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COUNTY COUNCIL OF SALOP.

# ANNUAL REPORT

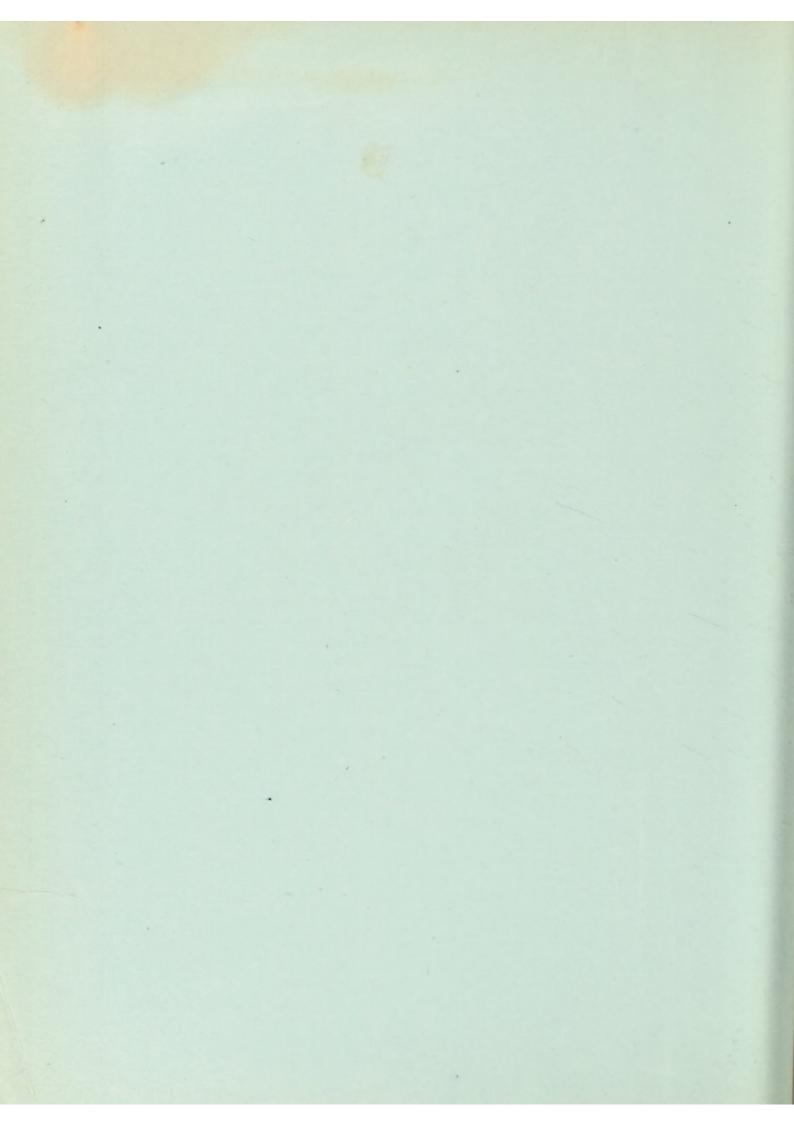
of the

County Medical Officer of Health for the year 1924.

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

IREWSBURY,

August, 1925.



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

GENTLEMEN,

I have the honour to present my Annual Report for 1924.

The Maternity and Child Welfare, Tuberculosis and Venereal Disease Schemes are being maintained and to a small extent extended in some directions.

The effect of education on health is becoming more and more recognised and it is hoped that shortly there will be a national scheme of health education.

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

In the interest of the health of the people, it is greatly to be deplored that the scheme of continuation classes has been indefinitely postponed. Continuation classes would open up great possibilities in the teaching of the laws of healthy living and in establishing a really effective system of national physical training. They are specially necessary at the present time with so large a number of young persons unemployed. I can conceive no other measure that would be likely to have such a beneficial effect upon the health of the rising generation.

I am, Gentlemen,
Your obedient Servant,
JAMES WHEATLEY.

Public Health Department,
County Buildings, Shrewsbury,
August, 1925.

### GENERAL STATISTICS.

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

The Registrar-General's estimate of the civil population of the combined Urban and Rural Districts for 1924 is 246,900. This is used for calculating all death-rates and birthrates.

### POPULATION OF THE URBAN AND RURAL DISTRICTS.

ase.

Urban po	pulation	Population at middle of 1924 , as estimated by Registrar-General.		po	pulation	Population at middle of 1924 , as estimated by Registrar-General
Bishop's Castle M.B. Bridgnorth M.B. Church Stretton Dawley Ellesmere Ludlow M.B. Market Drayton Newport Oakengates Oswestry M.B. Shrewsbury M.B. Wellington Wem	1268 5143 1671 7386 1831 5677 4710 3056 11349 9790 31013 8148	1272 5021 1582 7574 1841 5455 4745 3133 11850	Atcham Bridgnorth Burford Chirbury Church Stretton Cleobury Mortin Clun Drayton Ellesmere Ludlow Newport Oswestry Shifnal	  mer 	21978 8569 1268 3193 4516 7297 6243 7156 8008 8980	22470 8602 1254 3346 4511 7763 6346 7343 8120 8966 5795 16510
Wenlock M.B Whitchurch	13712		Teme Wellington Wem Whitchurch		1649 11207 8572	1664 11330 8645 2111

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

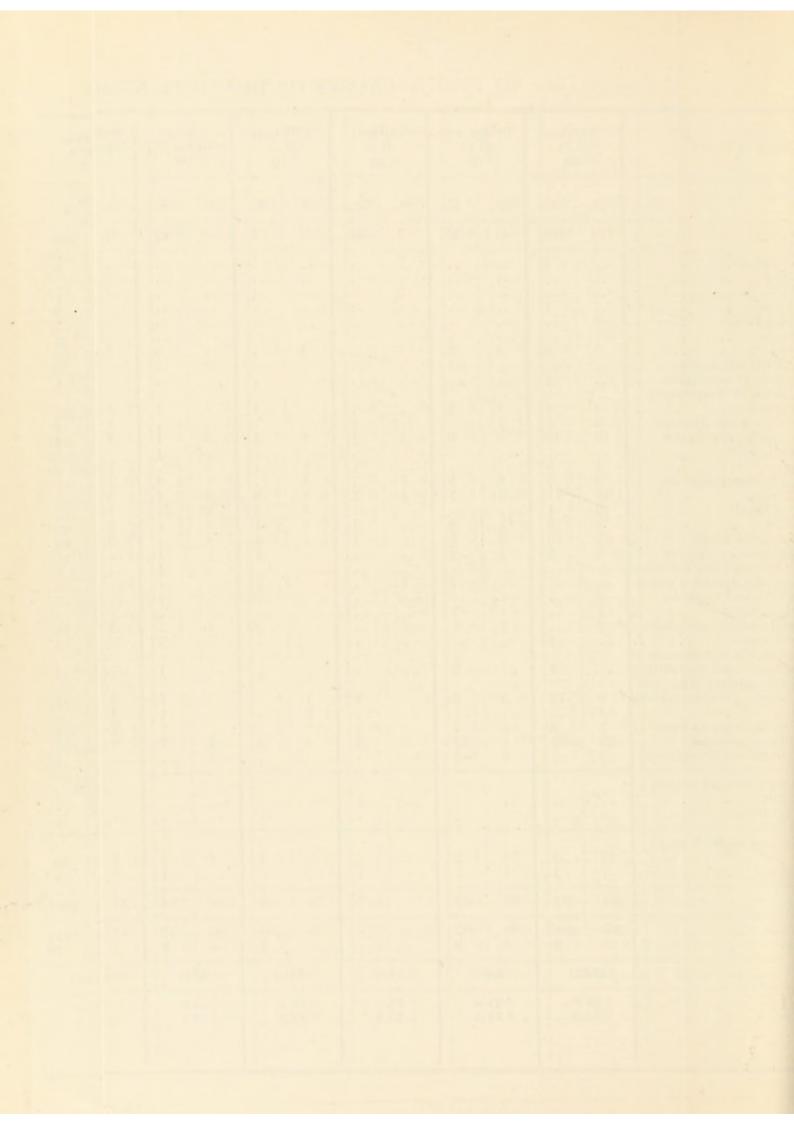
Marriages.—The number of marriages in the Registration County for 1924 was 1930, compared with 1833 in 1923, 1879 in 1922, 2050 in 1921, 2440 in 1920, and 2387 in 1919.

Births and Deaths.—The number of births and deaths and the rates are shown in the following table for the years since 1912:-

Year.	Births.	Deaths.	Na	atural Incr	rea
1913	 5245	 3012		2233	
1914	 5205	 3556		1649	
1915	 4917	 3532		1385	
1916	 4682	 3231		1451	
1917	 4059	 3232		827	
1918	 4283	 3702		581	
1919	 4264	 3441		823	
1920	 5943	 2952		2991	
1921	 5318	 3000		2318	
1922	 4904	 3295		1609	
1923	 4900	 3046		1854	
1924	 4622	 3102		1520	

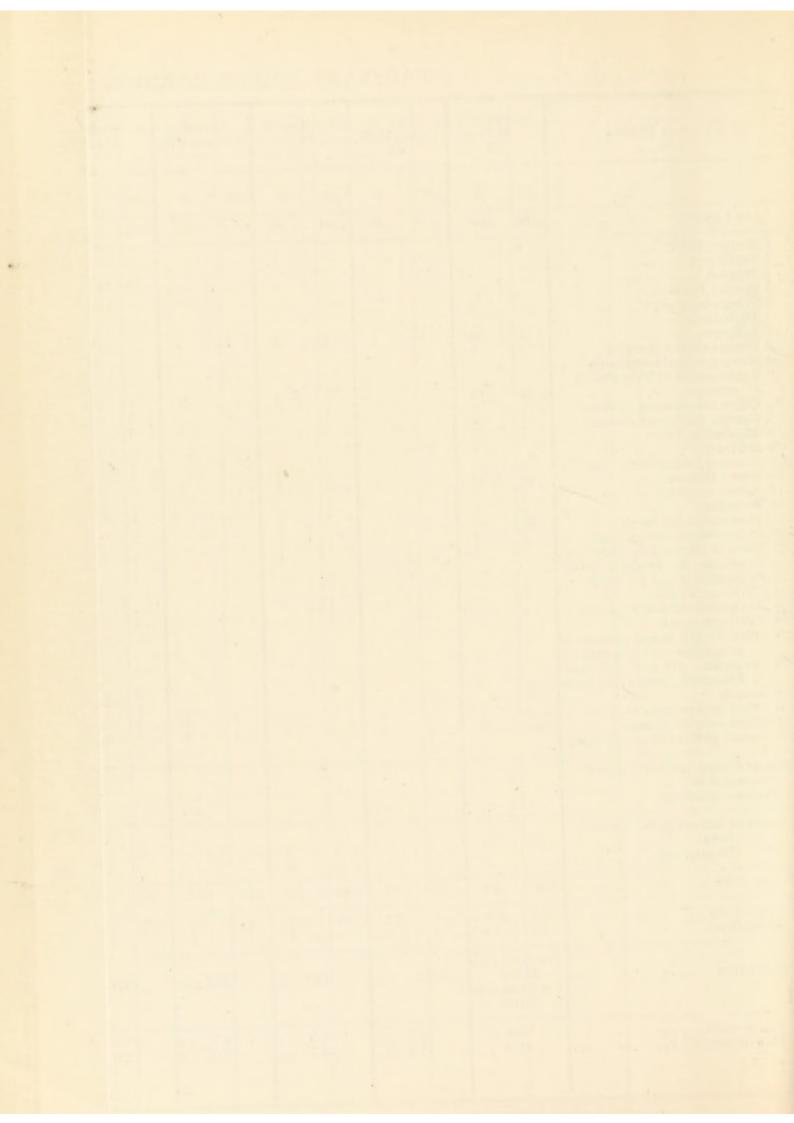
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Causes of Death.		R.D. 08	R	.D.	R	.D.	R	.D.	Strettor 2	n R.D.			R	.D.	R.	D.	R.	D. 8	R	.D.		D. 8	R.	estry .D.	R	fnal .D. 88	R.	me .D. i9	R	.D.	R.	D.	White R. 8	.D.		.D.
	M.	F.	M.	F.	M.	F.	М.	F.	M.	F.	M.	F.	M.	F.	M.	F.	М.	F.	М.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
MIL CAUSES	124	108	41	55	7	10	27	25	3.5	27	37	33	36	42	47	42	29	44	49	49	39	51	89	99	57	41	16	12	81	67	51	46.	12	18	777	769
Enteric Fever . Saull-pox . Saull-pox . Saull-pox . Saull-pox . Saule . Sauriet Fever . Whooping Cough . Dightheria . Enephalitis bethargica . Ene	3 .7  4 3 10  19 12 3 7 11 3	1 	3	31 . 2 . 6 57 521	1		3 3 4 3 2 2 1	8 1 4 1	1 3 2 2 4 1		1 1 1 1 1 3 3 3 3	3	1	233 : 330 = 321	33 55 18 82 22 55	7 1 1 7 4 4 3 5 5 2	· · · · · · · · · · · · · · · · · · ·		2 .1 3 5 2 6 2		1 1		3 2 4 4 5 2 11 5 5 6 2 2	7 7 19 6	3 		3			6 7 10 1 7 2	1 1 2 2 6 1 1	2 1 1 1 1 8 1 1 4 3 3			1 2 1 4 4 3 2 19 13 61 11 52 106 35 49 52 9	1 1 3 2 43 2 2 1 35 8 8 4 4 9 61 130 177 48 46 112
ser of Stomach or duodenum carrhoa, &c. (under 2 years) Aprodictits and typhilits composited Liver Late and chronic nephritis Preperal sepsis Ottr accidents and diseases of preparacy and parturition Commail debility and mal- formation, premature birth State (present the commander of the Commail debility and mal- formation, premature birth Other Deaths from violence other defined diseases	2 1 5	1 1 1 12 3 26	3 6 9 1		: : : : : : : : : : : : : : : : : : : :		1 1 6	3	·· · · · · · · · · · · · · · · · · · ·	1 1 7	3	2  1  1  1 	· · · · · · · · · · · · · · · · · · ·	3		1 2 1	1 1  3  2 4 1	:: 1 :: :: :: ::	1  1   2 1 2 18 1		          		1  1 5   13 1 8 12 1	: 1 : 5 2 2 2 4 1 3 9 : :	1	1		: : : : : : : : : : : : : : : : : : : :	·· · · · · · · · · · · · · · · · · · ·	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	1 4		2 1 7 5 21  50 8 43 170 10	1 5 3 16 3 8 8 34 5 14 168 2
Nil Causes (included above) : Nismyelitis		::		::	**			**	::	::	::	::		::	::	::-	::	::				**		::	::					::				::	::	
of infants under 1 year : Septimate	17	13	6	6	1	1	2	1	4	2 1	5 2	3	2	3	5	2 1	3	2	4 2	5	4	3	15 2	5	2	5 1				3	7	5	2		83 8	59 5
ou hares	201	195	91	95	3	-	26	38	58	54	77	87	53	50	64	78	72	54	84	69	54	41	180		70	71	14	14	119	104	78	80	26	21	1272	1231
Timate	189 12	186	83	92	5		26	35 3	50 8	48 6	72 5	5 5	52 1	48 2	61	71 7	69	52 2	78 6	61 8	49 5	36 5	164 16	160	68	67	14	12 2	109 10	99 5	70 8	74 6	25	20 1		1152 79
POLETION	22	470	86	02	12	54	33	46	451		- 100	63		46	734		813	-	89	166	57	95	165	10	76	24	16	64	113	130	86	45	21	11	1324	
MR-ARTES		7.6 0.3	21 11		11 13		19 15		24.1 13.1		21.9	.1	16 12		19. 12.		15. 9.	.5		0.0	16 15			1.4		1.5		1.8		1.7	18 11	3.2 1.2	22 14	2		1.6
																																			_	-



