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CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF SALOP, 1922.

CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS.										AGGREGATE OF RURAL DISTRICTS.									
		All Ages	0—	1—	2—	5—	15—	25—	45—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES .. .. .	M.	796	69	17	13	18	27	77	199	182	194	858	98	20	13	15	28	68	170	194	252
	F.	814	51	14	16	24	22	88	173	164	262	827	70	17	10	19	33	80	154	152	292
1. Enteric Fever .. .. .	M.	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..
	F.	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Small-pox .. .. .	M.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3. Measles .. .. .	M.	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..
4. Scarlet Fever .. .. .	M.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	3	..	..	1	2	..	..	..	..	..	2	..	..	..	1	1	..	..	..	..
5. Whooping Cough .. .. .	M.	3	1	1	1	..	..	..	..	..	..	3	1	1	1	..	..	..	..	..	..
	F.	7	3	2	2	..	..	..	..	..	..	5	3	2	..	..	..	..	..	..	..
6. Diphtheria .. .. .	M.	5	..	..	2	3	..	..	..	..	..	2	..	..	1	1	..	..	..	..	..
	F.	4	..	..	..	4	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
7. Influenza .. .. .	M.	45	2	2	..	..	..	9	11	12	9	33	2	2	..	..	..	7	10	10	2
	F.	52	2	3	2	..	1	9	13	8	14	49	..	2	..	..	5	16	13	7	6
8. Encephalitis Lethargica .. .. .	M.	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9. Meningococcal Meningitis .. .. .	M.	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10. Tuberculosis of Respiratory System .. .. .	M.	51	..	..	..	2	6	26	12	5	..	39	..	2	..	..	8	13	14	1	1
	F.	46	..	..	..	..	11	27	8	..	..	46	1	..	..	3	10	16	14	2	..
11. Other Tuberculous Diseases .. .. .	M.	17	3	2	3	2	5	..	2	..	..	14	..	3	2	3	1	2	3	..	..
	F.	11	2	2	1	1	..	4	..	1	..	16	1	1	2	3	4	3	1	..	1
12. Cancer, Malignant Disease .. .. .	M.	80	..	..	1	..	1	3	37	23	15	92	..	..	..	..	..	6	38	33	15
	F.	95	..	..	..	..	..	15	48	20	12	81	..	..	..	..	..	8	34	27	12
13. Rheumatic Fever .. .. .	M.	1	..	..	..	..	..	1	..	..	..	4	..	..	..	..	1	1	1	..	..
	F.	..	..	..	..	..	..	..	..	..	..	4	..	..	..	1	..	1	2	1	..
14. Diabetes .. .. .	M.	14	..	..	..	1	..	1	8	3	1	9	..	..	..	..	..	3	5	1	..
	F.	11	..	..	..	..	1	..	5	3	2	7	..	..	..	..	..	1	4	2	..
15. Cerebral Haemorrhage, &c. .. .. .	M.	58	..	..	..	..	..	..	21	21	16	60	..	..	..	..	..	..	8	23	29
	F.	62	..	..	..	..	..	2	12	18	30	65	..	..	..	..	..	1	11	25	28
16. Heart Disease .. .. .	M.	99	..	..	..	1	6	5	25	33	29	120	..	..	..	1	3	5	21	37	53
	F.	111	..	..	..	2	..	7	23	40	39	124	..	..	..	1	1	6	26	32	58
17. Arterio-sclerosis .. .. .	M.	42	..	..	..	..	..	..	6	9	27	36	..	..	..	..	..	..	2	13	21
	F.	25	..	..	..	..	..	..	2	8	15	23	..	..	..	..	..	..	..	7	16
18. Bronchitis .. .. .	M.	67	5	2	1	1	1	3	12	15	27	53	4	1	..	1	..	1	5	16	25
	F.	66	4	..	1	..	..	..	5	13	43	56	5	..	1	..	1	1	2	11	35
19. Pneumonia (all forms) .. .. .	M.	60	14	8	3	..	..	7	10	14	4	49	7	5	2	3	1	3	10	9	9
	F.	45	2	4	3	3	2	7	9	7	8	37	5	3	..	1	1	6	8	5	8
20. Other Respiratory Diseases .. .. .	M.	8	1	..	..	..	..	1	2	4	..	12	1	1	..	..	..	1	3	3	3
	F.	7	..	..	..	..	..	..	1	3	3	5	..	..	..	..	..	1	..	1	3
21. Ulcer of Stomach or Duodenum .. .. .	M.	6	..	..	..	..	1	..	3	1	1	6	..	..	..	..	1	2	1	1	..
	F.	5	..	..	..	..	..	1	2	2	..	3	..	..	..	..	..	1	2	..	..
22. Diarrhoea, &c. under 2 years .. .. .	M.	10	3	..	1	..	..	1	..	1	4	11	9	..	..	..	..	..	1	..	1
	F.	13	5	..	2	..	..	..	1	4	1	8	3	1	..	..	..	..	..	1	3
23. Appendicitis and Typhlitis .. .. .	M.	5	..	..	..	1	1	..	2	..	1	4	..	..	..	1	..	2	..	1	1
	F.	2	..	..	..	..	..	1	..	1	..	8	..	1	1	2	2	..	1	1	..
24. Cirrhosis of Liver .. .. .	M.	6	..	..	..	..	..	2	4	..	3	3	..	..	..	..	..	..	1	1	1
	F.	5	..	..	..	..	..	..	2	3	..	2	..	..	..	..	..	..	..	1	..
25. Acute and Chronic Nephritis .. .. .	M.	18	..	..	..	1	..	..	7	7	3	28	..	..	..	1	1	2	10	8	6
	F.	29	..	..	..	4	2	..	9	7	7	25	..	..	1	..	..	3	6	11	4
26. Puerperal Sepsis .. .. .	M.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27. Other Accidents and Diseases of Pregnancy and Parturition .. .. .	M.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	F.	4	..	..	..	..	1	2	1	..	..	6	..	..	..	..	2	4	..	..	..
28. Congenital Debility and Malformation, Premature Birth .. .. .	M.	30	..	..	..	..	..	..	..	..	..	53	53	..	..	..	..	..	..	..	..
	F.	20	30	..	..	..	..	..	..	..	..	40	39	..	1	..	..	..	..	..	..
29. Suicide .. .. .	M.	9	..	..	..	..	..	1	4	3	1	9	..	..	..	..	..	5	2	1	1
	F.	4	..	..	..	..	..	1	3	..	..	4	..	..	..	..	..	1	1	1	..
30. Other Deaths from Violence .. .. .	M.	21	..	..	..	3	8	3	3	4	34	..	2	3	2	8	8	4	3	4	4
	F.	12	..	..	2	1	2	..	2	3	9	..	..	..	1	..	..	..	..	..	8
31. Other Defined Diseases .. .. .	M.	134	9	1	1	6	3	7	27	28	52	173	21	3	2	3	7	24	31	79	79
	F.	165	13	3	2	5	1	10	21	25	85	189	13	5	4	5	11	23	14	110	110
32. Causes ill-defined or unknown .. .. .	M.	4	..	..	..	..	..	2	2	..	..	9	..	..	..	..	1	4	3	1	1
	F.	1	..	..	..	..	1	1	3	2	1	11	..	1	..	..	..	5	4	..	..



