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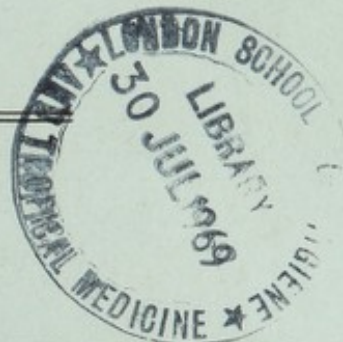
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COUNTY COUNCIL OF SALOP.



ANNUAL REPORT


OF THE

County Medical Officer of Health.

1931.

WILLIAM TAYLOR, M.D., D.P.H.

SHREWSBURY,
August, 1932.



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

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report for 1931, which has been drawn up in accordance with the Memorandum issued by the Ministry of Health ; and I am indebted to the Tuberculosis Medical Officers for assistance in the preparation of that part of the Report which deals with Tuberculosis.

The need for economy has made difficult any considerable development of the work of the Public Health Department at the present time, and no new schemes have been initiated during the year, although the scope of most branches of the work has been gradually extending.

On the coming into force of the Local Government Act, 1929, on 1st April, 1930, the duties in connection with the transferred functions of Vaccination and Infant Life Protection were automatically discharged by the Public Health and Housing Committee ; and under Section 6 of the Act the responsibility for the Domiciliary Relief of the Blind was immediately delegated to it. It has not so far, however, been considered advisable to make any declarations under Section 5 of the Act, but this question must arise on the completion of the scheme of classification of institutions under the Public Assistance Committee.

Under Section 63 of the Local Government Act, 1929, it is the duty of the County Council to prepare for the whole county a scheme for the provision of hospital accommodation for cases of infectious disease. This matter has already been before the Public Health and Housing Committee and has been the subject of negotiations. The completion of this scheme is now one of the most urgent matters demanding the attention of this Committee ; and with it should be considered the question of the establishment of a County Bacteriological Laboratory.

I am,

Your obedient Servant,

WILLIAM TAYLOR.

COUNTY HEALTH OFFICE,
COLLEGE HILL,
SHREWSBURY,

August, 1932.

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Staff.**County Medical Officer of Health and School Medical Officer.**

William Taylor M.D., D.P.H.

Deputy County Medical Officer of Health.

B. A. Astley-Weston M.B., Ch.B., D.P.H.

Tuberculosis Medical Officers.

A. C. Watkin M.R.C.S., L.R.C.P., D.P.H.

T. R. Elliott, L.R.C.P.I., L.R.C.S.I.

Assistant School and Child Welfare Medical Officers.

K. Priestley L.S.A.

Mabel Blake M.B., Ch.B.

§L. Wilson Evans M.C., M.B., B.S., D.P.H.

||W. H. Harris M.B., Ch.B., D.P.H.

C. G. M. Nicol M.B.B.S., D.P.H. (resigned 30th Sept., 1931).

Sydney S. Proctor M.D., D.P.H. (commenced duties 11/1/32).

Dental Surgeons.

Stephen Keenan L.D.S.

Frank H. Birch H.D.D., L.D.S.

Gerald R. Catchpole L.D.S.

Organiser of Physical Training.

Mrs. K. W. Davey Diploma of the Chelsea College of Physical Education.

Inspector of Midwives and County Health Lecturer.

Mrs. E. M. Hart Certificate of the C.M.B. and Sanitary Inspector's Certificate.

Assistant Inspector of Midwives.

Miss G. C. Collins Health Visitors Certificate and Certificate of C.M.B.

County Analyst.

Harold Lowe M.Sc., F.I.C.

Health Visitors and School Nurses.

*†Miss C. M. Bindloss.

Miss E. M. Griffiths.

*†Miss A. K. O'Connell.

*†Miss J. A. Brodersen.

*†Miss G. Gilsenan.

†Miss G. L. Thomas.

*Miss B. Connelly.

†Mrs. M. M. Lowrance.

*Miss E. Davies.

*†Miss M. Dorricott.

*Miss E. Q. Mason.

*Miss M. Parry.

*†Miss E. L. Griffiths.

*Miss G. M. Morgan.

Obstetrical Consultant and Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations, 1926.

R. L. E. Downer M.D., M.B.C.O.G.

Venereal Diseases Medical Officer (part time).

Col. J. Grech D.S.O., M.R.C.S., L.R.C.P.

Sister-in-Charge V.D. Clinic.

Mrs. D. A. Murray S.R.N., F.R.N.

Prees Heath Sanatorium.

Miss M. A. Treble Matron.

County Home for Ailing Babies.

Miss M. L. Crowe Matron.

Berrington Hospital.

Miss J. P. Cochran S.R.N. and C.M.B. Certificate, *Matron.*

G. W. Curtis M.R.C.S., L.R.C.P., *Resident Medical Officer.*

Clerical Staff.

W. H. Jones Chief Clerk, and Ten Assistants.

§ *Also Medical Officer of Health for the Urban and Rural Districts of Oswestry.* || *Also Medical Officer of Health for the Urban and Rural Districts of Ellesmere.* * *Holds C.M.B. Certificate.*

† *Holds Health Visitors Certificate.* ‡ *Holds Certificate of London Obstetrical Society.*

District Medical Officers of Health.

Name.	Address.	District or Districts.				
		Urban.		Rural.		
		Name.	Acreage.	Population (1931 Census)	Name.	Acreage. Population (1931 Census)
J. DALLEWY, M.R.C.S., L.R.C.P.	Wem.	Wem.	452	2,172	Wem.	51,999 8,583
L. E. DICKSON, M.D., M.R.C.S., L.R.C.P.	Bridgnorth.	Bridgnorth.	2,822	5,141	Bridgnorth.	70,717 8,570
L. WILSON EVANS, M.C., M.B., B.S., D.P.H.	Oswestry.	Oswestry.	1,887	9,785	Oswestry.	60,379 16,399
M. GEPP, L.R.C.P., L.R.C.S., D.P.H.	Shrewsbury	Bishop's Castle.	1,867	1,267	Atcham.	125,194 21,981
		Church	978	1,669	Chirbury.	27,045 3,214
		Stretton.	22,657	13,714	Stretton.	45,106 4,517
		Wenlock.	4,783	5,653	Clun.	82,206 6,244
J. A. K. GRIFFITHS, M.B., M.R.C.S., L.R.C.P.	Knighton.	Whitchurch	—	—	Whitchurch	11,702 2,012
		—	—	—	Teme.	23,090 1,649
W. H. HARRIS, M.B., CH.B., D.P.H.	Clive.	Ellesmere.	1,206	1,832	Ellesmere.	51,115 8,009
A. MACQUEEN, M.D.	Market Drayton.	Market Drayton.	1,216	4,714	Drayton.	50,168 7,155
A. D. SYMONS, M.B., D.P.H.	Shrewsbury.	Shrewsbury	3,525	31,006	—	— —
A. E. WHITE, M.B., C.M., L.R.C.P., L.R.C.S., D.P.H.	Wellington	Dawley.	2,790	7,388	Burford.	7,798 1,268
		Ludlow.	420	5,674	Cleobury Mortimer.	44,338 7,299
		Newport.	768	3,054	Ludlow.	66,348 8,980
		Oakengates.	2,329	11,345	Newport.	22,808 5,745
		Wellington.	700	8,146	Shifnal.	39,915 7,670
					Wellington.	33,472 11,207

Poor Law Medical Out-Relief.

Name of Area.	County Districts. comprised in Area.	Acreage.	Population	No. of Relief Districts.	No. of Relieving Officers.	District Medical Officers on 31st December, 1931.
Bridgnorth ..	{ Bridgnorth U. & R. Cleobury Mortimer R.	{ 117,877	20,368	2	2	Dr. G. W. C. Hodges, Dr. L. E. Dickson, Dr. G. R. Kennedy, Dr. R. G. Adden- brooke, Dr. W. A. N. Robinson.
Clun ..	{ Bishop's Castle U. .. Chirbury R. .. Clun R. .. Teme R. ..	{ 134,208	11,923	2	2	Dr. G. Wheldale Stanley, Dr. R. E. G. Phillips, Dr. L. Gameson, Dr. J. Adams, Dr. T. H. Gandy, Dr. G. H. H. Booth, Dr. J. A. K. Griffiths, Dr. W. B. Darroll, Dr. H. R. Cross.
Drayton ..	{ Drayton U. & R. .. Wem U. & R. .. Whitchurch U. & R.	{ 120,320	30,826	2	2	Dr. J. R. Mitchell, Dr. J. Dallewy, Dr. H. G. P. Le Fanu, Dr. V. E. Somerset, Dr. I. B. Richardson, Dr. A. H. Clough, Dr. W. King Hay, Dr. Frances Lilian Lewis, Dr. A. Lees Low, Dr. W. Hall.
Ludlow ..	{ Burford R. .. Church Stretton U. & R. Ludlow U. & R.	{ 120,650	21,707	3	3	Dr. H. Gooch, Dr. J. McClintock, Dr. F. W. Hudson-Bigley, Dr. C. H. Flory, Dr. G. W. C. Hodges, Dr. C. Fenwick, Dr. H. O. Watson, Dr. A. Sanders Green.
Oswestry ..	{ Ellesmere U. & R. .. Oswestry U. & R.	{ 114,574	35,552	3	3	Dr. W. B. A. Lewis, Dr. J. H. Crofton, Dr. H. S. O'Connor, Dr. D. J. Micah, Dr. C. E. Salt, Dr. J. H. Matthews, Dr. C. D. Rogers, Dr. A. C. Heard.
Shrewsbury	{ Atcham R. .. Shrewsbury U.	{ 128,732	55,025	3	3	Dr. W. E. Gemmell, Dr. J. H. Marshall, Dr. J. G. Glynn Pigott, O.B.E., Dr. G. M. Westwood, Dr. C. W. Cassell, Dr. P. A. Frazer, Dr. C. G. Whitney, Mr. H. H. B. MacLeod for Berrington Hospital.
Wellington	{ Newport U. & R. .. Oakengates U. .. Wellington U. & R.	{ 60,077	39,539	2	2	Dr. H. W. J. Hawthorn, Dr. D. L. Mac Kenna, Dr. G. E. Elkington, M.C., Dr. E. A. Elkington.
Wenlock ..	{ Dawley U. .. Shifnal R. .. Wenlock U. ..	{ 65,362	29,222	3	3	Dr. C. U. Whitney, Dr. H. C. Woodhouse, Dr. R. S. Mitchell, Dr. J. G. Boon, Dr. F. W. Hudson-Bigley, Dr. S. B. Legge, Dr. D. J. M. Legge.
		861,800	244,162	20	20	

Public Vaccinators and Vaccination Districts.

Vaccination District.	Vaccination Officer.	Public Vaccinators.
Bridgnorth ..	A. H. Reynolds ..	L. E. Dickson, G. W. C. Hodges, G. R. Kennedy.
Church Stretton ..	A. Dillon Smith ..	C. H. Flory, F. W. Hudson-Bigley, H. Gooch, J. McClintock.
Cleobury Mortimer	S. Whitehead ..	R. G. Addenbrooke, W. A. N. Robinson.
Clun.. ..	W. J. Beavan ..	G. H. H. Booth, W. B. Darroll, J. A. K. Griffiths.
	A. Lloyd Davies ..	S. J. Stewart, G. W. Stanley.
	M. George ..	H. R. Cross, T. H. Gandy.
	F. E. King ..	J. Adams, L. Gameson.
Drayton	G. H. Newitt ..	Walter Hall, W. King Hay, A. Lees Low, Frances L. Lewis.
Ellesmere	J. H. Butler ..	A. C. Heard.
	P. J. Whiston ..	C. D. Rogers.
Ludlow	R. G. Brookes ..	C. Fenwick, H. O. Watson.
	R. J. Price ..	C. H. Flory, G. W. C. Hodges.
	D. J. Morris ..	A. Sanders Green.
Madeley	W. Edge ..	J. G. Boon, F. W. Hudson-Bigley.
	E. P. Smith ..	C. U. Whitney.
	H. Briscoe ..	J. B. Robertson.
Newport	G. G. Crickmer ..	E. A. Elkington, G. E. Elkington, D. L. MacKenna.
Oswestry	T. Pughe-Jones ..	J. H. Crofton, W. B. A. Lewis, J. Hugo Matthews, H. S. O'Connor, C. E. Salt, E. H. Udall.
Shifnal	F. W. P. Cooper ..	G. R. Kennedy, D. J. M. Legge, S. B. Legge.
Shrewsbury ..	E. P. Everest, M.B.E.	C. W. Cassell, W. E. Gemmell, P. A. Frazer, J. H. Marshall, H. B. MacLeod, G. M. Westwood.
Wellington ..	R. Gwynne ..	H. W. J. Hawthorn, D. L. MacKenna.
Wem	R. J. Clayton ..	J. Dallewy, H. G. P. Le Fanu, J. R. Mitchell, V. E. Somerset.
Whitchurch ..	E. Jones ..	A. H. Clough.

Hospital Accommodation for Chronic Sick at Public Assistance Institutions.

Name.	Sick Wards.		Medical Officer.	Number of			
	No. of beds.	Average No. of beds used.		Trained Nurses.	Probationer Nurses.	Assistant Nurses.	Male Attendants.
Berrington Hospital	174	124	Resident*	7	27	..	..
Bishop's Castle ..	23	22	Visiting ..	2	..	2	1
Bridgnorth	45	38	Visiting ..	..	..	4	..
Ironbridge	61	51	Visiting ..	2	3	..	..
Ludlow	51	36	Visiting ..	1	..	4	..
Market Drayton ..	44	17	Visiting ..	..	..	3	..
Newport	34	28	Visiting ..	1	..	2	..
Oswestry	93	72	Visiting ..	3	..	8	..
Shifnal	27	18	Visiting ..	1	..	3	..
Wellington	108	96	Visiting ..	3	4	4	1
Wem	27	19	Visiting ..	1	..	1	..
Whitchurch	38	17	Visiting ..	1	..	2	..
	725	538	..	22	34	33	2

* Also Consultant.

Voluntary Hospital Accommodation.

Name and Situation.	No. of beds, including cots.	Facilities provided.
Bridgnorth and South Shropshire Infirmary, Bridgnorth	41	a, b, c, d, m, n.
St. Catherine's Cottage Hospital, Clun	6	a, b.
Cottage Hospital, Ellesmere	11	a, b.
Cottage Hospital, Ludlow	8	a, b.
Cottage Hospital, Market Drayton	12	a, b.
Lady Boughey Cottage Hospital, Newport	14	a, b, k, m, n.
Cottage Hospital, Oswestry	21	a, b, d.
Cottage Hospital, Shifnal	14	a, b, c, d, n.
District Cottage Hospital, Wellington	12	a, b, d.
Cottage Hospital, Whitchurch	14	a, b.
Shropshire Orthopaedic Hospital and Agnes Hunt Surgical Home, Oswestry	320	b, d, e, f, j, k, m, n.
Royal Salop Infirmary, Shrewsbury	156	a, b, c, d, f, j, k, m, n.
Eye, Ear and Throat Hospital, Shrewsbury	53	b, d, f, g, h, k, l, m.
Lady Forester Hospitals—		
Broseley	23	a, b, c.
Much Wenlock	27	a, b, c, k, l, o.
King Edward VII. Memorial Sanatorium, Shirlett ..	62	k, m.

Hospitals used outside Salop include the Hereford General Hospital, Wolverhampton Royal Hospital, Stafford Infirmary, Wolverhampton Eye Hospital, and the Kidderminster Hospital.

KEY.—a=General Medical and Surgical Treatment; b=Operating Theatre; c=Maternity Beds; d=Children's Wards; e=Orthopaedic Department; f=Dental Department; g=Nose, Throat and Ear Department; h=Ophthalmic Department; i=Dermatological Department; j=Laboratory; k=Light Therapy; l=Radium Treatment; m=X-Ray Facilities; n=Massage Treatment; o=Gynaecological Department.

Hospital Beds available in the County of Salop Classified according to Type of Case and as far as possible to Sex.

Type of Case.	Provided at	Total.	No. of beds.		
			Male.	Female.	M. &/or F.
General Medical	Royal Salop Infirmary, Shrewsbury	55	26	26	3
	St. Catherine's Cottage Hospital, Clun	6	3	3	
		61	29	29	3
General Surgical	Royal Salop Infirmary	69	40	26	3
General Medical and Surgical	Bridgnorth and South Shropshire Infirmary ..	35	15	15	5
	Lady Forester Memorial Hospital, Much Wenlock ..	23	7	7	9
	Lady Forester Cottage Hospital, Broseley ..	27	7	7	13
	Ellesmere Cottage Hospital	11			11
	Ludlow Cottage Hospital	8			8
	Market Drayton Cottage Hospital	12			12
	Newport, Lady Boughey Cottage Hospital ..	14			14
	Oswestry Cottage Hospital	19			19
	Shifnal Cottage Hospital	9			9
	Wellington Cottage Hospital	8			8
	Whitchurch Cottage Hospital	14			14
	Berrington Hospital (P.A.I.)	73	40	33	
		253	69	62	122
Children	Royal Salop Infirmary	22			22
	County Home for Ailing Babies, Wellington ..	16			16
	Public Assistance Institutions	77			77
	Bridgnorth and South Shropshire Infirmary ..	3			3
	Oswestry Cottage Hospital	2			2
	Shifnal Cottage Hospital	2			2
	Wellington Cottage Hospital	4			4
		126			126
Maternity	Lady Forester Cottage Hospital	6		6	
	Lady Forester Memorial Hospital	4		4	
	Royal Salop Infirmary	10		10	
	Bridgnorth and South Shropshire Infirmary ..	3		3	
	Berrington Hospital (P.A.I.)	13		13	
	Other Public Assistance Institutions	27		27	
	Shifnal Cottage Hospital	3		3	
		66		66	
Venereal Diseases	V.D. Clinic, Shrewsbury	4	2	2	
Tuberculosis	Shirlett Sanatorium	62			62
	Prees Heath Sanatorium	11			11
	Public Assistance Institutions (shelters) ..	23	13	10	
		96	13	10	73
Chronic Sick	Public Assistance Institutions	512	267	245	
Mental	Salop Mental Hospital	896	436	460	
Mental Deficiency ..	Church Stretton Public Assistance Institution ..	5		5	
	Madeley Public Assistance Institution	25	10	15	
		30	10	20	
Orthopaedic	Shropshire Orthopaedic Hospital	320			320
Eye, Ear, Nose and Throat	Eye, Ear and Throat Hospital	53			53
Puerperal Fever and Puerperal Pyrexia	Berrington Hospital (P.A.I.)		as occasion arises.		
Small Pox	See page 21	28			28
Other Infectious Diseases ..	See page 22	87			87

In addition, the County Council has made arrangements with the Royal Hospital, Wolverhampton, and Cleveland House, Wolverhampton, for the treatment of persons suffering from venereal diseases, and with the Mrs. Legge Memorial Home, Wolverhampton, for the admission of unmarried mothers without homes.



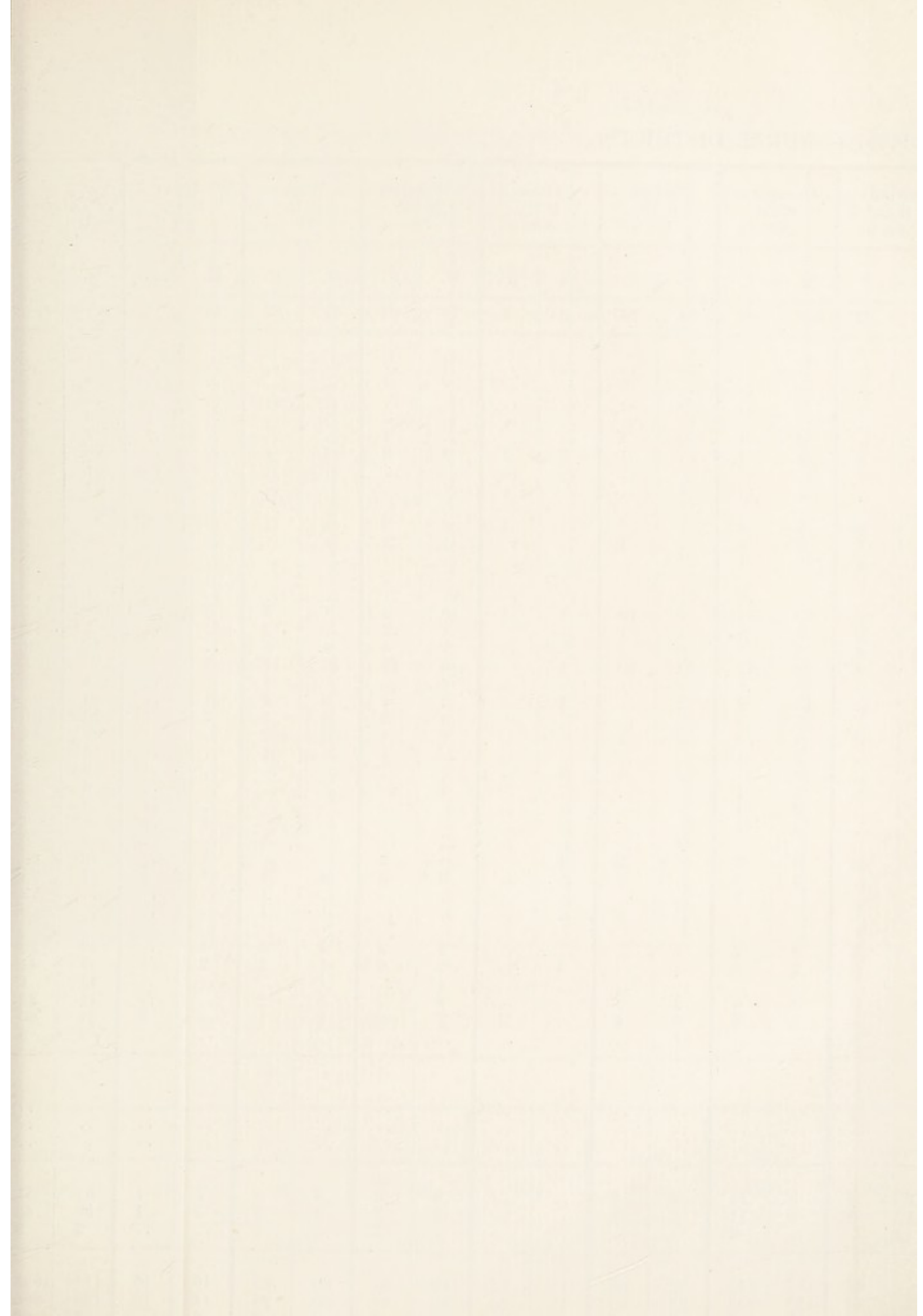
COUNTY OF SALOP, 1931.

