..	4797	6	3	..	..	..	4	..	..	..	1	2	..	..
Mortimer ..	6976	4	13	..	1	2	12	4	..	..	..	1	2	2
.. ..	6565	12	..	..	..	..	7	2	..	..	1	..	..	..
.. ..	7258	6	7	..	..	1	6	5	..	..	3	..	5	..
.. ..	8365	11	5	..	3	2	5	..	..	..	..	2	3	..
.. ..	9438	43	14	..	1	..	14	6	..	..	..	..	8	..
.. ..	6005	30	5	..	..	1	5	2	..	..	..	1	..	..
.. ..	15442	28	20	..	2	1	19	2	..	..	5	..	..	..
.. ..	8953	2	1	..	..	..	6	2	..	..	..	1	1	..
.. ..	1644	3	..	..	..	..	..	..	..	..	..	..	..	..
.. ..	11091	7	3	..	1	3	20	13	..	..	3	..	2	..
.. ..	8373	17	19	3	1	1	10	4	..	1	1	3	3	..
.. ..	1935	4	2	..	..	..	1	..	..	..	..	..	2	..
TRICTS.														
stle ..	1409	1	..	2	..	..	2	1	..	..	..	..	..	..
.. ..	5768	16	24	..	..	..	9	1	..	..	1	..	8	..
tton ..	1455	18	..	..	..	..	4	..	..	..	..	..	..	..
.. ..	7701	3	7	..	1	..	16	1	..	..	2	..	1	..
.. ..	1946	..	1	..	..	1	..	..	..	..	..	..	1	..
.. ..	5926	64	86	..	..	2	8	5	1	..	1	..	..	..
yton ..	5082	..	2	..	1	1	7	1	..	..	1	1	3	..
.. ..	3250	1	2	..	..	..	8	1	..	..	..	..	..	1
.. ..	11744	50	7	..	..	1	11	4	..	..	2	2	4	..
.. ..	9991	37	12	2	1	2	26	5	1	..	4	..	2	..
.. ..	29389	64	57	1	..	17	27	17	..	1	5	1	42	2
.. ..	7820	51	3	..	..	2	20	15	..	1	3	1	1	..
.. ..	2273	5	..	..	1	..	3	1	..	..	1	..	..	..
.. ..	15244	7	31	1	2	4	23	1	..	..	3	..	2	2
.. ..	5757	1	24	..	..	1	7	3	..	..	1	2	1	1
.. ..		532	420	9	15	50	331	104	2	3	43	19	109	10

There were 9 cases of Typhoid Fever in all reported :—

Week of Notification. (1)	Sanitary District. (2)	Age. (3)	Widal's Reaction. (4)	Suspected source of infection. (5)	Number in household. (6)	Widal's Tests of other members of household. (7)	Widal's Tests of other contacts. (8)	Bacteriological examination of excreta for freedom. (9)
Feb. 5	Wem R.	..	Positive	Not traced.	..	No.	No.	No.
Apr. 2	Wem R.	..	Positive	do.	..	No.	No.	No.
Apr. 30	Wem R.	..	Positive	do.	..	No.	No.	No.
July 9	Wenlock B. ..	36	Positive	do.	..	No.	No.	No.
Sept. 3	Oswestry U. ..	72	Negative	do.	5	No.	No.	No.
Sept. 10	Bishop's Castle B.	16	Positive	Not traced : probably imported.	..	No.	No.	No.
Sept. 17	Bishop's Castle B.	15	Positive	Not traced.	..	No.	No.	No.
Nov. 5	Oswestry U. ..	..	Positive	Not traced.	3	No.	No.	No.
Nov. 19	Shrewsbury B. ..	..	Positive	Not traced.	..	No.	No.	No.

Influenza.—There were 82 deaths from influenza. Although this was a slight increase on 1920, there was nothing in the shape of a serious epidemic. Ten schools were closed on account of outbreaks, and leaflets detailing precautions against spread and directions for care and nursing were distributed through the schools. The greatest prevalence was in the months of February and March.

Measles accounted for 13 deaths. Measles health visiting is now carried out by the general health visitors in accordance with the directions issued in 1918. There can be no doubt that this scheme is resulting in better care of children suffering from measles, and consequently fewer deaths and serious after effects. An arrangement has been made with many nursing associations for the nursing of serious cases. The efforts of public authorities can best be directed to improving the environment of the sick child, and to safeguarding any children under three years.

Encephalitis Lethargica.—The cases of encephalitis lethargica occurred in the following districts :—Atcham, Church Stretton, Cleobury Mortimer, Ellesmere, Newport, Shifnal and Wem Rural Districts, and Market Drayton, Oakengates, Shrewsbury, Wellington and Whitchurch Urban Districts. It will be seen that they were widely scattered throughout the County, but the north and east suffered much more than the south and west. There was slight grouping of cases in the Wem Rural and Whitchurch Urban Districts and in Oakengates, Newport and Shifnal. No origin of infection or of association of one case with another was discovered, but Dr. Gepp says with regard to the Whitchurch cases :—" . . . . . both had been employed in the same Railway Goods Yard, the second case taking on the work, two days after the first case fell ill and ceased work, of unloading trucks of grain and other feeding stuffs in the open. No probable contacts, or ' carrier cases ' were discovered among others in this yard, by enquiry."

In a small proportion of cases the disease had been preceded by pneumonia. Two of the cases were looked upon as of very doubtful diagnosis. Ten cases proved fatal during the year.

MATERNITY AND CHILD WELFARE.

The following statement in my last year's report has received constant confirmation throughout the year :—

As a result of the six years' working of the scheme it may be confidently asserted that a very great improvement in the upbringing of children has been effected. There is a greater appreciation of the importance of child welfare among the people. More attention is being given to the proper feeding, clothing, exercise, and fresh air for the infant. Natural feeding is becoming more universal ; regularity of feeding at satisfactory intervals is the rule rather than the exception.

Although there were few extensions of the scheme in 1921 there was evidence of steady progress. Reference to the figures under the section of Infant Mortality will show the progress made as indicated by the reduction of mortality. There are two primary facts that should be emphasised—that this work is essentially educational and that teaching in the homes of the people by the Health Visitor is infinitely the most important part of it. Although Centres serve a most useful function, they are apt to loom too largely in the eyes of the public, and the really more important work of the Health Visitor in the homes of the people is apt to be forgotten. It is most necessary in these times of economy that we should form clear ideas of the relative values of services, otherwise we may easily economise in the wrong direction.

The principal use of a Centre is to sustain and supplement the work of the Health Visitor. It helps to create a favourable atmosphere in the neighbourhood ; it helps to train the Health Visitor ; it is the place where collective teaching can be given, and to which the Health Visitor can refer all her difficulties. It is of course the place where early departures from normal can be detected and dealt with, if the children are brought to the Centre. Even in this branch of the work the Health Visitor's influence is paramount, as it is through her visits to the homes of the people that the first indications of departure from normal are noticed, and that the child is brought to the Centre.

Without a Centre a Health Visitor works under great disadvantages, but the teaching in the homes must always remain the essential part of this work, for these two reasons—(1) that only a small fraction of the children are brought regularly to the Centre, (2) that the environment of the particular home is essential to illustrate the teaching.

If this is true, it should be our principal endeavour to see that we have a sufficient number of well-trained health visitors. The future of Child Welfare depends upon the training, salary and status of the health visitor, and district nurse midwife.

The provision made for carrying out this work and the general activities of the Child Welfare Committee have not been added to during the year, and come under the following headings :—

(1) The administration of the Notification of Births Act.
(2) The provision for medical, health visiting, and nursing services, including the nursing of measles, whooping cough, pneumonia, and ophthalmia neonatorum.
(3) The provision of maternity and child welfare centres.
(4) The provision of orthopaedic treatment for children under five years of age.
(5) The provision of a home for ailing babies.
(6) The provision of maternity beds.
(7) The promotion of a midwifery service throughout the County.
(8) The provision of medical attendance when a midwife finds medical help necessary.
(9) The supply of milk to nursing and expectant mothers, and children under three years of age.
(10) The institutional treatment of the expectant mother suffering from venereal disease.*
(11) The payment for beds for unmarried mothers and their infants at existing hostels.
(12) Arrangements with the Shrewsbury Eye Hospital for treatment of defects of the eye, ear, throat, and nose.
(13) The provision of a lecturer on hygiene, who is available for lecturing on child welfare.

* This comes under the scheme for the Prevention and Treatment of Venereal Disease.

Notification of Births Act, 1907.—In 1919 the births notified and discovered were 72 in excess of the registered births. In 1920 the births notified and discovered were less by 178 than those registered.

Notification of Births.

Total births, exclusive of Shrewsbury		4654
Notification of Births by midwives	3675	
,, ,, medical practitioners	701	
,, ,, parents or other persons	11	
Total notified	4387	
Discovered by Health Visitors	34	
Obtained from Registrar's Returns	111	
		4532
Excess of Births registered over Births notified or discovered		122

In the Borough of Shrewsbury, 703 notifications were received, of which 514 were sent in by midwives, and 115 were sent in by doctors and midwives.

Medical and Health Visiting Services.—There are five medical officers undertaking school and maternity and child welfare work. Their duties consist of attending the Maternity and Child Welfare Centres and exercising a general supervision over the work of the health visitor. One of them is the Medical Officer to the Babies Home, Wellington. It is estimated that this work occupies about one-quarter of their time.

There are twelve whole-time health visitors. All these health visitors are now employed on maternity and child welfare, measles, ophthalmia, tuberculosis, and mental deficiency work, and 10 out of the 12 also do some school nursing. In this way the area of their districts has been greatly lessened.

In addition there are 56 district nurses acting as part-time health visitors.

The scheme is not yet fully developed, and the amount of visiting is not up to the standard fixed by the Ministry of Health. Four more health visitors have been authorised, but further appointments are held over for the present.

In 1921 the visits paid by Health Visitors were :—

	Under one year.				1 to 5 years.	Total.
	1st	2nd	3rd	Subsequent.		
Whole-time	3,194	3,144	3,231	5,561	11,624	26,754
Part-time	1,326	1,349	1,503	3,719	5,361	13,258
	4,520	4,493	4,734	9,280	16,985	40,012

and visits to expectant mothers numbered 4,017.

The visits paid to measles houses and the cases dealt with were :—

Houses visited.	Cases visited.	Cases without Doctor.	Cases doctor advised.
1,867	2,959	913	328

The visits to cases of tuberculosis are given on page 26.

The visits to expectant mothers (4,017) are gradually increasing in number. At present, however, this work is in its infancy.