### CAUSES OF DEATH IN ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1924—URBAN DISTRICTS.

Causes of Death.	Shrev M	sbury B.	Castle	M.B.	M	gnorth .B.		rch n U.D.	U.	wley D.	U	imere .D. 4	M	llow .B. 5	Mar Drayto	n U.D.	U.	port D. 6	U.	ngates D. 7		estry .B.	U	ngton .D.	U	em .D. 86		lock B.	U.	hurch D.	To	etal.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	180	196	5.	10	34	40	8	11	55	43	10	16	52	44	44	39	22	18	65	70	83	83	63	56	15	15	103	103	35	38	774	782
Enteric Fever  2 Small-pox  3 Measles  4 Scarlet Fever  5 Whooping Cough  6 Diphtheria  7 Influenza  8 Encephalusis schangica  8 Encephalusis schangica  8 Encephalusis schangica  10 Tuberculosis of Respiratory  system  11 Other tuberculosi diseases  12 Cancer, malignant diseases  13 Rheumatic Fever  13 Cenberl haemorrhage, &c.  18 Heart Disease  18 Derebell haemorrhage, &c.  18 Heart Disease  18 Pheumonis (all forms)  20 Other respiratory diseases  21 Other tuberculosis  23 Appendicitis and typhiltis  24 Cirrhoiss of Liver  23 Acute and chronic nephritis  25 Hearpenal Acy, Cunder 2 years)  25 Peurpenal Aepois  7 Other accidents and diseases of  7 Other accidents and diseases  8 Onegential debility and mal-  formation, premature birth  5 Sicide  30 Other deaths from violence  30 Other defined diseases  42 Causes ill-defined or unknown  Pecial Causes (included above)	**			2 2 3 3 1 1 1 2 2 1 1 2 2 1 1 1 2 2 1 1 1 1	21 3 3 1 5 5 5 1 4 4 1 1 1 1 1 1 1 4 4	1		22 55	5 5 3 5 5 2 2 4 4 3 1 1 3 3 4 4 1 1 1 1 5 5 8 2 2	4	1		3 3 5 2 7 7 1 11 7 7 1 1 1 1	33	2 2 4 4 4 1 1 2 2 3 1 1 1 6 6			1	3 1 1 8	3 2 2 5 5 5 5 7 7 2 2		77			2 2 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3			3 3 1 2 2 7 7 1 1 1 1 1 1		1 8 1 41 4 4 50 12 2766 1 18 8 49 105 127 54 61 13 30 30 388 122 5 5	1 4 3 66 1 4 40 9 8 45 5 4 62 117 20 55 43 3 6 3 22 2 2 13 160 5
Poliomyelitis			::	::	::		::	::	::	::	::-		::	1.5	::	**	::	::	::		::				1		11	::	1		2	::
Deaths of infants under 1 year Total	17	12			4	3 2			6	4 2	::	1	4	1	6 3	1	2		10	9	12 1	9 4	3	1	2		10	4	3	3	79 7	48 9
TOTAL BIRTHS	324	304	9	12	46	36	-11	12	78	83	25	13	48	51	42	35	29	19	108	93	101	119	71	64	21	16	116	137	44	52	1073	
Legitimate	310 14	286 18	7 2	11	44 2	32 4	11	11	76 2	78 5	24	12 1	47	48	39	33 2	26	16	103	89	97	108	61	58 6	20 I	15	1112	125 12	44	50	1021 52	972 74
Population	32 Forde	rth rate 360 ath rate 560	127	2	5/	021		582		574		341	5	155	47	45	3133		118	150	96	108	8	061	2	235	138	830	56	333	114 Fords	irth rate 1500 eath rate 1800
BIRTH-RATES DEATH-RATES		1.8		3.5		6.3 4.7		4.5		1.2		).6 i.1		1.6	16	.5		1.7		1.4		1.2		8.7 4.7		6.5 3.4		8.3		7.0		18.5 13.6



# CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF SALOP, 1924.

				77.00				_			ADM	INIS					OF S.			1-	
CAUSES OF DEATH.	Sex.			AGG	REGA	IE OF	URBA:	N DIST	RICTS	*			A	GGREG	ATE O	F RUE	RAL DIS	STRICT	rs.		
		All	0—	1-	2—	5—	15	25—	45—	65—	75	All Ages	0-	1-	2—	5	15	25—	45	65—	75-
ALL CAUSES	. M. F.	774 782	79 48	24 15	20 22	15 11	25 31	76 69	215 163	156 171	164 252	777 769	83 59	12 20	21 8	17	18 31	61 59	162 149	174 157	229 269
1 Enteric Fever	. M. F.	1	**	::		::	ï	::	1		.,	1					14		1	4.1	209
2 Small-pox	. М. F.		**		11		11											**	1		**
3 Measles	. М. F.	8 13	3	5 3	2 6	1	::					2		1	1			**			
4 Scarlet Fever	. M. F.	**	::	1::	13				**			1	**	1	-:				**	**	
5 Whooping Cough	M. F.	1 4	1 2	2	12	::	**					3	3	2	1		**		**		
6 Diphtheria	M. F.	· i		1:	2	**		i	**			2			-:	ï					
7 Influenza	M. F.	41 66		1 1	1 1	1	3 3	5 5	11 16	10 17	9 23	43 43				1	2	6	13	12	11
8 Encephalitis lethargica	M. F.	4		i		1	1		1	1		2 2		1				10	12	6	12
9 Meningococcal meningitis	M. F.	::	::							**		i				1		ï			**
10 Tuberculosis of Respiratory System	M. F.	50 40	*:		i		10	22	15	3		19					2	7	9	1	**
II Other Tuberculous Diseases	M. F.	12	**	2	2	3 3	14	18	5	2		13	**		4	1	12	3	9	3	
12 Cancer Malignant Disease		76 84		11			**	5 7	36 41	25 20	10	61	1			2	2	2	16	29	14
13 Rheumatic Fever	M. F.	1 5		**	::	2	2	1			16	84			**	2	**	7	30	26	21
14 Diabetes	M. F.	8 4		11		11	::	1	5	2 2	1	11 9					3	2	5	4	
15 Cerebral Haemorrhage, &c	M. F.	49 62	::	**		::	::	1	15 10	13 22	20 29	52 61		**					5	12	30
16 Heart Disease	M. F.	105 117	**	**	**	1 1	1 3	6 3	40 27	35 36	22 47	106 130				2	*:	7	15	31	51
17 Arterio-sclerosis	M. F.	27 20	***		::	::	::	1	4 3	8 8	14 9	35						2	7 2	9	17
18 Bronchitis	M. F.	54 55	11 2	2 1				1	10 11	13 20	17 21	49 48	6 2	2 3	1			2 1	5 6	6 12 11	9 21 25
19 Pneumonia (all forms)	M. F.	61 43	12 6	7 4	3 5	ï	i	3 7	26 5	5 3	5	52 46	11 6	4 5	4	4	3	5	10 6	11 10	111
20 Other Respiratory Diseases	M. F.	13	1	3		**		2 I	4 5	1 1	2 2	9 12	::	2	::	1	i	::	4	2 5	2 3
21 Ulcer of Stomach or Duodenum	M. F.	8 4	::	::				4 2	4		·i	2					1	1	ï		
22 Diarrhoea, &c	M. F.	5 7	3 2	·i	2	**	11	'i	1		1	6 9	1 4	·i	ï	i	**	3		1	1
23 Appendicitis and Typhlitis	M. F.	7 6	::		1	1	1	3 2	1 3	ï		7 3				1 2	1	3	2 1	1	
24 Cirrhosis of Liver	M. F.	4 3			::		::	::	4		2	5 3						1	2 1	1	1
25 Acute and Chronic Nephritis	M. F.	30 22	**		::	**	1 2	4	12 7	6 8	7 5	21 16	**			1	4	i	10 6	4 5	2 3
26 Puerperal Sepsis	M. F.	2			::			2				3	::			**	i	2			
27 Other Accidents and Diseases of Pregnancy and																					
Parturition	M. F.	5	::		::	::	::,	5		::		8	::	::	::	••	::	ŝ	12		
8 Congenital Debility and Mal- formation, Premature Birth	M.	38	37		**		1				75	50	46	1	2	1					11
29 Suicide	F.	12	21	**				5	1 1	6		8 5	33				ï	1	4	3	10
30 Other Deaths from Violence	M.	30	2	1	5	3	4	5	5	4 2	1 6	43	1	1	6	2	4	8	12	6	3
31 Other defined Diseases	M.	13	11	3	6	4	2 2	6	14	23 25	55	165	14	1	2	3	1	7	30	32	75
32 Causes ill-defined or unknown	F.	156	12	2	2	2		10	3 2	1	79	10	12	5	2	4	1	6	23	3	90
	F.	5			**	**		**	2	3	**	2	**	**			**	**	1	1	**

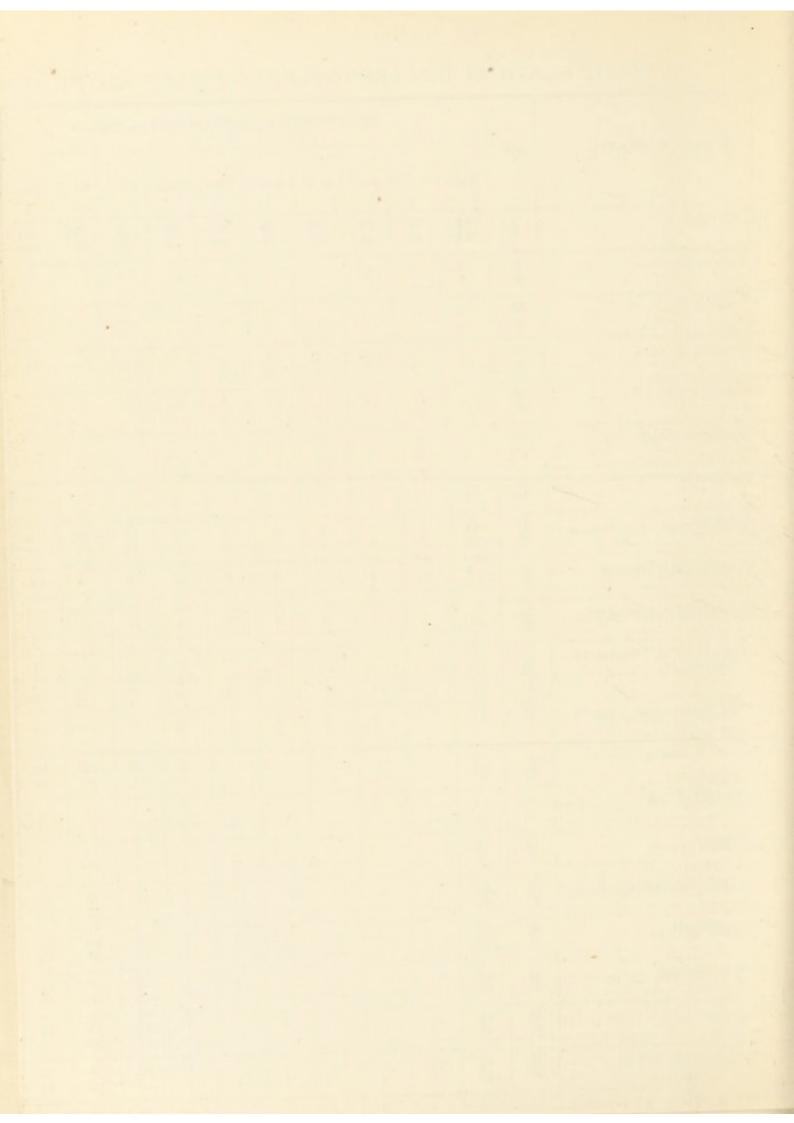


TABLE I.

BIRTH-RATES AND DEATH-RATES IN SANITARY DISTRICTS FOR 1924.

Uı	rban Distr	icts.	Birth-rates.	Death-rates.	Rural Districts.	Birth-rates.	Death-rates.
Bridgn Church Dawley	Drayton or Drayton or		16.5 16.3 14.5 21.2 16.2 20.6 18.1 15.3 16.9 22.2 19.4 16.7 16.5 18.3 17.0	11.8 14.7 12.0 12.9 17.5 14.1 17.6 12.7 11.4 16.7 12.8 14.7 13.4 14.9 12.9	Atcham Bridgnorth Burford Chirbury Church Stretton Cleobury Mortimer Clun Drayton Ellesmere Ludlow Newport Oswestry Shifnal Teme Wellington Wem Whitchurch	17.6 21.6 11.1 19.1 24.8 21.1 16.2 19.3 15.5 17.0 16.4 21.2 18.5 16.8 19.7 18.2 22.2	10.3 11.1 13.5 15.5 13.7 9.2 12.3 12.1 9.0 10.9 15.5 11.4 12.8 16.8 13.0 11.2
	TOTAL		 18.5	13.6	TOTAL	18.9	11.6

TABLE II.

Average of the Annual Infantile Mortality for the Sanitary Districts for the Periods 1901—1906, 1907—1914, 1915—1919, and the Rates for 1920, 1921, 1922, 1923 and 1924.

		rage	for	Percentage decreas	Increase or se in	r 1920	r 1921	r 1922	г 1923	r 1924
	to	to	1915 to 1919	Second period over first.	Third period over second.	Rates for	Rates for	Rates for	Rates for	Rates for 1924
hurch Stretton eawley Ilesmere udlow . Iarket Drayton ewport oakengates ohrewsbury Vellington Venlock	86 106 96 112 103 113  117 138 102 126 114 93 102 103	100 116 99 97 65 84  80 104 101 102 78 87 85 104	105 104 67 77 74 76 119 81 87 96 74 91 47 71 82	+ 16.3 + 9.4 + 3.1 - 13.4 - 36.8 - 25.7  - 31.6 - 24.6 - 1.0 - 19.0 - 31.6 - 6.4 - 16.7 + 1.0	+ 5.0 - 10.3 - 32.3 - 20.6 + 13.6 - 9.5  + 1.2 - 16.3 - 4.9 - 27.4 + 16.6 - 45.9 - 16.4 - 21.1	33 78 85 78 58 58 56 69 58 54 65 55 102 69 30	32 73 48 93 86 83 85 66 92 74 84 74 135 52 55	0 47 32 43 69 45 111 31 69 22 47 62 47 74 10	182 62 0 41 47 49 85 34 59 74 62 35 51 33 44	0 85 0 62 26 50 91 41 94 95 46 29 54 55 62
All Districts	112	96	82	— I4.3	- 14.5	65	78	52	54	59
Rural		year		Percentage decreas	se in	for 1920	for 1921	for 1922	for 1923	Rates for 1924
DISTRICTS.	to	to	7 1915 to 4 1919	period over	Third period ove second.	100	Rates	Rates	Rates for	Rates
	. 87 . 59 . 77	68	65 35 51	- 8.3 - 23.0 + 15.2 - 22.1 - 17.5	- 27·3 - 2·9 - 48·5 - 15·0 - 6·2	73 34 123	64 0 92	57 73 0 40 35	56 66 95 53 77	7 6 14 4 5
Mortimer . Clun Drayton .		7:	4 7 <sup>2</sup> 2 95 4 77	- 19.6 - 28.0 - 26.0 - 8.7	- 13.0	33 3 25 54	52 60 37	78 67 85	65 78 71 67	4 4 3
Ludlow Newport Oswestry Shifnal Teme.	. 91 . 106 . 96 . 92	6 8 8 7 10	9 59 6 97 7 83 6 52 2 67	- 9.4 - 9.4 - 19.1 - 19.7		5 76 5 36 3 54	79 70 70 6 21 6 61	88 62 49 0	69 42 28	5 7 5 4
	. 10					0.0				7

# INFANT MORTALITY.

TABLE III.