AGGREGATE OF RURAL DISTRICTS.

[illegible]

CAUSES OF DEATH

[illegible]



CAUSES OF

[illegible]

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) of Administrative County	..	..	..	..	..	..	861,800
Population (Census 1931)	..	..	..	..	..	..	244,162
Estimated population Mid Year 1931.	{	for Birth-rates	..	..	..	..	244,080
		for Death-rates	..	..	..	..	243,500
	{	Urban { for Birth-rates	..	..	..	..	115,580
		for Death-rates	..	..	..	..	115,000
	Rural for Birth-rates and Death-rates		..	..	..	..	128,500
Number of Inhabited Houses (1921)	..	..	..	..	..	..	54,873
Number of Families or separate Occupiers	..	..	..	..	..	..	55,878
Rateable Value	..	..	..	..	..	..	£1,067,684
Sum represented by a penny rate	..	..	..	..	..	..	£4,089

In a rural County such as Shropshire, the occupations chiefly followed are naturally agricultural. There are, however, areas in the County where the chief industry is coal mining, and in certain of these a considerable amount of work in iron produce is carried on. It is these areas of the County which are chiefly affected by the present industrial depression, and it is probable that in them there is a lowering of the general health of the population, although it cannot be said that the vital statistics for the year lend conclusive support to this opinion. It is the part of the population which is of school age which is likely to be most adversely affected, and the work at the school clinics in those areas seems to indicate that this opinion is justified.

EXTRACTS FROM VITAL STATISTICS OF REGISTRAR-GENERAL.

		Male.		Female.		Male & Female.		Rates.	
		1931	1930	1931	1930	1931	1930	1931	1930
Births	Total	2,073	2,181	1,879	1,914	3,952	4,095	16.19	16.79
	Legitimate	1,932	2,041	1,757	1,792	3,689	3,833	15.11	15.72
	Illegitimate	141	140	122	122	263	262	1.08	1.07
Still-births		82	95	94	80	176	175	.72	.71
Deaths: Total		1,526	1,454	1,568	1,495	3,094	2,949	12.70	12.12
Infant Mortality		117	168	86	67	203	235	51	57
Legitimate Births		109	151	75	57	184	208	49	54
Illegitimate do.		8	17	11	10	19	27	72	103
<hr/>									
Deaths of women dying in, or in consequence of child-birth:—				1926	1927	1928	1929	1930	1931
Total				22	17	16	14	22	21
From Sepsis				8	3	5	2	7	6
From other causes				14	14	11	12	15	15
Deaths from Measles (all ages)				4	13	13	7	12	10
„ Whooping Cough (all ages)				22	9	14	20	6	14
„ Diarrhoea (under 2 years of age)				13	8	14	27	17	11

POPULATION.

Below are given particulars of the population of the County at the time of the last four census returns, and the Registrar-General's estimate of the population at the middle of 1931 :—

1901 (Census)	..	..	239,783	1931 (estimated population)	244,080
1911	..	..	246,307		
1921	..	..	243,062		
1931	..	..	244,162		

The following are the particulars of the populations of the Urban and Rural Districts as estimated at the middle of 1931 by the Registrar-General. The census populations for 1921 and 1931 are given alongside for purposes of comparison :—

URBAN DISTRICTS.	Census Population.		Esti- mated Popu- lation. 1931		RURAL DISTRICTS.	Census Population.		Esti- mated Popu- lation. 1931
	1921	1931				1921	1931	
Bishop's Castle M.B.	1267	1352	1345		Atcham	21981	22655	22500
Bridgnorth M.B. ..	5141	5151	4885		Bridgnorth	8570	8292	8412
Church Stretton ..	1669	1705	1778		Burford	1268	1159	1285
Dawley	7388	7363	7405		Chirbury	3214	3058	3018
Ellesmere	1832	1872	1856		Church Stretton ..	4517	4524	4384
Ludlow M.B. ..	5674	5642	5306		Cleobury Mortimer	7299	6925	7263
Market Drayton ..	4714	4749	4647		Clun	6244	5950	6236
Newport	3054	3439	3081		Drayton	7155	7380	7338
Oakengates.. ..	11345	11189	11330		Ellesmere	8009	7323	7742
Oswestry M.B. ..	9785	9754	9751		Ludlow	8980	8677	8516
Shrewsbury M.B. ..	31006	32370	31990†		Newport	5745	5499	5525
Wellington	8146	8185	8596		Oswestry	16399	16603	16350
Wem	2172	2157	2161		Shifnal	7670*	7707*	7626
Wenlock M.B. ..	13714	14152	13900		Teme	1649	1563	1645
Whitchurch ..	5653	6016	5613		Wellington	11207	11227	11140
					Wem	8583	8434	8583
					Whitchurch	2012	2090	2037

† For birth-rate

* 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 of these parishes at the 1921 Census was 689, and at the 1931 Census 661, making a total of 8,355 and 8,368 respectively for the Rural District.

MARRIAGES.

The number of marriages in the Registration County during the year was 1,917, a fall of 21 as compared with 1930. The figures are as follows :—

Year	Marriages.	Year.	Marriages.
1917	1496	1924	1930
1918	1718	1925	1895
1919	2387	1926	1814
1920	2440	1927	1994
1921	2050	1928	1803
1922	1879	1929	1965
1923	1883	1930	1938
		1931	1917

BIRTHS AND DEATHS.

The number of births and deaths, with birth-rates and death-rates, for each year since 1917 is as follows:—

Year.	Births.	Deaths.	Natural increase of population.	Birth-rates.	Death-rates.
1917	4059	3232	827	16.63	14.12
1918	4283	3702	581	17.73	17.18
1919	4264	3441	823	17.73	14.91
1920	5943	2952	2991	24.73	12.3
1921	5318	3000	2318	21.88	12.34
1922	4904	3295	1609	20.1	13.5
1923	4900	3046	1854	19.95	12.4
1924	4622	3102	1520	18.7	12.5
1925	4469	2924	1545	18.1	11.8
1926	4479	2927	1552	18.27	11.98
1927	4179	3120	1059	17.06	12.77
1928	4121	2924	1197	16.8	12.0
1929	4118	3354	764	16.89	13.79
1930	4095	2949	1146	16.79	12.12
1931	3952	3094	858	16.19	12.70

Details of the birth-rates and death-rates of each of the sanitary districts for the year 1931 are shown in the following table:—

Urban Districts.			Birth-rates.	Death-rates.	Rural Districts.			Birth-rates.	Death-rates.
Bishop's Castle	..	..	20.07	16.35	Atcham	..	..	15.56	11.54
Bridgnorth	..	..	15.52	14.15	Bridgnorth	..	..	19.98	9.99
Church Stretton	..	..	9.96	18.67	Burford	..	..	12.24	13.99
Dawley	..	..	18.45	12.75	Chirbury	..	..	14.09	15.08
Ellesmere	..	..	12.30	14.98	Church Stretton	..	..	14.14	12.79
Ludlow	..	..	15.83	12.31	Cleobury Mortimer	..	..	19.53	14.17
Market Drayton	..	..	15.72	15.50	Clun	..	..	15.82	9.42
Newport	..	..	13.41	12.24	Drayton	..	..	17.46	12.45
Oakengates	..	..	16.45	9.78	Ellesmere	..	..	18.76	12.37
Oswestry	..	..	15.25	15.25	Ludlow	..	..	16.77	10.99
Shrewsbury	..	..	15.33	12.83	Newport	..	..	17.18	11.88
Wellington	..	..	14.88	13.16	Oswestry	..	..	16.83	12.33
Wem	..	..	13.58	14.52	Shifnal	..	..	16.62	13.74
Wenlock	..	..	16.82	15.89	Teme	..	..	14.91	7.78
Whitchurch	..	..	14.77	10.74	Wellington	..	..	16.01	12.43
					Wem	..	..	16.70	13.29
					Whitchurch	..	..	12.45	14.36
TOTAL	..	..	15.64	13.33	TOTAL	..	..	16.68	12.14

The comparison with England and Wales is as follows :—

	Birth-rate.			Death-rate.			Infant mortality.		
	1929	1930	1931	1929	1930	1931	1929	1930	1931
England and Wales	16.3	16.3	15.8	13.4	11.4	12.3	74	60	66
Shropshire	16.89	16.79	16.19	13.79	12.12	12.7	65	57	51

As in previous years, the death-rate for Shropshire is a little higher than that for England and Wales, but against this must be set the fact that the birth-rate in this County is also higher than that for the country as a whole ; and, as an important factor in the maintenance of the death-rate is the number of deaths of children under one year of age, this apparently unfavourable comparison can be accounted for in this way. While, therefore, both in this county and in the country as a whole there has been a fall in the birth-rate and an increase in the death-rate, and while the fall in the birth-rate has been 0.1 greater than that for England and Wales, the increase in the death-rate for Shropshire has been 0.3 less than that for the whole country. Whatever comfort there may be in this fact, it is nevertheless true that the birth-rate in Shropshire is gradually getting nearer to the national birth-rate. It still exceeds it, but the excess is annually becoming a diminishing quantity. There was a total of 3,952 births in Shropshire during 1931, which is 143 less than in the previous year, and is the lowest number recorded since 1917.

Principal Causes of Death from 1926 to 1931.

	1926	1927	1928	1929	1930	1931
Heart Disease	499	482	562	623	628	690
Other Circulatory Diseases	129	133	152	125	114	142
Cerebral Haemorrhage ..	250	253	209	212	204	204
Congenital Debility ..	122	113	129	144	131	118
Influenza	70	181	65	234	50	84
Bronchitis	165	171	131	179	135	150
Pneumonia	153	165	139	194	133	159
Pulmonary Tuberculosis	138	129	126	147	106	155
Other forms of Tuberculosis	37	44	41	33	34	37
Cancer, Malignant Disease	362	402	379	385	355	409

Of the 3,094 deaths in this County during 1931, heart disease, cerebral haemorrhage and other forms of disease of the circulatory system account for 1,036. Cancer contributes the next largest quota to the total, and accounts for 409 deaths, an increase on the previous year of 54, and the largest number since 1927. Diseases of the respiratory system, exclusive of pulmonary tuberculosis, account for 309 deaths, an increase of 41. Pulmonary tuberculosis is fourth on the list with 155 deaths, an increase of 49 on the previous year.

It is worthy of note, however, that both in the case of cancer and pulmonary tuberculosis there was a very considerable fall in the total number of deaths from those causes in 1930 and that, if an average for the last two years were taken, the number of deaths from cancer and pulmonary tuberculosis would be less than for the year 1929. The point of this observation is, of course, that to confine one's attention too closely to the statistics for any particular year is often rather misleading, particularly with diseases of the more chronic type such as cancer and tuberculosis, especially if an acute infection, such as influenza, complicates illness in a debilitated patient and becomes a contributory cause of death.

While the prevalence of cancer has become a matter for the anxious consideration of Public Health Authorities, no specific treatment has yet been discovered for this disease; and chief reliance in order to combat it has to be placed on the provision of facilities for early diagnosis that the aid of the surgeon may be called in at the earliest possible moment. Free transit is provided by the County Council to the Royal Salop Infirmary for those in whose case the question of cancer has been raised, and who are unable to pay, that they may have the advantage of the increased facilities for diagnosis which this Institution affords.

Death-rates from Cancer.

Year	County of Salop.	England and Wales.	Year	County of Salop.	England and Wales.
1894-1905	.978	.816	1919	1.39	*1.145
1906	1.019	.917	1920	1.27	1.161
1907	1.013	.909	1921	1.28	1.215
1908	1.082	.909	1922	1.42	1.229
1909	1.159	.952	1923	1.50	1.267
1910	1.195	.967	1924	1.24	1.297
1911	1.07	.993	1925	1.44	1.336
1912	1.08	1.019	1926	1.476	1.362
1913	1.18	1.064	1927	1.645	1.376
1914	1.22	1.069	1928	1.554	1.425
1915	1.23	*1.121	1929	1.583	1.44
1916	1.35	*1.166	1930	1.459	1.45
1917	1.35	*1.210	1931	1.679	
1918	1.55	*1.218			

* *Civilians only.*

The following table shows the position with regard to the chief matters referred to for each five-year period from 1901 to 1930, and for 1931:—

Periods.	Birth-rate.	Death-rate.	Infant Mortality Rate per 1,000 Births.	Death-rates from Phthisis.	Death-rates from Cancer.
1901—1905 ..	26.34	15.2	102	.938	1.025
1906—1910 ..	23.98	14.64	92	.948	1.093
1911—1915 ..	21.21	13.832	82	.804	1.156
1916—1920 ..	19.162	14.554	71	.808	1.382
1921—1925 ..	19.716	12.488	60	.614	1.374
1926—1930.. ..	17.17	12.53	56	.529	1.546
1931	16.19	12.7	51	.636	1.679

INFANT MORTALITY.

There were 3,952 births in 1931, and 203 children died before reaching the age of one year, giving an infant mortality rate of 51 per thousand births, which is a fall of 6 per thousand as compared with the previous year, and is 11 per thousand below the rate for England and Wales. This figure, with the exception of that for 1927, when the infant mortality rate was 48 per thousand births, is the lowest which has been recorded in this County. As usual, the mortality amongst illegitimate infants was much higher than amongst legitimate.

The table below gives particulars of the causes of infant mortality in this County since 1905. It will be observed that, of 203 deaths of infants in the year under consideration, no fewer than 118 (or 58 per cent.) were attributable to premature birth, congenital defects or malformations.

There were therefore only 85 deaths amongst infants presumably normal at birth, and as long as congenital conditions continue to contribute so largely to the infant mortality, the difficulty of reducing the infant death-rate below a certain level becomes apparent, since most congenital conditions are irremediable, and it is seldom that attention and advice on the part of the health visitors and medical attendants can alter what are already established facts at birth. It is probably true, however, that most congenital defects and premature births are preventable, and that with greater ante-natal care and more attention to the health of the mothers most of the conditions which contribute so largely to the infant mortality could be prevented. While it is an accepted fact that the practically continuous fall in the infant mortality during the last thirty years has been due chiefly to increased knowledge of the nutritional requirements of the new-born child, and especially to a recognition of the importance of breast-feeding, it does not seem to have been appreciated that perhaps a part of almost equal importance remains to be played by attention to the nutritional requirements and health of the mother, before, during and after pregnancy. The child born of a mother who is living under unhygienic conditions and is herself not receiving proper nourishment is handicapped from birth; and if, for similar reasons, the mother proves incapable of, or for some reason is prevented from, feeding the child naturally, it labours under an additional disadvantage. Few mothers are physiologically incapable of feeding their own children, but a considerable number, as a result of improper nutrition or for other reasons, become unable to do so.

Table giving particulars relating to Infant Mortality since 1905.

	Average for years					No. for years.	
	1905 to 1909	1910 to 1914	1915 to 1919	1920 to 1924	1925 to 1929	1930	1931
Births	5955	5427	4441	5137	4277	4095	3952
Deaths from all causes under one year ..	561	444	335	319	244	235	203
Deaths from Measles and Whooping Cough	34	22	19	14	11	7	5
Influenza .. .. .	..	..	11	3	5	1	1
Other Infectious Diseases	5	1	1	0	0	0	0
Tuberculous Diseases	19	12	6	6	4	3	5
Convulsions and Meningitis (not tuberculous)	60	42	..	..	..	..	..
Bronchitis	46	33	31	22	10	8	4
Pneumonia	65	43	34	32	32	24	33
Diarrhoea	22	14	15	20	11	15	8
Premature Birth, Congenital defects and Malformations	128	119	..	..	124	125	118
Atrophy, Debility and Marasmus	96	74	..	..	..	..	..

The great importance of care in the early weeks and months of life is abundantly brought out by the following table, which shows that of 723 deaths of children under twelve months which took place in the last four years, concerning which accurate information is available, 61 per cent. died under the age of one month, and 73 per cent. under the age of three months, and that only 7.6 per cent. of the deaths of infants under one year took place after the age of nine months.

Deaths of Infants under one year.

AGE.	1928		1929		1930		1931		1928—1931	
	No. of Deaths.	Per- centage.	No. of Deaths.	Per- centage.	No. of Deaths.	Per- centage.	No. of Deaths.	Per- centage.	No. of Deaths.	Per- centage.
Under 1 day ..	30	16.6	42	19.0	28	16.7	40	26.0	140	19.4
Over 1 day but under 1 week ..	35	19.2	52	23.6	49	29.3	28	18.1	164	22.7
1 week—2 weeks ..	18	9.9	13	5.9	12	7.2	9	5.8	52	7.2
2 weeks—1 month ..	27	14.8	24	10.9	23	13.8	11	7.2	85	11.8
1 month—3 months ..	22	12.0	26	11.9	19	11.4	21	13.6	88	12.1
3 months—6 months	18	9.9	23	10.5	13	7.8	17	11.1	71	9.8
6 months—9 months	20	11.0	22	10.0	12	7.2	14	9.1	68	9.4
9 months—12 months	12	6.6	18	8.2	11	6.6	14	9.1	55	7.6
TOTAL DEATHS	182		220		167		154		723	

61.1

38.9

The following table showing the infant mortality rates in the Sanitary Districts since 1901 is of interest, as it shows that, as a result of the steady fall in the infant mortality in this County, it is now only half of what it was 30 years ago. The years have been grouped in five-yearly periods up to 1930. This method of dealing with the statistics probably gives a much more accurate picture of the progress which has been made, as it has happened that in certain of the years towards the end of the period under consideration there has been a rise in the infant mortality rate due to special causes. In addition, the smallness of the population and therefore of the number of births in certain of the Sanitary Districts tends to make for wide variations from year to year. In such districts, a few deaths of children under one year make a great difference to the infant mortality rate.

Infant Mortality Rate since 1901 for each Sanitary District.

URBAN DISTRICTS.	Average for years						1931
	1901—1905	1906—1910	1911—1915	1916—1920	1921—1925	1926—1930	
Bishop's Castle	82	82	127	62	34	37	..
Bridgnorth	108	128	102	91	72	48	38
Church Stretton	116	90	100	54	16	67	0
Dawley	101	115	96	69	65	49	37
Ellesmere	92	84	47	79	54	72	43
Ludlow	108	104	77	93	53	58	11
Market Drayton .. .. .	..	..	79	116	90	76	81
Newport	120	89	86	75	39	45	22
Oakengates	124	107	94	79	74	73	10
Oswestry	106	92	104	87	64	58	47
Shrewsbury	129	116	85	73	63	58	60
Wellington	109	84	98	69	47	58	31
Wem	94	103	73	55	77	49	34
Wenlock	102	93	81	67	57	58	51
Whitchurch	103	102	103	66	45	47	79
All Urban Districts	113	104	91	76	62	58	50

RURAL DISTRICTS.	Average for years						1931
	1901—1905	1906—1910	1911—1915	1916—1920	1921—1925	1926—1930	
Atcham	87	77	75	56	59	53	62
Bridgnorth	90	67	68	64	70	65	18
Burford	73	44	67	45	70	43	71
Chirbury	76	67	55	74	49	77	93
Church Stretton	94	97	58	77	65	61	63
Cleobury Mortimer	98	82	75	63	62	39	74
Clun	96	84	76	75	58	55	0
Drayton	122	86	77	71	67	69	39
Ellesmere	95	88	74	73	56	65	21
Ludlow	90	83	60	67	53	53	41
Newport	111	103	89	95	75	40	64
Oswestry	99	96	81	79	64	60	70
Shifnal	96	72	81	44	36	37	39
Teme	119	103	83	68	39	53	0
Wellington	97	88	94	61	61	53	56
Wem	73	69	70	55	73	54	77
Whitchurch	49	59	73	68	38	45	115
All Rural Districts	95	92	76	68	60	55	52

LEGISLATION IN FORCE.

In addition to the Acts and Bye-laws in force in the various districts of the County, the County Council has acquired powers under the "County of Bedford, etc. (Prevention of Tuberculosis) Order, 1926," and the "County of Salop (Prevention and Treatment of Small-pox) Regulations, 1920."

INFECTIOUS DISEASE.

Full particulars of the notifications of cases of infectious disease are given in the table on page 19.

Apart from tuberculosis, which is considered separately, there was a considerable increase in the total number of notified cases of infectious disease in the County as compared with 1930. The increased prevalence of infectious disease was, however, more of a general nature than due to a large increase in the total number of cases of any particular disease. In all 1462 notifications were received, as compared with 1074 during the previous year, and 784 of these notifications were accounted for by scarlet fever and diphtheria. These two diseases, therefore, accounted for half of all cases of infectious disease in the County regarding which notifications were received. It may be mentioned here, however, with regard to pneumonia that the notifications were very incomplete and unsatisfactory, as shown by the fact that, while there were 159 deaths from this cause, notifications were only received in respect of 179 cases.

Scarlet Fever and Diphtheria.—There were 384 cases of scarlet fever and 400 cases of diphtheria, of which diseases during the previous year there were 372 and 371 respectively: and, while there were no deaths from scarlet fever, one adult and 20 children (of and under school age), died of diphtheria. The seriousness of this disease, especially in young children, raises the question of immunisation, which is frequently urged after diphtheria has broken out and continued for some time in a district with unfortunate results.