One of the criterions of the efficiency of a health visiting service is the proportion of infants that are naturally fed. The following very important rule was incorporated in the rules of the Central Midwives Board in the year 1919 :—

"A Midwife must forthwith notify the Local Supervising Authority of each case in which it is proposed to substitute artificial feeding for breast feeding."

Inquiry is made into these cases and advice and pressure is brought to bear on the midwife and mother to continue natural feeding where this is desirable. During the year 66 notifications were received under this rule. The causes given for ceasing natural feeding were :—

Mother.

Illness of mother	19
Death of mother	2
Insufficiency or absence of Milk	31
Refusal to Breast Feed	11

Baby.

Delicate weakly Babies	2
Cleft Palate	1

Percentage of children at first visit of health visitor with—

	Breast feeding.	Artificial feeding.	Mixed feeding.
1918	82.5	13.5	3.8
1919	85.8	9.7	4.4
1920	84.0	11.9	3.9
1921	86.6	9.6	3.7

Of the cases where the children were breast-fed on the first visit and the feeding was recorded after three months and six months, it was found that 79.0 per cent. were still breast-fed after three months and 74.0 per cent. after six months.

The figures show an improvement on last year.

It is to the credit of the district nurses concerned that in the following districts there were no artificially-fed infants at the first visit. :—Adderley and Norton-in-Hales, Bog Mine and District, Cound, Condover, Dorrington, Longnor, Leebotwood and Stapleton, Moreton Corbet, Shawbury and Lee Brockhurst, Richards Castle, Stanton, Wistanstow and Halford, and Worthen.

In the following districts the percentage of artificially-fed children was 25 per cent. or over. If such excess continues special inquiries will be made : -Baschurch, Bicton and Oxon, Prees, Whixall, and Woore.

The long-tube bottle—a most insanitary method of feeding, is disappearing, and was only found in 35 cases. The use of the dummy was recorded in 519 cases—probably a considerable under statement.

The following insanitary conditions were reported by the health visitors and forwarded to the Sanitary Authorities for their attention. This is a branch of work for which the health visitor has no special training. :

Water Supply.	Want of Ventilation.	Uncleanliness.	Dampness.	Overcrowding.	Nuisances.
24	86	118	32	58	38

Maternity and Child Welfare Centres.

These centres are open once a week, except for Ellesmere, and Newport, which are open once a fortnight.

The Health Visitors and the Child Welfare Medical Officers are always in attendance.

Name of Centre.	1st Quarter.				2nd Quarter.				3rd Quarter.				4th Quarter.				Total.			
	Infants.		Expectant Mothers.		Infants.		Expectant Mothers.		Infants.		Expectant Mothers.		Infants.		Expectant Mothers.		Infants.		Expectant Mothers.	
	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.	New Cases.	Total Attend-ances.
Wellington	68	436	11	34	54	298	10	13	62	393	12	40	59	430	19	34	243	1557	52	121
Bridgnorth	21	491	6	8	20	283	3	4	48	583	4	16	28	489	3	8	117	1846	16	36
Ironbridge	43	615	9	14	50	444	16	37	37	629	5	23	34	591	15	25	164	2279	45	99
Oakengates..	71	595	7	26	65	497	6	17	62	554	15.	33	61	530	6	42	259	2086	34	118
Oswestry	56	427	6	25	29	296	1	14	51	444	2	22	73	398	4	15	209	1565	13	76
Whitchurch	28	551	1	23	8	359	3	15	25	408	7	12	24	390	5	26	85	1708	16	76
Ludlow	28	44	..	..	14	39	..	..	49	138	1	4	25	175	6	21	116	396	7	25
Ellesmere	2	27	1	1	3	52	..	..	6	93	..	..	3	55	..	..	14	227	1	1
Newport	15	64	1	1	17	81	1	1	37	191	45	47	23	141	18	25	92	477	65	74
	332	3160	42	132	260	2349	40	101	377	3433	91	197	330	3199	76	196	1299	12141	249	626

For the year 1922 attendances at the Child Welfare Centres will be stated as new cases total number of cases and total attendances. They will also be analysed as to whether the cases are under one year of age or one to five. Previous to 1922 the method of keeping the records rendered this difficult.

Addresses and Short Talks are now given regularly at all the Centres, and a record is kept in every instance of the attendance. During 1921 short talks were given at almost all the Centres, but no definite records of most of them were kept. At *Wellington and Ironbridge* Centres addresses were given on cleanliness, care of the home, food, infection and teeth, by the Health Visitor, Miss Thomas. At *Oakengates* Centre short addresses were given by the Medical Officer, Dr. Priestley. At *Whitchurch* Centre two short talks were given, one on breast feeding and one on the general care of infants and the teaching of good habits, by the Health Visitor, Mrs. Lowrance. Short addresses were given by the Health Visitor, Miss Griffiths, at the *Oswestry* Centre, the subjects being: clothing, preparation of milk, whooping cough, dental caries, breast feeding. The average attendance at these addresses was 20.

Wellington Babies Home.—This home is under the control of the County Council. The County Council works through a local committee which includes representatives from the Public Health Committee and the County Medical Officer of Health. A monthly report including a complete financial statement is furnished to the County Council.

The number of cases in 1921 were :—

Admitted 43, Discharged 30 ; Died 7.

The cases were diagnosed on admission as :—

Malnutrition 20, gastritis 6, anaemia 1, spastic diplegia 1, marasmus 2, diarrhoea and vomiting 1, diarrhoea 1, prematurity 2.

Eight cases were taken in to prevent illness, and one for observation. Six healthy babies were taken in along with the wet nurses.

Of the 30 infants discharged, 25 were reported as in good health, 5 as improved.

Of the seven deaths, three were from marasmus, one from acute gastritis, one from heart failure, one from tuberculosis, and one from influenza.

The success of the Home depends more than anything upon the selection of the proper cases for admission, and this to a great extent rests with the Medical Officers of the Clinics and the Health Visitors throughout the County, in consultation with the medical practitioner, if there is one in attendance.

The efficiency of the Home has been greatly increased by two factors (1) the infants are treated now almost entirely in the open air, with most beneficial results, and with an almost complete cessation of cross infections, (2) whenever practicable a wet nurse is provided to supply a certain amount of natural food to as many infants as possible.

The Medical Superintendent, Dr. Horsburgh, reports as follows :—

"The Babies under treatment, for the year now under review, have represented every type of feebleness, debility, malnutrition, and the ordinary range of diseases which, combined, are essential sources of racial degeneration and high infantile mortality.

"At the commencement of the year, seven cases were in the Home—49 (including 6 healthy babies with mothers) were admitted during the twelve months, while on December 31st, 1921, 14 cases remained in the Home, including two healthy babies belonging to wet nurses.

"The average stay of cases discharged was 70 days. Of the 30 babies discharged, 25 were in good health, and five showed improvement.

"Seven deaths occurred during the year.

"One case of influenza occurred during January, but infection was limited to this one case.

"Other infectious diseases were significant by their absence ; this, in my opinion, being mainly due to the inauguration and development of open air as a fundamental principle in treatment.

" Five wet nurses were employed, who, as well as feeding their own babies, fed, or partly fed, 20 others.

" It was found more satisfactory to express the milk from the wet nurses than to put the babies to the breast, excepting of course, their own infants.

" In spite of the supposed increased strain upon these wet nurses, it is notable that the development of all the mothers and their babies progressed along normal lines.

" I am convinced that the lives of many of these infants have been saved by the administration of human milk.

" Open-air treatment, day and night, has been carried out in nearly all cases during the year ; the babies being gradually acclimatised, with the result that they sleep better and assimilate their food better than when kept indoors. This naturally leads to a quicker cure.

" For the restoration of breast feeding we have at times accommodation both for the mother and her baby, but only one such case was treated during the year, and this with complete success.

" Co-operation is maintained between the Home, Clinics and Health Visitors, mainly with the view of continuance of dietetic treatment.

" Cases were admitted from the following areas :—Aston-on-Clun, Bridgnorth, Coalbrookdale, Dawley, Ellesmere, Hinstock, Ketley, Ludlow, Madeley, Market Drayton, Much Wenlock, Newport, Oakengates, Oswestry, Shrewsbury, Wellington, Whitchurch.

" The Home in conjunction with the Welfare-centres, is undoubtedly playing an important part in the efficacy of the Child Welfare work, work which leads to the amelioration of high Infantile Mortality."

Orthopaedic Scheme.

This consists (1) of a central hospital at Park Hall, Oswestry, (2) after-care centres at Ludlow, Oakengates, Craven Arms, Oswestry, Cleobury Mortimer, Shrewsbury, Market Drayton, Wellington, Whitchurch, Wem, Ellesmere, Ironbridge, Shifnal, Bridgnorth, and (3) the assistance of all the health visitors and medical officers in the County for discovery of the cases.

The after-care centres are visited weekly by specially trained nurses from the Shropshire Surgical Home and Orthopaedic Hospital, and they are also visited by the senior Medical Officer of the Hospital once in two months.

It is our constant endeavour to link up this after-care work as closely as possible with the child welfare and school work. The early discovery of the cases depends almost entirely upon the health visitor as regards children under five, and largely on the School Medical Officers as regards school children. Where possible the Orthopaedic After-Care Centre is held on the same premises and the same day as the Child Welfare Centre or School Clinic. By this means the Child Welfare and School Medical Officers, and the Health Visitors should keep in close touch with this work.

CASES TREATED AT SHROPSHIRE ORTHOPAEDIC HOSPITAL IN 1921.

Disease.	Cases paid for by the County Council.			Cases not paid for by the County Council.		
	Child Welfare, Tuberculosis and School Cases.			Child Welfare, Tuberculosis and School Cases.		
	Under 5	5 to 14	Over 14	Under 5	5 to 14	Over 14
Tuberculosis of Bones and Joints	10	30	59	1	2	4
Tubercular Peritonitis	..	1	..	..	..	1
Poliomyelitis	6	27	..	1	3	6
Rickets	16	7	..	3	..	..
Knock Knees	..	4	..	..	..	2
Scoliosis	..	9	..	..	5	1
Kyphosis	..	..	..	..	..	1
Round Back and Shoulders..	..	12	..	..	6	..
Congenital Deformities	5	6	..	2	3	1
Flat Feet	..	3	..	..	2	4
Club Feet and Claw Feet	..	5	..	1	2	7
Osteo-Arthritis	..	..	..	..	..	3
Osteomyelitis	1	2	..	..	..	..
Disseminated Sclerosis	..	..	..	..	..	1
Spastic Paraplegia	3	4	..	2	1	..
Other Paralysis	3	3	..	..	..	1
Septic Wounds	..	..	..	..	..	2
Fractures and Dislocations	3	6	..	..	1	7
Mal-united Fracture	..	..	..	..	1	1
Other Accidents	..	2	..	..	1	7
Other Diseases	1	4	..	..	1	4
	48	125	59	10	28	53
		232			91	
			Total 323			

The importance of early treatment in Poliomyelitis is so great that arrangements have been made for a specially trained nurse to be sent, on receipt of a wire, to help the medical practitioner and afterwards to get the patient to the hospital if necessary.