COMPARISONS OF INFANTILE DEATHS FOR PERIODS OF YEARS.

Aven	rage an	nual years	Percentage numb	decrease of pers in					
1905 to 1909	1910 to 1914	1915 to 1919	secondperiod compared with first period.	third period compared with second period.	1920	1921	1922	1923	1924
						-			
5955	5427	4441	8.8	18.1	5943	5318	4904	4900	4622
561	444	335	20.8	24.5	395	354	288	291	269
34	22	19	35.3	13.6	24	15	8	0	9
		II			I	5	6	3	
5	Т	8	80.0	20.0					
19	12	5.8				6	7		т.
							1	3	
	42		30.0						
		-	255 E C 75		37	24			21
03	43	34	33.0	20.9	40	28	28	17	35
61	52	18.6	14.7	64.2	27	28	20	6	10
					-/		20	, i	10
128	119		7.0						137
96	74		22.9						
	1905 to 1909 5955 561 34  5 19 60 46 65 61	1905 1910 to 1909 1914  5955 5427  561 444  34 22  5 1 19 12  60 42 46 33 65 43  61 52  128 119	to 1909 to 1914 to 1919  5955 5427 4441  561 444 335  34 22 19 11  5 1 .8 19 12 5.8  60 42 46 33 30.6 65 43 34 61 52 18.6  128 119	numbers for years         numbers           1905 to 1910 to 1909         1915 to 1919         secondperiod compared with first period.           5955 5427 4441         8.8           561 444 335 20.8         35.3           34 22 19 35.3         35.3           5 1 8 80.0 36.8         36.8           60 42 30.0 36.8         30.6 28.2 36.8           60 42 30.0 30.6 33.8         30.6 28.2 33.8           61 52 18.6 14.7         128 119 7.0	numbers for years         numbers in           1905 to 1910 to 1909         1915 to 1919         secondperiod compared with first period.         third period compared with second period.           5955 5427 4441         8.8         18.1           561 444 335 20.8         24.5           34 22 19 35.3 13.6         11           5 1 8 80.0 36.8         20.0 51.6           60 42 30.0 36.8         51.6           60 42 30.0 30.0 31.8         28.2 7.2 30.0           65 43 34 33.8 20.9         20.9           61 52 18.6 14.7 64.2         64.2           128 119 7.0         7.0	numbers for years         numbers in           1905 to 1910 to 1909         1914 1919         secondperiod compared with first period.         third period compared with second period.           5955 5427 4441         8.8         18.1         5943           561 444 335 20.8         24.5         395           34 22 19 35.3 13.6 24         18.1         24           5 1 .8 80.0 36.8 51.6 12         20.0         1           60 42 33.8 36.8 51.6 12         365 43 34 33.8 20.9 40         20.9 40           61 52 18.6 14.7 64.2 27         22.0             128 119 7.0         7.0             96 74 22.0         22.0	numbers for years         numbers in         for           1905 to 1910 1915 to 1909         1915 to 1919         secondperiod compared with first period.         third period compared with second period.         1920 1921           5955 5427 4441         8.8         18.1         5943 5318           561 444 335 20.8         24.5         395 354           34 22 19 35.3 13.6 15.6 15.6         24 15 15 15           5 1 8 8 80.0 36.8 51.6 12 6         20.0 12 6           60 42 30.0 36.8 51.6 12 6         30.0 20.0 12 6           60 42 30.0 30.0 30.0 31.0 32.0 32.0 32.0 32.0 32.0 32.0 32.0 32	numbers for years         numbers in         for year           1905 to 1910 to 1999         1915 secondperiod compared with first period.         third period compared with second period.         1920 1921 1922           5955 5427 4441         8.8         18.1         5943 5318 4904           561 444 335 20.8         24.5         395 354 288           34 22 19 35.3 13.6 13.6 15 6         24 15 8 15 6           5 1 8 8 80.0 36.8 51.6 12 6 7           60 42 30.0 36.8 51.6 12 6 7           60 42 30.0 46 33 30.6 28.2 7.2 37 24 18 65 43 34 33.8 20.9 40 28 28           61 52 18.6 14.7 64 2 27 28 20           128 119 7.0 7.0	numbers for years         numbers in         for years           1905 to 1909 1914 1919         1915 secondperiod compared with first period.         third period compared with second period.         1920 1921 1922 1923 1923 1923 1925 1923 1925 1923 1925 1925 1925 1925 1925 1925 1925 1925

Market Drayton had again a high infant death rate (91), or 54% higher than the average for the urban districts of the County. The death rate was due to seven deaths, three of them being illegitimate children.

Three of the deaths were attributed to prematurity. One fatal case was a malformed infant that only lived ten minutes. One death from gastro-enteritis and one from convulsions could with some certainly be attributed to the adoption of artificial feeding in spite of the advice of the midwife and the health visitor. The remaining death returned as bronchitis was probably due to influenzal infection.

The prevention of the premature deaths is obviously principally a matter of antenatal care, although it is possible that two of the children might perhaps have been saved if they could have been removed to the Wellington Babies' Home. One of the infants was born in the Workhouse, otherwise poor law relief was not obtained or said to have been needed for any of them. Only two, out of the six, mothers attended the antenatal centre. The seventh was in the Workhouse for a considerable period before birth of the child.

The points that strike one are (1) the high rate of illegitimacy and (2) the large number of premature children. The remedy, I think, is to improve the work of the Centre in all directions, particularly the educational part and to get all expectant mothers who do not get regular medical advice to attend the Centre as early as possible.

### INFECTIOUS DISEASE.

Scarlet Fever and Diphtheria.—It is possible that in the near future these diseases may be more adequately dealt with by the utilisation of the Dick test (Scarlet Fever) and Schick test (Diphtheria) to distinguish the immune from the non-immune and by immunising the non-immune persons brought immediately into contact with the disease. These tests are particularly applicable to residential institutions and it appears as if residential schools should not be closed without this procedure. The work of Dick clearly shows that "peeling skin" in scarlet fever is not infectious. This is valuable knowledge, as it enables the person looking after the patient to direct all her attention in the prevention of infection, to the discharges from the throat, nose and ears. It is comparatively easy to collect these discharges and destroy them, whereas the prevention of diffusion of particles of skin is most difficult. It has long been held by most authorities on infectious disease that skin peeling was not dangerous, but hitherto no absolutely scientific proof has been forthcoming.

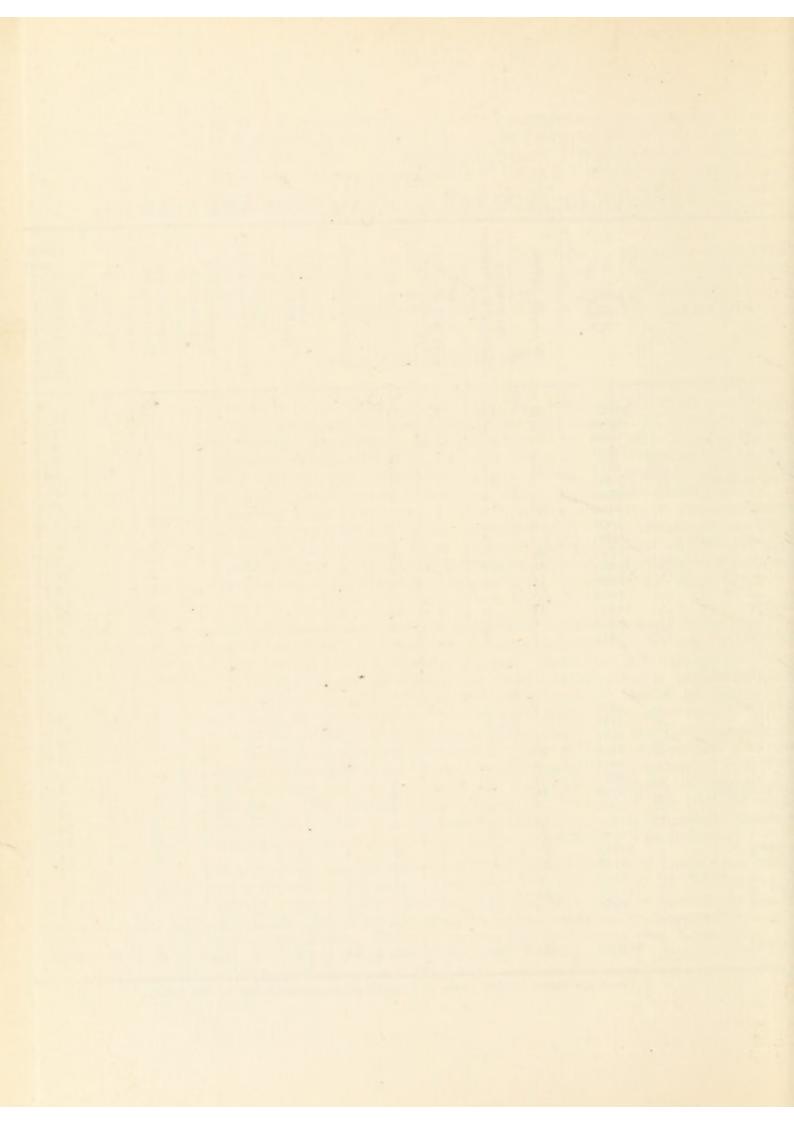
There can be little doubt that the control of diphtheria will resolve itself in the long run into the application of the Schick test and the active immunisation of those that prove positive. It is a very simple test; it readily separates those that are susceptible from those that are not. Those that are not susceptible should be swabbed to see if they are harbouring virulent diphtheria bacilli. Those that are susceptible should be immunised with toxin-antitoxin, and in the meantime their throats kept under observation. In a residential school or other residential institution, there should be no hesitation about applying this test. It is cheap and effective and not only prevents illness, but prevents all the upset and danger of spread caused by closure and much of the expense of isolation. Exactly under what circumstances it should be used in outbreaks in elementary schools is not quite clear. The necessity for getting the consent of the parents introduces a considerable difficulty, but notwithstanding this it may be confidently asserted that in the near future all troublesome outbreaks will be dealt with in this manner.

Measles.—The prevention of the spread of measles under present conditions being almost impossible, our efforts are directed to protection of the children at the dangerous age period, 6 months to 3 years, and to lessening the mortality and the damage to health from complications. In last year's report a lengthy quotation from Sir George Newman's report for 1922 was given dealing with (1) Instruction of Parents and Guardians, (2) Medical Assistance, (3) Health Visiting, (4) Nursing Provision, etc. A copy was forwarded to all the Medical Officers and Health Visitors. (Reference must be made to my report for 1923 for further details.)

TABLE IV.
RETURN OF INFECTIOUS DISEASES FOR THE YEAR 1924.

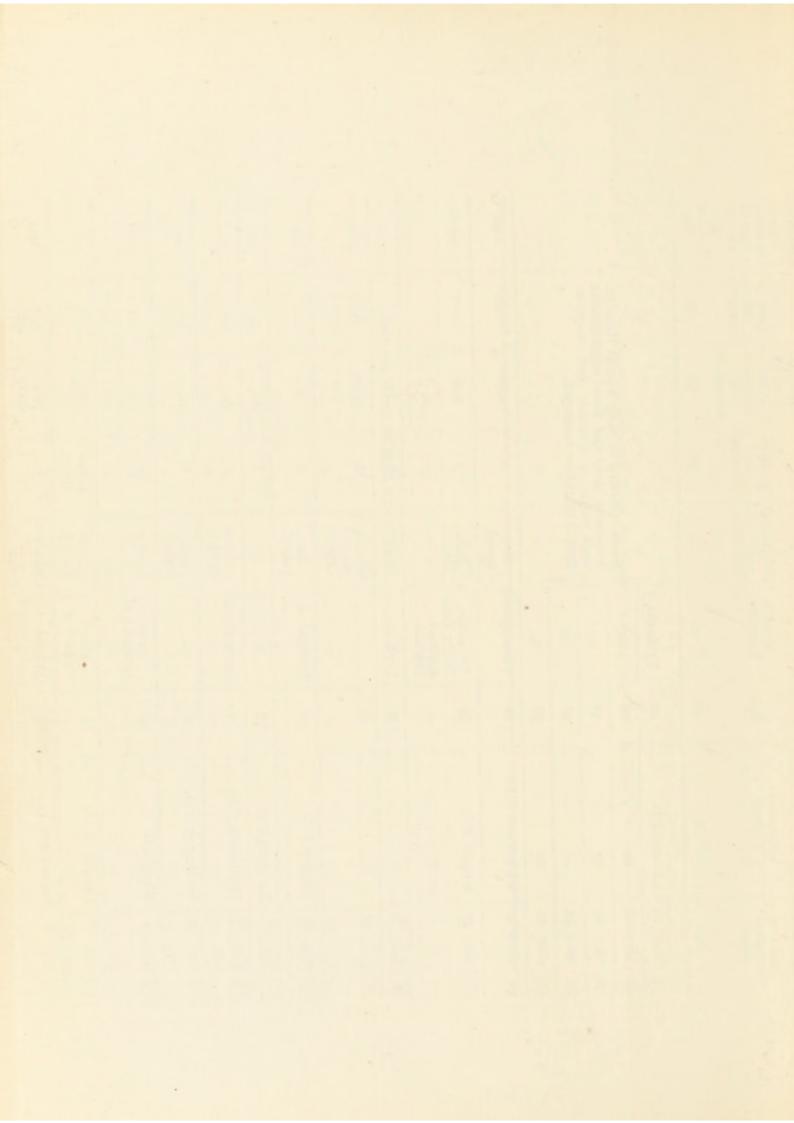
RURAL DISTRICTS.	Population Census 1921	SCARLET FEVER.	DIPHTHERIA (including Membranous Croup).	ENTERIC (Typhoid and Paratyphoid Fever).	PNEUMONIA.	PUERPERAL FEVER.	ACUTE POLIOMYITIS.	ACUTE POLIO-ENCEPHALITIS.	ENCEPHALITIS LETHARGICA.	OPHTHALMIA NEONATORUM.	ERYSIPELAS.		OTHER FORMS.	Malaria.
Atcham	8569 1268 3193 4516 7297 6243 7156 8008 8980 5747 16313 7666 1649 11207 8572	35 6 9 6 11 2  20 8 4 29 48 16 1 14 6 2	18 1  3 17 4 1 7 3 7 18 2  6 5 5	7	24 3  14 2 1 1 7 2 9 10 2 1  28 4 		1		1 2 1 1 1 4 1	1 1 1 1 2 2 1 1 5 2 2 2 1	5	12 3 3 5 4 7 2 3 10 6 7 20 4 4 20 4	8 7 1 2 4 2 1 3 2 2 5 7 5 6 7 1	· · · · · · · · · · · · · · · · · · ·
Bishop's Castle Bridgnorth Church Stretton Dawley Ellesmere Ludlow Market Drayton Newport Oakengates Oswestry Shrewsbury Wellington Wem Wem Wenlock Whitchurch	5143 1671 7386 1831 5677 4710 3056 11349 9790	1 10 3 4 16 5 35 27 94 16 4 11 9	1 5 1 7  6 5 4 7 2 24 1 2 19 55	1    1 	2 5 1 1  3 6 5 5 5  37 31 	  1  1  4   2	··· ·· ·· ·· ·· ·· ·· ·· ·· · · · · ·	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	 4  1 1 1 6 1  1	1 3 2 6 6 6 2	2 1 1 1 2 4 1	1 10 2 17  5  3 15 18 55 14  27 2	2 5 1 9  5 1 1 6  8 8  6 6	2
TOTAL	242959	453	236	27*	205	14	3	1	28	42	29	284	119	3