It has not so far been considered practicable to carry out systematic immunisation against scarlet fever and diphtheria with or without preliminary Dick and Schick testing in order to ascertain susceptibility. The extent to which it would be accepted by the parents is doubtful, and experience in other counties has shown that parents do not readily take advantage of such facilities when offered. While the protective value to the individual of immunisation against scarlet fever and diphtheria has been established, it is generally too late to carry out this procedure after one of these diseases has broken out in a district. The immediate effect is to increase susceptibility and, as the subsequent immunity takes some time to develop, the first result is an increased liability to infection at the very time when it is most desirable for the powers of resistance of the individual to be at their highest. The protective effect of immunisation also is to the individual rather than to the community, as in controlling outbreaks of scarlet fever and diphtheria it is the "carrier" who creates the greatest difficulty. A person who has been immunised, while protected himself, would still be capable of becoming a "carrier" and so of spreading the infection to others. A mixed community of immunised and unimmunised persons would be one in which the best results would not be obtained, although in a children's home or residential school immunisation would be very beneficial. It is always necessary to remember however, that the immunity conferred is not permanent, and is at best merely relative.

The question of systematic immunisation of elementary school children, however, especially against diphtheria, is one which is worthy of careful consideration. At present neither the facilities nor the staff are available for the purpose. It would be possible to undertake this work if a County Bacteriological Laboratory were established and a whole-time Bacteriologist were appointed. But the first step would have to be an educational campaign in order to secure the consent of the parents.

Puerperal Fever and Puerperal Pyrexia.—There were 64 cases during the year, one less than in 1930. Of these, 16 were due to Puerperal Fever, and 48 due to Puerperal Pyrexia. All the cases in which a midwife was in attendance were carefully enquired into and reported upon by the Inspector of Midwives.

It was considered necessary or desirable to remove to hospital 5 of the Puerperal Fever cases and 10 of the cases of Puerperal Pyrexia. The cases removed to hospital are as a rule the worst cases but with one exception all of them made a satisfactory recovery.

Closure of Schools.—During the year 43 schools were closed by the Education Authority to prevent the spread of infectious disease. It is difficult to get the teachers to realise that, from the public health point of view, there is no justification for closing a school unless the spread of infection is thereby going to be prevented; and that the School Medical Officer has no authority to advise closure on account of poor attendance, notwithstanding the fact that the number of children present is sometimes so low that there seems little justification for keeping the school open. Below are given particulars of the closures of schools on account of outbreaks of infectious disease.

Measles	..	..	..	..	..	24
Diphtheria	..	..	..	..	..	16
Scarlet Fever	..	..	..	..	..	3

Measles.—In twenty-four instances attempts were made to prevent outbreaks of measles by closing the schools for about a week, six or seven days after the occurrence of the first case, with the following result:—

In 16 instances no further cases occurred. Closure in these cases must therefore be considered to have been without effect and, therefore, unnecessary.

In 3 instances cases occurred during closure, and further cases developed on re-opening. Closure again proved to be without effect.

In 5 instances one or more cases occurred during the closure, and did not attend school till free from infection. There was no further outbreak, and it is justifiable to conclude that closure was effective in checking the spread of the disease.

It must be recognised that all the schools closed to prevent the spread of measles were very carefully selected, in that they were in sparsely populated country districts in which most of the homes of the children were widely separated. Yet in only five did the result justify the step. In numerous other schools no attempt was made to prevent the spread of infection by closure, as it was apparent from the commencement that its effect must be to prolong and possibly intensify the severity of the outbreak.

Return of Infectious Diseases for the year 1931.

61

DISTRICTS.	Population Census 1931	SMALLPOX.	SCARLET FEVER.	DIPHTHERIA (including Membranous Croup).	ENTERIC (Typhoid and Para- typhoid Fever).	PNEUMONIA.	PUERPERAL FEVER.	PUERPERAL PYREXIA.	CEREBRO-SPINAL FEVER.	DYSENTERY.	ENCEPHALITIS LETHARGICA.	ACUTE POLIOMYELITIS.	OPHTHALMIA NEONATORUM.	ERYSIPELAS.	TUBER- CULOSIS.	
															RESPIRATORY	OTHER FORMS
RURAL.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Atcham ..	22655	..	51	18	5	14	1	5	..	3	..	..	3	4	15	9
Bridgnorth ..	8292	..	10	4	..	5	1	1	..	..	..	..	..	1	7	1
Burford ..	1159	..	1	..	..	..	..	1	..	..	..	..	..	..	1	2
Chirbury ..	3058	..	10	..	..	2	..	2	..	..	..	..	1	2	3	..
Church Stretton ..	4524	..	10	8	..	..	..	2	..	..	..	..	..	1	..	1
Cleobury Mortimer ..	6925	..	35	21	1	12	..	..	..	..	..	..	1	1	..	5
Clun ..	5950	..	2	..	..	..	..	..	..	..	..	..	..	1	6	2
Drayton ..	7380	..	13	8	1	7	..	3	..	..	..	..	..	2	3	..
Ellesmere ..	7323	..	27	5	..	4	..	3	..	..	..	..	1	1	6	4
Ludlow ..	8677	..	8	9	..	6	..	1	..	..	..	..	1	3	10	2
Newport ..	5499	..	4	..	..	10	..	2	..	..	..	..	2	..	3	1
Oswestry ..	16603	..	8	31	..	11	3	..	..	..	..	..	6	5	14	5
Shifnal ..	7707	..	4	38	3	3	..	4	1	..	..	..	..	3	5	4
Temé ..	1563	..	1	37	..	1	1	1	..	..	..	..	..	2	2	..
Wellington ..	11227	..	12	8	..	10	2	2	..	..	..	..	3	2	15	9
Wem ..	8434	..	8	8	..	13	1	2	..	..	..	..	2	..	10	4
Whitchurch ..	2090	..	2	24	..	4	..	1	..	..	..	..	..	1	2	1
	129066															
URBAN.																
Bishop's Castle ..	1352	..	3	..	..	..	2	2	..	..	..	1	1	..	1	1
Bridgnorth ..	5151	..	30	..	3	6	..	1	..	..	..	..	..	..	6	3
Church Stretton ..	1705	..	6	48	..	1	..	1	..	..	..	..	2	..	3	..
Dawley ..	7363	..	2	2	..	16	1	1	..	..	..	..	..	..	5	4
Ellesmere ..	1872	..	5	2	..	1	..	..	..	..	..	..	..	2	2	1
Ludlow ..	5642	..	17	25	..	15	..	..	1	..	..	..	..	2	12	..
Market Drayton ..	4749	..	13	4	..	3	..	..	..	..	..	..	..	2	3	2
Newport ..	3439	..	1	2	..	4	1	2	..	..	..	..	..	2	4	..
Oakengates ..	11189	..	13	32	..	2	..	1	..	..	..	..	..	..	9	8
Oswestry ..	9754	..	4	18	2	5	..	1	..	..	..	..	3	..	4	6
Shrewsbury ..	32370	..	73	14	..	10	2	8	1	..	..	1	1	12	14	13
Wellington ..	8185	..	4	32	1	7	..	1	..	..	..	1	2	1	9	7
Wem ..	2157	..	3	1	..	..	..	..	..	..	..	..	..	..	2	5
Wenlock ..	14152	..	4	6	..	1	..	1	..	..	..	..	..	4	16	7
Whitchurch ..	6016	..	..	5	..	6	..	..	..	..	..	..	..	..	..	2
	115096															
TOTAL ..	244162	..	384	400	16	179	16	48	3	3	..	3	32	50	219	109

ISOLATION HOSPITAL ACCOMMODATION.

The accommodation available in order to secure the isolation and treatment of cases of infectious disease is in certain parts of the County quite inadequate. Section 63 of the Local Government Act, 1929, requires the County Council, as soon as may be, and within six months of being requested to do so by the Minister of Health, to prepare in consultation with the District Councils a scheme for securing adequate hospital accommodation for cases of infectious disease within the County, and this matter has been and still is receiving the consideration of the Public Health and Housing Committee.

It is usually considered that, for infectious diseases other than small-pox, one bed per thousand of the population should be provided in Urban Districts, and one bed per fifteen hundred of the population in Rural Districts; and that, for small-pox, one bed should be provided for every three thousand of the population. On this basis the hospital provision in this County falls far short of requirements. In addition, much of the accommodation at present in being is extremely unsatisfactory. The hospital units are in most cases too small to make possible efficient treatment of the patients; and the hospitals themselves are often faulty in structure and arrangement, inadequately lighted and ventilated, and insufficiently provided with ordinary sanitary conveniences. On the basis of one bed for every 144 sq. feet of floor space available (which is the standard set up by the Ministry of Health), there are in this County, in such hospitals as are at present in existence, 28 beds for small-pox cases and 87 beds for other cases of infectious disease. The table on page 22 shows the amount and nature of the accommodation at present available for cases of infectious disease other than small-pox.

Dr. Gepp, in his Annual Reports, states :—" I am glad therefore to note that, acting under " the duty laid down by the Local Government Act, 1929, the County Council has under con- " sideration the question of a scheme for securing adequate hospital accommodation for cases of " infectious disease within the County. With a scheme by which all the Districts concerned " share the costs of Hospital maintenance and upkeep, and the right to send in cases, a freer " and more desirable use of hospital facilities could be made, the cost of maintenance per head " of the patients admitted being reduced to a small figure. Under present conditions the " treatment of two or three cases sent in by a small district entails a cost which has an appreciable " effect upon the rates."

Dr. White, in his Report to the Cleobury Mortimer Rural District Council, states :—" There " were three cases of diphtheria notified at Highley; one, which was fatal, had extensive paralysis " when first seen by the doctor. It is probable that if an Isolation Hospital were made available " for district cases, earlier notification would result and several lives would be saved."

Summary of Accommodation for Small-pox Cases.

The County Council is responsible for the isolation of small-pox for the whole county with the exception of the Boroughs of Shrewsbury and Wenlock, and the Rural District of Teme. This power was obtained by a Special Order of the Ministry of Health made under the Public Health (Prevention and Treatment of Diseases) Act, 1913. Three hospitals situated at Whitchurch, Wellington, and Ludlow, were taken over from the local authorities and were put in order for

the immediate reception of patients. In the absence of small-pox in the County, the Whitchurch Hospital is used for advanced cases of consumption. The following is a summary of the Small-pox accommodation for the County :—

<i>Hospital.</i>		<i>No. of beds.</i>	<i>Provided by</i>
Prees Heath, Whitchurch ..	..	8	County Council.
Steeraway, Wellington ..	..	4	
Ludlow .. ..	..	2	
Underdale, Shrewsbury ..	..	8	Borough of Shrewsbury.
Broseley .. ..	..	6	Borough of Wenlock.

The condition of most of these small-pox hospitals is extremely unsatisfactory and, if there were a definite outbreak of small-pox in this County the position would be extremely awkward. The very fact that, with the exception of the hospital at Steeraway, they have not had to be used for small-pox cases, for a very considerable time at least, tends to add to their structural and other shortcomings, and indeed it is not certain that all of them could be immediately utilised if required. The sanitary arrangements are usually not only inadequate, but also crude and rather primitive ; and the accommodation provided for nursing staff is such that it would create a difficulty if a staff had to be provided and maintained in the hospitals for anything but a short period. The one hospital which is in a thoroughly satisfactory condition is that at Prees Heath, and this hospital is in continuous use for advanced cases of tuberculosis. As more beds are required for such cases, a solution of the present difficulty would appear to be the provision of another hospital to be used for tuberculous patients till required for small-pox cases.

Summary of the Provision made in the County for Isolation Hospital Accommodation for Infectious Diseases other than Small-pox.

District.	Population (1931 Census).	Provision of Hospital accommodation.	No. of beds (Allowing 144 sq. ft. per bed) and nature of accommodation.
Shrewsbury Borough .. and Atcham R.D. ..	32370 22655	} Monkmoor Isolation Hospital, Shrewsbury.	40—Accommodation very good.
Oswestry Borough .. and Oswestry R.D. ..	9754 16603		
Market Drayton U.D. .. and Drayton R.D. ..	4749 7380	} Little Drayton Joint Isolation Hospital.†	17*—Accommodation moder- ately satisfactory.
Bridgnorth Borough ..	5151		
Ludlow Borough ..	5642	Ludlow Isolation Hospital.	10*—Accommodation not good.
Newport U.D. .. and Newport R.D. ..	3439 5499	} Newport Isolation Hospital. (A number of cases are also sent to Monkmoor Hospital, Shrewsbury).	5*—Accommodation not good.
Teme R.D. ..	1563		
Bishop's Castle Borough ..	1352	} Knighton and Teme Isolation Hospital.§	4*—Accommodation extremely unsatisfactory.
Church Stretton U.D. ..	1705		
Dawley U.D. ..	7363		
Ellesmere U.D. ..	1872		
Oakengates U.D. ..	11189		
Wellington U.D. ..	8185		
Wem U.D. ..	2157		
Wenlock Borough ..	14152		
Whitchurch U.D. ..	6016		
Chirbury R.D. ..	3058		
Church Stretton R.D. ..	4524		
Clun R.D. ..	5950		
Ellesmere R.D. ..	7323		
Ludlow R.D. ..	8677		
Shifnal R.D. ..	7707		
Wellington R.D. ..	11227		
Wem R.D. ..	8434		
Whitchurch R.D. ..	2090		
Bridgnorth R.D. ..	8292	} No provision whatever.	2*—Accommodation extremely unsatisfactory.
Burford R.D. ..	1159		
Cleobury Mortimer R. D. .	6925		

* Slightly overestimated.

† Provides also for the Chirk R.D. of Denbighshire, which has a population of 4,879.

‡ " " " " Blore Heath R.D. of Staffordshire, which has a population of 2,863.

§ " " " " Knighton U.D. & R.D. of Radnorshire, which have a population of 5,791.

MATERNITY AND CHILD WELFARE.

(1) **Notification of Births.**—Notifications of birth, with the exception of those occurring in the Borough of Shrewsbury, which is an independent Maternity and Child Welfare Authority, must be sent to the County Medical Officer of Health by the midwife, doctor in attendance at the confinement, or other responsible person. The following are the particulars :—

	1928	1929	1930	1931
Live births:—				
Total registered births	3,569	3,566	3,557	3,451
Notifications by midwives	3,020	2,982	3,014	2,850
„ by medical practitioners	409	409	435	422
„ by parents	3	4	9	2
Otherwise discovered	49	59	46	53
Excess of births registered over births notified or discovered	88	112	53	124

There were one hundred and fifty four stillbirths registered during the year, and one hundred and fifty two notified as follows :—

By midwives 92, by medical practitioners 34, otherwise discovered 26.

In the Borough of Shrewsbury, there were 501 live births and 22 stillbirths registered.

(2) **Medical, Health Visiting and Nursing Services.**—The Assistant School Medical Officers are also the Medical Officers for Maternity and Child Welfare Work, to which they devote three-tenths of their time.

In addition to attendance at child welfare centres, where ante-natal clinics are also held, the medical officers are required to supervise in a general way the work of the health visitors, and to be available to give them advice when they are in need of guidance. It is at such times that child welfare centres prove most valuable and useful, as the mother can attend these with the health visitor, when the case can be fully gone into. There are now twelve whole-time health visitors whose work includes attendance at child welfare centres, ophthalmia neonatorum nursing, tuberculosis visiting and attendance at tuberculosis dispensaries, measles visiting, supervision of mental defectives and also duties as Infant Protection Visitors. Ten of the whole-time health visitors are also engaged in school work and attend school medical inspections, school clinics, eye clinics, and visit physically defective school children. In addition, 72 district nurses are also part-time health visitors.

Measles Visiting.—Houses in which infants were suffering from measles were visited by the whole-time health visitors, and the cases dealt with were as follows :—

	Houses visited.	Cases visited.	Cases without doctor.	Cases advised doctor.
1931	204	396	253	44
1930	77	134	95	10
1929	9	15	15	1
1928	471	699	505	72
1927	324	540	266	38
1926	1,239	1,755	580	50

Orthopaedic Cases.—See under Orthopaedic Section, page 34.

Dental Treatment.—Nursing and expectant mothers receive treatment by the School Dental Officers at the Welfare Centres, if they are not in a position to pay for treatment privately. During the year 149 such patients received treatment. In addition, 40 children under school age received treatment by the Dentists. This is an increase in the numbers as compared with the previous year, when 120 expectant and nursing mothers and 29 children under school age were treated.

Insanitary Conditions.—The following insanitary conditions were reported by the health visitors and forwarded to the Sanitary Authorities for their attention.

Unsatisfactory Water Supply.	Want of Ventilation.	Uncleanliness.	Dampness.	Overcrowding.	Nuisances.
28	49	86	65	99	24

The visits paid by health visitors during 1931 were :—

	To Children						To Expectant mothers.
	Under one year.				1 to 5 years.	Total.	
	1st	2nd	3rd	Subsequent			
Whole-time (12) ..	2,193	2,343	2,161	5,928	15,165	27,790	884
Part-time (72) ..	1,345	1,314	1,524	5,520	12,477	22,180	5,661
	3,538	3,657	3,685	11,448	27,642	49,970	6,545
Visits for 1928 ..	3,681	3,723	3,771	9,479	26,701	47,355	5,445
Visits for 1929 ..	3,400	3,388	3,558	9,883	25,625	45,854	5,784
Visits for 1930 ..	3,628	3,650	3,884	11,262	26,655	49,079	6,271
Visits for 1931 ..	3,538	3,657	3,685	11,448	27,642	49,970	6,545

It is satisfactory to note that there is an upward tendency in the number of visits made by health visitors. This is especially so in the case of expectant mothers, a branch of the work which is capable of much further development.

(3) **Feeding of Infants.**—The percentages of artificially and naturally fed infants are valuable indications of the efficiency of the health visiting services, as it is now generally accepted that practically all mothers are able to feed their own babies. It is a rule of the Central Midwives Board that "a midwife must forthwith notify the Local Supervising Authority of each case in which it is intended to substitute artificial for breast feeding." On receipt of such notifications each case is inquired into, and such advice and pressure as are possible are used to persuade the mother and midwife to continue the natural method of feeding, where there seems to be no sufficient reason for substituting artificial food. During the year 49 such notifications were received, as opposed to 46 in 1930. The reasons given were :—

Death of mother	1
Inability to breast feed	16
Refusal to breast feed	11
Poor health of mother (advice of doctor)	17
Weakly or physically deformed children	4

The percentages of infants being naturally and artificially fed on the first visit of the health visitor are given below :—

Percentage of children at first visit of health visitor on—

Year	Breastfeeding.			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		
1922	85.6	11.0		3.2		
1923	88.7	8.4		2.7		
1924	88.6	8.6		2.8		
1925	88.8	8.5		2.6		
1926	89.4	7.6		3.0		
1927	88.9	7.4		3.7		
1928	88.4	7.8		3.8		
1929	88.4	8.4		3.2		
1930	89.7	7.1		3.2		
1931	89.2	8.0		2.8		

It may be taken that practically all babies receiving mixed feeding will very soon be entirely artificially fed, unless the artificial part of the feeds is almost immediately eliminated.

While it is true that a certain proportion of mothers, as a result of economic circumstances, become unable to continue to breast-feed their infants during the whole period of nine months, it is probably also true that if they took only half the quantity of extra milk which it is necessary to have in order to feed the baby artificially, they would be able to do so naturally. It is not only unhygienic and unphysiological, but definitely uneconomical, to feed artificially a baby which can be naturally fed. Although over 10 per cent. of the babies were found to be artificially fed at the first visit of the Health Visitor, which is almost the same percentage as in the previous year, there appears to be an increasing recognition of the value of breast feeding by the mothers, as there was a large increase in the percentages of naturally-fed babies at three and six months. The percentages of breast-fed babies are, however, still too low, but good progress appears to have been made.

Percentage naturally fed at first visit of health visitor				..	..	1930	1931
..	..	..	..	..	..	89.7	89.2
..	..	..	..	..	..	58.9	73.5
..	..	..	..	..	..	38.5	65.4

(4) **Ophthalmia Neonatorum.**—On receipt of notification of a case of ophthalmia neonatorum the doctor in attendance is immediately communicated with, in order to place at his disposal all facilities for having the necessary treatment carried out. In order that early treatment may be secured in every case, whenever a copy of a medical help form is received showing that medical assistance has been sought on account of a discharge from an infant's eyes, a letter is immediately sent off to the general practitioner with regard to the case.

An arrangement has been made with the Salop Eye, Ear and Throat Hospital whereby the mother and child can be immediately admitted for treatment. An effort is made to get all cases treated in this way, and an ambulance is always available to convey them to hospital. If the mother refuses to be removed, or to allow the child to go to hospital, the services of a health visitor, who will remain in attendance on the case till cured, are offered to the doctor.

During the year 31 cases of ophthalmia neonatorum were notified, of which 30 recovered with apparently no injury to the eyesight. A recent inquiry was made into the conditions of the one baby whose eyesight is known to have suffered as a result of ophthalmia, and it was found that the sight in one eye had been completely destroyed, and that the sight in the other had been very seriously and permanently impaired.

It is difficult to bring home to the parents the seriousness of ophthalmia neonatorum, and to get them to realise that, unless constant and careful treatment is carried out, there is a very great risk of serious damage to the eyesight. In a very virulent case even a few hours' neglect may make all the difference between complete recovery and permanent impairment of vision. If ophthalmia neonatorum is notified immediately, and if immediate advantage is taken of the scheme in this County for providing free treatment, it can be stated that there would be one hundred per cent. of complete recoveries. Only when removal to the Eye Hospital has been refused, or consent has not been given till it has been obvious to the parents that the condition was really serious, has the treatment of the Hospital failed to save the sight unimpaired. No cases are refused at the Hospital, however slight the condition may apparently be, and any case will be accepted at the shortest notice. It may confidently be stated that the willingness with which cases are accepted by the Hospital and the efficiency with which treatment is afterwards carried out have been effective in preventing injury to the eyesight in numerous cases, and in preventing actual blindness in others. This, it may be added, ultimately results in the saving of probably thousands of pounds to the County Council, as not only has the Education Authority to make provision for the education of blind children in Special Schools, but later it has to send for training in occupations suitable for blind persons those over the age of sixteen who will benefit by it. On completion of training, they are included in the Home Workers' Scheme under the Public Health and Housing Committee which supplements their weekly wages according to their earnings. Those who, for some reasons, are not found suitable for training and yet are in need of assistance come under the scheme for the domiciliary relief of the blind.