Analysing this table it will be seen that of the cases paid for by the County Council 100 were due to tuberculosis and were dealt with under that scheme; 38 were non-tuberculous children under five years, and were dealt with under the Maternity and Child Welfare Scheme; and 94 were non-tuberculous school children and were dealt with under the scheme for the treatment of school children.

The average number of beds occupied by the three groups were—

Tuberculosis	44
Child Welfare	10
School	21

In the following analysis the cases are grouped, so far as possible, to show the cause :—

108	or 39.4	per cent	were due to tuberculosis.
38	,, 13.9	,,	,, poliomyelitis.
28	,, 10.2	,,	,, rickets.
22	,, 8.0	,,	,, congenital deformities.
44	,, 16.1	,,	,, other deformities—postural or of doubtful causation.
14	,, 5.1	,,	,, spastic paraplegia.
3	,, 1.1	,,	,, acute infections.
17	,, 6.2	,,	,, other accidents and diseases.

The number of cases of Poliomyelitis treated in the Hospital shews that many cases of this disease escape detection and nofification. The cases of Spastic Paraplegia are mostly due to injury at confinement, and it is my intention as far as possible to get the previous history of these cases

The Maternity Home provided by the Shrewsbury Victoria Nursing Association is now providing some accommodation for the County and Borough under the following agreement :—

" That in consideration of the capital sums paid by the County and Borough Councils, amounting to a total of £540 14s. 4d. (£270 7s. 2d. by each Council) for which they have received up to now no benefit, and in lieu of returning the money, the Shrewsbury Victoria Nursing Association undertake to provide one bed for the said Councils, to be used by nominees of either Council under the following conditions :—

" 1.—That the patients shall be admitted on the authority of the Medical Officer of Health of either Council.

" 2.—That one month's notice be given of the intention to send a patient, so that the bed may be kept free.

" 3.—That the Council nominating guarantee a minimum fee of one guinea per week for each patient sent by them, the fee to be charged not to exceed a sum to be fixed by the Medical Officer on whose authority the patient is admitted.

" Should this arrangement be terminated by the Councils or the Association, the Association will place at the disposal of the Councils the furniture and equipment purchased by the Association with the capital expenditure mentioned."

Maternity Beds at Broseley Hospital.—There are six maternity beds and one confinement bed at this hospital. Occasionally another has also been used. Patients are received principally from Broseley and Madeley, but also from other parts of the County. The fee charged is £3 3s. per week for private cases and £1 1s. for ordinary cases. The County Council have agreed to pay £1 1s. a week towards the cost of any case recommended by them, that cannot afford the fee.

One hundred and six cases were received during 1921 and were admitted from the Borough of Wenlock—Madeley, Broseley, Ironbridge, Coalbrookdale, Jackfield, Much Wenlock, Benthall, Coalport ; outside the Borough—Dawley, Ludlow Rural, Bridgnorth Urban and Rural, Church Stretton Urban, Atcham Rural, Oakengates Urban.

The hospital is doing a most excellent work and is much appreciated.

Maternity Beds at Newport Nursing Home.—Two beds are always available here. The County Council pays an annual fee of £10 per bed towards their maintenance. 24 cases were admitted in 1921, 9 from Newport Urban District, 2 from Church Aston, 2 from Pave Lane, 1 from New Caynton, 1 from Edgmond and 1 from Wellington. The remaining 8 were from out of the County.

Midwifery Service.

In the matter of training and provision of midwives the County Council has acted entirely through the Shropshire Nursing Federation, the County Council bearing three-quarters of the expense of training. The County Council also makes a grant of £20 towards the initial expenses of new associations.

During 1921 four associations were formed, viz. :—Llanymynech, Bedstone and Bucknell, Shawbury, Moreton Corbet and Lee Brockhurst, and Claverley. Since the end of 1921, one more association has been formed.

The following statement showing the parishes most urgently needing midwives and grouped in 26 districts was first published in the year 1916. The associations formed since 1916 are also shown and the date of formation.

	Association formed
1.—Albrighton, Astley, Battlefield and St. Alkmond	—
2.—Westbury and Wollaston	1920
3.—*Church Pulverbatch* and Smethcott (*Longden*)	1920
4.—†Morville, Upton Cressett, Aston Eyre, Tasley and Astley Abbotts	—
5.—†Chelmarsh, Eardington and Oldbury	—
6.—Chetton, Middleton Scriven, Deuxhill, Glazeley, Billingsley and Sidbury	—
7.—Wistanstow, Sibdon Carwood, and Halford Ecclesiastical Parish	1917
8.—Stottesdon	—
9.—Kinlet	—
10.—Hopton Wafers, Part of Cleobury Parish, Farlow, Cleeton St. Mary and Silvington	—
11.—Clun	1917
12.—Newcastle and Bettws-y-Crwyn	—
13.—Clungunford, *Hopton Castle, Bedstone,* and *Bucknell*	1919
14.—Welshampton, Lyneal and Colemere	—
15.—Bitterley Ecclesiastical Parish, Hopton Cangeford and East Hamlet	—
16.—Knowbury Ecclesiastical Parish	1920
17.—Cold Weston, Heath, Clee St. Margaret, Stoke St. Milborough and Abdon	—
18.—Kinnerley and Melverley	1920
19.—Llanyblodwell and Sychtyn	—
20.—Trefonen Ecclesiastical Parish	—
21.—East Part of Oswestry Rural Parish (Morton and Oswestry Ecclesiastical Parishes)	1922
22.—Badger, *Beckbury, Kemberton, Ryton* and Boningale	1917
23.—Sheriffhales, Boscobel and Tong	—
24.—*Kinnersley, *Preston-on-the-Weald-Moors and Part of Hadley*	1920
25.—Lee Brockhurst and Weston and Whixill	—
26.—Whitchurch Rural—Western Part (Tilstock)	1917
Additional Districts formed since 1916.	
The Bog Mine—parts of Shelve, Wentnor and Minsterley Parishes	1916
Hope—parts of Hope and Shelve Parishes	1917
Hopesay and Aston-on-Clun	1919
Donnington Wood Ecclesiastical Parish	1920
Child's Ercall, Hinstock and Sambrook	1920
Llanymynech—Parish of Llanymynech and parts of Moreton and Llanyblodwell Parishes	1921
Bedstone and Bucknell	1921
Shawbury, Moreton Corbet, and Lee Brockhurst	1921
Ironbridge,	1920
Oakengates	1920
Wellington	1920
Claverley	1921

Edstaston, Whixall and Coton Association has been divided into two Associations—Edstaston and Coton, and Whixall.

† By arrangement the Bridgnorth nurses take the midwifery cases in Oldbury, Eardington, Morville, Astley Abbots, Quatford and Tasley.

* Kinnersley is included in a district with Bolas Magna and Tibberton affiliated to the Shropshire Nursing Federation in 1918.

Medical Fees.—The fees of medical men called in by midwives under the rules of the Central Midwives Board are paid by the County Council, so that there is now no excuse for a midwife not calling in a doctor, and he is certain of getting his fee. The County Council in every case asks the patient to pay the fee or to show that she is not able to do so, and decides upon further action for recovery if necessary. This procedure should result in the medical practitioners in a large proportion of cases recovering directly from the patient where they are able to pay the fee. When the whole County is provided with trained midwives, there will be no resaon why every woman, however poor, should not have adequate midwifery and medical attendance at her confinement.

Supply of Free Milk.—Milk is supplied free in necessitous cases. Each case is enquired into and certified by the Medical Officer of the Centre, and one of the lady helpers, or where there is no centre, by the health visitor and a local responsible person. They are all scrutinised carefully at the Central Office. There can be no doubt that this is real preventive work of great value.

Institutional Treatment of expectant and nursing mothers and their infants suffering from Venereal Diseases is carried out under the Venereal Disease Scheme at Cleveland House, Wolverhampton.

Hostels for unmarried Mothers and their Infants.—The arrangements with Chaddeslode, Shrewsbury, and the Hereford Diocesan Home have fallen through. An arrangement has been made with the Mrs. Legge Memorial Home, Wolverhampton.

Prevention of Rickets.—The prevention and the provision of early treatment of rickets has been strongly emphasised as one of the most important parts of the work of the health visitors. Rickets is a disease which is not without danger to life whilst it lasts, and leaves permanent injury often of a serious character. The mere straightening of a limb is a very different thing from the prevention of the disease. Although the cause of rickets has not been demonstrated with certainty, there is reason to believe that food, and particularly the absence of one food factor, the fat soluble A vitamine is one of the principal causes. Recent investigation appears to show that the absence of direct sunlight is also an important factor in the cause of rickets. Great attention is paid to improving the conditions of food, fresh air, exercise, and cleanliness in all children, but in addition, for the special prevention of rickets, a memorandum with regard to the use of crude cod liver oil has been issued to health visitors.

An endeavour is being made to get crude cod liver oil stocked not only at the Clinics, but also with every district nurse throughout the county.

OPHTHALMIA NEONATORUM.

Thirty-five cases of ophthalmia neonatorum were notified, compared with 53 in 1920, 67 in 1919, 60 in 1918, 66 in 1917, 49 in 1916,

Every case is enquired into for the purpose of finding out whether proper treatment is being given and for supplementing it if necessary. Where a midwife has been in attendance inquiry is also directed to her conduct under the Midwives Act and the disinfection necessary before she attends other cases.

Statement showing how the confinements were attended :—

Number of cases attended by midwives	26
Number of cases attended by medical practitioners	9

How the cases were nursed :—

By nurse-midwives assisted by mothers	13
By relatives	5
By Health Visitors	9
At Eye and Ear Hospital, Shrewsbury	8

Twelve cases of discharging eyes, not notified as Ophthalmia Neonatorum, were visited by Health Visitors, and attended regularly until well.

Facilities for Treatment.—Sanitary Authorities have power to provide nursing and medical assistance for these cases, and under the Maternity and Child Welfare Act, 1918, the County Council is now also empowered to provide nurses.

A scheme was adopted and came into force in January, 1918, under which two nurses were appointed for health visiting and nursing of measles and ophthalmia neonatorum.

The scheme has been extended to the whole County and now includes measles, ophthalmia neonatorum, whooping cough, pneumonia and influenza, and all the health visitors have been made available for attendance on these cases.

There is an ambulance always available for bringing the mother and child to the Eye and Ear Hospital, when such a course is desirable.