<sup>\*</sup> There are three further cases of typhoid fever not included in this return.



a trender, 1924.

logical examina- tion of excreta for freedom	(6)						none	none		none	No.	do.	do.	do.	:	Yes	Died	Positive	:	1:	:	:	1				:	:	:	1 :	Negative
Tes	(8)		Hospital.	ninations suspects.			none	none	note).	none	No.	do.	do.	do.	:	Nil.	Not	Not	do.	do.	do.	do.	do.		0		Not taken.	do.	do.	:	:
To me	(2)		lop Mental	Extensive blood and faecal examinations were made of contacts and suspects.	pected.		none	none	Salop Mental Hospital (see above note).	none	No.	do.	do.	do.	:	Nill.	Not	Negative	Not	do.	do.	do.	do.	and the same	Shropshire Orthopaedic	pital.	Not taken.	do.	do.	Negative	do.
Number in household.	(9)		urring in Sa	de of con	zarrier sus		61	8	tal Hospita	8	9	63	00	10	10	Lives	60	10	9	4	5	+	4	N.	Shropshire	HOS	9	10	10	12	9
Suspected source of infection.	(5)		Cases occ	Extensive were ma	Spread by		Not traced.	Not traced.	Salop Men	Secondary Nursed case (7)	Not traced.	do.	Outside district.	Not traced.	London	Outside	Unknown	Not traced.	No. 17	No. 17	No. 17	Not traced.	do.	do.	do.	do.	do.	No. 20	No. 27	Unknown	Unknown; Defective
Widal's Reaction.	(4)	Typhosus +	do.	do.	do.	do.	Paratyphoid	Typhosus, Slight Para- typhoid marked.	Typhosus +		Typhoid +	do.	Paratyphoid +	do.	Para- Typhosus B.	-Para- typhoid +	Typhoid +	Paratyphoid B. +	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.	Typhosus + 1	·
Age.	(3)	38	35	44	31	21	34	82	56	88	10	38	34	48	28	54	42	74	15	26	56	24	19	19	19	20	21	6	7	20	28
		:	:	:	:	1		:	:	:	1	:	:	:	:	:	1		:	:	:	:	:		:	:	:	:	:	:	
Sanitary District,	(5)	Atcham R.D.	do	do	do	do	Whitchurch U.D.	Atcham R.D.	do	do	Dawley U.D.	Newport U.D.	Wellington U.D.	Wellington R.D.	Wem R.D	Drayton R.D.	Shrewsbury	Oswestry R.D.	do	do	do	do	do	do	do	do	ф	тор	do	Bridgnorth U.D.	do
Week of Notifica- tion.	(1)	(I) Mar. 22	(2) May 3	(3) May 24	(4) May 24	(5) May 24	(6) April 26	(7) June 28	(8) July 5	(9) July 26	(10) Aug. 23	(11) Sep. 27	(12) July 5	(13) Oct. 25	(14) Oct. 11	(15) May 17	(16) July 5	(17) May 17	(18) May 17	(19) May 24	(20) June 14	(21) July 5	(22) July 12	(23) July 12	(24) July 12	(25) July 12	26) July 26	(27) Aug 2	(28) Oct. 18	(29) July 5	(30) Dec. 30



Sir George Newman considers the problem very urgent and of vital importance. The action taken against measles consists of notification from the schools, exclusion of children from schools, visiting of homes by health visitors, and provision of nursing where necessary. The scheme is carried on in close co-operation with the Medical Officer of Health. The Sanitary Authorities have power to provide medical attendance where it is necessary and the parents cannot afford. The visiting under the scheme is detailed on page 9. The objects kept in view in the health visiting of measles are to protect the children under 3 years from infection, to improve the conditions under which the children are nursed, to get medical attendance where necessary and if any complications develop to see that they get appropriate treatment. The beds at the Lady Forester Hospital are available for school children who do not convalesce satisfactorily after measles.

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

"In addition to personal infection, typhoid fever is spread by means of water and food. The only district in which typhoid fever has been traced to water in recent years is the Borough of Bridgnorth. Since 1917 the river water supply to Bridgnorth has been chlorinated and the danger has been greatly reduced, but the intake from the river is still in dangerous proximity to the outfall from the sewage works and a short distance below a dangerous pollution, and neither efficient filter beds nor storage have been provided. These matters should receive early consideration, and the removal of the intake should be carried out forthwith. The foods that have been proved to carry the infection of typhoid fever are shell-fish, milk, ice-cream, and water cress. Of these, shell-fish-mostly oysters and mussels—are infinitely the most important, but fortunately the consumption of shellfish in this county is small. Careful inquiry into the source of milk is made in every outbreak and into the consumption or otherwise of ice-cream. The infection of ice-cream is not due to infection in the original milk, but to infection during careless preparation. is stated that ungutted immature plaice are also a source of spread of typhoid fever. such fish are usually satisfactorily cooked, the infective organisms should barely escape destruction."

Outbreaks of typhoid fever in Oswestry were dealt with in a special report by Dr. Beresford. The report dealt with two separate outbreaks—one of typhoid fever and one of paratyphoid fever. The paratyphoid outbreak consisted of 12 cases that occurred in the rural district of Oswestry in the summer and autumn of 1924, including three at the Shropshire Orthopaedic Hospital. The outbreak had been preceded by a number of cases in the neighbouring County of Denbighshire, but no connection could be traced. Six of the twelve cases were in Rhydycroesau and there can be little doubt that they originated

directly or indirectly from an overlooked case at a small farm where a small quantity of butter and milk was produced. Three other cases were evidently connected, but whether originating from the first group is uncertain. The three cases in the Orthopaedic Hospital were not traced to their source. In three instances the disease spread to another member of the same household. Two of the cases were removed to the Isolation Hospital at Morda.

The outbreak of typhoid fever is of great interest. In June, 1922, a maid servant at a house in Oswestry contracted typhoid fever; in February, 1923, another maid servant in the same house contracted typhoid, and in December, 1924, a third maid servant from this house was notified from Ellesmere as having typhoid fever. After the second case, it was suspected that one of the inmates of the house must be a "carrier," and blood was forwarded for examination from the one that was suspected. The examination was negative. As a result of the third outbreak I instituted a very complete inquiry and got specimens of blood and faeces sent off for examination from two inmates of the house. The blood from both persons showed a Widal's reaction and the bacillus typhosus was found in the faeces of both. These persons must therefore be looked upon as carriers and the three cases must have been infected by one or the other or by both. Whilst one of the persons had suffered from an illness that might well have been typhoid fever in the winter of 1919—20, the other person had always been remarkably free from illness. It seems almost as if an immune person can become a carrier by close and prolonged association with an infected person without actually suffering from the disease. A very difficult situation has arisen and has been met so far as possible by most careful instructions. There is no known method of freeing a typhoid fever carrier from infection. It is therefore extremely necessary to give detailed instructions and exercise careful supervision until repeated bacteriological examinations have shown freedom from infection.

## MATERNITY AND CHILD WELFARE.

The provision made for carrying out this work and the general activities of the Child Welfare Committee come under the following headings:—

(1) The administration of the Notification of Births Act.

(2) The provision for medical, health visiting, and nursing services, including the nursing of measles, whooping cough, pneumonia and ophthalmia neonatorum.

(3) The provision of maternity and child welfare centres.

(4) The provision of orthopaedic treatment for children under five years of age.

(5) The provision of a home for ailing babies.

(6) The provision of maternity beds.

(7) The promotion of a midwifery service throughout the County.

(8) The provision of medical attendance when a midwife finds medical help necessary.

(9) The supply of milk to nursing and expectant mothers, and children under three years of age.

(10) The institutional treatment of the expectant mother suffering from venereal disease.\*

(11) The payment for beds for unmarried mothers and their infants at existing hostels.

(12) Arrangements with the Shrewsbury Eye Hospital for treatment of defects of eye, ear, throat, and nose.(13) The provision of a lecturer on hygiene, who is available for lecturing on child

welfare.

(14) The provision of a course of six lectures to district nurses, health visitors and midwives.

<sup>\*</sup> This comes under the scheme for the Prevention and Treatment of Venereal Disease.

Health Visiting Service.—This service has not undergone any variation during the year.

Notifications of Deaths under one year and Deaths after Confinement .- Arrangements have been made for the Registrars to supply the Public Health Department with the deaths of infants under one year of age and all maternity deaths and the attention of the Ministry of Health has been called to the desirability of making it obligatory for the medical attendant to state on the death certificate, the date of the confinement where confinement has taken place within one month of death.

Notification of Births Act, 1907.-In 1924 the births notified and discovered were 118 less than those registered; in 1923 they were 105 less than those registered.

Not

01	Total births re Notification of	gistered (e births by	exclusive of	the E	oners	 rewsbur	3161 599	3994
	Discovered by Obtained from	Total not Health V Registrar	isitors			 	3765 25 86	
	Excess of Birth	s remisters	d D: 1					3876

Excess of Births registered over Births notified or discovered In the Borough of Shrewsbury 679 notifications were received, of which 417 were sent in by midwives, 32 by doctors, 201 were sent in by doctors and midwives, 12 by parents and 17 by Registrars.

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

There are twelve whole-time health visitors. All these health visitors are now employed on maternity and child welfare, measles, ophthalmia, tuberculosis, and mental

deficiency work, and 10 out of the 12 also do some school nursing.

In addition, there are 64 district nurses acting as part-time health visitors.

The scheme is not yet fully developed, and the amount of visiting is not up to the standard originally fixed by the Ministry of Health.

In 1924 the visits paid by the Health Visitors were: -

		 T Tear	Jnder one	year.		I to 5	
Whole-time	***	 1st 2,559	2nd 2,346		ubsequent.		Total.
Part-time		 1,289	1,274	2,245 1,477	5,142 4,107	9,662	25,325 17,809
isits to expect		3,848	3,620	3,722	9,249	22,695	43,134

and visits to expectant mothers numbered 4,461.

The visits paid to measles houses and the cases dealt with were: -Houses visited. Cases visited. Cases without

Cases doctor Doctor. advised. 1587 2408 IIOI 226

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

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

"A Midwife must forthwith notify the Local Supervising Authority of each case

in which it is proposed to substitute artificial feeding for breast feeding."

Inquiry is made into these cases and advice and pressure is brought to bear on the midwife and mother to continue natural feeding where this is possible. During the year 57 notifications were received under this rule, compared with 73 last year. The causes given for ceasing natural feeding were:—

Percentage of children at first visit of health visitor on-

	Brea	ast feeding.	Artificial feeding.	Mixed feeding
1918	 	82.5	13.5	3.8
1919	 	85.8	9.7	4.4
1920	 	84.0	11.9	3.9
1921	 	86.6	9.6	3.7
1922	 	85.6	11.0	3.2
1923	 	88.7	8.4	2.7
1924	 	88.6	8.6	2.8

Of the cases where the children were breast-fed on the first visit and the feeding was recorded after three months and six months, it was found that 75.2 per cent. were still

breast-fed after three months and 66.5 per cent. after six months.

It is to the credit of the district nurses concerned that in the following districts there were no artificially-fed infants at the first visit:—Beckbury, Kemberton and Ryton; Bicton and Oxon; Clunbury and Clunton; Cound; Dorrington, Stapleton, Woolstaston, Longnor and Leebotwood; Hope and Shelve; Lydbury North and Plowden; Onibury and Stokesay; Shawbury, Moreton Corbet and Lee Brockhurst; Stockton Norton and Sutton Maddock; Trefonen, Treflach and District; Westbury; and Worthen.

In the following districts the percentage of artificially-fed children was 25 per cent. or over:—Ash and Broughall; Bedstone and Bucknell; Edstaston and Coton; Kinnerley, Knockin and Melverley; Leaton, Fitz and Preston Gubbalds; Lilleshall; Montford, Shrawardine and Great Ness; Prees; Tilstock and Alkington; Whixall; and Woore.

The long-tube bottle—a most insanitary method of feeding—is disappearing, and was only found in 16 cases. The use of the dummy was recorded in 554 cases—probably a

considerable under statement.

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

Water Supply. Want of Uncleanliness. Dampness. Overcrowding. Nuisances. Ventilation.

27 98 128 97 124 34

Maternity and Child Welfare Centres.—A new centre was started during the year at Highley. Good and well-equipped centres will probably shortly be provided at Bridgnorth and Market Drayton in place of the present most unsatisfactory places.

ATTENDANCES AT MATERNITY AND CHILD WELFARE CENTRES FOR THE YEAR 1924.

			INF	ANTS.	INTS.			EXPECTANT MOTHERS.		
	Under 1 year.			Betwe	Between 1 and 5 years.			The second second		
	New Cases.	Total Cases.	Total Attend- ances.	New Cases.	Total Cases.	Total Attend- ances.	New Cases.	Total Cases.	Total Attend- ances.	
Wellington Bridgnorth Ironbridge Oakengates Oswestry Whitchurch Ludlow Ellesmere Newport Market Drayton Dawley Highley Church Stretton	211 77 114 163 212 47 72 41 56 66 47 14 37	381 105 123 320 338 60 93 67 100 114 47 14 37	1401 471 1505 1400 1107 452 445 314 567 689 95 23 124	345 49 50 62 45 30 57 19 17 95 81 25 73	560 205 370 105 235 181 194 29 105 343 81 25 73	2994 1896 3202 1718 948 1499 1055 243 659 1414 138 46 327	57 4 30 50 11 12 18 10 9 16 8 2 4	68 34 48 55 21 19 20 12 9 23 8 2	210 36 271 201 60 136 63 35 17 66 15 3	
Totals	1157	1799	8593	948	2506	16139	231	323	1117	

Addresses at the Centres.—Three hundred and two addresses were given during the year on the following subjects:—Prevention of Dental Caries 22, Food 8, Feeding after Weaning (1—5 years) 3, Food Values 7, Breast Feeding 14, Weaning 8, Diet 9, Value of Milk 8, Infant Feeding 21, Value and Danger of Fruit 2, Care of Food in Hot Weather 2, Cod Liver Oil 1, Wholemeal Bread 1, Water Drinking 1, Dangers of Bread Sop 1, Alcohol 1, The Greengrocer's Shop 2, Clothing 33, Hygiene of the Child 1, General Care of the Baby 17, Bathing and Dressing Baby 1, Suitable Clothing for School Girls 1, Model Clothing for Infants (with specimens) 1, Sunshine and Fresh Air 12, Sleep 2, The Danger of Using Dummies 4, Summer Hygiene 2, Measles 22, Influenza 11, Colds 3, Rickets 5, Diarrhæa 14, Constipation 8, Discharging Ears and Eyes 2, Common Ailments 2, Infectious Diseases 2, Venereal Disease 1, Burns and Scalds 1, Convulsions 1, Squint 1, Cancer 1, Nose and Throat 3, Vaccination 6, Dangers of the House Fly 8, and other subjects 26.