(5) **Maternity and Child Welfare Centres.**—There are now thirteen Welfare Centres in the County, nine of which are held weekly, those at Church Stretton, Ellesmere, Newport and Highley being held fortnightly.

When time and opportunity allow, addresses on subjects of importance to health are given at the Welfare Centres by doctors, health visitors, dentists, and voluntary workers.

The following are the particulars for the years 1928, 1929, 1930 and 1931:—

				No. of Addresses.				Average Attendance.			
				1928	1929	1930	1931	1928	1929	1930	1931
Bridgnorth	..	..	..	17	19	15	10	10	17	11	11
Church Stretton	..	..	..	4	5	5	6	26	25	23	25
Dawley	..	..	..	42	45	39	45	30	37	34	31
Ellesmere	..	..	..	0	0	0	0	0	0	0	0
Highley	..	..	..	3	0	4	21	7	0	11	15
Ironbridge	..	..	..	28	22	8	15	8	8	8	7
Ludlow	..	..	..	23	1	0	0	19	16	0	0
Market Drayton	..	..	..	45	51	48	48	25	23	19	14
Newport	..	..	..	0	0	3	0	0	0	15	0
Oakengates	..	..	..	40	35	36	33	10	11	13	15
Oswestry	..	..	..	0	6	9	5	0	12	14	12
Wellington	..	..	..	50	48	43	48	26	37	31	29
Whitchurch	..	..	..	26	25	21	16	14	15	14	13
				278	257	231	247	18	17	21	20

Attendances at Maternity and Child Welfare Centres in 1930 and 1931.

	CHILDREN.												EXPECTANT MOTHERS.					
	Under 1 year.						Between 1 and 5 years.											
	New Cases.		Total Cases.		Total Attendances.		New Cases.		Total Cases.		Total Attendances.		New Cases.		Total Cases.		Total Attendances.	
	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931	1930	1931
Bridgnorth ..	86	91	136	136	1090	909	50	23	167	161	2798	2525	39	96	49	150	136	204
Church Stretton ..	18	12	20	22	149	194	25	3	143	138	580	591	3	11	3	12	22	33
Dawley ..	105	118	130	164	1244	1485	66	16	199	165	3783	3900	52	65	59	70	129	235
Ellesmere ..	46	45	75	67	395	445	10	14	85	53	390	601	14	17	2	20	27	48
Highley ..	34	46	215	56	249	322	6	4	151	65	157	268	0	4	0	4	0	9
Ironbridge ..	112	123	124	219	1126	1312	58	33	254	354	2036	1762	36	32	42	41	83	43
Ludlow ..	78	85	88	156	754	703	48	44	345	416	1667	1289	21	13	35	21	60	33
Market Drayton ..	90	91	147	130	1326	705	39	49	195	222	2741	2241	52	66	61	70	143	138
Newport ..	93	79	134	117	529	536	27	16	178	196	456	528	57	54	60	55	87	89
Oakengates ..	145	143	219	212	1023	1322	54	37	270	189	1158	1249	37	51	51	60	153	148
Oswestry ..	192	205	382	362	1373	2016	82	52	507	247	1594	1824	57	36	76	42	177	112
Wellington ..	153	141	197	210	753	1242	68	67	263	229	3643	2344	55	39	59	43	128	93
Whitchurch ..	89	93	151	146	1532	1462	24	27	162	180	1239	1467	21	27	26	30	51	72
Totals ..	1241	1272	2018	1997	11543	12653	557	385	2919	2615	22242	20589	444	511	523	618	1196	1257

As compared with 1930 there has been an increase of 1,110 in the attendances of children under one year of age, and a decrease of 1,653 in the attendances of children between the ages of one and five years.

Although the ante-natal work is capable of much further development, progress in this very important branch of the maternity services continues to be made. During the year there was an increase of 95 in the number of expectant mothers attending the welfare centres, and there was an increase of 61 in the total number of attendances.

Under an arrangement with the Borough of Shrewsbury, by which the County Council makes a small payment per case attending the Shrewsbury Welfare Centre or Ante-natal Clinic, 73 expectant mothers made 99 attendances, and 51 children under five years of age made 153 attendances.

This arrangement proves very helpful with County Council cases resident near Shrewsbury and not, therefore, near any other Welfare Centre.

(6) **Infant Life Protection.**—Every person accepting for reward the care of a child under seven years of age has now to notify the fact within 48 hours to the Authority responsible for the Maternity and Child Welfare Services of the area. These children are then put under the supervision of the whole-time Health Visitors, who are required to visit them at least once a quarter, or more frequently should the home conditions or health of the child not be found quite satisfactory. All unsatisfactory conditions, which the foster-parent cannot or will not remedy with the advice of the Infant Protection Visitor, are immediately reported and the necessary action taken.

In one case the foster mother died, and as no satisfactory arrangements for the child's welfare had been made by the surviving husband, the child was removed to a Public Assistance Institution.

The following are the particulars of the cases supervised during the year :—

Number of cases 1st January, 1931	..	..	..	..	..	132	
Number of cases added during the year	..	..	..	..	..	41	
						<hr/>	173
Number of cases	{	reached seven years of age	..	..	..	11	
		legally adopted	..	..	..	6	
		left County	..	..	..	10	
		removed to relatives	..	..	..	13	
		died	..	..	..	2	
		found not to be Infant Life Protection cases	..			1	
		removed to Public Assistance Institution	..			1	
						<hr/>	44
Number of cases supervised at 31st December, 1931	..	..	..	..	..	<hr/>	129

(7) **Supply of Free Milk.**—There is no doubt that the commonest condition from which children suffer during the first few years of life is rickets. It is true to say that the majority of them, when old enough to attend school, show to a greater or less degree evidence of having been subject to this condition, which, it is important to remember, is a systemic disease. The evidence is fortunately usually very slight, but it is none the less significant, and shows that the child, for one reason or another, has been unable to assimilate the necessary minerals in sufficient quantities for sound body construction. As lime, to mention only one and at the same time the chief of these, enters into the composition of every cell of the body, the effect on the general health can readily be imagined when there is an inadequate assimilation of this important constituent.

It is for this reason that an adequate supply of milk for the growing child and nursing mother is so very necessary, as it is one of the few foods which contains all the materials necessary for health in a suitable form for assimilation, and in such quantities as to meet the requirements of the growing child.

Milk is supplied free in necessitous cases, and before the necessary order is given, each case is carefully inquired into 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. The opinion of the Relieving Officer is obtained in all cases, and the reports are all carefully scrutinised at the central office. Notwithstanding this careful supervision there has been a gradual increase in the amount of free milk supplied, no doubt chiefly as a result of the prevailing industrial depression, which is bringing a larger number of families within the scope of the scheme. Although the sum of £1,287 was spent on free milk in the year ending March, 1932, it must be recognised that this is undoubtedly preventive work of great value, because, if a considerable proportion of the poorer people go short of important vitamins and necessary constructive materials, as seems probable, the provision of milk should greatly improve the health of the children, lessen the amount of rickets, and diminish the number of infectious illnesses which are so frequently associated with this condition.

(8) **County Home for Ailing Babies.**—The County Council works through a local committee which includes representatives from the Public Health Committee. A monthly report, including a complete financial statement, is furnished to the County Council.

The Home is chiefly intended for babies under one year of age who are obviously suffering from malnutrition due to one cause or another. Infants of mothers suffering from tuberculosis in a highly infectious state, however, are now admitted to the Home, with the object of getting

immediate removal from the source of infection and afterwards, if possible, of arranging for some means of boarding the children away from their mothers (see page 45). The Home is particularly suitable for this type of case, as almost all the infants are treated entirely in the open air with very beneficial results. The educational side of the work, however, is not its least important aspect, and to the benefits which the individual infants derive from treatment at the Home must be added the advantages which are derived from the increased knowledge spread by the mothers whose babies are treated there.

The number of babies admitted during the year was 99, sixteen more than in 1930; three babies died, and 95 were discharged. The causes of death in the three cases were marasmus, convulsions and acute gastritis respectively. Of the infants discharged, 85 were sent out in good health, 3 improved, whilst in the remaining seven cases, no improvement was shown. The average duration of stay was 60 days—five more than in the previous year; and the number of babies admitted was larger.

(9) **Midwifery Services.**—In 1930 there were 246 midwives practising in the County, 10 of whom were untrained; and in the year under consideration, of the 246 registered midwives engaged in midwifery practice in Shropshire, 238 were trained, 8 being untrained.

Under the Maternity and Child Welfare Act, 1918, the duty is placed on the County Council of making provision for midwifery services, and its obligations in this respect it discharges through the agency of the Shropshire Nursing Federation and the affiliated District Nursing Associations. There were 101 District Nursing Associations in being during 1931, an increase of one on the previous year.

Training of Midwives.—By an arrangement with the County Council, the Shropshire Nursing Federation sends suitable candidates for training as midwives, three-fourths of the expense being borne by the County Council, the remainder being met by the Shropshire Nursing Federation. The number of midwives sent for training under the arrangement since 1921 is as follows:

1921	14	1926	3
1922	13	1927	11 (1 did not complete training)
1923	14	1928	10
1924	4	1929	9
1925	8 (2 did not complete training).	1930	9 (1 did not complete training)
		1931	10 (2 did not complete training)

Medical Help sought by Midwives.—There was a slight increase in the number of cases for which medical help was sought by midwives, there being 1,239 during the year as opposed to 1,192 in 1930. Seven hundred and two claims for payment were sent in by medical practitioners, and fees amounting to £1234 were paid to them.

During the previous year, the number of claims was 584, and the payments in respect of these amounted to £1,010. When the family is in a position to pay, the whole or part of the fee is re-claimed by the County Council.

An analysis of the reasons for sending for medical help is given in the following statement:—

			1930	1931
On account of a complication of pregnancy	..	..	221	236
„ „ „ „ „ labour	..	..	733	784
„ „ „ „ „ the puerperium	..	..	68	62
„ „ of the health of the child	..	..	170	157

Still-births.—Notifications of 35 still-births (26 males and 9 females) were received from midwives during the year. There was evidence that death had occurred during or shortly before labour in 16 of them, and some time previously in 18, while in one case this point remained undecided.

Statistics relating to Work under Midwives Acts.

Year.	Number of Midwives practising in the County in June of each year.	Number of Visits paid.	Notifica-tions of having sent for medical help.	Notifications of Still-births	Notifications of death of mother or child with no medical man in attendance.	Notifica-tions of Artificial Feeding by Midwives.	Notifica-tions of Midwives' Liability to be a source of Infection.	Notifica-tions by Midwives of having laid out a Dead Body.
				By Midwives.				
1925	255	694	882	48	3	51	28	22
1926	247	846	895	52	5	46	25	42
1927	236	854	898	55	3	36	37	28
1928	235	847	1056	50	2	44	32	32
1929	249	796	1066	41	4	38	45	38
1930	246	845	1192	57	8	47	59	38
1931	246	780	1239	35	4	49	57	35

(10) **Maternal Deaths.**—A great deal of propaganda work relating to Maternal Mortality has recently been carried on which has served to focus public attention on this problem ; but it is a matter in connection with which it is necessary to consider the facts in their proper perspective. It should be remembered that, while the maternal death-rate is too high and ought to be very considerably reduced, the very great majority of mothers do have normal confinements, and subsequently lead healthy, happy normal lives. It is possible, therefore, that the propaganda work has not all been entirely helpful ; and anything which tends to promote fear and create anxiety in the expectant mothers of to-day cannot be good. In addition, it would be very unfortunate if the confidence of the patient in the medical and nursing services upon which she has to rely in her time of difficulty were to be taken away. It is, however, a lamentable fact that there are too many maternal deaths, and notwithstanding the progress which has been made in other branches of Public Health work, an example of which is the fall in the Infant Mortality rate, the progress is not reflected in the statistics relating to maternal mortality. In spite of the continual improvement and development of the midwifery services, which has been a feature of the last dozen years, we continue to lose approximately one in every 250 mothers in confinement ; and owing to the circumstances in which it takes place and the consequences to others which it frequently entails, nothing is more distressing than a maternal death.

Every maternal death is now the subject of careful investigation, and a report is sent to the Ministry of Health for submission to the Maternal Mortality Committee which has been set up to inquire into this problem. A large amount of valuable information has already been collected and gone into by this Committee, and its final report should be one of great interest.

In 1931 there were in Shropshire 24 maternal deaths directly or indirectly due to pregnancy, or due to a condition complicated by pregnancy, but of these, three cases were residents of another administrative area and were in Shropshire for confinement only. Of the deaths which took place during the year under consideration, in 13 of the cases a doctor had been engaged previous to confinement. The large proportion of cases in which a doctor had been engaged would seem to indicate either that the health of the mother had required attention during pregnancy, or that difficulty had been anticipated at the confinement.

Particulars of the pregnancies and of the causes from which the deaths resulted are given in the Table on page 31. Of the 83 maternal deaths which took place during the years 1928 to 1931, 13 were due to eclampsia, 15 to pulmonary embolism, 14 to heart disease, and no less than 20 were due to causes which came within the legal definition of puerperal pyrexia.

Particulars of Maternal Deaths for the Four Years 1928 to 1931.

Cause of Death.	Total Deaths.	Number of Pregnancy.										Total for years			
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Un-known.	1928	1929	1930	1931
Puerperal Fever	10	8	..	..	..	1	..	..	..	..	1	2	2	3	3
Caesarian Section { and Peritonitis and Grave's Disease ..	2	2	..	..	..	..	..	..	..	..	..	1	..	..	1
White Leg	1	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Pneumonia	1	4	1	..	2	1	..	..	..	..	..	3	1	1	3
Eclampsia	13	9	2	..	..	..	..	..	1	..	1	5	5	2	1
Nephritis	4	..	2	1	..	..	..	1	..	..	..	..	1	..	3
Perforated Gastric Ulcer ..	1	..	..	..	..	..	..	..	..	1	..	..	1	..	..
Pulmonary Embolism	15	6	3	1	1	1	1	1	..	1	..	4	3	6	2
Acute Otitis Media	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..
Post-partum Haemorrhage ..	1	1	..	..	..	..	..	1	..	..	..	..	1	..	..
Miscarriage { and Measles and Appendicitis ..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Intestinal Obstruction	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Pelvic Injuries and Peritonitis ..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Perforation of Uterus	2	1	..	..	1	..	..	..	..	..	..	..	..	1	1
Heart Failure	14	7	3	1	1	..	..	1	..	1	..	1	6	2	5
Septic Abortion	2	1	..	1	..	..	..	..	..	..	..	..	1	1	..
Inanition and Puerperal Insanity ..	1	1	..	..	..	..	..	..	1	..	..	..	..	1	..
Placenta Praevia	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Meningitis	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1
Hyperemesis Gravidarem	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1
	83	44	11	4	6	4	2	4	2	3	3	17	24	21	21

(11) **Appointment of Obstetrical Consultant.**—In accordance with the recommendation of the Government Committee on Maternal Mortality, the County Council has appointed an Obstetrical Consultant under the Maternity and Child Welfare Scheme, and the services of Dr. Downer, who was appointed Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations in 1927, are now also available for any doctor who desires a second opinion or assistance as a result of a serious complication or emergency arising during pregnancy, parturition, or the puerperium.

Between May, 1931, when Dr. Downer was appointed Obstetrical Consultant, to the end of the year his services were required in this capacity in four cases. As Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations he attended 4 cases during the twelve months.

Arrangements have been made by the County Council whereby patients suffering from puerperal fever or puerperal pyrexia are admitted to Berrington Hospital for treatment; or if the medical practitioner so desires it, a nurse is provided through the agency of the Shropshire Nursing Federation to look after the patient in her own home.

(12) **Provision of Maternity Beds.**—The following are the arrangements made for the provision of maternity beds by the County Council :—

Berrington Hospital.—Ordinary maternity cases are taken into this hospital at a fee of £2 2s. od. per week, and septic cases at a fee of £3 3s. od. per week. The number of cases admitted during the year was 49 (15 septic cases with an average length of stay of 22.1 days, and 34 ordinary cases with an average stay of 17.3 days). The County Council undertakes responsibility for payment in cases unable to afford the fee.

Newport Nursing Home.—Two beds are always available here. The County Council pays an annual fee of £10 per bed towards their maintenance. During the year 4 County Council cases were admitted, the average stay being 12.25 days.

The Lady Forester Hospitals, Broseley and Much Wenlock.—There are six maternity beds at Broseley hospital and four beds at Much Wenlock hospital. Occasionally other beds have been used. The County Council has agreed to pay £1 1s. a week towards the cost of any case recommended that cannot afford the fee.

Hostels for unmarried mothers and their infants.—An arrangement is in force with the Mrs. Legge Memorial Home, Wolverhampton, by which patients are admitted for six months, the County Council paying £2 a week for the first six weeks, the expense of the remainder of the period being borne by the Home. Five cases were sent during the year.

Institutional Treatment of expectant and nursing mothers and their infants suffering from Venereal Diseases is carried out under the Venereal Diseases Scheme at Cleveland House, Wolverhampton. Five mothers were sent during the year (see page 50).

NURSING HOMES REGISTRATION ACT, 1927.

The inspection of Nursing Homes is carried out by the Inspector of Midwives, who submits a report on each once a quarter, and more frequently should it be necessary.

During the year one registered Nursing Home was voluntarily closed. Four applications for registration were received, all of which were granted. On 31st December, 1931, the par-

particulars of Nursing Homes registered under the Nursing Homes Registration Act, 1927, were as follows :—

Nursing Home.	No. of Beds.	Dates of Registration.	Cases accepted.
			Maternity and General.
3, Edgeley Road, Whitchurch.. ..	3	25/10/28	"
Wrekin Nursing Home, Wellington	4	25/10/28	"
Salop Nursing Institution, Shrewsbury	22	25/10/28	"
Park Cottage Nursing Home, Clun	2	25/10/28	"
Clifton Villa Nursing Home, Ludlow	2	25/10/28	"
Newport Nursing Home, Newport	4	25/10/28	"
Ardmillan, Oswestry	5	25/10/28	"
The Limes Nursing Home, Shrewsbury	12 and 1 cot.	14/11/28	"
Bridgnorth and South Shropshire Infirmary.. ..	29	14/11/28	"
Shifnal Cottage Hospital	11 and 2 cots.	14/11/28	"
Oswestry Cottage Hospital	19 and 2 cots.	23/2/29	"
Wellington Cottage Hospital	11 and 1 cot.	26/2/29	"
Clifton Nursing Home, Dodington, Whit- church	5	22/3/30	"
The Manse, Dovaston	2	7/4/30	"
Caynham, Port Hill Drive, Shrewsbury	1	16/4/30	"
Brynantur, All Stretton	1	26/6/30	"
Haybridge Nursing Home, Wellington	5	13/11/30	"
Oswestry Nursing Home, Morda Road	4	17/11/31	"
Brooklands, Adderley Road, M. Drayton	6	25/11/31	"
Gobowen Nursing Home, Gobowen	2	23/12/31	"
Market Drayton Cottage Hospital	10 and 2 cots.	24/1/29	General only.
Ludlow Cottage Hospital	10	24/4/29	"
Ellesmere Cottage Hospital	12	20/6/29	"
Whitchurch Cottage Hospital	14 and 1 cot.	4/11/30	"
Newport, Lady Boughey Cottage Hospital	14 and 1 cot.	15/11/30	"
St. Catherine's Cottage Hospital, Clun	6	5/3/31	"
34, Jennings Road, Oswestry	1	21/6/27	Maternity only.
3, Glanaber Terrace, Weston Rhyn	1	21/6/27	"
11, Burton Street, Shrewsbury	1	21/6/27	"
4, Hordley Road, Tetchill	1	7/11/27	"
3, Woodbine Terrace, Bishop's Castle	2	3/3/28	"
Church Street, Shawbury	2	14/4/28	"
Hampton Bank, Welshampton	1	25/10/28	"
27, Broadway, Shifnal	1	4/5/29	"
81, Canon Street, Shrewsbury.. ..	2	4/7/29	"
West Farm, Ruckley	2	22/7/29	"

The following Institutions have been granted exemption from registration :—

Eye, Ear and Throat Hospital, Shrewsbury.

King Edward VII. Memorial Sanatorium, Shirlett.

Lady Forester Hospitals, Broseley and Much Wenlock.

Royal Salop Infirmary, Shrewsbury.

Shropshire Orthopaedic Hospital and Agnes Hunt Surgical Home, Oswestry.

ORTHOPAEDIC SCHEME.

There is a central hospital at Park Hall, Oswestry, and after-care centres are held at Bridgnorth, Cleobury Mortimer, Craven Arms, Dawley, Ellesmere, Ironbridge, Ludlow, Market Drayton, Newport, Oakengates, Oswestry, Shifnal, Shrewsbury, Wellington, Wem, Whitchurch.

The Orthopaedic Centres are visited at regular intervals by a Medical Officer of the Hospital, and ten of the Centres are visited weekly by specially trained nurses, the remainder being visited fortnightly. All the Orthopaedic Centres, except that at Ellesmere, are held on the same day as the Child Welfare Centres, an arrangement which makes for that co-operation between the two branches of the work which is so essential, as the early discovery of orthopaedic conditions in children under five depends almost entirely on the health visitors. The early discovery of cases amongst school children is largely in the hands of the School Medical Officers, who are also the Medical Officers in attendance at the Child Welfare Centres. By these means the Orthopaedic work is closely linked up with the School and Child Welfare work.

The importance of early treatment of poliomyelitis is so great that arrangements have been made with the Orthopaedic Hospital for a specially trained nurse to be sent to help the medical practitioner, and afterwards to get the patient to hospital if necessary.

In order to ensure early treatment in cases of poliomyelitis and tuberculosis, a circular letter was drawn up and sent to all the medical practitioners in the County in which the facilities for diagnosis and treatment provided by the Orthopaedic Hospital were pointed out.