In order that no cases shall escape and in order that cases shall be notified as early as possible, and satisfactory treatment be provided, (1) all cases where a midwife sends for a doctor on account of discharge from the eyes, are immediately inquired into, (2) an arrangement has been made by which the Medical Officer of Health notifies the County Medical Officer of Health at once any case of Ophthalmia Neonatorum that has been notified to him.

MIDWIVES ACT.

Year.	Number of Midwives practising in the County in June of each year.	Number of Visits paid.	Notifications of having sent for medical help.	Notifications of Still-births.		Notifications of death of mother or child with no medical man in attendance.	Notification of Artificial Feeding by Midwives.	Notification of Midwives' Liability to be a source of Infection.	Notification by Midwives of having laid out a Dead Body.
				By Midwives.	By Parish Clerks.				
1918	234	477	478	73	59	8	..	..	..
1919	227	482	519	56	88	16	57	..	..
1920	240	651	733	70	73	8	60	9	23
1921	240	675	734	76	..	10	66	11	28

Routine Work under the Act:—

The returns sent in by the certified midwives, although incomplete, show that they attended 3,675 births in 1921, out of a total of 4,654, leaving less than 979 or 21 per cent. to be attended by medical men and uncertified midwives.

Sending for Medical Help by Midwives.—An analysis of the reasons for sending for medical help has been made and is given in the following statement. The information available is frequently insufficient.

For Mother.

During pregnancy		68
Haemorrhage	24	
Threatened abortion	31	
Accident	3	
Varicose veins	6	
Convulsions	2	
Deformity	1	
Other causes	1	

At Labour		494
Premature labour	21	
Uterine inertia and prolonged labour	197	
Abortions, miscarriages and still-births ..	27	
Abnormal presentation	35	
Placenta praevia..	5	
Haemorrhage	17	
Convulsions	5	
Ruptured perinaeum	112	
Adherent placenta and retained membranes	40	
Other causes	35	
After Labour		29
Rise of temperature	27	
Other causes	2	
For Child		143
Feebleness	60	
Malformation	17	
Discharge from eyes	56	
Convulsions	5	
Other causes	5	

Analysis of the 76 notifications of still-births sent in by midwives shows that—

35 were at full time ; 39 premature ; in 2 no statement.

The condition of the child pointed to—

Death during labour or shortly before in 38 ; death some time before labour in 36 ; in 2 there was no indication given.

The presentations were :—head 49, breech 18. In 9 cases the presentations were not mentioned.

The sex of the children was as follows :—males 40, females 35 ; 1 not stated.

These figures, although incomplete, are of some value in showing the number of children that might have possibly been saved if skilful attendance had been available at the time of confinement.

The prevention of still-births is a part of the general question of the care of women during pregnancy, and is receiving attention under the scheme of Maternity and Child Welfare.

As a proportion of cases of miscarriages and still-births are due to venereal diseases and can be prevented by suitable treatment from occurring in subsequent confinements, it is most important that inquiries should be so directed that these cases shall have appropriate treatment. These inquiries, however, need to be conducted with the greatest care, and can only be made by or with the consent of, the medical attendant. All a midwife can do is to advise the patient to consult her medical attendant or to attend at a welfare centre. The question of obtaining specimens for pathological examination from the placenta or maternal blood is receiving consideration. When it is sufficiently realised that a pregnant woman suffering from syphilis if put under complete treatment, will give birth to a healthy child instead of to a still-born child, or a child that will die in a few months or suffer from very serious disability throughout life, every facility for discovering and treating these cases will be insisted upon.

This work may be helped forward by analysing the notification of still-births and miscarriages that have occurred during the last few years.

Puerperal Fever.—Fourteen cases were notified, compared with 26 in 1920. Two cases were attended by trained midwives, and 12 by medical practitioners alone.

Other Accidents of Parturition.—There were 18 deaths of women under this heading during the year. Only two out of the 18 cases were in urban districts. This might appear to be due to the lack of prompt skilled medical attendance in the rural districts, but the figures for the previous two years showed no corresponding excess in rural districts.

Present Supply of Midwives.—In June, 1922, there were 240 midwives registered as practising in the County, compared with 240 at a corresponding period in 1921.

MIDWIVES GROUPED ACCORDING TO NUMBER OF CONFINEMENTS THEY ATTENDED IN 1921.

(*a*) TRAINED MIDWIVES.

Number who have attended				no confinements								17
,,	,,	,,	,,	less than	10	confinements						67
,,	,,	,,	,,	between	10	and 20	confinements					64
,,	,,	,,	,,	,,	20	and 30	,,					28
,,	,,	,,	,,	,,	30	and 40	,,					16
,,	,,	,,	,,	,,	40	and 50	,,					6
,,	,,	,,	,,	,,	50	and 60	,,					6
,,	,,	,,	,,	,,	60	and 70	,,					3
,,	,,	,,	,,	,,	70	and 100	,,					6
,,	,,	,,	,,	,,	over 100		,,					1

Ten midwives were brought before the Local Supervising Authority during the year. Three of these midwives were eventually struck off the roll. Four midwives were asked to send in their resignations owing to age and inability to carry out the rules. These resignations have been received. Three midwives were cautioned.

The number of midwives trained or taken over during the five years was as follows:—

	Trained by County Council and Shropshire Nursing Federation.	Taken over from Rural Midwives Association and paid for by County Council and Shropshire Nursing Federation.
1916 ..	9	2
1917 ..	12	4
1918 ..	6	3
1919 ..	7	2
1920 ..	13	2
1921 ..	14	0

TUBERCULOSIS.

A fairly full statement was made in last year's report upon the relative importance of the factors concerned in the production of tuberculosis and of the measures to be taken for prevention. This will not be re-stated in full, but reference can be made to the annual report for 1920, pages 21 and 22.

Leaving out of account the national economic factors which govern the spending power of the community, and of housing, food, etc., which depend to a considerable extent on these economic factors, there can be little doubt that education directed to a better knowledge of the fundamental laws of healthy living and to teaching the way in which tuberculosis is spread, and how it can be prevented, will be found to be the most powerful means of combating the disease. In this

educational campaign, which is going on more or less silently the whole time, the Shirlett Sanatorium, the After-Care Committees, both local and central, the Tuberculosis Dispensaries, the Child Welfare Centres, the work of the health visitors and medical officers, both in the schools and the homes, all play an important part. The teaching of the whole community is perhaps more important than the special measures directed to known cases and their surroundings. For this reason the maternity and child welfare work, particularly the home visiting by the health visitor should, when perfected, have a marked influence. Next to education are the measures directed to the prevention of intense infection and particularly the protection of children. Special education helps greatly in this direction, but more beds are required for the isolation of dangerously infectious cases. Shortage of beds for this purpose is the greatest defect in our scheme.

As the other measures for the prevention of tuberculosis become more and more perfected, the question of some form of regulated protective inoculation instead of the present haphazard infection assumes more and more importance. It is not inoculation to take the place of other measures, but to supplement them and to prevent a condition that may arise, if the preventive measures we are taking should produce a large number of persons quite free from tuberculous infections, and consequently highly susceptible to tuberculosis.

On this point I said in my annual report for last year :—" In towns, particularly, almost every person becomes infected in some degree before adult life, and the question naturally arises whether the minimum infections to which sooner or later we are almost all subject to, should not be administered in such a manner as regards the dose and virulence of the organism, and the age and environment of the individual, that the danger of serious disease arising would be negligible. *This is the most important matter in the prevention of tuberculosis that awaits decision.*"

In summarising the position in the report for 1920, I said :—" In reviewing this statement in the light of our present measures, it is apparent that there is much work in the prevention of tuberculosis that is at present left undone or is imperfectly done. It becomes obvious too that perhaps the most important and most permanent work in its prevention, is work not directly undertaken for this object ; such work as the improvement of houses and environment generally, educational work as to the value of food, exercise and fresh air, maternity and child welfare work, dental and throat treatment."

Education of the public as to food and exercise is dealt with in another part of the report. This is probably one of the most hopeful ways of attacking all forms of chronic infection.

If the present dental scheme could be extended later on to form the nucleus of a public dental service, it would prove a powerful aid in our fight against tuberculosis.

As regards the measures directed specially against tuberculosis, improvement is needed in the following directions :—

1. An increased number of beds for isolation purposes.
2. An institution for children requiring open air treatment, including those suspected of tuberculosis.
3. Observation beds near Shrewsbury, and facilities for X-ray examination and for treatment of pneumothorax.
4. More complete and prompt notification.
5. More complete bacteriological examination of sputum.
6. More perfect arrangements for the examination of contacts and suspects, including school children.

Whereas the first three measures would necessitate the expenditure of a considerable amount of money, and perhaps will have to stand over for a time, the three last are matters to a great extent of arrangement and administration, and are being taken in hand.

The following is an analysis of the cases admitted to Shirlett Sanatorium from its opening in 1911 until the end of 1921 :—

SHIRLETT SANATORIUM, 1911—1921.

Year	Patients Treated.	Known to be Alive.	Known to be Dead.	Left County.	Unaccounted for.	Cases notified.	Percentage treated at Shirlett.
1911	38	11	19	7	1	..	..
1912	74	40	27	4	3	439	16.8
1913	80	39	35	5	1	290	27.5
1914	114	50	57	6	1	267	42.6
1915	133	68	54	11	..	381	34.9
1916	158	81	61	16	..	392	40.3
1917	164	105	52	7	..	403	40.6
1918	124	79	29	16	..	425	29.1
1919	123	82	24	17	..	341	36.0
1920	120	89	25	6	..	325	36.9
1921	121	106	12	3	..	318	38.0
Total	1249	750	395	98	6	..	..

Incidence.—During the year 318 cases of pulmonary tuberculosis and 112 cases of other forms of tuberculosis were notified. There were 144 deaths from pulmonary tuberculosis and 12 deaths from other forms of tuberculosis.

TABLE V.

Notifications Classified for Age and Sex.

Age Periods.	Notifications on Form **A.**												
	Number of Primary Notifications.												Total Notifications on Form **A.**
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	Total Primary Notifications.	
Pulmonary Males	..	6	6	11	14	21	32	32	21	10	1	154	162
,, Females ..	..	4	12	7	19	27	33	26	13	12	2	155	162
Non-pulmonary Males ..	3	9	9	13	2	4	3	1	3	1	..	48	49
,, Females ..	2	5	9	15	10	11	8	2	1	1	..	64	67

Age Periods.	Notifications on Form **B.**				Number of Notifications on Form **C.**	
	Number of Primary Notifications.			Total Notifications on Form **B.**	Poor Law Institutions.	Sanatoria.
	Under 5	5 to 10	10 to 15	Total Primary Notifications.		
Pulmonary Males	..	..	..	..	..	..	62
,, Females ..	..	..	..	..	..	2	59
Non-pulmonary Males ..	..	1	..	1	1	..	2*
,, Females ..	..	..	..	..	..	..	1*

*These numbers do not represent the cases of non-pulmonary tuberculosis admitted to sanatoria. The numbers are 53 males and 51 females. The sanatorium concerned has failed to notify the Medical Officers of Health of the Districts from which the cases were admitted. This is now being properly carried out.