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## INFANT MORTALITY.

## TABLE II.

## COMPARISONS OF INFANTILE DEATHS FOR PERIODS OF YEARS.

TABLE I.

## BIRTH-RATES AND DEATH-RATES IN SANITARY DISTRICTS FOR 1922.

Urban Districts.	Birth-rates.	Death-rates.	Rural Districts.	Birth-rates.	Death-rates.
Bishop's Castle .. ..	19.5	13.2	Atcham .. ..	18.8	12.8
Bridgnorth .. ..	16.6	17.4	Bridgnorth .. ..	20.7	13.3
Church Stretton .. ..	21.0	12.2	Burford .. ..	18.3	13.5
Dawley .. ..	24.5	10.6	Chirbury .. ..	22.9	10.1
Market Drayton .. ..	19.0	15.6	Church Stretton .. ..	18.8	12.7
Ellesmere .. ..	23.3	18.4	Cleobury Mortimer .. ..	21.7	13.2
Ludlow .. ..	23.3	17.1	Clun .. ..	18.4	14.5
Newport .. ..	20.7	17.5	Drayton .. ..	20.5	13.3
Oakengates .. ..	22.1	12.4	Ellesmere .. ..	21.8	11.7
Oswestry .. ..	18.1	14.2	Ludlow .. ..	19.2	13.0
Shrewsbury .. ..	19.5	13.3	Newport .. ..	21.3	14.1
Wellington .. ..	19.7	14.2	Oswestry .. ..	19.5	13.6
Wem .. ..	18.8	13.5	Shifnal .. ..	18.6	12.6
Wenlock .. ..	21.4	16.0	Teme .. ..	20.3	7.1
Whitchurch .. ..	17.7	14.0	Wellington .. ..	20.3	13.6
			Wem .. ..	18.2	11.6
			Whitchurch .. ..	23.3	7.7
<b>TOTAL .. ..</b>	<b>20.32</b>	<b>14.22</b>	<b>TOTAL .. ..</b>	<b>19.89</b>	<b>12.87</b>





## INFANT MORTALITY.

TABLE II.