In the case of lesions due to tuberculosis there is frequently delay on account of the insidious nature of the disease and the failure of the patients to recognise the seriousness of the comparatively mild symptoms which manifest themselves at its commencement. Many of the tuberculous cases, therefore, come under notice only after considerable damage has been done. The opinion of an orthopaedic surgeon, who has X-rays and every facility for diagnosis at his disposal, can be obtained at the Orthopaedic Hospital.

Conditions and defects of such a nature that they cannot be adequately dealt with at the After-Care Centres, are admitted for treatment to the Orthopaedic Hospital.

Cases Treated at Orthopaedic After-Care Centres. 1931.

	Cases beginning of year 1931.	Cases admitted during 1931.	Number of Attendances.	Number Discharged.	Condition on discharge.			Other particulars.				
					Remedied.	Improved.	Unaltered.	Dead.	Left County.	Refused to Attend.	Treated elsewhere.	Still in Attendance.
Under 5 years	156	172	2240	78	19	8	1	1	6	39	4	250
5—16 years ..	548	289	5876	260	95	28	1	..	19	105	12	577
Over 16 years	295	223	2449	154	33	52	1	6	14	40	8	364
T.B. cases of all ages ..	131	38	1270	20	2	4	..	2	5	2	5	149
Totals	1130	722	11835	512	149	92	3	9	44	186	29	1340

512

Cases treated at the Shropshire Orthopaedic Hospital during the year, and paid for by the Public Health and Medical Inspection Committees.

Disease.	Under 5 years.	5—16 years.	Over 16 years.	Total.	Per-centages.
Tuberculosis of Bones and Joints ..	8	26†	37	71	46.71
Diseases and Injuries of the Nerves ..	4	19	..	23	15.13
Fractures and Dislocations	2	4	..	6	3.95
Flat Foot .. ..	..	4	..	4	2.63
Osteomyelitis .. ..	..	7	..	7	4.61
Spinal Curvature—Non-Tubercular ..	..	7	..	7	4.61
Claw Foot .. ..	..	7	..	7	4.61
Torticollis .. ..	..	1	..	1	.66
Arthritis (Septic and Rheumatoid) ..	1	5	..	6	3.95
Club Foot	2	4	..	6	3.95
Rickets	1	..	..	1	.66
Congenital Deformities	3	5	..	8	5.26
Conditions due to faulty footwear ..	..	3	..	3	1.97
Injuries to feet .. ..	..	1	..	1	.66
Periostitis	1	..	..	1	.66
Total for 1931 ..	22	93	37	152	
Total for 1930 ..	30	105	42	177	

† Includes 3 Shrewsbury Borough School Children.

Of the 71 cases dealt with under the Tuberculosis Scheme, 24 were diagnosed as suffering from affections of the hip, 18 of the spine, and 8 of the knee, while in 21 cases other bones and joints were affected. The average length of stay was 168 days. In the previous year, 73 tuberculous cases were admitted, the average length of stay being 110 days.

From the above table it will be seen that 25 fewer cases were treated in the Orthopaedic Hospital during 1931 than in the previous year, but the average number of beds occupied was greater, being 45 as compared with 40 in 1930. The apportionment of the cases for the years 1926—1931 inclusive was as follows:—

				1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Tuberculosis	..	{	Cases treated ..	99	91	95	96	75	71	92	87	75	73	71
			Av. No. of beds ..	44	42	37	40	37	31	40	39	30	23	31
			Cost to C.C. ..	£5281	£5431	£5205	£4436	£4986	£4398	£3208	£5055	£4989	£3695	£2619
Medical Inspection		{	Cases treated ..	95	47	56	70	70	72	71	61	59	83	67
			Av. No. of beds ..	21	11	11	13	14	15	15	14	8	13	11
			Cost to C.C. ..	£3299	£3194	£1356	£1414	£1728	£1894	£1663	£2047	£1434	£1003	£1567
Child Welfare	..	{	Cases treated ..	38	34	31	25	33	21	22	20	22	21	14
			Av. No. of beds ..	10	8	6	7	9	5	9	2	6	4	3
			Cost to C.C. ..	£1546	£1125	£905	£781	£896	£1061	£582	£1122	£266	£861	£240
Total Cases				232	172	182	191	178	164	185	168	156	177	152
Average No. of beds				75	61	54	60	60	51	64	55	44	40	45
Total Cost to C.C.				£10126	£9750	£7466	£6631	£7610	£7353	£5453	£8224	£6689	£5559	£4426

TUBERCULOSIS.

The incidence of tuberculosis in 1931 compared with the two previous years is as follows :—

Pulmonary Tuberculosis.				Other forms of Tuberculosis.		Total.	
Notifications.		Deaths.		Notifications.	Deaths.	Notifications.	Deaths.
1929 ..	194	147		138	33	332	180
1930 ..	184	106		119	34	303	140
1931 ..	216	155		102	37	318	192
Average for 1930 & 1931				200	130.5	110.5	35.5
						310.5	166

Comparing the figures for the year 1931 with those of the previous year, it will be observed that the number of deaths from pulmonary tuberculosis increased by 49, while the number of notifications increased by 32. The deaths from non-pulmonary tuberculosis on the other hand increased by 3, while the notifications decreased by 17.

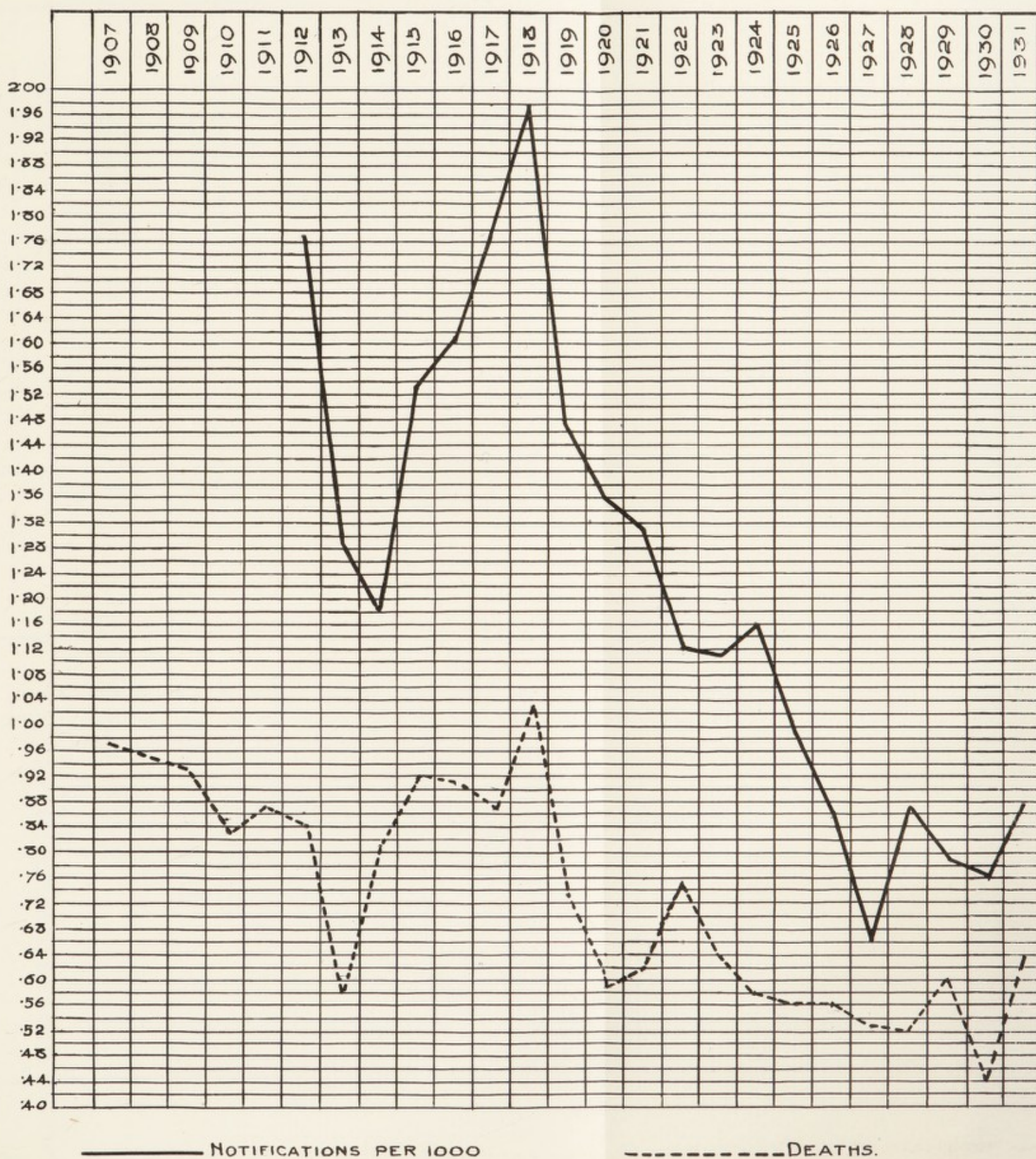
There has been, therefore, an increase of 15 in the total number of notifications and an increase of 52 in the total number of deaths.

Notifications of, and Deaths from, Tuberculosis.

			New Cases.				Deaths.			
			Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
			M.	F.	M.	F.	M.	F.	M.	F.
0—1	0	0	2	1	1	0	1	3		
1—5	0	3	7	7	0	1	2	4		
5—10	7	2	18	10	1	0	4	2		
10—15	4	1	11	3	11	13	3	2		
15—20	8	10	1	9						
20—25	20	15	5	4	37	44	2	8		
25—35	27	31	4	8						
35—45	25	15	4	4	27	15	2	3		
45—55	21	10	3	0						
55—65	8	7	0	0	3	2	1	0		
65 and upwards ..	2	0	0	1						
	122	94	55	47	80	75	15	22		
TOTALS	216		102		155		37			

Out of a total of 155 deaths from pulmonary tuberculosis, 12 were not notified previously, and out of 37 deaths from non-pulmonary tuberculosis, 10 deaths were not notified. The ratio of non-notified tuberculosis deaths to total tuberculosis deaths is 1 to 9.

PULMONARY TUBERCULOSIS NOTIFICATIONS AND DEATH RATES, 1907 TO 1931.



Although the figures for non-pulmonary tuberculosis would at first seem to point to inefficient notification in this county, it can be said that in practically all 10 cases a diagnosis of tuberculosis, and therefore notification, before the death of the patient was impracticable by reason of the short duration of illness.

No action was taken to enforce notification, nor was there any evidence of wilful neglect to notify tuberculous cases during 1931.

There was no evidence of excessive incidence of, or mortality from, tuberculosis in any particular occupation in the county during the year.

Of the 216 cases of pulmonary tuberculosis notified in 1931, five were inmates of the Salop Mental Hospital and were not seen; one case was notified by the military authorities; five cases were notified from Berrington Hospital; and one case from Wolverhampton General Hospital. It should be noted that, after making these deductions, 73 per cent. of the cases notified were seen by the Tuberculosis Medical Officers before notification. This figure is a very important one, as it is an index of the relations which exist between the General Practitioners and the Tuberculosis Officers, the closest co-operation between whom being essential for the success of the Tuberculosis Scheme.

The 73 per cent. only applies to those cases actually notified to be suffering from pulmonary tuberculosis, and does not apply to cases where a diagnosis of tuberculosis is rejected.

It will be observed from the Table on page 36 that the greatest death-rate from pulmonary tuberculosis is again between the ages of 15 and 45. The increase of 49 deaths in 1931 is largely accounted for by the deaths of 16 more males and 24 more females, between the ages of 25 and 45, whilst the deaths between the ages 15 to 25 show a decrease of six.

The morbidity figures indicated by the notifications show 14 notifications between ages 5 to 15, 53 between ages 15 to 25, 58 between ages 25 to 35, 40 between ages 35 to 45, and 31 between ages 45 to 55. It will be seen, therefore, that the greatest morbidity to tuberculosis is in the young adult from 15 to 35, and the greatest death-rate between 25 and 45. A number of these deaths, however, are amongst patients who suffered from active pulmonary tuberculosis in the earlier ages and died in the later years.

This high morbidity and mortality from pulmonary tuberculosis in the young adult is one of the most baffling facts in tuberculosis, and on a satisfactory solution to this must depend the success of our anti-tuberculosis work. It would therefore appear that concentrated research on this point would be amply repaid.

In the first fifteen years of life there were three deaths from pulmonary tuberculosis as against sixteen deaths from other forms of the disease. Infection through milk by the bovine type of tubercle bacillus causes a large proportion of the cases of non-pulmonary tuberculosis, see page 54 whilst pulmonary tuberculosis is nearly always due to the human type of bacillus. A higher incidence of non-pulmonary tuberculosis would, consequently, be expected in the earlier years of life when opportunities for infection are greater owing to this being the great milk-drinking age. The difference, however, is not quite so great as that shown by the figures, as 7 deaths from tubercular meningitis are included in the sixteen non-pulmonary deaths, and many of these meningitis cases are undoubtedly due to the human type of infection.

There is, however, a high morbidity in the cattle type of infection, as there were fifty-nine cases of non-pulmonary tuberculosis notified, as opposed to seventeen cases of the pulmonary type.

It will be seen that there is still a great danger from infection by milk. The ideal is, of course, a tubercle-free milk for our children but, as this is neither practicable nor possible at present, it would appear that the only method of dealing with this type of infection is to insist on all milk given to young children being boiled, unless Certified or Tuberculin Tested. Pasteurized milk has not been definitely proved as safe and, even if it were, pasteurization is not applicable to a scattered county area like Shropshire.

In the table below is given the average annual number of deaths from pulmonary tuberculosis for the Urban and Rural Districts, classified in age periods and sex during five-yearly periods from 1916 to 1930, and for the year 1931.

*Urban Districts.**Rural Districts.*

	All ages.		0—		15—		25—		45—		65—		All ages.		0—		15—		25—		45—		65—	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Average 1916—20	53	46	4	5	7	10	24	21	14	8	4	2	44	46	1	3	8	13	19	22	13	7	3	1
Average 1921—25	45	40	1	2	7	11	20	19	15	7	2	1	33	35	1	1	6	11	14	14	10	8	2	1
Average 1926—30	36	32	1	2	7	9	15	15	12	5	1	1	31	29	1	1	5	7	16	14	7	6	2	1
1931	45	41	1	0	7	8	23	23	12	9	2	1	35	34	1	1	4	5	14	21	15	6	1	1

Table giving particulars of Notifications and Deaths from Pulmonary and other Forms of Tuberculosis in each of the Sanitary Districts during the year 1931.

Urban Districts.	Pulmonary		Other forms		Rural Districts.	Pulmonary		Other forms	
	Notifi- cations.	Deaths.	Notifi- cations.	Deaths.		Notifi- cations.	Deaths.	Notifi- cations.	Deaths.
Bishop's Castle	1	0	1	2	Atcham	15	9	8	2
Bridgnorth ..	6	3	0	0	Bridgnorth ..	7	8	1	1
Church Stretton	2	2	0	0	Burford	1	0	2	1
Dawley	5	3	5	1	Chirbury	3	2	0	0
Ellesmere ..	2	0	1	0	Church Stretton ..	0	0	1	1
Ludlow	12	7	0	1	Cleobury Mortimer	3	3	5	0
Market Drayton	5	5	1	0	Clun	5	2	2	0
Newport	4	1	0	1	Drayton	3	2	0	0
Oakengates ..	8	4	8	1	Ellesmere	3	3	6	4
Oswestry	16	10	7	3	Ludlow	10	7	2	1
Shrewsbury ..	26	26	13	3	Newport	2	3	2	1
Wellington ..	10	5	6	0	Oswestry	14	9	5	4
Wem	2	2	1	1	Shifnal	5	4	3	1
Wenlock	19	15	6	4	Teme	1	1	0	0
Whitchurch ..	0	3	3	1	Wellington ..	14	9	7	2
					Wem	10	5	4	1
					Whitchurch ..	2	2	2	0
Totals ..	118	86	52	18	Totals ..	98	69	50	19

It will be noticed that the death-rates in the Urban Districts have been higher than those in the Rural, but that there has been a very definite fall in the death-rates in both Urban and Rural Districts. The rate of decline in the Urban and Rural Districts for the past thirty years is approximately equal, being 40 per cent. in the Urban and 37 per cent. in the Rural.

In the ten-yearly periods, the death-rate in the manufacturing districts of the county is as low as, if not lower than, the death-rate in the other Urban areas where there is no factory life; and from this it would seem that infection does not take place in the work-rooms as much as one might imagine, but rather in the homes of the people. It would appear necessary, therefore, to concentrate more and more on the improvement of the home conditions, especially on those homes in which there are infectious cases with a positive sputum.

It was pointed out in the Annual Report for the year 1929 that the death-rate from tuberculosis in Oswestry during the ten-yearly period 1921—1930 was the highest in the County. This matter was the subject of investigation by Dr. Watkin, and has been fully reported on by him. A summary of the conclusions and recommendations is as follows:—

Conclusions.

- " 1.—The average annual death-rate from *Pulmonary* Tuberculosis in Oswestry Borough was in the period 1921—1930, forty-six per cent. in excess of the rate for the whole of the Urban Districts of the County. During the same period the rate for the Oswestry Rural District was slightly below the rate for the whole of the rural districts of the County.
- " 2.—The average annual death-rate from *Non-Pulmonary* Tuberculosis during the last decade 1922—1931 was .23 per 1,000 of the population, as compared with .18 per 1,000 for the whole of the urban population of the County.
- " 3.—The high death-rate is to be attributed chiefly to infection with the human bacillus. Infection through milk is not more prevalent than in other boroughs.
- " 4.—Probably the immigration of people from upland homes in Wales to town life has something to do with the excessive mortality. They have previously had less opportunity to be infected, and not having been 'salted' with the disease, succumb more readily.

Recommendations.

- " (a) There are no figures to show that the housing problem is worse in Oswestry than in other towns in the County, but as Tuberculosis is favoured by overcrowding, and as the disease is excessive in the Borough, there seem to be good reasons for a special effort on the part of the Public Authority in the direction of building more houses. The allocation of Council houses to overcrowded families suffering from Tuberculosis is especially desirable.
- " (b) Propaganda for the education of the public in health matters should be continued with, if possible, increasing vigour, and steps should be taken to see that the community is well informed of the facilities provided for diagnosis and advice at the Tuberculosis Clinic. The chronic, unrecognised infectious case is more of a danger to the public than the advanced bedridden case. Leaflets or posters might be displayed giving the necessary information.

Stress should be laid on the importance of contact examination. Those who have been living in contact with an infectious case should attend the Tuberculosis Clinic every three or six months for examination, so that if the disease develops it may be detected early. The tendency at present in many cases is for only the child contacts to be brought. It is much more important for the young adults to attend.

- " (c) Although infection through milk does not seem to be excessive in Oswestry, it is important to push on with the campaign for clean milk. It is estimated that from 5 per cent. to 6 per cent. of all deaths from tuberculosis are due to the bovine bacillus."

Number of Cases of Tuberculosis on the Register at the end of the Year.

Pulmonary.			Non-Pulmonary.			Total cases
Males.	Females.	Total.	Males.	Females.	Total.	
780	743	1523	546	638	1184	2707

A study of the chart opposite page 36 will show that in those years in which influenza was prevalent, there was an increased death-rate from pulmonary tuberculosis. This is shown in the high death-rate from pulmonary tuberculosis in the years 1918, 1922, 1929, which coincided with severe epidemics of influenza. The death-rate in 1930 was the lowest on record, but in 1930 there were only 50 deaths from influenza in the County, as compared with 84 in 1931.

In the report for 1930 it was stated :—Whilst this big decrease in the number of deaths from pulmonary tuberculosis is very satisfactory, it is generally found that a sudden fall is often succeeded by a slight rise. The increase in the number of deaths in 1931 has confirmed this statement, and an average taken over a ten-yearly period is, therefore, a much truer index of the position.

The figures for the three ten-yearly periods 1901—1930, show a very consistent and satisfactory decline. They are :—

1901 to 1910 :	..	.961 per 1,000 of population.
1911 to 1920 :	..	.816 per 1,000 of population.
1921 to 1930 :	..	.580 per 1,000 of population.

While these figures show that there has been a very definite decrease, which was most marked in the last decade, this, however, has to be discounted by the fact that, in the decade 1911 to 1920, the War years intervened with consequent added stress and strain and depleted food supplies, all of which were conducive to the development of tuberculosis.

The Tuberculosis Problem is very definitely a Public Health one, and will not be solved by any single measure solely directed against tuberculosis, but by the combined effect of all schemes designed to promote the general health of the community, and the big drop in the death-rate in the last ten years cannot be attributed to the Tuberculosis Scheme alone. The rapid development of School Medical Inspection and of Maternity and Child Welfare Schemes has played a very important part in the decline. In the absence of a specific cure, it is felt that pulmonary tuberculosis can most effectively be dealt with by adopting those measures which will result in the dilution of infection and in raising the resistance of the individual.

This can best be done by :—

- (1) Education in general healthy living, in food values and the special food requirements of growing children, and in the early symptoms, causes and prevention of tuberculosis.
- (2) Better housing of the population generally and, more particularly, better housing of the infectious cases in order to dilute infection.
- (3) A more general use of open-air shelters, especially for the child contacts, in order to get children out of the house where gross infection takes place.
- (4) Boarding out of children in those cases which cannot be dealt with by other means.
- (5) Segregation of advanced cases of pulmonary tuberculosis.
- (6) A thorough search for the source of infection among the contacts of all children dying from acute generalised tuberculosis or tubercular meningitis.
- (7) The segregation of babies born of infectious tubercular mothers.
- (8) The regular supervision of the health of "contacts," especially contacts with cases which have a positive sputum.
- (9) The most intimate co-ordination of all health schemes in raising the general health of the community.

Work under the Scheme.