TABLE VI.

Year of Notification.	PERCENTAGES OF PATIENTS KNOWN TO BE ALIVE AT END OF :—									
	The Year of Notification.	1st year after Notification.	2nd year after Notification.	3rd year after Notification.	4th year after Notification.	5th year after Notification.	6th year after Notification.	7th year after Notification.	8th year after Notification.	9th year after Notification.
1912	72.3	63.5	53.1	49.3	47.3	46.4	44.4	44.2	43.8	43.1
1913	82.5	64.4	59.6	56.7	55.9	52.3	50.7	49.6	48.7	
1914	72.8	58.2	53.5	51.1	48.0	45.5	44.6	43.6		
1915	76.2	61.9	57.0	52.8	49.0	46.7	46.4			
1916	78.5	65.8	59.9	56.5	55.3	53.6				
1917	76.6	64.3	56.8	54.3	52.9					
1918	76.7	67.1	63.0	60.1						
1919	78.9	72.2	65.5							
1920	71.2	60.7								
1921	78.2									

For the purpose of this table those cases that have left the County or in which the diagnosis was wrong have been excluded.

TABLE VII.

AFTER-HISTORY OF NOTIFIED CASES SINCE 1912.

Year	No. of cases notified in year	Number of cases that died in years										Known to be alive at end of years										Left County and wrongly diagnosed.	Unaccounted for.
		1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921		
1912	439	117	36	43	15	8	4	8	1	1	3	306	266	222	205	197	193	185	184	182	179	7	17
1913	290		50	51	12	8	2	9	4	3	2		236	183	167	159	156	145	140	137	134	12	3
1914	267			73	34	12	6	8	6	1	2			188	149	137	131	123	116	113	110	12	3
1915	381				89	49	17	14	12	7	1				286	225	206	189	174	165	164	23	5
1916	392					81	44	20	11	4	6					297	141	217	203	198	192	30	4
1917	403						90	44	29	5	5						298	243	209	200	195	34	1
1918	425							93	42	6	10							306	251	241	228	46	..
1919	341								67	21	19								252	229	204	30	..
1920	325									90	30									223	186	19	..
1921	318										66										238	14	..

Comparison of Pulmonary Tuberculosis with previous years :—

Years.	Cases notified.	Deaths.	Years.	Cases notified.	Deaths.
1906	2	253	*1912	439	208
1907	3	236	1913	320	146
1908	33	230	1914	295	204
1909	32	225	1915	379	214
1910	19	206	1916	364	206
1911	103	216	1917	406	199
			1918	425	222
			1919	341	171
			1920	325	138
			1921	318	144
	Average	228		Average	185

* Compulsory notification commenced in 1912.

It will be seen that there has been a very considerable decrease in the number of deaths since compulsory notification came into force.

Analysis of the cases notified during the year shows that 12 were notified after death, 3 on day of death, 4 less than a week before death, 4 between one and two weeks before death, 9 within a month of death, and 13 within three months of death. Some of the cases of late notification are due to the fact that a medical practitioner was not called in until shortly before death.

Enforcement of notification is a duty of the Local Sanitary Authorities. The County Council has on several occasions circularised the profession pointing out the importance of early notification, and there is reason for thinking with good results.

No less than 73 of the cases were notified by the Tuberculosis Officers.

ANNUAL DEATHS FOR THE SIX YEARS 1916—1921 INCLUSIVE, CLASSIFIED IN AGE PERIODS, SEX, AND URBAN AND RURAL DISTRICTS.

	URBAN DISTRICTS.												RURAL DISTRICTS.											
	All ages.		0—		15—		25—		45—		65—		All ages.		0—		15—		25—		45—		65—	
Year	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1916	48	58	2	3	8	8	28	32	8	14	2	1	52	48		4	3	11	24	21	21	9	4	
1917	55	52	4	7	7	10	24	24	18	10	2	1	44	48	1		6	13	19	27	14	8	4	
1918	62	52	6	6	8	12	32	25	12	7	4	2	47	61	1	4	13	21	17	28	15	8	1	
1919	52	42	1	5	10	14	15	18	19	3	7	2	42	35	2	3	14	9	19	17	6	6	1	
1920	47	28	5	3	3	7	21	8	14	6	4	4	32	36		3	6	10	15	16	8	6	3	
1921	40	34		3	6	7	12	14	22	9		1	39	37	2		9	12	20	19	8	5		
Average ..	50	44											42	44										

This table is of interest in many directions. It bears out what has been noticed throughout the country that men suffer more than women in urban districts, but that in rural districts there is no marked inequality of rates. In the urban districts men are more exposed to workshop and general occupational infection. This being mainly an agricultural county, the difference between male and female mortality is not great.

Position of Scheme.—A full description of the scheme was given in the Annual Report for 1918. Since then a dispensary has been opened at Wellington; arrangements have been made for the examination of patients, suspects and contacts once a month at Whitchurch and Ludlow Centres. Similar arrangements are made from time to time at other centres, *e.g.*, Bridgnorth and Ironbridge. In this manner the Tuberculosis Officers are able to examine patients and particularly the referred school children in a much more efficient and expeditious manner.

The following quotation from my last report deals with another important defect in our present arrangements :—

" It is allowed on every hand that one of the principal difficulties of dealing with consumptive persons is that on discharge from the Sanatorium they cannot under existing circumstances be prevented from going back to their previous unsatisfactory housing and other conditions. The provision of farm colonies and other similar provision will only deal with a fraction of the cases. Nor is there any likelihood that phthisical persons will benefit by the municipal housing schemes, unless there is legislation in their favour. The selective action of the housing authorities will frequently be exercised in excluding these families. There can be no doubt, however, that the best and cheapest way of dealing with such families is to provide a healthy dwelling with a garden sufficient for the use of a shelter. The Government is bearing most of the financial loss on the housing scheme, and the Government should see that the schemes are a means of removing phthisis families from slum houses, thus both diminishing the risk of the spread of infection and giving the discharged sanatorium patient the possibility of continuing a sanatorium life. Sanitary Authorities should also bear in mind that they are responsible for the satisfactory housing of consumptive persons."

All the Sanitary Authorities have been circularised and many of them have replied that they will do what is possible to carry out the views stated above.

On this point Dr. Watkin says :—

" I communicated with the Medical Officer of Health for the Borough of Shrewsbury, with regard to allocating one of the new Corporation Houses to a family living in an insanitary and overcrowded house, one member of which was suffering from consumption. The Medical Officer of Health was successful in obtaining one of the new houses for this family.

The difficulty in many of these cases, however, is that the family are unable to pay such high rents."

A grant from the Sanitary Authority of a few shillings a week to enable a phthisical family to pay a higher rent for a suitable house would probably be one of the most economical and effective way of spending money in the prevention of phthisis.

Analysis of the home conditions shows that of the patients visited for the first time in 1921 :

109 had separate bedrooms.
43 shared bedrooms but had a separate bed.
85 shared beds.

When one considers the smallness, bad ventilation and bad construction of many of these bedrooms, it is obvious that the chances of the spread of the disease are great.

Work under the Scheme.—A full description of the work of the Tuberculosis Officers and Health Visitors appeared in the report for 1918. In addition to the work there set out, each of the Tuberculosis Officers now attends at the Pensions Board for one half-day per week, and one of the Tuberculosis Officers (Dr. Elliott) has superintendent duties in connection with the Shirlett Sanatorium and the Prees Heath Hospital for advanced cases of consumption.

Dispensaries.

SHREWSBURY.

	Insured.	Non-insured.	School Children.	Total.
Number of patients who attended in 1921 for the first time	63	47	66	176
Attendances during 1921	791	241	766	1798

OSWESTRY.

Number of patients who attended in 1921 for the first time	36	27	52	115
Attendances during 1921	256	147	232	635

WELLINGTON.

Number of patients who attended in 1921 for the first time	125	66	151	342
Attendances during 1921	566	233	787	1586

Examination Centres (open once a month).

WHITCHURCH (opened 6th July, 1921).

	Ins.	Non-Ins.	School Children.	Total.
Number of patients who attended in 1921 for the first time	5	6	17	28
Attendances during 1921	8	9	35	52

LUDLOW (opened 18th October, 1921).

Number of patients who attended in 1921 for the first time	9	1	7	17
Attendances during 1921	16	5	16	37

VISITS BY THE TUBERCULOSIS MEDICAL OFFICERS IN 1921.

To Insured Patients.					To Non-Insured Patients.					To School Children.				
Notified cases.	Contacts.	Suspects.	On discharge from Sanatorium.	On other occasions.	On notification.	Contacts.	Suspects.	On discharge from Sanatorium.	On other occasions.	On notification.	Contacts.	Suspects.	On discharge from Sanatorium.	Other occasions.
115	13	25	36	485	51	29	13	17	200	42	40	160	7	1
		674					310					387		
							1371							

VISITS BY HEALTH VISITORS TO PHTHISIS HOUSES IN 1921.

To Insured Patients.	To Non-Insured Patients.	To School Children.	Total.
1638	1005	796	3439

King Edward VII. Sanatorium (Shirlett).—The number of patients admitted to the Sanatorium in 1921 was 121, and consisted of :—

Insured patients—Males	51
,, ,, Females	20
Non-insured patients—Males	12
,, ,, Females	38

Length of Stay in Sanatorium.	*Length of stay in days.*
Cases in which permanent recovery may usually be anticipated	184.4
Cases in which temporary though possible prolonged improvement may be anticipated	186.9
Cases admitted for educational purposes	58.4
All patients	175.5

The percentage of cases discharged as "arrested," and without tubercle bacilli in the sputum was 28, compared with 48 in 1920, 49 in 1919, 56 in 1918.

The other sanatorium tables have not been repeated this year, but can be found by reference to the Sanatorium Report.

It is gratifying to know that no patient in whom there was a reasonable prospect of arrest or cure of the disease was discharged owing to lack of accommodation, and that the waiting list was always small, so that patients were never kept waiting any considerable length of time.

The policy of concentrating more on the preventive treatment in children and limiting prolonged treatment in adult cases to those who have a distinct chance of recovering has been adopted. This policy means that adults without any real prospect of recovery are kept in as a rule for a month's educational training only, but the rule is varied to some extent where definite and rapid progress is being made. By this means more accommodation is available for children in whom a definite recovery can be expected.