Centre.			Addresses give	n by		Total.	Average Attendance.
Bridgnorth			Dr. Taylor			 . 4	
			Dr. Wilson			 I	
			Miss O'Connel			 22	12
CHURCH STRETTON			Dr. Blake				
CHURCH STRETTON			Dr. Higginson			 I	
			Mrs. Dixon			 I	
			Miss Cavanagh			 I	
			Miss White			 I	
			Nurse Wells Smit	th.		 I	22
				-11		 1	24
DAWLEY		• •	Miss Thomas			 3	18
Ellesmere	• • •		Dr. Evans			 2	10
HIGHLEY			Miss Mae Turk			 I	
			Miss Connelly			 I	II
Ironbridge			Dr. Fox Edwards	3		 I	
			Dr. Symons			 5	
			Dr. Wilson			 I	
			Mrs. Heywood			 3	
			Mrs. Terry			 I	
			Mi s Thomas			 9	1000000
			Miss Morgan			 6	22
LUDLOW			Dr. Blake			 6	Manager III
			Dr. Wilson			 I	I Salmin eq
			Mrs. Higgins			 8	
			Miss White			 I	1010211 101
			Miss Joyce			 II	8
MARKET DRAYTON			Dr. Priestley			 4	
			Dr. Wilson			 I	
			Miss Thomas			 43	
			Miss Browne			 3	-0
			Nurse Farrar			 3	18
			D D:				
NEWPORT			Dr. Priestley			 4	
			Miss Brazendale			 II	
			Nurse Wilcox			 2	***
			Nurse Hall			 I	19
OAKENGATES			Dr. Priestley			15	
OAKENGATES	1.5		Dr. Symons			 15	
			Dr. Wilson		• •	 3	
			Miss Jones			 II	
			Miss Thomas			 5	17
					12.12	9	-/

Centre.	Addresses given by							Average
OSWESTRY								Attendance.
OSWESIKI	 		Dr. Evans				3	
			Dr. Wilson				3	
			Mrs. Hart				I	
			Miss Gorick				8	
			Miss Bindloss				7	
			Mrs. Lowrance				2	16
WELL NGTON	 		Dr. Symons					
			Dr. Wilson				I	
			Mrs. King				I	
			Mrs. Woodhouse				I	
			Miss. Woodhouse				I	
			Miss Greenhalgh				2	
			Miss Thomas				41	
			Miss Browne				3	27
WHITCHURCH	 		Dr. Evans				8	
			Dr. Taylor				I	
			Mrs. Pullen					
			Mrs. Hart				I	
			Mrs. Lowrance		• •		I	-0
			mis. Lowrance		• •		19	18
			Total	addre	sses		302	

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

The numbers for 1924 were :-

Admitted 53, Discharged 50; Died 2.

Average duration of stay, 77.2 days.

The cases were diagnosed on admission as :-

malnutrition 22, prematurity 4, marasmus 4, improper feeding 8, diarrhoea and vomiting 2, rickets 4, tubercular contact cases 2, to restore breast milk 4, preventive cases 3.

Of the 50 infants discharged, 43 were reported as in good health, 5 as improved, and 2 no improvement.

The deaths were one from prematurity and one from marasmus.

The report of the Medical Superintendent, Dr. Symons, states that the Hospital has been conducted more efficiently and has well fulfilled its purpose. The only drawbacks mentioned were (1) the absence of the mothers, which cannot be remedied, and (2) the fact that the babies do not quite get sufficient of the exercises of which they are capable owing to the limited size of the staff. There can be little doubt that the Home should be made greater use of for the purpose of educating the mothers of the locality with regard to the possibility and desirability of keeping the babies in the open air as much as possible.

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

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

Orthopaedic Scheme.

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

The after-care centres are visited weekly by specially trained nurses from the Shropshire Orthopaedic Hospital, and they are also visited by a Medical Officer of the Hospital periodically.

It is our constant endeavour to link up this after-care work as closely as possible with the child welfare and school work. The early discovery of the cases depends almost entirely upon the health visitors as regards children under five, and largely on the School Medical Officers as regards school children. All the Orthopaedic Centres are now held on the same day as the Child Welfare Centres. This is a great improvement and enables that co-operation between the two branches of the work that is so essential.

		Case	s paid for unty Cou	by the	Cases the C	not paid County Co	for by ouncil.
Disease.		Child We	elfare, Tu School Ca	berculosis ases.		lfare,Tub and other	erculosis Cases.
		Under 5	5 to 14	Over 14	Under 5	5 to 14	Over 14
Tuberculosis of Bones and Joints		9	31	56**	2	I	8
Poliomyelitis		2	16		I	I	I
Rickets		II	7		I	I	
Knock Knee			Í			1.77	
Scoliosis			8			Ι	
Kypho-Lordosis			I				7
Congenital Deformities		I	2		I	2	3 2
Flat Foot			4			I	
Club Foot and Claw Foot		5	6		4	I	4
Osteo-Arthritis							9
Osteomyelitis		I	3			Ι	I
Osteo-chondritis			I				3
Exostoses						• • •	.:
Arthritis			1				I
Spastic Paraplegia						I	7
Other Paralysis			4	Maria I	I	2	
Fractures and Dislocations			4			I	I
Synovitis Knee		4	4		I		5
Torticollis							I
Hammer Toes			I			I	
Round Shoulders and Flat Feet							I
Hallux Ridigus Fleyus	• •		I				I
Periostitis Tibia							I
Halluy Valone			I				
Gunshot Wounds							I
Other Accidents		.:					16
Other Diseases		I	I				18
Other Diseases		••	3		••	•••	9
		34	101*	56	II	14†	100
* Includes , Change C. L. L. C. L.			191			125	
* Includes 4 Shrewsbury School Child	iren.						

<sup>\*</sup> Includes 4 Shrewsbury School Children. † Includes 5 Shrewsbury School Children.

\*\* Four of these cases notified and sent into the Hospital as tuberculous were diagnosed afterwards to be Osteomyelitis, Sarcoma, Functional Spine and Fibrositis.

In all, 316 cases have been treated at the Hospital, compared with 265 in 1923. So far as we are aware all the cases really needing treatment have been dealt with. This is very satisfactors.

factory. It is our constant endeavour to get the cases treated as early as possible.

Analysing this table it will be seen that, of the cases paid for by the County Council, 96 were due to tuberculosis and were dealt with under that scheme; 25 were non-tuberculous children under five years, and were dealt with under the Maternity and Child Welfare Scheme; and 70 were non-tuberculous school children and were dealt with under the scheme for the treatment of school children.

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

	1924	1923	1922	1921	1920
Tuberculosis	 40	37	42	44	37
Child Welfare	 7	6	8	10	14
School	 13	II	II	21	23

There has been a slight increase during the year, but taken year by year there has been a considerable diminution, and it must be remembered that the scheme is dealing more completely than ever with the cases in the County, and that many slight cases of deformity are now dealt with that were previously overlooked.

Analysis of cases according to causation:—

101 or 32.0 per cent. were due to tuberculosis.

21 ,, 6.6 ,, poliomyelitis.

20 ,, 6.3 ,, rickets.

29 ,, 9.1 ,, congenital deformities.

53 ,, 16.7 ,, other deformities—postural or of doubtful causation.

injuries and diseases arising at birth.
infections other than tuberculosis.\*

other accidents and diseases.

\* Includes Rheumatoid Arthritis, Osteo-Arthritis and Osteo-Chondritis.

This classification of cases in accordance with causation is extremely instructive. Tuber-culosis, rickets, postural deformities and infections other than tubercular must be looked upon as eventually preventable, and most of the conditions here mentioned are comparatively easily cured if got under treatment at the very beginning of the disease. This particularly applies to poliomyelitis, rickets, congenital deformities, and to a considerable extent it applies to cases of tuberculosis. The paralytic conditions arising from child birth are possibly also preventable. A systematic inquiry into these cases would well repay the trouble.

Many of the tuberculous cases come under notice after considerable damage has been done, the cause of the trouble not being recognised in the early stages. It is particularly important that cases should be removed to the Orthopaedic Hospital as soon as the defect is recognised, and not

after the cases have been treated for a considerable length of time.

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

Unfortunately a very small proportion of these cases of poliomyelitis is notified, the remainder being overlooked until later when paralysis or weakness is noticed. Only 3 cases were notified

during the year.

An inquiry is being made into the early history of cases of poliomyelitis that come under our notice for treatment.

The Maternity Home established by the Shrewsbury Victoria Nursing Association is providing some accommodation for the County and Borough under an agreement the terms of which were set out in the Annual Report for 1921.

Ma'ernity Beds at 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 have agreed to pay £1 is, a week towards the cost of any case recommended by them, that cannot afford the fee.

One hundred and eleven cases were admitted during 1924. They were admitted from Ironbridge, Madeley, Broseley, Jackfield, Coalbrookdale, Benthall, Much Wenlock, Shifnal, Dawley, Bridgnorth, Nordley, Horsehay, Leighton, Wellington, Leebotwood, Munslow, Cressage,

Kenley and Easthope.

Maternity Beds at Newport Nursing Home.—Two beds are always available here. The County Council pays an annual fee of fro per bed towards their maintenance.

Sixteen cases were admitted during the year.

The Chirk and District Cottage Hospital, situated in Denbighshire, also takes any maternity cases amongst the wives of their subscribers at a cost of two guineas a case.

During 1924, two associations were formed, viz. :- Meole Brace and Trefonen and District. Since the end of 1924, one more association has been formed.

The following statement showing the parishes most urgently needing midwives, grouped in 26 districts was first published in the year 1916. The associations formed since 1916 are also shown and the date of formation. When only part of the district has been supplied, the name of the parish supplied is printed in italics, and additional portions not in the districts originally

I.—Albrighton, Astley, Battlefield and St. Alkmond		ociation formed
2. Westbury and Wollaston		_
		1920
4. MUIVING, UDION Crescett Acton France T. 1		1920
4.—†Morville, Upton Cressett, Aston Eyre, Tasley and Astley Abbotts  5.—†Chelmarsh, Eardington and Oldbury		_
5.—†Chelmarsh, Eardington and Oldbury 6.—Chetton, Middleton Scriven, Douybill, Clarity, Prince Control of the C		_
7.—Wistanstow, Sibdon Carwood, and Halford Ecclesiastical Parish		1922
	1.	1917
y.—Kinet		
10. Hopton Wafers, Part of Cleobury Parish, Farlow Part of Cleoton C.	*:	_
Part of Silvington Parish, Farlow, Part of Cleeton St. Mary,	and	
II.—Clun  12.—Newcastle and Batture of C		1923
ANCHEGOLI GIRLI DELIWS-V-I FURTY		1917
-J. Crungumoru, Homon Casho Rodetona and D. 1. 11		-
		1919
15.—Bitterley Ecclesiastical Parish Hant C		19.9
16.—Knowbury Ecclesiastical Parish		_
17.—Cold Weston Heath Clee St Manager Cold Street Street		1920
17.—Cold Weston, Heath, Clee St. Margaret, Stoke St. Milborough and Abdon		
The first state of the state of		
19.—Llanyblodwel (Nantmawr and Porthywaen)		1920
20.—Trefonen Ecclesiastical Parish (Treflach, Llanforda and Sychtyn)  21.—East Part of Oswestry Rural Parish Massham M.		1922
21.—East Part of Oswestry Rural Parish, Maesbury Morda Aster Walter		1924
21.—East Part of Oswestry Rural Parish, Maesbury, Morda, Aston, Woolston, Middlet and Sweeney  22.—Badger, Beckbury, Kemberton, Buton, and Barrian, Company, Morda, Aston, Woolston, Middlet	on,	
22.—Badger, Beckbury Kemberton Patter and B		1922
		1917
24.—*Kinnersley, Preston-on-the-Weald Moors and Hadley		
25.—Lee Brockburst and Western J. W.		1920
25.—Lee Brockhurst and Weston and Wixhill (Lee Brockhurst in Shawbury, West	on	-920
26 — Whitchurch Purel W		
Winterfacti Karai—Western Part, Tilstock	100	
* † By arrangement the D. 1		1917

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

<sup>§</sup> Knockin is now included with Kinnerley and Melverley.

<sup>\*</sup>Kinnersley is included in a district with Preston and Tibberton affiliated to the Shropshire Nursing Federation in 1918.

Additional Districts formed since 1916:-	-						
The Bog Mine-part of Shelve, Wentnor and	Min	sterley 1	Parishe	s			 1916
Hope—parts of Hope and Shelve Parishes							 1917
Hopesay and Aston-on-Clun							 1919
Donnington Wood Ecclesiastical Parish							 1920
Ch ld's Ercall, Hinstock and Sambrook							1920
Ironbridge, Coalbrookdale, Jackfield, Brosele	y, Be	enthall,	Madele	y and (	Coalpor	t	1920
Oakengates Urban District							1920
Wellington Urban District							1920
Llanymynech—Parish of Llanymynech and	part	s of Me	oreton	and Ll	anyblo	lwel	
Parishes (very small part)							 1921
Shawbury, Moreton Corbet, and Lee Brockhu	ırst						1921
Claverley							1921
Whitchurch Urban District							1922
Munslow, Brockton, Holdgate, Tugford, and						ish	1923
Meole Brace and District					~		1924
Gobowen							1925
Edstaston, Whixall and Coton Association							
Edstaston and Coton, and Whixall.							

Medical Fees.—The fees of medical men called in by midwives under the rules of the Central Midwives Board are paid by the County Council, so that there is now no excuse for a midwife not calling in a doctor, and he is certain of getting his fee. The County Council in every case asks the patient to pay the fee or to show that she is not able to do so, and decides upon further action for recovery if necessary. This procedure should result in the medical practitioners in a large proportion of cases recovering directly from the patient where they are able to pay the fee. When the whole County is provided with trained midwives, there will be no reason why every woman, however poor, should not have adequate midwifery and medical attendance at her confinement. Two hundred and forty-three claims were sent in during the year, and £438 is. od. paid to medical practitioners.

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

Institutional Treatment of expectant and nursing mothers and their infants suffering from Venereal Diseases is carried out under the Venereal Disease Scheme at Cleveland House, Wolverhampton. 5 mothers were sent during the year (see page 31).

Hostels for unmarried Mothers and their Infants.—An arrangement has been made with the Mrs. Legge Memorial Home, Wolverhampton, by which patients are admitted for six months, the County Council paying for the first six weeks, the expense for the remainder of the period being borne by the Home. No cases were sent during the year.

Prevention of Rickets.—The prevention of rickets and the provision of early treatment has been strongly emphasised as one of the most important parts of the work of the health visitors. Rickets is a disease which is not without danger to life whilst it lasts, and leaves permanent injury often of a serious character. The mere straightening of a limb is a very different thing from the prevention of the disease. It is now definitely known that rickets is

caused by a deficiency of a vitamin contained in most animal fats and green vegetables, or by the absence of direct sunlight, or by the two combined. It can be prevented or cured by attention to these conditions. Not only will sunshine on the skin of the child prevent rickets, but exposure of certain foods to sunshine will give anti-rachitic properties which they previously did not possess. There are other food factors of importance such as the amount of calcium in the food and the excess of carbo-hydrate food, and the amount and kind of cereals eaten. Mellanby has shown that oatmeal under certain conditions is very liable to produce rickets.

Great attention is paid to improving the conditions of food, fresh air, sunshine, exercise, and cleanliness in all children, but in addition, for the special prevention of rickets, a memorandum emphasising these matters and also advocating the use of crude cod liver oil whenever there is

likely to be a shortage of milk fat in the diet, has been issued to health visitors.

Crude cod liver oil is now stocked not only at the Clinics, but by many of the district nurses throughout the County.

#### OPHTHALMIA NEONATORUM.

Forty-one cases of ophthalmia neonatorum were notified.

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

Thirty-six of the cases recovered completely; in two the eyesight was damaged, and three of the children died.

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

There is an ambulance always available for bringing the mother and child to the Eye and

Ear Hospital, Shrewsbury, when such a course is desirable.

In order that all but very slight cases shall be promptly removed to the Eye Hospital, a circular letter, printed in last year's report, was sent to all practitioners in the County pointing out the facilities and advantages.