Scheme for Contact Examination.—On notification of each case of pulmonary tuberculosis the health visitor makes a report on the health of all the contacts in the home, and visits the family at regular intervals. Contact visiting is continued after the death of the patient, and every case of ill-health is immediately reported to the Tuberculosis Officer, who examines the case as soon as possible. With regard to "contacts" of school age, the Assistant School Medical Officer examines these cases at his routine inspection of the school. After examination, every doubtful case is referred to the Tuberculosis Officer.

Results of all sputum examinations are sent to the health visitors, who are instructed to pay particular attention to all cases in which there is a positive sputum, as these are, of course, the cases which are most infectious.

In 1931, 563 contacts were examined and 28 cases of tuberculosis were discovered among them. On the other hand, of the 216 cases of pulmonary tuberculosis notified, 50 had a definite history of contact with a case of tuberculosis.

Pneumothorax or Collapse Therapy.—This is undoubtedly one of the greatest advances in the treatment of pulmonary tuberculosis in the last half century. The principle is that by introducing air between the layers of the pleura the lung collapses and is kept at rest. The lung is kept collapsed for at least three years, and as the air becomes absorbed refills are necessary at intervals of two weeks to a month. A great extension of this form of treatment is expected and, in order to enable this to be done satisfactorily, the County has been divided into three areas. The West and the North-West cases are treated at the Tuberculosis Dispensary, Shrewsbury; the East and North-East cases at the County Public Assistance Institution, Wellington, and those from the Southern part at Shirlett Sanatorium.

This scheme has been in operation for over twelve months and seems quite adequate for the needs of the County. During 1931, artificial pneumothorax was induced on six new cases at Shirlett Sanatorium and 146 refills were given at the various centres to out-patients.

Apart from the great benefit to the individual receiving this treatment, artificial pneumothorax has a very important bearing upon the prevention of tuberculosis, as it renders a number of our infectious cases non-infectious by stopping all sputum, and in other cases it decreases the amount of infection by diminishing the quantity of the sputum so that these cases can be returned to ordinary life with much greater safety.

Experience shows that contact with an open case of tuberculosis in the past is very common, so that to prevent the spread of the disease, it is imperative to attempt to make every positive case of tuberculosis non-infectious or, at any rate, less infectious. Artificial pneumothorax, either by stopping the expectoration or by diminishing it, materially helps, and it appears to be advisable to attempt collapse in every tubercle positive case where one can be satisfied that the other lung will stand up to the extra work.

Under the present arrangement cases are sent at periodic intervals to Shirlett Sanatorium for a refill and a control X-ray, but as the Sanatorium is situated in the south of the County, the travelling expenses are heavy and beyond the means of a great many of the patients.

In order to do this work satisfactorily, X-ray control is essential, and when better times arrive, the question of an X-ray installation at a more central point in the County, preferably at the Shrewsbury Dispensary, must be seriously considered.

Shropshire Orthopaedic Hospital.—See page 34.

Prees Heath Sanatorium.—This hospital has proved of great use during the year, and there are now 11 beds available in it, but additional accommodation is required. Fourteen patients were admitted, five were discharged, and ten died.

Dental Treatment.—Thirteen patients received dental treatment, which consisted of extractions of 34 teeth and six other operations.

Shelters.—Twelve new shelters constructed in accordance with our new design, have been provided, and 7 have been scrapped.

There are at present over 159 shelters in the County. The County Council have provided 145, Shrewsbury Borough 4, Whitchurch Urban District Council 2, Drayton Rural and Urban District Councils 2, Chirbury Rural District Council 1, the Ludlow Care Committee 5, and, in addition, several have been provided by private individuals.

Of the 145 shelters provided by the County Council, five have been in continual use for 19 years; twenty for 18 years; nine for 17 years and twenty-five for 16 years. These old shelters continually need expensive repairs, and it is probable that a number of these will have to be scrapped during the next few years.

In the treatment and prevention of tuberculosis, shelters should be used—(1) to provide for the sleeping out of children in crowded phthisical homes; (2) for the accommodation of early cases to aid in their recovery; (3) for the accommodation of advanced cases to prevent infection.

Shelters are sometimes provided for cases of surgical tuberculosis to allow of them being treated at home, and consequently discharged from the hospital at an earlier date.

Care Scheme.—There is a Central Care Committee, and there are also local Care Committees covering the whole County. 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 patient to live as far as possible a "sanatorium life." Unfavourable conditions that they cannot remedy are reported to the Tuberculosis Officers.

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 has 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.

Cases notified.	Sputums examined.		Not Examined.	Cases with no sputum.	In Institutions.
	Positive.	Negative.			
216	129	46	2*	34	5

* Of the 2 cases not examined, there was objection by the Private Practitioner or Patient concerned in each case.

Attendance at Tuberculosis Dispensaries and Examination Centres in 1931.

No. of Cases.	DISPENSARIES.	Notified Cases.			Non-Notified Cases.				Total.
		Insured.	Non-Insured.	School Children	School.		Other		
					Contact.	Suspect.	Contact.	Suspect.	
438	SHREWSBURY.								
	No. of new cases	20	5	3	18	42	32	97	217
	Total attendances	282	207	416	105	134	107	189	1440
214	OSWESTRY.								
	No. of new cases	6	5	4	14	11	18	15	73
	Total attendances	290	139	228	53	22	39	26	797
710	WELLINGTON.								
	No. of new cases	12	2	..	28	101	32	146	321
	Total attendances	566	562	1750	159	321	139	325	3822
	<i>Examination Centres (open once a month).</i>								
58	WHITCHURCH.								
	No. of new cases	5	4	4	2	3	..	7	25
	Total attendances	51	20	23	19	21	2	16	152
64	LUDLOW.								
	No. of new cases	5	1	3	4	9	7	11	40
	Total attendances	34	16	13	10	24	15	17	129
80	BRIDGNORTH.								
	No. of new cases	6	1	1	6	5	3	16	38
	Total attendances	76	9	9	21	25	9	24	173

Under the arrangement made in 1928 by the Church Stretton Care Committee, for the use of a room at the Institute for the examination of contacts once every three months, three sessions were held in 1931, the total attendances being 30.

Visits by the Tuberculosis Medical Officers for 1931.

TO INSURED PATIENTS.					TO NON-INSURED PATIENTS.					TO SCHOOL CHILDREN.				
On notification.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.	On notification.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.	On notification.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.
27	15	73	23	295	22	81	64	4	177	2	59	40	..	13
		433					348					114		

Visits by Health Visitors to Phthisis Homes.

To Insured Patients.		To Non-insured Patients.		To School children.		Total.	
1930	1931	1930	1931	1930	1931	1930	1931
2031	1981	1230	1290	368	294	3629	3565

An analysis of the home conditions of the 216 patients notified during the year shows that at the time of notification—

116 had separate bedrooms.

46 shared bedrooms but had a separate bed.

38 shared beds, and

16 objected to the health visitor making inquiries.

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.

The latest information regarding the 38 cases who shared beds showed the position to be as follows :—

Cases have separate beds.	Shelters supplied.	Dead.	Not infectious.	In Sanatorium.	No change.
8	5	7	4	11	3

Babies' Home Scheme.—When a pregnant woman is found to be suffering from pulmonary tuberculosis, she is sent to the sanatorium until her confinement is due. She then enters a nursing institution, and as soon as the baby is born it is sent to the Wellington Babies Home, where it is kept for twelve months. In the meantime the mother is sent back to the sanatorium to complete her treatment. If there is doubt as to the danger of infection at the end of twelve months an attempt is made to persuade the parents to allow the child to go to relatives or to be boarded out. The results so far have been very satisfactory.

Since the scheme commenced in 1923, 36 cases have been dealt with. Up to the present no baby has developed tuberculosis.

In 1930 there were in England and Wales 2472 deaths from tuberculosis of the nervous system, and 306, or approximately 12 per cent, occurred during the first year of life. This shows the great liability of the infant to this form of disease, and the danger therefore of allowing it to remain in contact with a mother suffering from open tuberculosis.

A Mantoux Tuberculin test is now done on all these babies. We find that the test is invariably negative in those cases which are separated from the mother immediately they are born. In two cases during 1931 there was a definite reaction. In one of these cases the baby had been in contact with the mother for six months before the mother was diagnosed as suffering from pulmonary tuberculosis, and in the other case the baby had been in contact with the mother for three months. Neither of these babies has shown any active signs or symptoms of tuberculosis, although the positive Mantoux test showed that they had been infected.

Sanatorium (Shirlett).—The number of patients admitted to the Sanatorium in 1931 was 115, and consisted of :—

Insured patients—Males	54
Females	29
Non-insured patients—Males	10
Females	22

Analysis of the Cases admitted to Shirlett Sanatorium since its Opening in 1911.

Year	Patients treated.	Known to be Alive.	Known to be Dead.	Left County.	Unaccounted for.	Cured.	Non-Tubercular.
1911	38	10	20	7	1	..	..
1912	74	29	29	11	3	2	..
1913	80	28	40	9	1	2	..
1914	114	34	61	13	1	5	..
1915	133	41	56	24	1	10	1
1916	158	45	70	27	..	15	1
1917	164	65	66	19	..	12	2
1918	124	34	45	35	..	10	..
1919	123	50	43	23	..	7	..
1920	120	55	45	16	..	4	..
1921	121	52	53	14	..	2	..
1922	107	35	60	12	..	*	..
1923	109	44	47	16	..	2	..
1924	151	75	56	19	..	1	..
1925	130	63	50	16	..	1	..
1926	110	46	48	16	..	*	..
1927	86	45	36	5	..	*	..
1928	111	63	40	8	..	*	..
1929	113	69	36	7	..	*	1
1930	113	82	22	9	..	*	..
1931	115	104	10	..	..	*	1

* Cases are not described as cured until after the lapse of at least 5 years.

Public Health (Prevention of Tuberculosis) Regulations, 1925, and the Public Health Act, 1925 (Section 62).—No action was necessary during the year.

MENTAL DEFICIENCY.

The fact that in this county no real provision has been made for mental defectives has added greatly to the difficulties of the work, and has entailed an immense amount of correspondence. The only accommodation in the County for mental defectives is in two of the Public Assistance Institutions, namely, Madeley (which is a certified institution for 10 male and 15 female defectives), and Church Stretton Institution (which is certified for five female defectives). All other mental defectives for whom institutional accommodation has been found are in institutions situated in various parts of the country. The difficulty of the position is further added to by the fact that other Authorities, who have accepted Shropshire cases, are bringing pressure to bear on the County Council to have them removed, as the accommodation is now required for their own patients. The defectives for whom it is most difficult to find accommodation are the troublesome cases, as those defectives whom Institutions outside the County will accept are, as a rule, comparatively easily managed, and are capable of doing a moderate amount of useful work. Certain of the cases, therefore, for whom accommodation is most urgently required are those which no Institution which can select its patients will willingly accept.

Whatever may be the value of the arguments for and against sterilization, and to whatever extent it may ultimately be considered justifiable and practicable to employ this as one of the methods of dealing with certain cases of mental defect, it is certain that chief reliance will have to be placed on the provision of institutional accommodation and of home supervision for mental defectives.

At the present time the Mental Deficiency Committee have under consideration a scheme for the provision of accommodation for mental defectives in this County, and it is possible that certain Public Assistance Institutions will become available for use by the Committee. The intention is that the Wem Institution should be used as the nucleus for a colony for mental defectives, although the development of a colony at Wem would not preclude the use for certain classes and grades of mental defectives of any other institutions which might become available. One of the greatest needs of the moment is accommodation for low-grade mentally defective children.

It can of course with great truth be argued that the provision of accommodation for these people will be very costly, and will also be very uneconomic. Against this has to be set the fact, however, that they are already a great burden to the country, and that their actual cost to the community is concealed in the returns of various forms of relief. Many of them are in receipt of charity of one kind or other; many are in Poor Law Institutions; some are "casuals"; a certain proportion are potential or actual criminals, populating gaols and other houses of correction; and the great majority of them are unemployables. In addition, as a mental defective tends to beget mental defectives, the fact that they are roaming at large without proper care and control is only adding to what is already a social problem of immense magnitude.

The figures relating to the number of mental defectives in the County of Salop show an increase on the previous year. These figures, however, bear little relationship to the believed increase in the number of mental defectives in the country as a whole, but represent rather the completeness with which the ascertainment of these cases is being carried out in this County. There is no definite line of demarcation between the various grades of mental defectives, or between the highest grade and the normal person, the one shading gradually into the other; but the passage of the Mental Deficiency Acts, containing definitions of the various degrees of mental defect, has made possible the ascertainment of the number of persons who come within the legal definitions, and has also presented local authorities with the problem of making the necessary provision for them.

Ascertainment of Mental Defectives.—Mental defectives under 16 years of age, in whom the degree of defect is not so great as to make them uneducable in Special Schools, are dealt with under the Education Act. All mental defectives over 16 years of age, and all uneducable mentally defective children under this age, are dealt with under the Mental Deficiency Acts. The position at the end of the year may be summarised as follows :—

Reported under Mental Deficiency Acts.

Age	Moral Defectives.		Feeble-Minded.		Imbeciles.		Idiots.		Unclassified		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 16 ..	..	..	27	17	45	35	6	8	..	..	78	60
Between 16 and 40 ..	4	2	295	286	47	41	11	12	..	..	357	341
Over 40 ..	..	2	49	70	7	15	2	0	..	..	58	87
Age unknown ..	..	..	22	42	1	0	..	..	..	18	23	60
Totals for 1931	4	4	393	415	100	91	19	20	..	18	516	548
Totals for 1930	2	2	256	265	99	112	22	21	112	127	491	527

These cases are dealt with in the following ways :—

	M.	F.	Totals.	
			1931	1930
In Institutions for Mental Defectives ..	56	78	134	130
On licence out of Institutions	2	0	2	2
Under Guardianship	1	8	9	2
In Salop Mental Hospital	40	29	69	107
Under supervision by Health Visitors ..	114	92	206	195
Ascertained, but not medically examined ..	247	259	506	455
In Public Assistance Institutions	50	79	129	117
In Certified Institutions (chargeable to Public Assistance Department)	6	3	9	10
	<u>516</u>	<u>548</u>	<u>1064</u>	<u>1018</u>

Mentally Defective Children (Educable) under the Education Committee.

	M.	F.	Totals.	
			1931	1930
In Special Schools	10	5	15	16
Awaiting admission to a Special School ..	1	0	1	0
Under supervision of School Nurses	89	54	143	147
	<u>100</u>	<u>59</u>	<u>159</u>	<u>163</u>

Children who are probably mentally defective, including those "ascertained" but not medically examined, and those in whose case a final decision has not yet been arrived at.

		Totals.	
Males.	Females.	1931	1930
148	91	239	158

The gross total of mentally defective persons and alleged mentally defective persons under the Local Authority is 1,064, and under the Education Authority is 398.

MENTAL TREATMENT ACT, 1930.

The responsibility for carrying out the provisions of this Act has been placed upon the Mental Deficiency Committee, which has at present got the matter under consideration.

There are in this County three authorities under this Act, namely :—

The County Council, the Borough of Shrewsbury, and the Borough of Wenlock. The position at present is that the County Council has made arrangements for the admission of *temporary* and *voluntary* patients to the Salop Mental Hospital, but so far no clinics for the treatment of out-patients have been opened. The establishment of at least one centrally-situated clinic would be useful in this County. There is always a certain number of cases who are not suitable for admission to a Mental Hospital, and consequently whose requirements at the moment there is no satisfactory means of meeting. The provision, to begin with, of a clinic, where expert advice on mental diseases was available, would be a great benefit to these patients. In addition, such a clinic would assist in the after-care of patients who had been discharged from the Mental Hospital, and would provide a means by which they could be kept under a certain measure of supervision. It would probably enable a certain number of patients to be discharged from the Mental Hospital at an earlier date. The clinic would also be very helpful to the Medical Practitioner in general practice as a means whereby a specialist opinion would be available for the poorer class of patient. It has happened on several occasions recently that a doctor has had a case which he felt ought not to be at large, but which he himself was unable to certify. When such a case occurs in a household with a small weekly income the services of a consultant are not available; and it would seem that till a clinic for out-patients is set up it will not be possible to get the advice needed, and so deal with the case according to its requirements.

VENEREAL DISEASE.

The scheme for the treatment of Venereal Disease consists of :—

- (1) Provision of facilities for diagnosis in connection with the Birmingham and Bristol Universities and at the County Clinic.
- (2) Provision of 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.

The School Medical Service and the Child Welfare Centres are utilised for finding out cases of venereal disease, particularly congenital syphilis, and following them up. Two such cases have been referred for treatment during the year.

Cases of Venereal Disease Treated in 1931.

Shrewsbury Clinic.						Wolverhampton and Staffordshire General Hospital. Shropshire Patients.				
						Cases.		Attendances.		
						M.	F.	Total.	M.	F.
Syphilis	72	71	143	501	636	1137	1	..	..	..
Soft Chancre	0	0	0	0	0	0	0	..	..	..
Gonorrhoea	141	62	203	1374	407	1781	8	..	..	..
Other conditions	47	41	88	71	67	138	18	..	..	..
Total for 1931	260	174	434	1946	1110	3056	27	854	..	..
Total for 1930	270	153	423	2086	867	2953	42	1276	..	..

* These numbers only refer to cases attending for the first time in 1931.

There has been no great variation in the number of cases of venereal disease receiving treatment under the County Council Scheme as compared with the previous year, although there has been a definite increase in the number of female cases undergoing treatment for syphilis. In view of the fact, however, that it is not yet notifiable, it is impossible to say to what extent the problem is being met, and there is no doubt that much avoidable ill-health is due to failure to take advantage of the facilities provided for obtaining treatment. It will be observed that there has been an increase in the total number of attendances at the Shrewsbury Clinic, but that there has been a considerable falling off in the number of attendances of patients from Shropshire at the Wolverhampton and Staffordshire General Hospital.

Cleveland House, Wolverhampton.—This Hostel is now available for girls and women suffering from venereal disease, whether pregnant or not, who cannot receive proper treatment in their own homes. It has proved most useful, and the work, particularly in the treatment of pregnant women, in order to save the infants from disease, is of fundamental importance. During the year 5 cases of gonorrhoea were admitted from the County, 3 being pregnant women.

Examinations of Pathological Specimens.

Nature of Test.	Number of Tests.			
	Bristol University.	Birmingham University.	Shrewsbury Clinic.	Wolverhampton and Staffordshire General Hospital.
For detection of gonococci ..	6	22	177	97
For detection of spirochetes ..	..	..	..	3
For Wassermann reaction ..	287	222	..	98
For Gonococcal Complement Fixation Test	1	1	..	..

BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

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

In addition to the work done in connection with Venereal Disease, referred to on page 50, the following examinations were made :—

	Total.	Positive.	Negative.	Doubtful.
Tubercle Bacilli (Sputum)	403	61	342	0
" " (Pleural Fluid)	4	0	4	0
" " (Cerebro-spinal Fluid)	4	0	3	1
Meningococcus (Cerebro-spinal Fluid)	3	0	3	0
Diphtheria Bacilli (Secretion from Throat)	4338	1061	3277	0
Paratyphoid Bacilli (Faeces)	34	3	31	0
" " (Urine)	7	0	7	0
Typhoid Bacilli (Faeces)	26	1	25	0
" " (Urine)	9	0	9	0
Blood for Widal's reaction	134	19	115	0
Dysentery Bacilli (Faeces)	3	0	3	0
Total for 1931	4965	1145	3819	1
Total for 1930	3596	918	2678	0

The question of establishing a Bacteriological Laboratory in this county is one which has from time to time been before the Public Health Committee, but considerations of expense have so far prevented any definite action in the matter. The advantages of a centrally situated laboratory for bacteriological work in Shropshire would be very great from the point of view of increasing the efficiency of public health work. The results of examinations of certain pathological specimens, such as diphtheria swabs, would be known in about half the time which is required at present, a matter of great importance in controlling an outbreak of infectious disease ; it would also be possible to extend the scope and thoroughness of the work which is now being carried on, and investigations could be undertaken which are not at present carried out.

The work under the Milk and Dairies Act is limited by the expense which this entails ; and investigations are only undertaken to ascertain the source of tubercle in milk when it has been found present by an outside Authority. This work could be greatly developed if a County Bacteriological Laboratory were established.

At the present time, when the question of more adequate provision for cases of infectious disease is under consideration, the possibility of establishing a bacteriological laboratory in connection with an isolation hospital should also be taken into consideration.

BLIND PERSONS ACT, 1920.

The following are the particulars of the blind persons in the County as supplied by the Secretary for the Shropshire Association for the Blind on 31st March, 1932 :—

Age periods.	Male.	Female.	Total.
0—5	0	1	1
5—16	13	5	18
16—21	3	5	8
21—50	50	20	70
50—70	64	47	111
70 and over	56	67	123
	<hr/> 186	<hr/> 145	<hr/> 331

The cause of blindness in these cases has not been investigated, but, speaking generally, blindness under one year of age is either due to ophthalmia neonatorum or to congenital defects. Blindness commencing over 50 years of age is to a large extent due to degenerative causes such as cataract, whereas in the intermediate ages a considerable proportion of the blindness has probably been due to accident. The excess of blindness in males over females between the ages of 21 and 50 (males 50, females 20), is strong evidence of this.

The blind may be considered as falling into three classes—those under 5 years of age, those between 5 and 16, and those over 16 years of age.

Those under 5 years of age come automatically under the supervision of the Health Visitors, who visit them regularly under the Maternity and Child Welfare Scheme. Children between 5 and 16 years of age come under the care of the Elementary Education Authority, who make provision for them by sending them to a Special School for the Blind. As regards those over 16 years of age, the Higher Education Committee arrange for the training of such as are capable of benefiting from special instruction and of learning an occupation which is likely to enable them partly or wholly to support themselves. On completion of training, they come under the care of the Public Health Committee, which provides for them under the Home Workers' Scheme of the Birmingham Royal Institution for the Blind, which arranges for their supervision by Home Teachers and supplies them with materials, assists them with their work, and helps them to dispose of the articles for which they are unable to find a sale. In addition, their wages are supplemented according to their earnings. Those who cannot be provided for in these ways come under the County Council Scheme for the Domiciliary Relief of the Blind, and are also assisted by the Shropshire Association for the Blind, to which the County Council make a grant of £1,000 per annum. A Home Teacher has been appointed by this Association who visits all the blind persons in the County, teaches them Moon and Braille, arranges for them to be supplied with books, and reports to the Secretary of the Association, who draws the attention of the County Council to those blind persons who are in need of assistance under one or other of the Schemes.