The difficulty in this line of action is to discover the children, who if not dealt with in this manner would be likely to break down in early adult life. The Lady Forester Hospital at Wenlock would have provided accommodation for this purpose in a perfect manner—any infectious cases being sent as at present to Shirlett.

Shropshire Orthopaedic Hospital.—Ninety-nine cases were sent to this hospital by the County Council in 1921. The average length of stay of these cases was 165 days, and the average number of beds occupied 44. The cases were :—

Tuberculosis of the hip 36, spine 28, knee 14, other joints and bones 21.

Further details are given in the table on page 13.

The number of cases under supervision at the various after-care centres was 556 in September, 1921.

Shelters.—There are at present over 112 shelters in the County. The County Council have provided 97 ; Shrewsbury Borough 4 ; Atcham Rural District 2 ; Whitchurch Urban District Council 2 ; Drayton Rural and Urban District Councils 2 ; Chirbury Rural District Council 1 ; the Ludlow Care Committee 5 ; in addition several have been provided by private individuals. Shelters were originally provided for curative purposes, either for patients who could not go to the sanatorium or for patients on their discharge, but perhaps an even more valuable use for shelters is in providing living and sleeping accommodation for highly infectious cases. The removal of such a case from a crowded household into a shelter not only removes a most dangerous source of infection, but also provides more room for the remainder of the occupants, and thus

reduces overcrowding. There will always remain a considerable number of cases that cannot be dealt with at home by means of shelters, including especially those cases where the mother of a family is the person affected, and those in which the surroundings of the home do not permit of the use of a shelter. For all these, hospital beds are essential.

The use of shelters for the prevention of infection hardly appears to have received sufficient attention. It is one of the most important functions of shelters. Probably the best use to which shelters can be put is the provision of sleeping accommodation for children living in an overcrowded 'phthisis' home. The Health Visitors are being directed to give special attention to this matter. It is, however, full of difficulties.

The complete embargo on the provision of shelters should now be removed. Shelters are a very economical and efficient way of preventing infection and overcrowding.

Care Scheme.—A Central Care Committee and local Care Committees covering the whole County, have been appointed. Broadly speaking, the object of these Committees is to keep in touch with the cases of phthisis throughout the County and by means of advice and help to enable the patients to live as far as possible a "sanatorium life"; and also to report unfavourable conditions that they cannot remedy.

Reference should be made to the last report for details of the reorganised scheme.

Disinfection of Houses.—Much correspondence has taken place between the County Council and Local Sanitary Authorities on this matter.

It was suggested by me that phthisis houses should be disinfected on the following occasions:

1.—On notification of the case.
2.—During progress of the case, to be determined by the nature of the case and its surroundings.
3.—On removal to the sanatorium or change of address.
4.—After death.
5.—Disinfection of shelter when it has ceased to be used.

All authorities have not yet signified their willingness to carry out the disinfection here described. Efforts are being made to get disinfection carried out satisfactorily in all districts.

Examination of Sputum.—It is recognised as of the utmost importance that sputum, if present, should be examined in every case of phthisis, and that the examination should be repeated as often as may be necessary to determine the progress of the case or its infectiousness. The County Council have for many years provided facilities for examination of sputum, and practitioners are urged to make the fullest use of these facilities in every case.

Arrangements have now been made so that with the consent of the practitioners, the health visitor takes specimens when required. In this way specimens should be obtained in all cases where there is any sputum to examine.

SPUTUM EXAMINATIONS, 1921.

No. of Patients.	Cases examined.		Cases in which there was no sputum.	Not Examined.	In Institutions (Bicton, &c.)
	Positive.	Negative.			
318	121	60	65	55**	17

** Of the 55 cases not examined, there was objection by the Private Practitioners concerned in 9 cases; in 7 cases the Notifications were received after death; and in 23 cases the patients have died or left the County, thus leaving only 16 unaccounted for.

The following statement taken from my last year's report deals with such an important matter that it is again repeated :—

Milk Supply in Country Districts.

Now that it is proved that either dairy produce and eggs, or green vegetables in quantities much greater than are consumed by persons in this country are essential for satisfactory growth and development, it should be one of the first aims of public health authorities to see that the supply of milk shall be increased and improved in every possible way.

In towns the problem is an economic and an educational one.

In country districts there is the additional difficulty that there is no retail distribution. The farmer generally prefers to sell his milk in bulk, and the purchaser of small quantities is often looked upon as a nuisance and sometimes refused a supply. He often has to send a considerable distance for his daily supply, at a time convenient to the farmer, and has usually to pay ready money. For these reasons and on account of the high price of milk as a food, the country wage earner and his family usually do with a very small quantity of milk. To this must be greatly attributed the poor physical development of the inhabitants of rural districts—poor considering the advantages they have in many respects.

It appears as if the only solution of this question in country districts is to be found in the keeping of goats by a large proportion of the householders who have a grass patch sufficiently large.

The advantages would be enormous. A goat will supply sufficient milk for a fairly large family. The milk would be absolutely fresh—a most important point—free from dirt, as the milk of animals kept singly and in the open air always is, unless there is gross carelessness ; and almost with certainty free from tubercle. The milk too, is as nutritious and wholesome, and in some respects richer, than cows' milk. The trouble of milking and looking after the goat is probably less than the trouble of sending half a mile for the milk. When one adds to all this, the fact that it can be produced by the cottager at much less than the price of cows' milk, one can see that there are great possibilities.

I can conceive no single influence that would cause so much improvement in the health of the people as the consumption of one or two quarts of *fresh* milk by every household. In country districts, by the keeping of goats, this is possible, and at the same time the people would be enriched by obtaining an extremely valuable food at a low cost.

As a sufficient supply of good clean milk is one of the most important parts of the treatment of tuberculosis, it appears desirable that the Sanatorium should take a prominent part in popularising the keeping of goats. This might be done by keeping one or more goats at the Sanatorium so as to familiarise the patients with the management of goats and the benefits to be derived from keeping them. If a proportion of patients discharged from the Sanatorium could be persuaded to keep goats, a great impetus would be given to the movement, with undoubted benefit not only to the consumptive person but the community generally.

A commencement has been made at the Sanatorium.

VENEREAL DISEASE.

No additions have been made to the scheme described in my report for 1917. It consists of :

(1) Provision of facilities for diagnosis in connection with the Birmingham University.

(2) Provision for treatment at—

(*a*) The County Council Clinic, Belmont, Shrewsbury.
(*b*) Wolverhampton and Staffordshire General Hospital.
(*c*) Arrangements with the surrounding hospitals.

(*d*) Arrangements by which girls without homes and suffering from venereal disease can be sent to a Home at Wolverhampton provided by the Lichfield Diocesan Society, for treatment and training; the Home also provides treatment for pregnant women suffering from venereal disease.

(3) Arrangements for supplying Salvarsan substitutes to Medical practitioners.

(4) The formation of a Propaganda Committee as a Branch of the National Council for Combating Venereal Diseases, and the formation of nine sub-branches to cover the County.

No subsidiary clinics have so far been started.

In my report for last year I said :—

Apart from the establishment of clinics there is much work to be done if our knowledge of the treatment of venereal disease is to be utilised to the utmost.

In out of the way districts it is particularly important that some scheme should be devised by which the co-operation of the private practitioner can be obtained. This is essential with regard to gonorrhoea.

Investigations should be carried out into the causes of still-births and miscarriages, with the object of getting appropriate treatment if venereal disease exists. Investigation should be made of all mentally defectives for purposes of information and treatment if desirable. All cases of blindness and nerve deafness should be investigated for similar purposes.

Cases of congenital syphilis in school children should be made a starting point for inquiry and treatment.

An almost equally important matter is the training of the midwives in the knowledge of venereal disease, the significance of miscarriages and how to proceed. None of this work can be done merely by the establishment of clinics and the appointment of clinical officers. *The services of a special officer are required, whose business it would be, in addition to treatment at the clinics, to do everything in his power to get the persons suffering from venereal disease under treatment and keep them under treatment until cured.*

These are matters that require the utmost tact and knowledge of how to proceed, in addition to a good knowledge of the diagnosis and treatment of venereal disease.

As there seems to be no probability of getting a special officer for some time, it is intended to utilise the maternity and child welfare centres and school clinics so far as possible in dealing with these diseases amongst children and expectant and nursing mothers.

CASES OF VENEREAL DISEASE TREATED DURING 1921.

Shrewsbury Clinic.			Wolverhampton and Staffordshire General Hospital. Shropshire Patients.			Kidderminster Infirmary. Shropshire Patients.		
	Cases.	Attendances		*Cases.	Attendances		*Cases.	Attendanc
Syphilis	265	1532	Syphilis	8	..	Syphilis	4	..
Gonorrhoea	244	6201	Gonorrhoea	12	..	Gonorrhoea	0	..
Other conditions	26	62	Other conditions	9	..	Other conditions	0	..
Total	535	7795		29	784		4	22

* At these Clinics the number of cases refers only to those attending for the first time in 1921.

The number of patients attending the clinic and the number of attendances showed a very considerable increase over the year 1920.

The weakest point in our provision of treatment is the small number of women treated and the impossibility with our present means of treating gonorrhoea in women satisfactorily. For this purpose in-patient treatment at an early stage is almost an essential.

Another weak point is the lack of any systematic intermediate treatmemt of gonorrhoea in men, but to remedy this the provision of a male orderly to attend to the daily irrigation of males is now under consideration.

The Shrewsbury Centre has not so far been utilised for postgraduate classes.

With these exceptions the Centre has been most successful.

Pathological material sent to Birmingham University for examination during 1921 :—

Nature of Test.	Number of Tests.
For detection of gonococci	235
For detection of spirochetes ..	2
For Wassermann reaction	487
Gonococcus Complement Fixation Tests	110

Cleveland House, Wolverhampton.—This Hostel is for Venereal Disease amongst girls without homes, and pregnant women. It has proved most useful, and the work, particularly in the treatment of pregnant women to save the infants from disease, is of fundamental importance. During the year 18 cases were admitted from this County, 8 of pregnant women and 10 of girls without suitable homes. 1 patient was suffering from syphilis, 13 from gonorrhoea, and 4 from both diseases.

Propaganda.—The Organiser from the National Council for Combating Venereal Diseases at the request of the Committee visited the County and attended meetings of the local committees at eight centres. As a result of these meetings the following programme was carried out :— The film, " The Gift of Life," was shown at Wellington, Whitchurch, Market Drayton, Shrewsbury, and Oswestry, and in connection with it, addresses were given by Sir Francis Champneys, Dr. Wright, and the Organiser, Mrs. Adney. Addresses were also given at Ludlow and Ruyton-xi-Towns by Mrs. Adney. The attendances at all the meetings were very satisfactory.

BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

Examinations ore made by the Birmingham University under an agreement with the County Council.

Quarters of 1921.	For Typhoid Fever. Widal's Reaction.		For Diphtheria.		For Phthisis.	
	Positive.	Negative.	Positive.	Negative.	Positive.	Negative.
First	3	25	88	364	35	143
Second	0	7	57	133	32	121
Third	1	17	72	220	37	157
Fourth	0	17	86	256	24	101
Whole year..	4	66	303	973	128	522
	70		1276		650	

Twenty-one other disease products were examined and reported on.

Thirty-six specimens of sputum were examined at the Tuberculosis Dispensary with the following results :—Four positive and 32 negative.

THE PREVENTION OF DENTAL CARIES.

In my last report I said :—

It is a matter for great congratulation that the Ministry of Health have appointed a Committee to investigate the causes of dental decay.

As a result it is hoped that a definite pronouncement will be made and that the subject will receive that attention from Sanitary and Education Authorities that its extreme importance demands. For the last 10 or more years efforts have been made through the schools and by means of the health visitors to teach the prevention of dental caries on physiological lines. Simple rules of prevention have been drawn up and supplied to the schools and to the health visitors. The directions to the health visitor are to leave these at every house where there are young children and explain them. In addition lectures have been given by the medical staff to school teachers, to nurses, to mothers at the Child Welfare Centres and by the County Council health lecturer to the children at the schools.

This teaching is regarded as one of the most important duties of the health visitors. There is reason to think that there has been a considerable improvement in the teeth of the children of the County.

ALCOHOL AND PUBLIC HEALTH.

I again repeat the statement on this subject which appeared in my report for 1917 in the hope that the matter may be brought more prominently before the public.

The interim report of the Advisory Committee appointed by the Central Control Board (Liquor Traffic) will give that impartial statement regarding the effect of alcohol upon the human body and on society, which is so necessary as a basis for any action by a public health authority. Hitherto the public have been bewildered by the one-sided statements of enthusiasts for reform and of their opponents.

In this report the subject is set out in a simple and yet scientific manner. It may, with confidence, be accepted as a correct statement of fact, and no effort should be spared to make its main conclusions widely known.

Undoubtedly the abuse of alcohol is a factor in public health of the widest importance. It enters into almost all the large public health questions. To mention one only—the effect of bad housing on the production of alcoholism, and the effect of alcoholism in the production of bad housing conditions, is one of the most interesting examples of the cumulative result of two adverse conditions acting and re-acting upon one another.

The abuse or misuse of alcohol affects the health of the public broadly in five ways :—

(1) It directly affects the physical and mental health of the individual, frequently causing disease, lower vitality and premature death.
(2) In a large number of families the expenditure on alcohol leaves an insufficient income for feeding and clothing the family, with the resultant evils of underfeeding, underclothing, etc.
(3) The standard of cleanliness and general household management is greatly lowered in a house where alcohol is consumed in excessive quantities, particularly if this excess is committed by the housewife.
(4) The abuse very materially lessens the productive power of the nation, on which efficient housing, feeding, clothing and all other material comforts and services entirely depend.
(5) The expenditure on the production of alcohol in the present excessive quantity is a considerable strain upon the productive power.

All our efforts with regard to public health will fail unless production is maintained and increased, for it is on increased production that the possibility of providing better housing and sanitation, better food and clothing, better education and better medical supervision and attendance entirely depend. It is for this reason, as well as the direct poisonous effect of excess of alcohol upon the individual, that this subject is one of supreme importance to the nation, particularly at the present time.

The statement contained in the preface to the report that the amount spent on alcohol in this country is nearly 50 per cent greater than the traffic receipts of the whole railway system, including both goods and passengers; more than double the expenditure on bread, more than equal to the expenditure on meat and, before the war, it was approximately equal to the total revenue of the State, and was more than eight times the total amount required for interest on the National Debt, shows what immense possibilities there are.

There will, no doubt, be great divergence of opinion as to the social action that is desirable, but most responsible persons will acknowledge that some action is necessary, and that the first step should be an attempt to educate the people with regard to the nature of alcohol, and the results of its abuse upon the individual and the nation.

Since this report was written in 1918 the dependence of our sanitary services and schemes, particularly the more expensive ones, such as housing, upon economic conditions has been clearly demonstrated.

This subject should form an important part of the propaganda work, which in my opinion should have now a foremost place in the duties of public health authorities. So far, action has been confined to sending a copy of the report of the Advisory Committee with this section of my annual report to every school in the County.

EDUCATION IN HEALTH.

Public Health work has been confined in the past almost entirely to improvement of the environment of the people in so far as it can be improved by public authorities, and as a result we are probably one of the best 'protected' peoples in the world. We probably run less risk of infection than any other country with a similar density of population.

This unfortunately does not mean that we can show a corresponding superiority of physique. Our army records and other evidence rather points in the opposite direction. There is undoubtedly marked undergrowth and lack of satisfactory development of a considerable proportion of the people of this country. This is probably principally due to the great urbanisation of the population without the full application of our knowledge to remedy the evils thus produced. Apart from bad housing, the bad effects of urbanisation are brought about by staleness and unsuitability of food, lack of facilities for exercise, and a stagnant smoke-laden atmosphere which prevents the full effect of the sun and wind. To these must be added the great facilities for obtaining alcohol and the very limited facilities for obtaining healthy recreation and amusement.

There can be no doubt that food (including *kind*, quantity, and method of eating) and exercise under fresh air conditions are the governing factors in growth and health. Under the artificial conditions existing in most civilised countries, and particularly in urbanised countries like ours, it is most improtant that research into these health matters should be pushed on vigorously and that all important practical advances should be brought to the knowledge of the people. Important as the work of "protection" is, the most important improvement must come from the efforts of the people themselves. They must be taught the principles of healthy living and made to feel that their health depends mostly on themselves, and to feel also that illness and inefficiency is a disgrace if brought on by their own neglect.

There is a vast amount of knowledge recently acquired with regard to foods of the utmost importance, that we ought to make every effort to bring to the notice of the public in an effective manner.

The effect of exercise on the development of the body and of the maintenance of health throughout life is now much better understood, and should form a very important part of this educational work. Along with this teaching would come naturally an effort to improve the facilities for exercise.

Unfortunately the wrong diseases have been labelled as "preventable." This term has been used for the acute infectious diseases, *e.g.*, measles, whooping cough, scarlet fever, diphtheria, etc. Some of them are perhaps the least preventable of diseases, whereas the majority of diseases not due to acute infections are preventable by proper attention to environment and mode of life. It is, however, a question mostly of personal knowledge and personal effort, always assuming that the facilities for putting the knowledge into practice are available. This is the reason that education in health matters is so important.

As a first step this work should be definitely imposed upon Sanitary Authorities or County Councils and County Borough Councils as part of their duties, and the Ministry of Health should be responsible for half the cost. Even in these times of economy the cost need not frighten one. It would be the most economic form of public health work ever undertaken. In this educational work the health visitors will no doubt take a most important part.

ISOLATION HOSPITALS.

There has been no alterations of the isolation accommodation in the County for small-pox and other diseases since the statement in the last report. Reference should be made for details to pages 40 and 41 of that report.

Plans have been submitted by the Atcham Joint Board to the Ministry of Health for altering the buildings at Monkmoor formerly used as a women's hostel by the Royal Air Force, which have been purchased by the Board. The Monkmoor Hospital has been used on payment by private persons and health authorities outside the area, and has proved a very great convenience.

As regards *Small-pox* the Medical Officer of Health of the Borough of Shrewsbury states :— "Having regard to the fact that vaccination is not now so systematically carried out as formerly, it is very likely that, should an outbreak of small-pox occur, the existing accommodation provided by the Borough will be quite inadequate, and it might be wise to give consideration to this point at an early date."

WATER SUPPLIES.

Under this heading, the most important matters for consideration at the present time are : the provision of (1) a supply for the village of Prees in the Wem Rural District, (2) a supply to the village of Bucknell in the Teme Rural District, (3) a supply to the village of Worthen and Brockton in the Chirbury Rural District.

The following are the principal references to water supplies in the District Medical Officer's Reports :—

Atcham Rural District.—"*Meole Brace*—supply has had to be curtailed by shutting off water from 8 p.m. to 7 a.m. from June to December. This was owing to the drought which commenced in February and continued until November. *Pontesbury Village Supply*—shortage from July until November. All the wells on the hill ran dry with the exception of the Dingle Well. This well was improved by cutting off some sources of contamination. *Bayston Hill* public supply has been very satisfactory, and although most of the private wells failed during the long drought, causing greater demands from the Council's mains, it stood the strain very well. *Plealey Village* well failed entirely from September until March. There was a general shortage at *Bomere Heath.*"

Clun Rural District.—" The private system of supply to Clungunford Village practically failed for three months. The public pumps at Chapel Lawn and Wentnor failed, and the inhabitants had to rely upon private pumps. A few farms and cottages had to carry water considerable distances, as at the Cabin, Hopesay, where the shortage lasted six months. The Council decided to sink a well here. The *Chapel Lawn* supply scheme remained suspended owing to cost of materials."

Ludlow Rural District.—" A well has been sunk near the river at Craven Arms, and a rough test has been made of the yield. I have advised that a sample of the water should be analysed and an engineer be called in to advise the Water Committee on suitable pumping arrangements. Periodically the present supply failed for a day or two during the summer, and some auxiliary supply is very necessary."

Wellington Rural District.—"There has recently been enquiries made by the Ministry in regard to the advantage that would result from pooling the water supplies of contiguous districts. This is an area where excellent results would follow such a policy."

Wenlock Urban District.—" A public Enquiry was held in July on an application for sanction to borrow £10,000 for renewal of pumping plant at the Harrington Water Works, supplying Madeley and Broseley Sanitary Divisions. The work has been put in hand in view of its immediate urgency, and to avoid a breakdown.

" It is satisfactory to note that the Borough Water Engineer's report that the drought of the year did not affect the level or the rate of inflow into the well.

" Public Enquiry was also held as to an application for sanction to borrow £600 for the purpose of developing an additional supply to the town of Much Wenlock from the spring known as the Stretton Road Spout. Sanction was deferred pending further bacteriological investigation. The well was thoroughly cleaned out about the end of the year, and a sample submitted in March of the present year was returned as of very good quality, the total number of bacteria per c.c. being 5, and bacillus coli not found in 100 c.c. The town supply ran low and stringent measures to conserve it were necessary."