#### MIDWIVES ACT.

	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  By Midwives.	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.	Notifications by Midwives of having laid out a Dead Body.
-	1920	240	651	733	70	8	60	9	23
	1921	240	675	734	76	10	66	11	28
	1922	218	635	682	75	6	58	19	39
	1923	235	649	781	54	11	73	32	35
	1924	227	752	721	51	5	57	19	38

Routine Work under the Act :-

The returns sent in by the certified midwives, although incomplete, show that they attended 3,578 births in 1924, out of a total of 4,673, leaving less than 1,095 or 23 per cent. to be attended by medical men and uncertified women.

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

	For	Mothe	r.			
During pregnancy						76
Haemorrhage					24	
Threatened abor	tion				26	
Accident					I	
Varicose veins					8	
Convulsions					4	
Deformity					I	
Purulent Dischar	rge				4	
Other causes					8	
At Labour						474
Premature labou					15	17.1
Uterine inertia a					223	
Abortions, misca				ıs	35	
Abnormal presen					18	
Placenta praevia					6	
					24	
					5	
Ruptured perina					124	
Adherent placen						
Transcrent Placen	· · · · · ·				-7	
After Labour						31
Rise of temperat	ure				29	3-
Other causes					2	
o ther endoes					7	
	For Ch	ild				140
Feebleness					74	
Malformation					13	
Discharge from eyes					42	
Convulsions					8	
Other causes					2	
Death of child					I	
archell of cities 11					-	

Analysis of the 51 still-births that were notified by midwives shows that—
28 were at full-time; 23 premature.

The condition of the child pointed to-

Death during labour or shortly before in 34; death some time before labour in 15; 2 no statement.

The presentations were:—head 30, breech 18. In 3 cases the presentations were not mentioned.

The sex of the children was as follows: -males 23, females 28.

The significance of still-births and miscarriages is dealt with in my report for 1921.

Puerperal Fever.—Fourteen cases were notified, compared with 16 in 1923. Eight cases were attended by midwives, and 6 by medical practitioners alone. There were no fatal cases.

Other Accidents of Parturition.—There were 13 deaths of women registered under this heading during the year.

Present supply of Midwives.—In June, 1924, there were 227 midwives registered as practising in the County, compared with 235 at a corresponding period in 1923.

MIDWIVES GROUPED ACCORDING TO NUMBER OF CONFINEMENTS THEY ATTENDED IN 1924.

Midwives	who	have	attended	no confin	ements			 	24
,,	,,	))	,,	less than	10 confine			 	89
,,	,,	,,	"	between	10 and 20		nts	 	63
.,,	,,	,,	,,	,,	20 and 30	2.5		 	28
,,	,,	,,	"	"	30 and 40	2.2		 	9
",	"	"	,,	"	40 and 50			 	7
"	"	"	**	,,	50 and 60	"		 	5
,,	>>	,,	,,	"	60 and 70	,,		 	I
,,	,,	"	22	,,	70 and 100	0 ,,		 	4
,,	,,	,,	,,	,,	over 100	,,		 	_

Four midwives were brought before the Local Supervising Authority during the year. Three of these were cautioned and one severely censured.

The number of midwives trained or taken over during the nine years was as follows:—
Trained by County Council and
Shropshire Nursing Federation.

Taken over from Rural Midwives Association and paid for by County Council and

			Shropshire Nursing Federation.
1916	 	9	2
1917	 	12	4
1918	 	6	3
1919	 	7	2
1920	 	13	2
1921	 	14	Ō
1922	 	13	0
1923	 	14	0
1924	 	4	0

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

### TUBERCULOSIS.

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

I am of opinion, as stated in my last year's report, that the reduction of phthisis is not dependent primarily upon any particular scheme. In order of importance, I would place—

- (1) The education of the public in health matters—principally in food, exercise, fresh air, sunlight and infection.
- (2) The provision of proper facilities, e.g., houses, playing fields, open spaces, and physical training.
- (3) The various health schemes—Tuberculosis, Child Welfare, and School Medical Inspection. All these schemes take an important place in the education of the public.

In placing these schemes in the third place, their influence as educational factors has been ignored. If their general educational influence is taken into account, their importance is greatly enhanced.

Incidence.—During the year 287 cases of pulmonary tuberculosis and 121 cases of other forms of tuberculosis were notified. There were 144 deaths from pulmonary tuberculosis and 42 deaths from other forms of tuberculosis.

TABLE V.
Notifications Classified for Age and Sex.

					1	Notifi	catio	ns on	For	m A			
				N	lumb	er of	Prim	ary N	lotifi	ication	ns.		T
Age Periods	to 1	to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up- wards.	Total Primary Notifi- cations.	Notifica- tions on Form A.
Pulmonary Males Females	2	5 2  14 6	10 10  11 14 	10 13  12 15	9 15 1  6 8 	25 19  6 9 	40 26  4 5	26 23 4  3  1	18 8 1  1 1 	7 8 1 3 	1 2   1	151 126 7 3 5 <sub>7</sub> 61 3	162 135 7 3 61 63 3
		N	Notific	cation	ns on	Form	n <b>B</b> .			Num	ber of N	otification	s on Form C.
	]	Numb Not	ber of tificat	Prin tions	nary		T	otal		Por	or Law		
Age Periods.	Un- der 5	5 to 10	10 to 15	Pi	Total rimar lotific tions.	ry ca-	Not	tifica- ns on m <b>B.</b>			tutions.	San	natoria.
Pulmonary Males Females Non-pulmonary Males Females	::	::	::							:		78	33 78 2.** 2.*

<sup>\*</sup>These numbers do not represent the cases of non-pulmonary tuberculosis admitted to sanatoria.

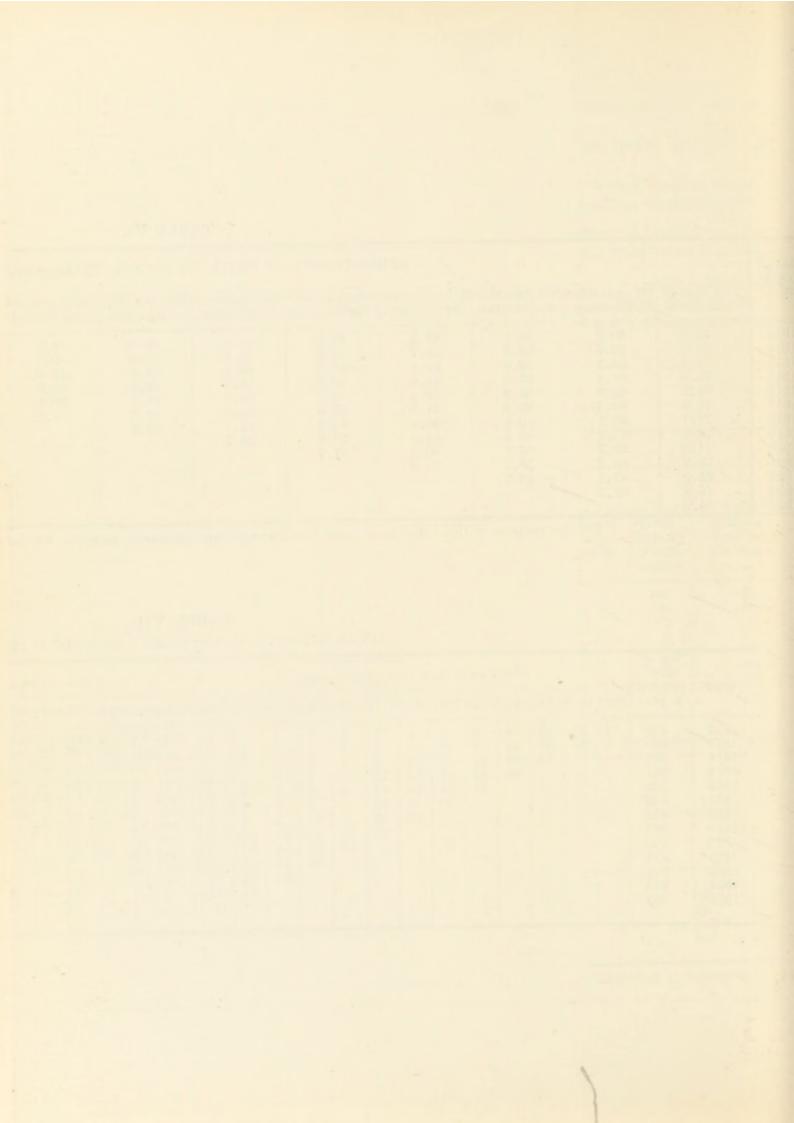
The numbers are 28 males and 33 females.

TABLE VI.

Year of Notifi-				PER	CENTAGES	OF PATIENT	S KNOWN	TO BE ALIV	E AT END	OF :			
cation.	The Year of Notification.	1st year after Notification.	2nd year after Notification.	3rd year after Notification.	4th year after Notification.	5th year after Notification.	6th year after Notification.	7th year after Notification.	8th year after Notification	9th year after Notification.	Notification.	Notification.	Notification.
1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924	72.3 82.5 72.8 76.2 78.5 76.6 76.7 78.9 71.2 78.2 66.9 75.4 74.9	63.5 64.4 58.2 61.9 65.8 64.3 67.1 72.2 60.7 63.4 47.1 61.2	53.1 59.6 53.5 57.0 59.9 56.8 63.0 65.5 53.8 55.6 40 7	49.3 56.7 51.1 52.8 56.5 54.3 60.1 61.3 50.3 50.8	47.3 55.9 48.0 49.0 55.3 52.9 59.3 57.9 47.7	46.4 52.3 45.5 46.7 53.6 50.8 57.7 55.5	44.4 50.7 44.6 46.4 51.9 48.6 55.9	44.2 49.6 43.6 45.2 50.1 48.1	43.8 48.7 43.2 45.1 48.2	43.1 48.3 42.2 44.9	42.8 47.8 42.2	42.7 46.5	42.3

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

Year	No. of cases notified				Nun	nber	of cas	es tha	at die	d in	years						К	now	n to l	e ali	ve at	end o	of yea	ırs				Left County and wrongly	Unac- counted
Tear	in year	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	diagnosed.	for.
1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924	439 290 267 381 392 403 425 341 325 318 274 273 287	117	36 50	43 51 73	15 12 34 89	8 8 12 49 81	4 2 6 17 44 90	8 9 8 14 20 44 93	1 4 6 12 11 29 42 67	1 3 1 7 4 5 6 21 90	3 2 2 1 6 5 10 19 30 66	1 1 1 2 4 6 2 11 18 44 85	 1 2  5 7 4 10 10 22 44 62	1 3  5 1 6 5 6 12 12 12 34 69	306	266 236		167 149	197 159 137 225 297	156 131 206	145 123	140 116 174 203 209 251	137 113 165 198	134 110 164 192 195 228 204	185 223 187 161	131 106 157 176 176 214 176 150 165	127 106	14 13 29 40 41 55 42 30 25 36	17 3 3 5 4 1 



Comparison of deaths from pulmonary tuberculosis in three six-year periods :-

Years.	Cases notified.	Deaths.	Years.	Cases notified.	Deaths.	Years.	Cases notified.	Deaths.
1907	3	236	1913	320	146	1919	341	171
1908	33	230	1914	295	204	1920	325	143
1909	32	225	1915	379	214	1921	318	150
1910	19	206	1916	364	206	1922	274	182
1911	103	216	1917	406	199	1923	273	157
*1912	439	208	1918	425	222	1924	287	144
1907—1912	2 629	1321	1913—1918	2189	1191	1919—1924	1818	947

\* Compulsory notification commenced in 1912.

A fall in the number of deaths in 12 years from 1,321 in one six-year period to 947 in another six-year period is very large. The figures are a complete answer to persons who say that there is evidence from mortality statistics that the tuberculosis scheme has failed. On the other hand it must not be assumed that the fall has been principally due to the scheme.

Analysis of the cases notified during the year shows that 10 were notified after death, 0 on day of death, 8 less than a week before death, 5 between one and two weeks before death, 14 within a month of death, and 20 within three months of death. Some of the cases of late notification are due to the fact that a medical practitioner was not called in until shortly before death.

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

Fifty-five of the cases notified were by the Tuberculosis Officers.

URBAN DISTRICTS

Annual Deaths for the Nine Years 1916—1924 inclusive, Classified in Age Periods, Sex, and Urban and Rural Districts.

					2.1.	., 1	,151	IXI	CIS	٠.						RUI	KAL	. D.	151.	RIC	TS.					
			A	l ages.	0-	_	15	_	25	<u>;</u>	45	;_	65	_	All	ages.	0-	_	15		25	;_	45	_	65	_
Year			М.	F.	Μ.	F.	M.	F.	M.	F.	М.	F.	М.	F.	М.	F.	М.	F.	M.	F.	М.	F.	M.	F.	М.	F.
1916 1917		:			2 4	3 7			28		8 18	14 10		1		48 48	. 1	4	-		24 19	21 27		9		3 0
1918	::	:	200		6	5	8 10	12	32 15	25	12 19	7		2 2	47	61 35	1 2	4	13 14	21	17 19	28	15	8	1	0
Average			54	51	3	5	8	11	25	25	14	8	4	2	46	48	1	3	9	13	20	24	14	8	2	1
1920 1921			40	28 34	5	3	-		21 12		14 22	6	4	4	32 39	36 37	2	3	0	10	15 20	16		6		1
1922 1923	::		51 45	46 41	2	3	6 10	11 13	26 22	27 15	12 12	8 9	5	1	39 40	46 31	2	4 2	8		13	16			2 5	2
1924 Average	••		47	38	1	1 2	10		22		15	5		2	19	35			2	12	7	11	9	9		3
	• •		47	30	1	2	7	10	21	16	15	1	3	2	34	37	1	2	7	11	14	15	10	8	2	1

In comparing these two periods it is interesting to notice that in the Urban Districts the reduction was 25.5 per cent. amongst females and only 13 per cent. amongst males. In Rural Districts the reduction was 22.9 per cent. amongst females and 26 per cent. amongst males. It is difficult to say what the significance of these figures is. The influence of home conditions is greater amongst females, whereas the influence of occupational conditions is greater amongst males. The age period in which the greatest reduction has taken place, both in Urban and Rural Districts is that of 25—45.

TABLE VIII.
DEATHS FROM PHTHISIS.

1915—1924 PERIOD.

Rural Districts:	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	Average number Deaths peryear.	Average annual Death- Rate.
Adobassa	22	25	12	17	12	8	12	15	17	8	14.8	.72
Bridgnorth	4	5	6	3	4	5	3	7	8	3	4.8	.57
Burford	1	1			1		3	1			.7	.52
Chirbury	5	5		2		2	3	1	3	1	2.4	.80
Church Stretton	2	5	5	2 7	1	1	1	3	3	2	3.0	.65
Cleobury Mortimer	5	4	12	6	6	5	10	1	3	4	5.6	.81
Clun	4	7	6	8	3	3	3	3	2	2	4.1	.66
Drayton	4	4	1	4	7	3	4	5	1	1	3.4	.49
Ellesmere	6	4	1	2	1	4	5	3	2	3	3.1	.41
Ludlow ,.	7	7	11	3	8	2	6	6	4	2	5.6	.63
Newport	1	2	11	5	9	1	1	7	2	3	4.2	.74
Oswestry	9	12	16	14	9	8	4	12	12	9	10.5	.68
Shifnal	8	4	1	7	5	7	7	4	2	3	4.8	.53
Teme	1	4 7	2 4	20	2 5	1 15	10	10	1	2	1.6	.96
Wellington	9	4			3	3	3	6	10	8	9.8	.86
Wem Whitchurch	2		3	7	1	-		1		-	.6	.28
whitehuren	4		+	1	+		**	1			.0	.20
URBAN DISTRICTS:												
Dishon's Costle	9	9		3	1			2			1.0	.77
Bridgnorth	2 3	6	6	7	3	4.	2	6	5	4	4.6	.90
Church Stretton	1	1	1		6	1		3	1		1.4	.90
Dawley	5	5	8	4	5	4	3		8	9	5.1	.69
Ellesmere	2	2	1	4	2		1	1	1		1.4	.85
Ludlow	8	5	12	12	13	5	2	7	2	6	7.2	1.27
Market Drayton	5	2	3	2	4	4	3	4	4	6	3.7	.78
Newport	2	5	1	3	2	1	3	1	2	1	2.1	.70
Oakengates	11	2	2	7	5	8	6	7	7	6	6.1	.51
Oswestry	16	15	15	12	9	8	6	10	12	7	11.0	1.08
Shrewsbury	34	31	29	27	21	18	22	38	24	34	27.8	.89
Wellington	7	8	8	8	9	3	7	6	8	6	7.0	.89
Wem		1	2	1	1	2	2	1	1	1	1.2	.58
Wenlock	12	15	13	17	10	12	12	9	9	10	11.9	.89
Whitchurch	8	6	6	7	3	5	5	2	2		4.4	.76

The districts with high death rates are the Urban Districts of Ludlow and Oswestry and the Rural Districts of Teme, Wellington, Cleobury Mortimer, Chirbury, Newport and Atcham. The Rural Districts of the North and North-east of the County have had consistently low rates (Whitchurch, Wem, Drayton and Ellesmere).