The following statement is from the report of the Shropshire Association for the Blind for the year ended March 31st, 1932 :—

No. on Register, 31/3/31	..	..	..	..	..	331
Added during the year :—Discovered	..			31		
Came to Salop				4		
				—		35
Being trained and at school	..	..	..	..	..	19
Home Workers	..	..	..	..	..	19
Old Age Pensions secured for	..	..	..	..	..	8
Number of weekly grants awarded	..	..	..	..	..	80
Patients taken to Hospital	..	..	..	..	..	35
Deaths	..	..	..	..	..	30
Transferred	..	..	..	..	..	3
Taken off Register	..	..	..	..	..	2
Total on Register 31st March, 1932	..	..	..	..	..	331

The Ministry of Health now require a County Council Officer to supervise the work carried out on behalf of the blind by voluntary associations. As such an official would require to be familiar with the technical details of the work in order to carry out the supervision in an efficient manner, the Salop County Council is in consultation with other Authorities whereby a combined appointment may be made to secure a person who would be responsible for the supervision of the work in a large combined area.

FOOD AND DRUGS ACTS.

Return of Samples taken by Members of the Shropshire Constabulary for Analysis during the Year 1931.

Nature of Sample.	Number taken.	Genuine.	Adulterated.	Remarks.
Milk	166	159	7	3 Cautioned. 4 Fined. (1) 10/- and £3 9s. 10d. costs. (2) 10/- and £3 17s. od. costs. (3) 10/- and £1 1s. od. costs. (4) £5 and £1 5s. od. costs.
Butter	11	11	..	..
Lard	6	6	..	..
Pepper	4	4	..	..
Potted Meat ..	8	8	..	..
Jam	11	11	..	..
Flour	7	7	..	..
Oatmeal	7	7	..	..
Rice	4	4	..	..
Sausage	3	3	..	..
Brawn	3	3	..	..
Total	230	223	7	

EDUCATION IN HEALTH.

Although education in matters pertaining to health is of the utmost importance, pressure of other duties is the great limiting factor in health propaganda work. During the year, 97 lectures were given in schools at the close of medical inspections by the Assistant School Medical Officers. In the Child Welfare Centres 247 were given by the Medical Officers and Health Visitors in attendance. The Inspector of Midwives, who also holds the position of County Health Lecturer, gave 28 lectures at various Institutes and other centres. Four lectures were also given by the Tuberculosis Medical Officers.

Seven lectures were given by members of the medical staff to health visitors, district nurses, midwives, and other persons interested in the public health, at St. Mary's Hall, Shrewsbury. They were well attended and much appreciated. The following are the particulars:—

June 2nd ..	"General Hygiene of the Child"	(Dr. B. A. Astley Weston).
June 9th ..	"Peculiarities of Disease and Characteristics of Healthy Childhood"	(Dr. W. H. Harris).
June 16th ..	"The Training of the Young Child"	(Dr. Mabel Blake).
Sept. 15th.	"Ante-Natal Care"	(Dr. Kathleen Priestley).
Sept. 22nd ..	"The Dental Officer and Public Health"	(Mr. Stephen Keenan, L.D.S.).
Oct. 6th ..	"The Importance of the Skin in the Maintenance of Health"	(Dr. L. Wilson Evans).
Oct. 13th ..	"The Place of the Nurse in the Health of the Public"	(Dr. T. R. Elliott.)

Ten lectures and demonstrations were given on the principles and practice of Meat Inspection. The lecturer was Mr. T. Speake, Chief Sanitary Inspector, and the demonstrator, Mr. F. Farrell, Abattoir Superintendent and Meat Inspector, both of the Borough of Shrewsbury. Seventeen Inspectors and two trainees attended, the average attendance being 16. The Inspectors showed keen interest throughout, and the course was highly appreciated.

A very successful anti-venereal disease campaign, organised by the British Social Hygiene Council took place in Whitchurch, Wem, Oswestry and Ellesmere from the 3rd to the 6th March. Two lectures, illustrated by film displays, were given each day to large audiences. The films shown were, "Deferred Payment," to mixed audiences, and "V.D. Cash Register," to men only.

MILK.

Tuberculous Milk.—Milk is the usual means whereby bovine infection is conveyed to man, and unfortunately the opportunities for infection from this source are not infrequent. Cows suffering from tuberculosis are not all giving tuberculous milk, however, and in order to estimate the proportion of cows which are doing so it is necessary to know the number which are suffering from tuberculosis of the udder, which is much more common in older cows than younger animals. It is somewhat unusual for tuberculosis to commence in the udder, and in about 50 per cent. of the cows found to be suffering from this condition the disease had already become generalised in the body. Tuberculosis of the udder is almost impossible to detect clinically in its early stages, and tubercle bacilli may be appearing in the milk while the udder remains unaltered in appearance. It is also necessary to remember that milk from healthy cows may become infected by contaminated manure, fodder or dust, and by the hands of the milkers. The importance of clean milk production will therefore be apparent.

The tuberculin test provides a means of estimating the incidence of tuberculosis in cattle and, when an animal reacts to this test, it must for practical purposes be regarded as infectious, as such an animal would almost certainly go on to a condition of active progressive tuberculosis and become highly dangerous to other animals with which it was coming in contact, and to human beings consuming its milk. Milch cows are much more liable to infection than other bovine animals, and in a number of investigations about 40 per cent. of them have been found to react to the tuberculin test.

It is in children especially that the bovine type of infection is found to take place and, although there is little evidence that this type of bacillus produces pulmonary tuberculosis in children, in some other varieties of the disease bovine infection has been found to have been the cause in more than 50 per cent. of the cases; and it is tuberculosis of bovine origin which is mainly responsible for the glandular forms of the disease. While the death-rate from tuberculosis is a serious matter, it is necessary also to bear in mind the amount of morbidity, crippling and deformity which it causes, results which are not reflected in the mortality statistics. The death-rate from non-pulmonary forms of tuberculosis is, however, less than half of what it was twenty years ago.

There is little doubt that tuberculosis in cows could be almost completely eradicated in a few years by subjecting all cows compulsorily to the tuberculin test, if this were followed by immediate slaughter of all reactors; but it is more than doubtful if such a state of affairs would be permanent. As, however, this procedure would necessitate the slaughter of from one-third to one-half of our milking cattle, it would disorganise the milk supply in this country and would increase its cost for years to come. The Tuberculosis Order of 1925 aims only at the destruction of cattle in the more advanced stage of the disease, and cannot be expected seriously to affect the incidence of tuberculosis either in man or in animals. The building up of a tubercle free herd by subjecting all cows in it to the tuberculin test and casting out all "reactors" is recommended; but this is expensive, and it is extremely difficult to keep the herd free from tuberculosis

if the common practice of recruiting it from outside is followed. The routine, systematic, clinical examination of all cows by competent veterinary surgeons and the exclusion of all animals found diseased, when combined with other measures, is said to give encouraging results. While the biological test by guinea-pig inoculation, especially if combined with clinical examination, is of importance, it is made impracticable on a large scale by the expense incurred.

The importance of educating the cowkeeper is often lost sight of in enthusiasm for other and more drastic measures. All methods of reducing bovine tuberculosis are unsatisfactory so long as milch cows are kept under conditions which favour its spread. Infection in cattle is conveyed by means of the secretions of infected animals, and old, dirty, grossly insanitary cowsheds provide a ready means of promoting the spread of infection.

Milk and Dairies (Consolidation) Act, 1915.—Procedure under the Act has so far been limited to the investigation of all cases of tuberculous milk reported by outside Authorities, and of suspected cases that have otherwise been brought to the notice of the County Medical Officer. On receipt of the result of the bacteriological examination, the cows found to be giving tuberculous milk are dealt with under the Tuberculosis Order. Particulars are supplied to the Notifying Authority in each case, and a copy is sent on to the District Medical Officer in whose area the farm is situated, with a note of the condition of the cows and cowsheds as found by the Veterinary Officer.

Below are details of the work carried out during the year :—

Number of farms affected 42 ; Cows examined 1354.

Number of samples of milk taken 334 (Individual 194, Bulk 140).

Results of examination of samples of milk :—

Positive 53 (Individual 33, Bulk 20).

The presence of tubercle bacilli in the twenty bulk samples necessitated the re-examination of 252 cows, and the figures for the further sampling involved are included above.

Two other farms came under suspicion, but sampling did not reveal any tubercle in the milk.

In addition, there were 14 notifications that milk from this County was being produced under unclean conditions. The producers were communicated with and the Agricultural (Education) Department and the District Medical Officer of Health were informed with a view to suitable action being taken to bring about an improvement in the methods and secure the production of clean milk.

Milk (Special Designations) Order, 1923.—The position at the end of the year under this Order as compared with that for the previous year was as follows :—

	No. of Producers.	
	1930	1931
Licensed to produce—		
Certified Milk.	1	2
Grade A (T.T.) Milk	4	6
Grade A Milk	9	11
	—	—
	14	19
	—	—

In addition, 2 licences for bottling Grade A Milk were granted.

An arrangement has been made whereby Sanitary Inspectors in whose areas Grade A Milk farms are situated take samples of the milk every quarter on behalf of the County Council. These are sent for examination to the laboratory at the Harper Adams Agricultural College.

AMBULANCES.

Two motor ambulances are owned by the County Council, one by the Public Health Committee and stationed at a garage in Shrewsbury ; the other by the Public Assistance Committee and kept at Berrington Hospital. The Public Health Ambulance is generally available for patients being removed to or from any house or hospital in Shropshire, and is utilised both for infectious and ordinary cases. Whenever the Ambulance is used for an infectious case, the Sanitary Inspector of the District is responsible for taking the necessary steps for its disinfection afterwards.

The Public Assistance Ambulance is utilised almost entirely for the purposes of Berrington Hospital.

Other motor ambulances are owned by the Borough of Bridgnorth, Urban District of Ludlow, the Oswestry and Chirk Joint Hospital Committee, and the Wellington Urban District Council. These ambulances are chiefly used for the removal of cases of infectious disease to their respective hospitals.

VACCINATION.

At the beginning of the present century, Vaccination legislation made vaccination before the age of six months compulsory in this country, and ensured a considerable measure of protection to the community against small-pox, but by the passing of the Vaccination Act, 1907, a parent was relieved from this obligation if within four months of the birth of a child he stated that he conscientiously believed that vaccination would be prejudicial to its health.

Since 1907, increasing numbers have obtained exemption, and under the recent Vaccination Acts and Orders the proportion of the protected population has fallen steadily, until now it may be stated that the compulsory element of the legislation dealing with vaccination does not effect its purpose, and is a mere shadow, if not actually a sham.

It is suggested that the time has come when the present method of make-believe compulsory vaccination be given up, and that in its place voluntary acceptance of vaccination and re-vaccination be secured by a steady educational campaign mainly through the agency of the Health Visitors and District Nurses.

The general public have ceased to be afraid of small-pox and, the mentality of the British nation being what it is, the idea of compulsion would seem to create opposition in the minds of many people who might otherwise be disposed to accept vaccination. Owing to certain formalities in the way of certificates, it is less trouble to secure exemption from vaccination than to have a child vaccinated, and in addition vaccination at the public expense must be performed by a special doctor, who is often not the usual medical attendant.

To summarise, it is suggested that a greater measure of protection would be secured if all element of compulsion were abolished and that, if the aims of vaccination were explained by a person acceptable in the home, such as a Health Visitor or District Nurse, vaccination would be accepted much more willingly, especially if it were done by the usual medical attendant ; but that, as a measure of security, Local Authorities should have the power of compulsory vaccination in times of emergency.

VACCINATION OF INFANTS BORN IN 1930.										VACCINATION OF CHILDREN UNDER 14 DURING 1931.	
Vaccination Districts.	Births.	Successfully Vaccinated.	Insusceptible of Vaccination.	Declarations of Conscientious Objections.	Died Unvaccinated.	Vaccination postponed.	Removed out of District.	Uncounted for.	Total No. of Certificates of successful Primary Vaccination received.	No. of Statutory Declarations of Conscientious Objections actually received.	
Bridgnorth ..	192	80	..	86	8	..	4	14	100	101	
Church Stretton ..	83	55	1	20	5	1	1	..	58	25	
Cleobury Mortimer ..	118	49	..	63	4	..	1	1	66	63	
Clun.. ..	209	112	1	70	7	3	2	14	93	101	
Drayton ..	257	169	..	67	19	..	2	..	176	53	
Ellesmere ..	146	106	1	28	4	1	4	2	102	41	
Ludlow ..	247	110	..	118	11	..	2	6	132	109	
Madeley ..	380	127	..	203	17	4	18	11	145	209	
Newport ..	180	85	..	82	4	1	2	6	75	74	
Oswestry ..	412	103	..	214	23	6	3	63	106	165	
Shifnal ..	196	74	..	107	3	..	8	4	106	70	
Shrewsbury ..	969	570	4	300	54	..	19	22	551	284	
Wellington ..	447	151	..	258	17	3	2	16	142	261	
Wem ..	150	76	..	67	7	..	..	..	78	60
Whitchurch ..	137	64	1	65	4	..	..	3	57	58
	4123	1931	8	1748	187	19	68	162	1987	1674	
Percentage of Total No. of births											
1930 ..	..	46.83	.2	42.4	4.54	.46	1.65	3.93		
1929 ..	..	46.81	.22	41.21	4.84	.32	1.52	5.08		

RIVER POLLUTION.

Although a comparatively small area of the north-eastern part of the County drains into the River Dee, the chief concern of the County Council in connection with Rivers Pollution Prevention is the River Severn. While there is no serious gross pollution of the River in view of the volume of water which flows down it, the effect of a certain number of trade effluents will have to be carefully watched and investigated. Certain minor tributaries of the Severn show at parts rather gross pollution, but although these will have to be dealt with, they do not seriously affect the purity of the main river. A survey extending from noon of September 7th until noon September 8th was made by the Deputy County Medical Officer, at Port Hill Bridge, Shrewsbury, and hourly samples of water were taken from the Severn for examination. The results showed that, although there was a certain amount of pollution, the extent to which this was taking place was insufficient to affect the water appreciably in view of the volume of the flow. If a Joint Committee of Local Authorities under the Rivers Pollution Prevention Act, 1876 (which the Technical Advisers to the Board of Agriculture and Fisheries wish to see established) is set up, its chief concern in this County will probably be to take such steps as will prevent further pollutions of the River and its tributaries, although it would be misleading to suggest that those at present taking place will not be dealt with.

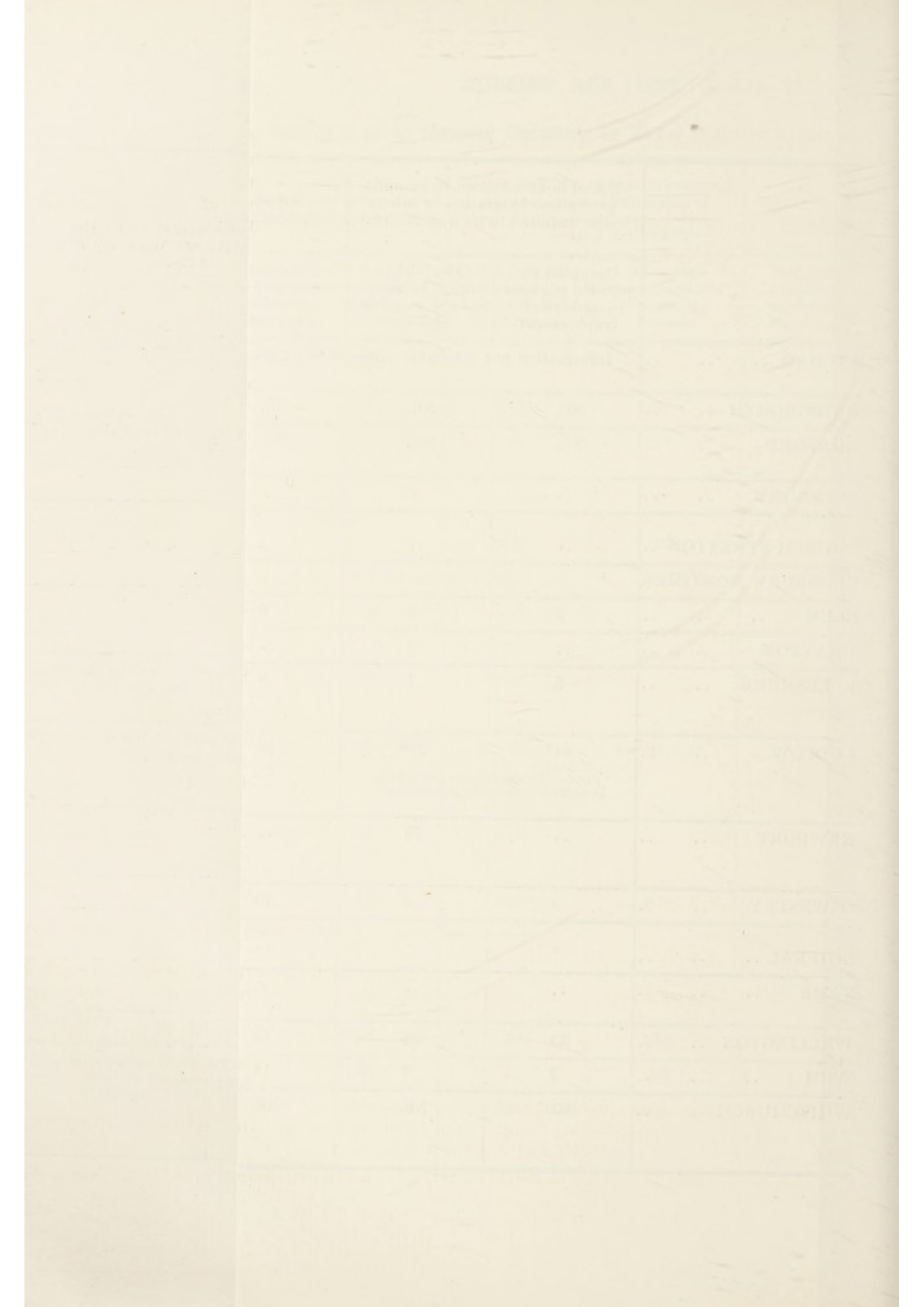
HOUSING.

The Housing Act, 1930, has placed definite duties on the County Councils in connection with housing. The provisions of the Act which are of chief interest to the Public Health Committee are contained in Part IV, which deals with houses in Rural Districts. The County Council are required to have constant regard to the housing conditions of people of the working classes in Rural Districts, and of the sufficiency of the steps which the Rural District Councils are taking to remedy unsatisfactory housing conditions. To carry out the provisions of this part of the Act the County Council should make a complete survey of housing conditions in Rural Districts, noting specially the question of overcrowding, the relationship of the number of inhabited houses to the population of the district, the condition of repair in which the houses are maintained, and the degree to which the ordinary sanitary requirements are being met to make the houses fit for human habitation. Complete and accurate information is not available concerning these matters and, although Rural District Councils are required under this Act to furnish from time to time but not oftener than once a year such reasonable information as the County Council consider necessary, there is good reason to believe that this information could not at present be obtained for the County as a whole. A questionnaire was issued by the County Council to obtain particulars of the housing conditions in the areas of the various Rural District Councils, a summary of which is given in the Table opposite this page. It will be seen that, while some authorities are dealing energetically with housing under this Act, in other cases very little is being done.

Housing (Rural Workers) Act, 1926.—In the County of Shropshire the probability is that, while there is urgent need for new houses, there is even a greater need for the carrying out of repairs in order to make houses already occupied fit for human habitation, and for this purpose the Rural District Councils have been urged by the County Council to take full advantage of the provisions of the Housing (Rural Workers) Act of 1926. Under this Act a great deal can be done to improve the housing conditions of agricultural workers in their areas; and it may be pointed out here that it is more economical to improve housing conditions in suitable instances than to undertake the construction of new houses.

County of Salop.

Name of houses approved by Council, but not completed.	Total No. of houses contemplated for erection in the year ending 31/3/1933 but not yet approved by the Minister.			Scope for action under the Housing (Rural Workers) Act, 1926.
	Persons in rural employment.	For other persons of the working classes.	For persons engaged in agricultural employment.		For other persons of the working classes.
AT			6	Much has been done. Still scope for action.
BR	Nil.	Nil.	Nil.	Not required.
BU	Nil.	Nil.	Nil.	No applications received since Act passed.
CH	..	..	..	Yes.
CH	..	..	..	Yes.
CL				
CL	6	12	6	Yes.
DR	..	..	..	Yes.
EL	7	4	..	49 houses have been enlarged, but a number still require to be enlarged.
LU	Nil.	16	10	48 houses already dealt with. Scope for further action.
NE	..	In view of financial position, a new Scheme for 50 houses is not being proceeded with.		Considerable.
OS	12	..	12	
SH		12		
TE	..	Considering building houses at Bucknell.		
WE	30	29	6	114 houses eligible.
WE	..	10	16	Owners have been approached.
WE	Nil.	Nil.	Nil.	"None known at present."



Housing (Rural Authorities) Act, 1931.—Under this Act the Minister of Health is authorised to make grants for a period of forty years, in addition to the grants received under other Housing Acts, to those Rural District Councils whose financial resources are insufficient to enable them to provide houses in agricultural parishes for agricultural workers and persons of substantially the same economic conditions. Below is given a list of applications made by Rural District Councils with particulars of the number of houses in respect of which the Ministry undertook to make a grant :—

Rural District Council making application.	No. of houses.		
	for which grant asked.	approved for grant.	to be built.
Clun	36	10	10
Oswestry	34	12	12
Wellington	38	14	14

An application was made by the Ellesmere Rural District Council for a grant for twenty-four houses but, as these had previously been sanctioned by the Ministry under another Act, no grant could be made.