Whitchurch Urban District.—" Official enquiry was held and sanction given to borrow £3,000 for new pumping plant.

" A new suction gas plant has been installed at the Fenns Bank Pumping Station, by Messrs. Tangy's, Birmingham, and a new length of 8-inch Cast Iron Pumping Main 240 yards in length laid from the pumping station to the Cambrian Railway embankment, at a total cost of about £3,000.

" We carefully watched the effect of last summer's drought on the bore tubes, but were unable to find any appreciable difference either in the level or yield of the water. I am satisfied owing to the depth of the tubes that the drought did not continue for sufficient length of time to affect the yield.

" By systematic inspection we managed to reduce the waste of water supplied for domestic use to a minimum. Twenty gallons per head per day was the average amount supplied for the whole year."

SEWAGE DISPOSAL AND RIVER POLLUTION.

One of the most difficult problems in the prevention of river pollution is how to deal with the effluent from ' creameries.' These places are not so much ' creameries ' as cheese factories and the by-product is not separated milk, which is of very considerable value, but whey, which the farmers will often not take away. The satisfactory disposal of whey or of the sewage of pigs that are fed on the whey is so very difficult, that Sanitary Authorities should very clearly warn

any persons contemplating the establishment of a cheese factory of the great risk they are running, unless they can dispose of the whole of the whey to farmers or deal efficiently with any sewage from pigs fed on the whey. A letter was written to all the Sanitary Authorities in the County to the following effect in July, 1921 ;—

ERECTION OF CREAMERIES.

"Dear Sir,—Cheese factories, or Creameries, as they are usually called, have been erected in various parts of the County during the last few years, and there is every likelihood that more will be erected in the near future.

It is therefore most desirable that Sanitary Authorities should be fully alive to the highly polluting character of the effluent, and to the fact that there is no known means of treating the effluent so as to make it inocuous when discharged into a stream.

The Ministry of Health in a letter dated July 16th, 1921, say—

'I am directed by the Minister of Health to advert to your letter of the 2nd instant with regard to the pollution of streams by the waste from creameries.

I am to state that this question has been discussed with the Ministry of Agriculture and Fisheries, and although there appears to be no power to prohibit the erection of creameries, local authorities should no doubt, discourage their erection in situations where a nuisance is likely to arise.'

Unless the river in which the effluent is discharged is a very large one, a nuisance must inevitably arise *unless the whole of the whey is very carefully collected and carted away by farmers and pig-keepers.*

Not only is it necessary to deal in this way with the whey discharged from the cheese vats and squeezed from the cheese presses, but also with the washings from the floors of these rooms and the washings from the milk cans.

It should be pointed out to any persons intending to erect a creamery, that this condition must be conformed to, as it is very important that they should understand this from the first, so that they can select a site, where the distribution of the whey amongst pig keepers will not be too difficult.

The other alternative of keeping a large number of pigs on the site is not a desirable one on account of the nuisance that is likely to arise, and to be successful it needs a really efficient sewage-disposal plant.

Yours faithfully,

To the Clerk of each Urban and Rural District Council in the County of Salop." JAMES WHEATLEY.

The outstanding work of sewerage and sewage disposal in the County is the provision of a system for Market Drayton. Dr. Macqueen says :—

"The weekly removal of house refuse and the periodical tar-spraying of the streets have contributed to the improved health conditions of the town. When a scheme has been settled for the sewerage and sewage disposal, and the work completed, still further improvement may be looked for. The establishment of a public abattoir, and the inspection and more humane slaughter of animals for food, and also the need for a public bathing place, are subjects which should deserve the attention of your Council."

Some of the sewage works have hardly been kept up to the pre-war standard. The Urban District of Ludlow is applying for a loan to enable them to efficiently pump the sewage and put the works in order.

The works of the Urban District of Newport do not produce a satisfactory effluent, and were the subject of much complaint.

Wellington Rural District.—" I would again urge on the Council the necessity for the sewering of the main road in Ketley. If the entire scheme is considered too great an expense at present, the plans for the whole should be got out and the work done in sections under the guidance of the Surveyor."

Whitchurch Urban District.—" Sewage Disposal—The larger proportion of the Rising Sun Farm has been re-drained, and if necessary we can deal with the whole of the Town Sewage on the farm, without any fear of polluting the water-courses that surround the farm."

HOUSE ACCOMMODATION.

The housing schemes throughout the County have proved of the greatest benefit. Nor is it a serious argument against the schemes that the houses have not catered for the poorest part of the working classes, and often not for the more permanent inhabitants of the districts. They have undoubtedly lessened to some extent the very serious shortage of houses, but there are some districts, particularly the Borough of Shrewsbury, where the shortage is still very acute. The houses that have been built are on the whole fairly satisfactory, and in particular the arrangement and spacing of the houses is a very great advance on previous building. It would be unfortunate if on account of the present financial stringency houses of inferior type were put up. On the other hand where overcrowding is really acute, it is the first duty of sanitary authorities to make provision.

Cleobury Mortimer Rural District.—" I would suggest that a systematic survey of houses at Cleobury Mortimer should be made, and notices for the thorough repair of those, on which work is outstanding, served.

Ludlow Rural District.—" At Craven Arms there is undoubtedly a need for a considerable addition to the housing accommodation."

Newport Rural District.—" The housing conditions at Donnington Wood cannot be put on a proper basis, till additional houses are erected. Overcrowding is very common and impossible to deal with, under the existing conditions."

Wem Urban.—" The area known as Worrall's Yard, off High Street, would in my opinion constitute a slum area, being dilapidated, congested and without proper lighting and ventilation."

HOUSES BUILT UNDER THE MINISTRY OF HEALTH'S SCHEME UP TO THE END OF 1921, AND HOUSES BUILT BY PRIVATE ENTERPRISE IN 1921.

URBAN DISTRICTS.	Total number of houses erected under Ministry of Health's Schemes up to the end of 1921	Total number of houses erected in 1921 by private enterprise	Total	RURAL DISTRICTS.	Total number of houses erected under Ministry of Health's Schemes up to the end of 1921	Total number of houses erected in 1921 by private enterprise	Total
Bishop's Castle	0	0	0	Atcham ..	90	114	204
Bridgnorth ..	0	0	0	Bridgnorth ..	0	0	0
Church Stretton	6	2	8	Burford ..	0	0	0
Dawley ..	0	1	1	Chirbury ..	0	1	1
Ellesmere ..	4	..	4	Church Stretton	10	2	12
Ludlow ..	22	..	22	Cleobury Mortimer ..	16	1	17
Market Drayton	14	1	15	Clun ..	0	3	3
Newport ..	14	0	14	Drayton ..	19	4	23
Oakengates ..	130	4	134	Ellesmere ..	..	4	4
Oswestry ..	25	3	28	Ludlow ..	18	8	26
Shrewsbury ..	234	9	243	Newport ..	0	7	7
Wellington ..	22	7	29	Oswestry ..	20	9	29
Wem ..	9	0	9	Shifnal ..	0	8	8
Wenlock ..	0	0	0	Teme ..	0	2	2
Whitchurch ..	41	6	47	Wellington ..	50	2	52
				Wem ..	0	3	3
				Whitchurch* ..	36	0	36
Total ..	521	33	554	Total ..	259	168	427

*In addition 2 brick and 2 wooden bungalows have been built and approved for periods of 5 years and 3 years respectively.

The total number of houses built in the whole County including the Ministry of Health's Scheme, private houses and small holdings, is 1,056. This means housing a population of about 5,280.

MILK AND FOOD INSPECTION.

The details of the supervision of *Milk Supplies* is very meagre in the District Medical Officers' reports. No doubt sanitary authorities are waiting for new legislation.

The *Meat Inspection* of the County cannot be considered to be satisfactory, and endeavours are being made to improve it by giving the Sanitary Inspectors an opportunity of increasing their knowledge, and in some districts by attempts to concentrate slaughtering in fewer places.

An epidemic of food poisoning occurred in the Borough of Shrewsbury in October. This was reviewed in my corresponding Quarterly Report. Dr. Smith, the Medical Officer of Health, suggests that the delay that elapsed before the matter came to his notice possibly prevented efficient action, and suggests that food poisoning cases should be notifiable. He also says—"In this connection it is appropriate to again point out that insufficient attention is frequently

given to the preparation and distribution of foods of diverse character. The streets of Shrewsbury are narrow, and on two days in the week numerous cattle, sheep, and other animals are driven through the town to the Smithfield. In consequence, manure is frequently present to a considerable extent in the streets, and it is very undesirable that on a dusty summer's day foods such as ham, cheese, bacon, pork pies, bread, cakes, butcher's meat and milk should be exposed in the shops or houses to the highly contaminated dust of the general atmosphere. It is a matter of considerable importance, too, that those who handle food in any form should be in good health and acquainted with the elementary rules of personal and general hygiene. It is to be hoped that we shall soon follow the Americans, who have adopted standards of health and cleanliness for those concerned in the preparation and distribution of food to the general public."

FOOD AND DRUGS.

Return of samples taken by members of the Shropshire Constabulary for analysis under the Food and Drugs Act during 1921 :—

Nature of Sample.	Number taken.	Genuine.	Adulterated.	Remarks.
Milk	126	118	8	4 Cautioned. 1 Dismissed. 1 fined £9 4s. 0d. 1 fined 4/- costs. 1 fined £3 0s. 6d.
Butter ..	33	33		
Lard	12	12		
Jam	2	2		
Margarine ..	1	1		
Preserved Cream ..	5	5		
Fresh Cream ..	7	7		
White Pepper	3	3		

Of 115 samples of milk analysed :—

34	contained fat	above	4 per cent.	
43	,, ,,	between	3.5 per cent. and	4 per cent.
30	,, ,,	,,	3.0 ,,	3.5 ,,
8	,, ,,	,,	2.5 ,,	3.0 ,,
0	,, ,,	below	2.5 ,,	
28	,, non-fatty solids		above 9 per cent.	
71	,, ,,	,,	between 8.5 per cent. and 9 per cent.	
16	,, ,,	,,	below 8.5 per cent.	

Report of administration in connection with the Public Health (Milk and Cream) Regulations, 1912, for the year ended December, 1921 :—

1. Milk and Cream not sold as Preserved Cream—

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk	50	*Nil.*
Cream	5	*Nil.*

2. Cream sold as Preserved Cream—

(*a*) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct :

(i) Correct statements made	4
(ii) Statements incorrect	1

(*b*) Determinations made of Milk Fat in Cream sold as Preserved Cream :

(i) Above 35 per cent.	2
(ii) Below 35 per cent.	2
Not stated	1
	5

All samples of cream now taken under these regulations are examined for fat and preservative and proceedings taken where there is any infringement.