Position of Scheme.—This is in all essentials the same as in the year 1921.

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

An examination centre has been opened at Bridgnorth, and has proved of great use.

# ATTENDANCE AT DISPENSARIES.

No.of		No	otified Ca	ses.		Non-Noti	fied Cases		
Cases.	DISPENSARIES.	Insured.	Non- Insured.	School Children	Sch	iool.	Ot	her	
						Suspect.	Contact.	Suspect.	Total.
457	SHREWSBURY.  Number of patients who attended in 1924 for the first time	23 664	6 237	3 247	32 72	65 289	28 63	78 239	235 1811
148	OSWESTRY. Number of patients who attended in 1924 for the first time	2 223	8 157	3 139	7 28	19 68	11 29	45 85	95 729
758	Wellington. Number of patients who attended in 1924 for the first time	22 605	4 398	10 1365	53 221	111	73 159	143 345	416 3497
50	Examination Centres (open once a month). WHITCHURCH. Number of patients who attended in 1924 for the first time	36	4 13	1 42	5 15	5 8	1	6	22
66	Ludlow.  Number of patients who attended in 1924 for the		10	42	15	8	6	11	131
68	Attendances during 1924  BRIDGNORTH. Number of patients who	7 76	7	2 20	17 22	12 24	7	4 9	47 165
	attended in 1924 for the first time	7 44	5 13	1 3	2 2	18 28	10 15	10 11	63 116

# VISITS BY THE TUBERCULOSIS MEDICAL OFFICERS FOR 1924.

	To In	SURED	PATIENTS.		Т	To Non-Insured Patients.					To Sci	HOOL CI	HILDREN.	
On notifi- cation.	Con- tacts.	Sus- pects.	On dis- charge from Sana- torium.		On notifi- cation.	Con- tacts.	Sus- pects.	On dis- charge from Sana- torium.	The second secon	On notifi- cation.	Con- tact3.	Sus- pects.	On dis- charge from Sana- torium.	On other occa-
68	22	32	54	396	45	101	49	25	286	30	95	111	10	64
		572					506					310		
							1388							

### Visits by Health Visitors to Phthisis Houses in 1924.

To Insured Patients.	To Non-Insured Patients.	To School Children.	Total.
1534	1184	732	3450

King Edward VII. Sanatorium (Shirlett).—The number of patients admitted to the Sanatorium in 1924 was 151, and consisted of:—

Insured patients—Males	 	 63
" —Females	 	 25
Non-insured patients—Males	 	 17
" —Females	 	 46

The percentage of cases discharged as "arrested," and without tubercle bacilli in the sputum was 41, compared with 37 in 1923, 36 in 1922, 28 in 1921, 40 in 1920, 49 in 1919, 56 in 1918.

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

The following is an analysis of the cases admitted to Shirlett Sanatorium from its opening in 1911 until the end of 1924:—

Shirlett Sanatorium, 1911-1924.

Year	Patients Treated.	Known to be Alive.	Known to be Dead.	Left County.	Unaccounted for.	Cases notified.	Percentage treated at Shirlett.
1911	38	10	20	7	I		
1912	74	38	27	6	3	439	16.8
1913	80	32	39	8	I	290	27.5
1914	114	43	60	10	I	267	42.6
1915	133	55	56	22		381	34.9
1916	158	65	68	25		392	40.3
1917	164	84	66	14		403	40.6
1918	124	61	35	28		425	29.1
1919	123	66	36	21		341	36.0
1920	120	77	34	9		325	36.9
1921	121	70	44	7		318	38.0
1922	107	61	38	8		274	39.0
1923	109	83	19	7		273	39.9
1924	151	132	13	6		287	52.6
Total	1616	938	511	161	6	4415	35.4

It will be noted that in 1924 there was a sharp increase in the percentage of cases treated at the Sanatorium.

Shropshire Orthopaedic Hospital.—Ninety-six cases were sent to this Hospital by the County Council in 1924. The average length of stay of these cases was 154 days, and the average number of beds occupied 40. The cases were:—

Tuberculosis of the hip 31, spine 33, knee 12, other joints and bones 20.

Further details are given in the table on page 15.

The number of cases under supervision at the various after-care centres was 971 in December, 1924.

Shelters.—There are at present over 110 shelters in the County. The County Council have provided 96; 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; in addition, several have been provided by private individuals.

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.

The principle of providing shelters for the healthy children in a crowded phthisical home has been approved. This is probably the most important use of shelters and considerably more will be required in the near future.

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

It is not the duty of members of the Care Committee to systematically visit the cases or to attempt to give professional advice. Generally speaking, apart from occasional visits, they

should rely on the reports of the Health Visitors.

Reference should be made to the report for 1920 for details of the reorganised scheme.

Disinfection of Houses.—The position is as stated in the report for 1921.

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

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

where there is any sputum to examine.

Notified Cases.	Cases exa	mined.	Cases in which there was no	Not Examined.	In Institutions
Cases.	Positive.	Negative.	sputum.	Examined.	(Bicton, &c.)
287	127	54	64	27*	15

<sup>\*</sup> Of the 27 cases not examined, there was objection by the Private Practitioners or patients concerned in 14 cases; in 10 cases the Notifications were received after death; and the remaining 3 patients have died or left the County.

SUGGESTIONS FOR IMPROVING THE SCHEME.—The suggestions here made are principally for the protection of households, particularly of the children against infection from advanced and dangerously infectious cases.

- (1) Removal of children from a house where there is a dangerously infectious case, by means of boarding out. This has been left entirely to Care Committees, and so far it has not been found possible to do much. This great work should be aided by Public Health Authorities.
- (2) The provision of shelters for the use of apparently healthy children in infected households. A commencement has been made.
- (3) The provision of an open-air school or convalescent home at which ill-nourished and suspected tuberculous children might receive open-air treatment. Such an institution would deal with all feeble children requiring institutional treatment except those suffering from tuberculosis in an infectious condition. This is to some extent being met so far as school children are concerned by the arrangements made with the Lady Forester Trust.
- (4) An increase in the number of sanatorium beds for dangerously infectious cases. This matter is under consideration at the present time.
- (5) Better facilities for phthisical families to obtain good houses in which the patient will have a better chance of recovery and with much less risk of infection to others. Sanitary Authorities can solve this problem to a considerable extent by granting in suitable cases one of the Council houses, if necessary, at a reduced rent, or by making a grant towards the rent so that the patient can get a more suitable house. It must be remembered that Local Sanitary Authorities have very important powers and duties with regard to the prevention of tuberculosis.
- (6) The provision of beds, wherever separate beds for phthisical persons cannot be afforded. The Tuberculosis Officers give very special attention to this matter and it is usually attended to by the local care committees. The figures, however, show that the problem is not always satisfactorily solved. It may be necessary for the County Council to give help in those cases where the Care Committee find it impossible to effect the necessary improvement without help.

A strong effort should be made to get every phthisical person to sleep in a separate bed.

It is on these lines rather than on expensive action for the benefit of the individual, such as increased and more expensive sanatorium treatment, farm colonies, training colonies, etc., that a real reduction of phthisis is likely to be brought about, always bearing in mind that the most hopeful work of all is that which tends to bring about a higher state of physical fitness of the population generally (see page 22).

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

120 had separate bedrooms.

48 shared bedrooms but had a separate bed.

72 shared beds.

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

#### VENEREAL DISEASE.

No additions have been made to the scheme described in my report for 1917, except the provision of a male orderly in connection with the Shrewsbury Clinic. It consists of:—

- (1) Provision of facilities for diagnosis in connection with the Birmingham University.
- (2) Provision for treatment at-
  - (a) The County Council Clinic, Belmont, Shrewsbury.(b) Wolverhampton and Staffordshire General Hospital.
  - (c) Arrangements with the surrounding hospitals.
  - (d) Arrangements by which girls without homes and suffering from venereal disease can be sent to a Home at Wolverhampton provided by the Lichfield Diocesan Society, for treatment and training; the Home also provides treatment for pregnant women suffering from venereal disease.
- (3) Arrangements for supplying Salvarsan substitutes to Medical practitioners.
- (4) The formation of a Propaganda Committee as a Branch of the National Council for Combating Venereal Diseases, and the formation of nine sub-branches to cover the County.

No subsidiary clinics have been started and now that the great post-war increase of Venereal Disease has passed away there is not the same necessity.

The School Medical Service and the Child Welfare Centres are utilised for finding out cases of hereditary syphilis and following them up, but comparatively few cases have been discovered in this way.

The training of Midwives in the knowledge of venereal disease, the significance of miscarriage, and what steps to take is a very important matter. To qualify them better for this work two lectures were recently given to the district nurse midwives in the county, one on "The Meaning of Vaginal Discharge in Pregnancy" and the other on "The Syphilitic Mother and Child."

A definite effort is at present being made to get the mothers of infants with Ophthalmia Neonatorum to the clinic for treatment.

Fourteen mothers were brought from the Hospital during the year to the Clinic for the purpose of examination and treatment if necessary.

## CASES OF VENEREAL DISEASE TREATED DURING 1924.

Shrewsbury Clinic.		shire ospita	General	Kidderminster Infirmary. Shropshire Patients.			
Cases. Attendances. Syphilis 171 788 Gonorrhoea 165 2937 Other conditions 42 86	Syphilis Gonorrhoea Other conditions	ases. 4 4	Attendances.	Syphilis Gonorrhoea Other conditions	I 0	Attendances.	
Total 378 3811		15	1287		3	3	

<sup>\*</sup> At these Clinics the number of cases refers only to those attending for the first time in 1924.

The very marked decrease of venereal disease that had taken place in recent years shows signs of slackening.

The weakest point in the scheme is the small number of women treated and the

impossibility up to the present of treating gonorrhoea in women satisfactorily.

Arrangements have now been made with Cleveland House for the treatment of young women whether pregnant or not who are suffering from gonorrhoea and requiring in-patient treatment. Pathological material sent to Birmingham University for examination during 1924:—

Nature of Test.		Number of Tests.
For detection of gonococci		 30
For detection of spirochetes		 
For Wassermann reaction Gonococcus Complement Fix	 ation	 327
Test		 I

Cleveland House, Wolverhampton.—This Hostel is now 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 to save the infants from disease, is of fundamental importance. During the year 7 cases were admitted from this County, 5 of pregnant women and 2 of girls without suitable homes. One patient was suffering from syphilis and 6 from gonorrhoea.

# CAUSES OF DEATH.

Analysis from the point of view of prevention.—The causes of death so far mentioned in this report are those against which some direct action has been taken. They are the notifiable and other infectious diseases. They account for 12.5% only of all deaths. Excluding influenza, against which it has not been possible to take any effective action, they account for 6%; and if tuberculosis, which by general consent is a disease which is much more amenable to general hygienic measures, than to individual or direct measures, be also excluded, there only remains 1.7% of the deaths due to diseases dealt with by direct means.

This statement should be qualified to this extent (1) that the prevention of certain infectious diseases will prevent deaths from other causes, e.g., deaths from bronchitis or other lung trouble may be primarily due to measles; heart disease, kidney disease or septic meningitis to scarlet fever; (2) infant welfare work is partly direct action against specific diseases, although far the most valuable part of it is educational and general. It is very clear that direct action against disease can have had very little effect on the death rate and yet there has been an enormous reduction during the last 50 years. Apart from tuberculosis and in epidemic years, influenza, the diseases that are responsible for the great mass of deaths are:—

(1) Heart Disease (2) Diseases of Arteries—		Deaths in 1924. 458
Cerebral Hemorrha	ge	224
Arterio-Sclerosis		129 —— 353
(3) Bronchitis		206
(4) Pneumonia		202
(5) Cancer		305
Total		1524

Excluding deaths from violence and from unknown causes, the diseases above mentioned accounted for 64% of the total deaths and if the deaths from tuberculosis and influenza are also excluded they accounted for over 78%.

It is becoming generally accepted that all disease is preventable, although our know-ledge concerning the way to prevent many diseases is very incomplete.

With regard to the first four groups of diseases mentioned above, our knowledge is sufficient to show that they can be controlled, lessened and perhaps eventually almost abolished by attention to the fundamental laws of health. With increased knowledge it is not unlikely that the position may eventually be the same with respect to the fifth group—cancer.

The great factors affecting health are Food, Exercise, Fresh Air, Sunlight and Infection. Infection is to a large extent governed by the first four factors.

It is quite easy to show how heart disease, disease of arteries, bronchitis and pneumonia are mostly due to defects in the four great factors producing lowering of function followed by infection. It is true that in some acute diseases the exposure to infection appears to be the determining factor, but in the majority of infections the condition of the individual is the more important. The infection in bronchitis is quite a secondary matter; the infective virus in pneumonia is extremely prevalent and exposure to it usually comparatively unimportant, the determining factor being the condition of the individual. In the large majority of deaths returned as due to heart disease in later life the sequence is probably lowered function of the heart and lungs due to insufficient exercise, fixation of chest, chronic bronchitis, general infection and heart failure. A large proportion of the cases of heart disease in early and a proportion of those in later life are due to rheumatic infection. Exposure to rheumatic infection is, however, not probably the determining factor but the general health conditions enumerated above.

The remarkable diminution of rheumatic fever during the last thirty years along with

a great improvement in sanitation points also in this direction.

Chronic infections, which are so important in and after middle age, are secondary

to lowered function due to non-observance of the health factors.

The object of these remarks is to direct work into the most effective channels and to show the extraordinary value of certain work in the improvement of health and saving of life, and the infinitely smaller importance of other work, which on the face of it may appear more effective. Attention to the abnormal, although important and humane, can never have any great and permanent effect upon the public health.

What measures are necessary for improving these five great health factors?

The first and most important is education in health. Education affects all the factors. Without it, little can be done. With effective education, everything necessary for health must follow.

Of the measures here mentioned, some are possible at present, but others only when the supreme importance of health is recognised. In some, only the end to be kept in view is mentioned, the means for effecting it are not at present clear.

Food.—A great increase of supply of fresh perishable food to our towns—dairy produce, green vegetables and fruit; a decrease in the consumption of "refined" or "fractioned" food; increased facilities for cultivating allotments; increased facilities for obtaining milk in country districts under certain specified conditions, at less than the town prices; facilities for and aids to the keeping of goats; good drinking water readily available; provision of a proper food store in every house.