COMPARISONS OF INFANTILE DEATHS FOR PERIODS OF YEARS.

	Average annual numbers for years			Percentage decrease of numbers in		Numbers for years		
	1905—1909	1910—1914	1915—1919	second period compared with first period.	third period compared with second period.	1920	1921	1922
Births .. .. .	5955	5427	4441	8.8	18.1	5943	5318	4904
Deaths from all causes under one year ..	561	444	335	20.8	24.5	395	354	288
Deaths from—								
Measles and Whooping Cough .. .. .	34	22	19	35.3	13.6	24	15	8
Influenza .. .. .	..	..	11	..	..	1	5	6
Other Infectious Diseases .. .. .	5	1	.8	80.0	20.0	0	1	..
Tuberculous Diseases	19	12	5.8	36.8	51.6	12	6	7
Convulsions and Meningitis (not tuberculous) .. .. .	60	42	..	30.0	..	..	..	..
Bronchitis .. .. .	46	33	30.6	28.2	7.2	37	24	18
Pneumonia .. .. .	65	43	34	33.8	20.9	40	28	28
Diarrhoea, Enteritis and Gastritis ..	61	52	18.6	14.7	64.2	27	28	20
Premature Birth, congenital defects and malformations ..	128	119	..	7.0	..	..	..	..
Atrophy, Debility and Marasmus .. .. .	96	74	..	22.9	..	..	..	..



TABLE III.

AVERAGE OF THE ANNUAL INFANTILE MORTALITY FOR THE SANITARY DISTRICTS FOR THE PERIODS 1901—1906, 1907—1914, 1915—1919, AND THE RATES FOR 1920, 1921, AND 1922.

URBAN DISTRICTS.	Average for years		Percentage Increase or decrease in			RURAL DISTRICTS.			Average for years		Percentage Increase or decrease in			Rates for 1920	Rates for 1921	Rates for 1922
	1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.	1901 to 1906	1907 to 1914	1915 to 1919	1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.	Rates for 1920	Rates for 1921	Rates for 1922
	1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.	1901 to 1906	1907 to 1914	1915 to 1919	1901 to 1906	1907 to 1914	1915 to 1919	Second period over first.	Third period over second.	Rates for 1920	Rates for 1921	Rates for 1922
Bishop's Castle ..	86	100	105	+ 16.3	+ 5.0	33	32	0	84	77	56	—	—	71	48	57
Bridgnorth ..	106	116	104	+ 9.4	+ 10.3	78	73	47	87	67	65	—	—	73	64	73
Church Stretton ..	96	99	67	+ 3.1	— 32.3	85	48	32	59	68	35	+	—	34	0	0
Dawley ..	112	97	77	— 13.4	— 20.6	78	93	43	77	60	51	—	—	123	92	40
Ellesmere ..	103	65	74	— 36.8	+ 13.6	58	86	69	97	80	75	—	—	76	77	35
Ludlow ..	113	84	76	— 25.7	— 9.5	85	83	45	92	74	72	—	—	59	78	62
Market Drayton ..	..	..	119	..	..	76	85	111	..	..	..	..	..	..	..	..
Newport ..	117	80	81	— 31.6	+ 1.2	69	66	31	100	72	95	—	+	33	52	78
Oakengates ..	138	104	87	— 24.6	— 16.3	58	92	69	115	84	77	—	—	25	60	67
Oswestry ..	102	101	96	— 1.0	— 4.9	54	74	22	92	84	73	—	—	54	37	85
Shrewsbury ..	126	102	74	— 19.0	— 27.4	65	84	47	91	69	59	—	—	81	35	81
Wellington ..	114	78	91	— 31.6	+ 16.6	55	74	62	106	96	97	—	+	96	79	88
Wem ..	93	87	47	— 6.4	— 45.9	102	135	47	96	87	83	—	—	76	70	62
Wenlock ..	102	85	71	— 16.7	— 16.4	69	52	74	94	76	52	—	—	36	21	49
Whitchurch ..	103	104	82	+ 1.0	— 21.1	30	55	10	127	102	67	—	—	54	61	0
									102	83	74	—	—	79	71	48
									69	67	62	—	—	68	63	95
									61	58	69	—	+	76	22	62
All Districts ..	112	96	82	— 14.3	— 14.5	65	78	52	93	78	69	—	—	67	57	64



The decrease of infant mortality in Urban and Rural Districts as shown in this table is extremely interesting and will afford data for checking our work. The high mortalities appear to follow very often on previous low mortalities and consequently one has to be careful in drawing inferences from single years. Market Drayton Urban District had the highest rate for 1922. This District has had a consistently high rate since its formation. It is satisfactory that a Child Welfare Centre has now been established in this district.