The Wem Rural District Council applied for grant for 20 houses and eight were approved for grant, but the Council decided to apply for sanction for building the houses under another Act.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—

Atcham Rural.—The activities of the Council under the Housing (Rural Workers) Act, 1926, have been exceptional—106 houses having been dealt with. Four Ministry of Health Housing Inspectors (including Sir Arthur Lowry) made a tour of inspection in April, and Sir Arthur Lowry subsequently published a cordial appreciation of the Council's work under this Act.

Church Stretton Rural.—Dr. Gepp reports that as a result of an inspection he has found a real need of houses in this village, and has recommended the building of at least four.

Cleobury Mortimer Rural.—"During the year six houses were erected by the Council at Highley, and ten at Sudlow Road, Cleobury Mortimer."

Clun Rural.—"Eight houses were completed during the year, and eighteen more have been put in hand up to the present date."

Housing (Rural Workers) Act.—"In 1931 applications for grant in respect of eight houses were received and maximum grants made in each case." In all, the number of houses improved and completed, or in hand, is 21.

Ellesmere Rural.—"A survey of the District showed that there is a need for more houses . . . A report was submitted suggesting that 24 houses be erected among six parishes, for the use of rural workers. The Council having received the consent of the Ministry of Health, are taking immediate steps to have the building of the houses carried out."

During the year 18 more houses were improved under the Housing (Rural Workers) Act, making a total of 49 since the Act came into force.

Ludlow Rural.—"Seventeen cottages were re-conditioned under the Housing (Rural Workers) Act, 1926.

Newport Rural.—"During the year the Council erected thirty houses. This brings the total of Council houses in the area to 40. In addition, there were two bungalows and one house built for private owners.

"With a return of prosperity to the industries of the district, there is no doubt that a further instalment will be needed, especially at Donnington and in some of the agricultural parishes near to Newport. The survey of housing undertaken by Mr. Adams at the request of the Council revealed a very considerable amount of overcrowding at Donnington Wood and Lilleshall."

"Grants were made under the Housing (Rural Workers) Act in respect of four houses during the year."

Oswestry Rural.—"Fourteen houses were reconstructed under the Housing (Rural Workers) Act, 1926, during the year, making a total of 47 reconditioned since the passing of the Act."

Shifnal Rural.—"Twenty-six new houses were built during the year, eighteen by the Council at Shifnal and eight by private persons.

"The demand for Council houses is still in excess of the supply, firstly, because of the large proportion of two-bedroomed houses that are overcrowded, and secondly, from the need for re-housing the displaced tenants in the fifteen houses which were demolished during the year."

Wellington Rural.—"During the year fifty houses were completed, and 42 are in the course of construction.

"A survey was made of the houses in the nine agricultural parishes, and Mr. Roberts reports that of a total of 687, 493 are in good repair, 194 in a bad state of repair, 114 eligible for a grant under the Housing (Rural Workers) Act, 57 repairable by owner and 23 beyond repair. 370 of them had two bedrooms and 37 only one.

"Thirteen houses have been dealt with under the Housing (Rural Workers) Act, and three more have been accepted for the grant.

"The Council have decided that all houses, for which grants are made, shall have three bedrooms when completed."

Wem Rural.—"The Council have granted a subsidy for 12 houses under the Housing Act of 1923, and for 8 houses under the Housing Act of 1924.

"Grants have been made under the Rural Workers Housing Act for the re-conditioning of 4 houses."

Whitchurch Rural.—"The total number dealt with so far under the Housing (Rural Workers) Act, 1926, is two, and I may repeat that in my opinion a larger use and appreciation of this Act would be found of great advantage in the radical improvement of housing conditions."

Bishop's Castle Urban.—"The Council completed the erection of 12 houses on the Kerry Green site during the year, and now owns 30 houses built under the Housing Acts.

"One other house was built during the year, privately, and without State assistance."

Church Stretton Urban.—"There is no real shortage of houses, but the Council has a waiting list of 20 applicants, and has under contemplation the question of erecting 12 additional houses on a site which has already been acquired in a suitable position.

"On general grounds I am of opinion that the Council would be well advised to build these houses."

Dawley Urban.—"There is still a considerable number of applicants, who are waiting for houses and are living in dwellings which are undoubtedly unfit for habitation. A list of ten were inspected and reported to the Council, and the owners were interviewed but no orders were made, because the tenants could not then be re-housed. It is to be hoped that in the near future it may be found possible to provide houses for the numerous applicants who are living in damp and insanitary houses."

Ellesmere Urban.—A survey completed in January, 1931, showed that there were 12 houses unfit for human habitation, and that there were six cases of marked overcrowding. The Council decided to defer consideration of the matter.

Ludlow Urban.—"A total of 139 houses have been erected under the various Housing Acts, which is sufficient to re-house one-tenth of the population. Future schemes should be directed to re-housing tenants from the worst dwellings in the courts for whom the rents of the existing Council houses are too high, and the Housing Act, 1930, was intended to benefit. Some of this class of tenant have already been housed under the last scheme, but many more could be dealt with if houses at a low rent were made available under the Act.

"A report was presented to the Council during the year on fifty houses inspected by the Surveyor and myself: it resulted in the closure of 13 and the repair of 14."

Newport Urban.—"A survey of the housing conditions in the town was undertaken by the Surveyor and myself at the request of the Council, and 120 houses were examined and reported on.

"There were two families living in one house with two bedrooms in six instances, and altogether twenty cases of overcrowding. Fifteen houses had one bedroom, and about one hundred two only. It seems clear that the chief requirement of the Town is a further number of three-bedroomed houses. Six houses were definitely beyond repair, and ten below a reasonable standard which, if not re-conditioned, would soon require to be closed. Twenty, owing to the bad arrangement in courts, lacked proper ventilation and lighting, and should be dealt with under the Improvement Area clauses of the Housing Act, 1930."

Oakengates Urban.—"Steady progress was made by the Lilleshall Company in the re-conditioning of sections of their houses. Four houses in respect of which Demolition Orders had been made some time ago were closed and demolished, and some of the tenants re-housed in Council Houses.

"During the year the Council erected forty more houses including parlour type at Hart's Hill, Wombridge and Wrockwardine Wood. This brings the total number of houses erected under various schemes to 254. There is still a very long list of suitable applicants unprovided for, and in addition a recent survey for the purposes of the Housing Act of 1930, called for by the Council, showed that about fifty houses are beyond repair, or for various reasons cannot be dealt with. The sites on which certain of these houses stand should, I think, be acquired by the Council when they are cleared, for re-housing the displaced tenants."

Oswestry Urban.—At the request of the Health Committee the Housing Committee have decided to give favourable consideration to the claims of applicants who are living in overcrowded or unhealthy dwellings, and the Sanitary Inspector has been given the duty of investigating the applications for houses.

"There are a certain number of dwelling-houses which could come within the scope of the 1930 Housing Act and must eventually be dealt with by demolition either as Clearance Areas, Improvement Areas, or as Individual Houses, being unfit for human habitation by reason of disrepair or sanitary defects and not capable of repair at a reasonable expense."

Shrewsbury Borough.—"A five-year programme of house construction was adopted by which it was decided during the next five years to build 500 houses, of which number 100 will be for slum clearance purposes.

"The first instalment of this programme, consisting of 100 houses, was commenced towards the end of the year, and should be completed by the autumn of 1932.

The number of new houses erected during 1931 was 120 (78 by private enterprise).

Wellington Urban.—"During the year a survey was made of the housing conditions in the district, and a Report was presented to the Council on the findings. 135 houses were inspected throughout, and 103 were found to be so far below the standard laid down by the Ministry of Health in the Housing Manual as to be not repairable at a reasonable cost, and were recommended to be dealt with under the Clearance or Improvement Area Clauses of the Housing Act, 1930.

"A commencement was made by scheduling a group of nineteen houses, including 2 Courts, as a Clearance Area, and the Council agreed to set aside 12 Council houses for displaced tenants.

"Some special provision will be required for the tenants of several houses consisting of one or two men living alone, or elderly married couples without children. They might be satisfactorily dealt with by the provision of flats on the cleared areas or elsewhere."

Wenlock Urban.—"Thirty-two houses were built during the year by the Madeley Sanitary Committee, viz. :—16 at Madeley, and 16 at Coalbrookdale.

"The number of houses built and owned by the Council, at the end of the year, was 179, viz. :—Madeley 105, Broseley 36, and Wenlock 38.

"Plans for the erection of a further 8 houses at Broseley were passed, and these houses are in course of erection.

"There is still a considerable waiting list for houses and it may be suggested that for many people, and especially for those of small means in unfit houses, the provision of houses which could be let at an inclusive rental of 5/- per week would meet a distinct need and assist greatly towards the solution of a difficult problem."

Housing (Rural Workers) Act, 1926.

No. of houses for which grants were made during the year	..	..	2
No. of houses in which improvements were completed	..	..	5
Total number completed, since 1926, under the Act	..	..	13

Whitchurch Urban.—"The Council purchased two fields 10 $\frac{3}{4}$ acres in extent on the South side of Station Road, opposite to the Railway Station entrance, for the purpose of erecting 10 parlour type houses and 48 non-parlour type houses.

"The Ministry of Health objecting to the parlour type, it was decided to proceed at once with the erection of 52 non-parlour type, with all the necessary roads, sewers, water mains, etc.

"Six houses will be completed during the month of January, 1932, and it is proposed to complete the remainder at the rate of one pair per week until completion.

"Provision will be made on this site for the housing of tenants of the cottages in Yardington, for which the Ministry of Health issued Demolition Orders after an Official Enquiry."

WATER SUPPLY.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—

Burford Rural.—"Two new houses were connected to the Tenbury main and two private wells reconstructed during the year. Except at the Knowle, the district is fairly well supplied with water, but in a number of instances the wells need better protection from surface contamination."

Church Stretton Rural.—*All Stretton.*—"The steps taken by the Company during last year constitute a great improvement in the method of collection. A recent inspection showed that the intake has been removed to a point about 150 yards above the reservoir, obviating the former condition of fouling by road washings, and by access of animals to the feeding stream in proximity to the reservoir. The water is conveyed from the intake to the reservoir by a laid and covered main."

Picklescote.—"The small gravitational system of supply to this hamlet received attention during the year. The Council had the spring well and tank cleaned out, the main flushed, and the stand pipe conduit repaired, in November."

Soudley.—"A roadside public well here, from which water is carried by a few cottagers, has been reported to the Council by the Inspector as in need of repair and covering. As this water is in a good situation as regards natural freedom from sources of contamination, the well should be put, and kept, in good structural condition."

Cardington.—"No public or private action has so far resulted from my recommendation as to bringing the water of St. James's well to a more central point in the village."

Cleobury Mortimer Rural.—"The supply was extended to the 10 new Council houses erected on the Ludlow Road during the year, and five certificates for the Water Supply to seven new houses were issued by the Council."

Clun Rural.—*Kempton.*—"The Parish Council are still pressing for a supply for this hamlet, and the Council have decided that tests shall again be made during the summer of 1932."

Clun.—"A new main has been laid the entire length of Powell's Lane from Newport Street to High Street, and the main in Knighton Road has been extended to the top of the Housing Site at Pikey Field, Clun."

Ellesmere Rural.—"The water supply of *Harmer Hill Village* is insufficient and inconvenient. It is desirable that a new water scheme be provided. This is receiving the attention of the Council. Two hundred and sixty-eight houses are connected with the Liverpool Water Supply—an increase of 18 during 1931."

Ludlow Rural.—"The public supply at *Craven Arms* was satisfactory throughout the year. Two public wells were put in repair and six private ones reconstructed and improved. Many cottages on the *Clee Hill* are taking their supply from shallow waters grossly contaminated, and others are dependent on supplies which contain a considerable amount of iron and are not suitable for all domestic purposes. A public service is, I consider, an urgent need at the higher parts of the *Clee Hill*."

Newport Rural.—"One hundred yards of new main were laid to supply the new Council houses, and two new public wells were sunk for the same purpose. A total of 33 houses were provided for."

Oswestry Rural.—"Schemes have been prepared and estimates laid before the Council for providing a water supply for the villages of *Maesbury*, *Rhosygadfa*, *Nantycaws* and the *Moors*, *St. Martin's*. The Council after consideration decided to defer taking any action for the present."

Shifnal Rural.—"The Shifnal main was extended to serve the new Council houses in Orchard Street by 140 yards of two-inch main, and also to Lodge Hill, 1,000 yards, and a short length in Beckbury Road. Twenty-five houses were connected to the supply, one public pump put in repair, and three private wells reconstructed."

"At *Albrighton*, the water is still the subject of occasional complaints and the results of frequent analysis made during the year were unsatisfactory. The mains are flushed out frequently. It is considered that the smaller demand on the Cosford work, now that the new works at Diminsdale are completed, will result in better filtration of the water and the cause of complaints be shortly removed."

Teme Rural.—"Bucknell is still without a satisfactory supply of water, and in the *Kinsley* district of *Stowe* 16 houses get their water from wells so near to cesspits as to make the water unsafe for domestic use."

Wellington Rural.—"Thirteen additional houses were connected to the supply at *Hadley*. Negotiations with the Urban District Council have been undertaken with a view to supplying the villages of *Admaston*, *Wrockwardine* and *Bratton* from the Urban District's new wells at *Longwood* in the Rural area. The possibility of supplying *New Works* and *Arleston* from the same source is being investigated."

"Four private wells were reconstructed and improved, and one hundred and thirty yards of new water main laid."

Bishop's Castle Urban.—"New mains 380 yards in length were laid, to serve the *Kerry Green* Housing site.

"Thirteen new and two old houses were connected to the mains."

Bridgnorth Urban.—"The River Severn Water Supply has been extended to a group of new houses on the *Stourbridge Road*.

Dawley Urban.—"Forty-eight houses were connected to the mains during the year and one new length of main laid for the service to new Council houses."

Ludlow Urban.—"During the year negotiations with the Birmingham Corporation were carried on, which resulted in an agreement by which the Borough can, in case of need, secure a supply from the Birmingham main. This, with their own present sources of supply, should provide for any extension of the town and make the service an excellent one in every respect."

Newport Urban.—"The new 18-inch borehole was completed during the year, together with the new 8-inch rising main and 580 yards of new main for the purpose of linking up existing mains to enable smaller areas to be shut off."

Oakengates Urban.—" 960 yards of new water main were laid to carry the water to the new Council houses, and replace existing mains that were worn out. Fifty additional houses were connected to the mains."

Shrewsbury Borough.—" The attention of the Town Council has during the year been directed to certain of the shortcomings of the river water supply, including the cramped and unsuitable position of the works and the comparatively low elevation of the service reservoir tank. Consequently the Council have under consideration a scheme for the erection of new works above the town at Shelton."

Wellington Urban.—" An Enquiry was held on October 7th, 1931, for permission to borrow £35,335 for the purpose of increased Water Supply for the District. This work includes duplicate Borehole and Pumps, Engine House, 8-inch cast iron rising main to Reservoir, and new high level Reservoir to hold 800,000 gallons situated on the Ercall at 525 feet O.D. The increased supply will meet the needs of the District when the area is enlarged, and possibly give a supply to one or two parishes in the Rural District through which the main passes. A constant supply was maintained throughout the year, no doubt assisted by the heavy rainfall. Sixty-nine houses were connected to the water supply, and 634 yards of new water main laid."

Wenlock Urban.—*Madeley Ward.*—" Water was laid on to the 32 new houses of the Council's housing scheme, each with w.c. and bath, and 30 new services were laid on to other properties, 1,500 feet of new service pipes being laid. Water was also laid on to 15 w.c.'s and 6 urinals in connection with licensed houses, to 6 w.c.'s for a new factory, and 2 w.c.'s and a urinal at a new Picture House."

" In *Broseley Ward* 20 properties were connected to the supply and 12 new w.c.'s connected.

" In *Jackfield* renewals of very old and defective mains and pipes are found necessary. The Water Engineer has under consideration a scheme for diversion of a bad length of water main."

Much Wenlock Supply.—" A constant supply was maintained from the well and springs. Four houses were connected to the mains and 15 w.c.'s connected."

Little Wenlock Village.—" The supply of the village has during the year been greatly improved by private action, the 'ram' supply being developed by the construction of a large new concrete reservoir of a capacity of some 40,000 gallons. I understand that most of the houses in the village are now supplied from this private source, which should be satisfactory unless the spring feeding the 'ram' should fail in drought for any prolonged period."

Whitchurch Urban.—" The Council continued during the year its investigations into possible sources for augmentation of the Water Supply, in view of the development of building, and increasing consumption."

SEWERAGE AND DRAINAGE.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health:—

Atcham Rural.—*Bicton Heath—Oxon.*—" The difficulty arising from the inadequacy of the disposal works at Shelton Gardens was under review by the Council during the year. Negotiations were opened with the Salop Mental Hospital Committee and the Borough of Shrewsbury, and an arrangement was reached whereby the sewage from these houses should be directly connected with the Hospital drainage system, which is connected to the Borough sewer. The work of connection has been completed by the Council's Surveyor in the present year, and the old outfall works will be completely abolished."

Cleobury Mortimer Rural.—"New drains were constructed or old drains amended at seventeen premises. Five privies were converted into water closets and two to pan closets."

Ellesmere Rural.—*Streams.*—"Definite steps have been taken to stop the pollution of the Tetchill Brook. Ellesmere Urban District and Ellesmere College are installing efficient sewage disposal works, both nearing completion."

Ludlow Rural.—"New drains were laid or old ones reconstructed at 30 houses, and twenty privies were converted into pail closets."

Newport Rural.—"Four hundred yards of new sewer was laid for dealing with the sewage of the new houses, and a short length of sewer was laid at Muxton to take the sewage from about six cottages, where in times of heavy rain it back-pounded into the houses."

Oswestry Rural.—"The extension of sewers has been laid on the Overton Road and the cottages at Llangollen Terraces have been connected thereto. The majority of the houses in the *Gobowen* and *Whittington* areas have now been connected to the public sewer and new water closets erected.

"There are other districts that will demand sewerage in the future, such as *Morda*, *Pant* and the village of *Llanymynech*. All three places have an excellent water supply."

Shifnal Rural.—"The only addition to the sewers was the extension for the purpose of connecting up the new Council houses in Orchard Street, Shifnal."

Wellington Rural.—"Fifty-five conversions to the water carriage system were completed at Hadley during the year, and a large number of drains reconstructed. The necessity for economy has postponed the consideration of a scheme for dealing with the Ketley sewerage. It is proposed to schedule a part of Ketley as an Improvement area, and this will raise the question again."

Bishop's Castle Urban.—"New lengths of sewer, of 652 yards, were laid for the Council's Housing Site at Kerry Green. Fifteen houses were newly connected to the sewers. The drainage of 5 premises was improved or reconstructed under the Inspector's notices."

Bridgnorth Urban.—"Sewers have been extended to the group of new houses on the Stour-bridge Road.

Church Stretton Urban.—"Of the total number of 448 dwelling houses within the district, 431 are connected to the public sewers."

Dawley Urban.—"Owing to the reduction in the amount of the grant now available from the Unemployment Grants Committee, it has been considered necessary by the Council to postpone for a time the carrying out of the proposed new sewerage disposal works, as the cost would entail too heavy a burden on the rates at the present time. The Council have, however, purchased the necessary sites for both eastern and western outfalls. They have taken a five years' Lease of three acres of land adjoining the proposed eastern outfall, and are treating the sewage on beds, so as to improve the effluent. The Dark Lane sewage outfall works and also the joint scheme at Lawley Bank are reported to be working very satisfactorily. The sewers were flushed periodically and three lengths of old sewer were relaid."

Ellesmere Urban.—*Streams.*—Steps are being taken to stop pollution of the Tetchill Brook by the installation of sewage disposal works, which are nearing completion.

Work on a scheme for the provision of new sewers and sewage disposal works was commenced in April, 1931. The cost of the scheme is £27,000 approximately.

Newport Urban.—“ There are still about 40 closets on the conservancy system in the district, and in view of the refusal of the local bench to make orders for the conversion in the recent cases, I think the Council should consider the advisability of proceeding under the Public Health Acts Amendment Act, 1907, and apply for a loan and clean out the remaining privies.”

Oakengates Urban.—“ Several new lengths of sewer were laid, 170 yards of 12-inch, 400 yards of 9-inch and 250 yards of 6-inch, to connect up the new Council houses and a number of houses in Wrockwardine Wood. Altogether, 56 houses were connected to the public sewer.”

Wellington Urban.—“ 333 yards of new sewers were laid and 17 houses connected to the public sewers, and 8 privies converted into water closets ; 50 remain to be dealt with, some few are not within reach of the sewers.”

Wenlock Urban.—“ In Madeley Ward 417 yards of 9-inch sewer and 540 yards of 6-inch surface water drainage were laid for the 16 new houses at the Madeley housing site, and at Coalbrookdale the 16 new Council houses were connected to the existing sewer.

“ In Broseley Ward 300 yards of 9-inch sewer were laid at Broseley Wood, and a further 100 yards at Quarry Bank.

“ In Barrow Ward an improvement was made at Little Wenlock by an extension of the existing sewer by 30 yards.”

Whitchurch Urban.—*Stream Pollution.*—“ Pollution of the Mile Bank Brook was reported in June, by sewage waste from the Milk Factory and an adjacent Whey Products Factory. I visited and inspected in August, in company with the County Medical Officer. The brook, which is of very small capacity in comparison with the amount of waste which it may receive, was found to be heavily polluted. Five samples of effluent from the brook were taken and sent for analysis. The report stated them to show pollution, and the effluent to be unsatisfactory as regards purification. Representations were made to the Company, who undertook to carry out the alterations and improvements in method which I suggested, and they have since, the Surveyor states, cleaned out the water course from time to time and prevented the necessity of a prosecution.”

Sewerage.—“ The Surveyor reports work done during the year :—A 9-inch sewer 585 yards in length, complete with manholes and ventilation pipes, to the new Grammar School site purchased by the County Council at Mossfields is now being laid, and it is hoped to have the whole completed early in this year.”