Exercise, Fresh Air, Sunlight.—An extension of physical training in our schools; the provision of town playing fields, sports fields and swimming facilities; the provision of local playgrounds in proximity to houses, and adequate school playgrounds and fields; the encouragement of physical exercise and training amongst the adult population in every way possible; the provision of adequate gardens for new houses for—

- (1) Exercise—gardening for adults—playground for young children.
- (2) A lying-out place where the baby can sleep out all day.
- (3) A place for a shelter for children or adults to sleep in at night or for a tuberculous patient.
- (4) Space to live out in the air and sun in suitable weather.

The proper spacing of new houses (not more than 12 to an acre).

The arrangement of new houses with regard to one another so as to get a free circulation of air and access of sunlight.

The planning of individual houses so as to get a maximum of sunlight into the rooms principally lived in, and each room well ventilated.

The prevention of the pollution of atmosphere by smoke.

Infection.—Infection is controlled to an enormous extent by the foregoing four factors. The acute infections depend largely upon proximity of individuals (that is overcrowding), bad ventilation, lack of sunlight and lack of ordinary precautions mostly due to ignorance; the chronic infections depend greatly upon food—the amount and the way it is eaten—exercise, regular habits and the action of fresh air upon the mucous membranes. For the prevention of infection through food a campaign against the house fly is very important.

The suggestions with regard to gardens and the spacing of houses may at first sight appear to be expensive. For houses already built they would mean the demolition of probably nearly 90% of the working class houses in our towns; for new houses the cost of these provisions is trifling. With land at £200 an acre the building of twelve houses to the acre, instead of 40 to the acre, means an addition of less than fourpence a week to the rent. With 12 houses to the acre satisfactory conditions with regard to circulation of air, sunlight, garden space, playgrounds, etc., can be obtained.

To be sure of these conditions every town in which there is likely to be building, should town plan their district and should fix a maximum of 12 houses to the acre. Where a town planning scheme is not adopted the authority should not recommend a house for a subsidy unless it has a sufficiency of ground and its aspect, etc., are satisfactory.

In this brief attempt to direct attention to the most essential matters for health, no mention has been made of important town services such as scavenging, and sewerage and means to prevent dampness in and around houses, as the importance of these is fairly well recognised.

CANCER.

DEATH-RATES FROM CANCER.

Year.	County of Salop.	England and Wales.	Year.	County of Salop.	England and Wales.
1894-1905 1906 1907 1908 1909 1910 1911 1912 1913	.978 1.019 1.013 1.082 1.159 1.195 1.07 1.08	.816 .917 .909 .909 .952 .967 .993 1.019	1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924	1.22 1.23 1.35 1.35 1.55 1.39 1.27 1.28 1.42 1.50 1.24	1.069 1.121 Civilians only 1.166 do. 1.210 do. 1.218 do. 1.145 1.161 1.215 1.229 1.267 1.3

Registration County, 1894—1911. Urban and Rural Districts, 1912—1924.

Very important discoveries have recently been made with regard to cancer which may enable public health authorities to take effective action. In the meantime the action of these authorities can best be directed to teaching the public (1) the importance of avoiding chronic irritation, particularly of certain types, (2) the early signs of cancer, (3) the necessity for early treatment. In addition, facilities for diagnosis should be provided.

#### GOITRE.

Goitre, that is the enlargement of the thyroid gland, arises whenever the demand for thyroid secretion is in excess of the supply.

The manufacturing capacity of the gland is interfered with very materially if there is not sufficient iodine in the food, and therefore the disease becomes in one sense a food deficiency disease. The other factors determining the causation of goitre are:—

- (I) Those interfering with the absorption or utilisation of the iodine taken into the body—
  - (a) contamination of water and food with bacillus coli.
  - (b) excess of fat in food.
  - (c) excess of calcium—hard waters.
- (2) Those causing an increased demand for thyroid secretion-
  - (a) Pregnancy and lactation.
  - (b) adolescence.
  - (c) sex—the demand in females is greater than that in males.

These subsidiary factors give a rational explanation of the fact that only a certain proportion of the population suffer in a goitrous district. I am of opinion that in a mildly goitrous area like Shropshire it is advisable that the ordinary salt should contain a small amount of added iodine, e.g., I part of potassium iodide in 50,000 to 100,000 parts of common salt. This amount of iodine could not possibly do the slightest harm, as the amount taken in a year would only be about one or two grains and is well within the limits of natural supplies in a non-goitrous area. Although this amount appears to be extraordinarily small it is recommended by the Swiss Royal Commission as effective.

It is, I think, most desirable that the Government should undertake an investigation into the smallest amounts of iodine that will prevent goitre, and should then consider the advisability of approving salts with added iodine for sale in goitrous areas. The dosing of school children for the prevention of goitre with much larger quantities of iodine is, in my opinion, objectionable, whether done under medical supervision or not. Such a method only affects one section of the population. It would lead to self-drugging of other sections of the population, and it would not supply universally that food deficiency in iodine which is the root cause. The prevention of contamination of water and food with bacillus coli are part of our general public health measures.

# BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

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

Quarters of 1924. For Typhoid Fever. Widal's Reaction.				For Diphtheria.			For Phthisis.	
	Positive	Negative	Doubt- ful.	Positive	Negative	Doubt- ful.	Positive	Negative
	12	11 32 88 11	0 0 0 0	41 90 141 45	77 124 274 195	0 0 0 0	11 17 13 9	55 88 68 74
	32	142	0	317	670 987	0	50	285
		Positive  1 12 14 5	Widal's React   Positive Negative	Widal's Reaction.   Positive Negative Doubtful.	Widal's Reaction.   Positive   Positive	Widal's Reaction.   Positive Negative   Posi	Positive Negative Doubt-ful.   Positive Negative Doubt-ful.   Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.     Positive Negative Doubt-ful.   Posit	Widal's Reaction.

Seventeen other disease products were examined and reported on.

Three hundred and fifty-eight specimens of sputum were examined at the Tuberculosis Dispensary with the following results:—85 positive and 273 negative; also 2 specimens of Urine, both of which proved negative. One specimen of pus from the glands was examined also, and was found to be negative.

# THE PREVENTION OF DENTAL CARIES.

This is an important part of the work of health visitors, school medical officers and dentists.

### EDUCATION IN HEALTH.

This is likely to become a very important duty of local authorities in the near future.

### ISOLATION HOSPITALS.

The Atcham and Shrewsbury Hospital which accommodates 26 patients has proved a great convenience to outside sanitary districts. The question of the erection of a hospital for the East Shropshire area is under consideration.

### WATER SUPPLIES.

A scheme has been got out for the supply of the village of Prees in the Wem Rural District. A supply to the village of Bucknell is now under consideration by the Ministry of Health and the County Council. A supply to the villages of Worthen and Brockton is most desirable.

## 36 HOUSING.

In last year's report a full analysis was made of the Registrar-General's figures on housing, and references should be made to this report for details (page 42). The urban districts with the largest amount of overcrowding were Oakengates (17), Dawley (14.9), Shrewsbury (8.7), Wenlock (8.5), Newport (7.7), and Wellington (7.5); the rural districts were Clun (11.0), Wellington (10.9), Cleobury Mortimer (10.1), Newport (9.0), and Chirbury (8.5).

TABLE IX.

Showing Housing Proposals and Houses actually built under the Ministry of Health Scheme and by Private Enterprise.

		S	CHEME AND BY P	RIVATE ENTERPRI	SE.	
			Minis	stry of Health Sch	eme.	
Sanitary Districts.			Number of Houses in original Scheme.	Number of Houses actually completed up to date.	Number of Housescompleted since June, 1921.	Private Enterprise since June, 1921.
Rural.						
Atcham			551	90	64*	113
Bridgnorth			Nil.	Nil.	Nil.	Nil.
Burford			Nil.	Nil.	Nil.	8
Chirbury			Nil.	Nil.	Nil.	I
Church Stretton			38	10	10	8
Cleobury Mortin	ner		Nil.	Nil.	Nil.	8
Clun			80	Nil.	Nil.	4
Drayton			92	92	89	21
Ellesmere			Nil.	Nil.	Nil.	I
Ludlow			16 10	16	10	9
Newport	* *				122 .	15
Oswestry Shifnal			250 Nil.	134 Nil.	Nil.	71 26
T			Nil.	Nil.	Nil.	3
Wellington			150	50	50	30
Wem			64	Nil.	Nil.	15
Whitchurch			36	36	32	6
URBAN.						
Bishop's Castle			12	12	12	4
Bridgnorth			Nil.	8	8	I
Church Stretton	١		20	20	20	45
Dawley			Nil.	Nil.	Nil.	A Nil.
Ellesmere			20	20	20 Nil.	
Ludlow			22 60	22 76	76	3
Market Drayton			28	28	28	4 6
Newport			217	217	217	N.K.
Oakengates Oswestry			50	50	50	24
Shrewsbury			359	316	242	138
Wellington			51	114	92	32
Wem			52	28	28	5
Wenlock			Nil.	Nil.	Nil.	3
Whitchurch			41	47	47	42
	Total		2219	1396	1217	650

The importance of the spacing, aspect and construction of houses in the preservation of health has been very strongly emphasised on page 33 of this report. It is a matter of great national importance not only that the present overcrowding should be relieved and houses built to replace the present insanitary ones as rapidly as possible, but also that no further houses should be built that are not satisfactory as regards spacing, aspect and construction. This matter goes to the very root of the physical and mental or spiritual well-being of the people. The provision where not met by private enterprise is primarily the duty of health authorities, but there is also great scope for persons who are charitably disposed and wishful to help to raise the health and well-being of the poor. There is probably no class of charitable work that could in its results compare with this. There can be no doubt that houses are still needed in all parts of the county, partly to provide for families at present living with other families, and partly to replace houses which are really unfit for habitation.

### MEAT INSPECTION.

Public Health (Meat) Regulations, 1924; Slaughterhouses Regulations.—These regulations impose very important duties upon the Meat Inspectors. It has yet to be seen how far they will be carried out in the county.

In order to better fit the Sanitary Inspectors for work under these regulations, a course of lectures and demonstrations has been given in the spring of the last three years. In the last course ten lectures were given and the average attendance was 11.3. Inspectors from the following districts attended:—Rural Districts—Atcham, Bridgnorth, Shifnal, Oswestry, Wellington, Ludlow, Wem, Ellesmere; Urban Districts—Church Stretton, Wenlock, Bishop's Castle, Shrewsbury, Dawley, Newport, Wem, Oakengates and Market Drayton.

A number of sanitary authorities did not give permission for the inspectors to attend or did not pay their expenses. Meat inspection is an important duty of sanitary inspectors; it is also very difficult work for fully trained and experienced persons. With one or two exceptions, none of the Inspectors of the County can be looked upon as fully competent to carry out these duties. It is consequently difficult to understand how it is that all the sanitary authorities do not seize upon this opportunity, being practically the only opportunity of improving the training of their inspectors in this duty. The Ministry of Health has given a very clear indication in the matter.

#### FOOD AND DRUGS.

Return of samples taken by members of the Shropshire Constabulary for analysis under the Food and Drugs Acts during 1924:—

Nature or Sample.	Number taken.	Genuine.	Adulterated.	Remarks.
Milk	122	115	7	3 Cautioned. 1 Dismissed. 1 Fined £5. 1 Fined 4/ 1 Fined £5.
Fresh Cream Preserved	6	6		
Cream	6	6		
Jam	20	20		
Sausage	6	6		
Butter	49	49		
Potted Meat		5		
Sponge Cake	5 5	5 5		
Shrimp Paste	I	I		
Prawns	I	I		
Beer	3	3		

Of 122 samples of milk analysed :-

45 C	ontaine	d fat ab	ove		cent.			
39	"	,, bet	tween	3.5 P	er cent	. and	4 per	r cent.
32	,,	,,	,,	3.0	,,		3.5	"
5	,,	,,	,,	2.5	,,,		3.0	,,
I	,,			2.5	,,			
36	,,,	non-fat	ty soli					
72	,,	,,,	,,					it. and 9 per cent.
14	,,,	,,		be	low 8.5	per	cent.	

Report of administration in connection with the Public Health (Milk and Cream) Regulations, 1912, for the year ended December, 1924:—

1. Milk and Cream not sold as Preserved Cream—

	Number of	samples	examined for preservative.	Number in which a preservative was reported to be present.
Milk		. 122		Nil.
Cream				Nil.
2. Cream solo	d as Preserv	ed Crear	m—Four.	
(a) Instance	es in which	sample	s have been submi	tted for analysis to ascertain if th

- - (i) Above 35 per cent. .. .. .. .. 4 (ii) Below 35 per cent. .. .. .. .. ..

### BLIND PERSONS ACT, 1920.

The scheme under this Act is now in complete working order. No statement has hitherto been made in my annual report, and this opportunity is taken of describing the scheme.

The County Council is the responsible body for carrying out the Act, and works, except with respect to institutional education, entirely through the Public Health Committee. The Local Education Authority is responsible for all institutional education and training.

The Public Health Committee provides for the supervision and help of home workers and the teaching of pastime occupations by an arrangement with the Birmingham Royal Institution for the Blind. The Public Health Committee has also called into being a voluntary association called the Shropshire Association for the Blind, and has delegated to them important duties. The Association consists of representatives of the County Public Health and Housing Committee (5), the County Education Committee (2), the Shrewsbury Education Committee (1), and persons elected at the annual meeting of the Association (17).

The duties assigned to them are—(a) helping in making the Register of Blind persons complete and in keeping it up to date; (b) co-operating with the County Council and the Local Education Authorities in seeing that blind children, young persons and adults are being suitably educated and trained and their after-care attended to; (c) promoting the employment of blind workers and securing the old age pension for those over 50 years of age; (d) visiting the aged and infirm in their homes and seeing that such relief as may be available from public or private sources are obtained for those needing help.

The Association forwards to the Public Health Committee copies of the Minutes of their meetings and of annual and periodic reports. The income of the Association is made up of an annual grant from the County Council—£200 (recently raised to £600), a grant from the Ministry of Health (last year £60), and voluntary subscriptions.

I have formed the opinion that the work carried on by the Association is of great value. By means of visitors all over the County specially interested in this work they keep in touch with the blind persons and bring to our notice conditions that need action by the Public Health Committee or the Local Education Authority. They are able in many instances to render valuable services which make the life of the blind person happier. They keep us informed of new cases of blindness, or supposed cases requiring investigation, thus enabling us to make the register as complete as possible. They arrange for the examination of suspected blind persons, and lastly they augment the income of the aged and unemployable blind persons either by direct grants or by inducing the Guardians to give a grant, or by obtaining for them the old age pensions.

The following tables were sent to the Ministry of Health on March 31st, 1925 :-

TABLE I.—CLASSIFICATION IN AGE PERIODS.

Age Period.	Male.	Female.	Age Period.	Male.	Female.
0—5 5—16 16—21 21—30	5 7 5 10	6 2 11	40—50 50—60 60—70 70—	19 18 26 36	8 13 16 52

TABLE II.—AGES AT WHICH BLINDNESS OCCURRED.

Age Period.	Male.	Female.	Age Period.	Male.	Female.
0—1	23	17	40—50	12	6
1—5 5—10	4 5	4 6	50—60 60—70	17 23	12 24
10—20 20—30	7 18	9 4	70—	8	21
30-40	16	6	Unknown	9	5

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 20 and 50 (males 46, females 16), is strong evidence of this.

The following statement is from the report of the Shropshire Association for the Blind for the year ended March 31st, 1925:—

					252
					27
					12
					10
for					7
ded					34
er Socie	eties				2
tients					37
					7
					25
	for ded er Socie tients	for ded er Societies tients	for	for	for