### INFECTIOUS DISEASE.

There was nothing in the shape of a serious epidemic of infectious disease during the year, although in a few districts there was more than the usual prevalence of scarlet fever and diphtheria. The action of health authorities has in the past been directed principally against the common infectious diseases, particularly the notifiable diseases, to the exclusion of much more effective action in other directions. Many of these diseases such as typhus fever and cholera are now non-existent in this country; others, such as typhoid fever and (judged by death-rates), scarlet fever also, have been reduced to negligible quantities. It is true that scarlet fever, unlike typhoid fever, may, for anything we know, become prevalent and malignant again at some future time but this does not appear likely. The death-rate from diphtheria would also be reduced almost to the vanishing point if we could ensure the injection of a sufficient dose of antitoxin at the onset of the illness. There remain the two diseases—measles and whooping cough—which are responsible directly and indirectly, for most of the deaths due to the 'common' infectious diseases.

In dealing with infectious diseases the means to be employed and the results that can be expected differ widely. Typhoid fever must be attacked principally by protecting our food and water supplies and general sanitation, and will by these means be finally eliminated. Small-pox can be absolutely controlled by vaccination and isolation. The group of diseases spread mostly by throat and nose carriers, including scarlet fever, diphtheria, cerebro-spinal fever, pneumonia, influenza and probably poliomyelitis and encephalitis lethargica, are most difficult to control. In these diseases isolation of the known case is often of little avail, because the unsuspected cases or carriers continue to spread the disease. These diseases, together with measles and whooping cough, can probably best be reduced and rendered less fatal by improving ventilation and cleanliness, by lessening overcrowding of homes, schools and workplaces, and by providing skilled health visiting and nursing in the homes.

Education of the people in the nature of infection, how it is spread, how the danger of spread can be lessened and in the general hygienic principles that should be observed when the disease is contracted, is the most hopeful way of dealing with this class of infectious disease.

*Small-pox.*—No case of small-pox was notified during the year. The number of unvaccinated persons in the county must now be very large, and consequently if cases of small-pox are introduced, we shall have to depend upon prompt isolation of the cases, and supervision and vaccination of contacts. Hospital isolation is provided by the County Council for all districts except the Boroughs of Shrewsbury and Wenlock and the rural district of Teme, and all arrangements have been made for the prompt removal of patients to a hospital.



*Diphtheria.*—The most important matter in connection with lessening the mortality from diphtheria is the injection of a sufficient dose of antitoxin whenever there is good grounds for suspecting this disease. In such cases the bacteriological report should not be waited for. Every medical practitioner in the County has been supplied with a memorandum of the Ministry of Health dealing with this matter, and has also been informed where antitoxin can be obtained in each district. When a positive bacteriological result has been obtained, swabs should be submitted from every other member of the household. It is ridiculous to isolate the patient and not to take any trouble to find out whether the other members of the household are infectious or not.

It is possible now, by means of the Schick Test, to find out whether any particular person is susceptible to diphtheria or not, and then it is possible to give immunity for a time by inoculation. These measures may be of great use in institutions, but so far it has not been found practicable to apply them in this County.

*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.

There were 8 cases of typhoid fever reported:—

	Week of Notification.	Sanitary District.	Age.	Widal's Reaction.	Suspected source of infection.	Number in household.	Widal's Tests of other members of household.	Widal's Tests of other contacts.	Bacteriological examination of excreta for freedom.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
No. 1	April 8	Shrewsbury ..	8	Positive	Not traced	4	No examination made	No examination made	Died 15/4/22
2	June 24	Oswestry R. ..	..	Positive	do.	..	..	..	..
3	do.	do. ..	..	do.	do.	..	..	..	..
4	June 24	Wellington R. ..	14	do.	No. 6	4	No	No	No
5	July 8	do. ..	59	do.	No. 6	3	No	No	No
6	do.	do. ..	27	do.	Away from home	3	No	No	No
7	July 22	Shrewsbury ..	17	..	..	..	..	..	..
8	Aug. 19	Atcham Rural ..	51	Positive	..	..	..	..	..



The source of infection does not appear to have been discovered in any of the cases, except Nos. 4 and 5, nor, so far as information goes, do the measures advised above for tracing the cases or locating infection appear to have been carried out. Although no epidemics have arisen, or are likely to arise except through milk, and in one or two districts perhaps through water, it is disconcerting to find these eight or ten untraced cases of typhoid fever occurring each year.

*Encephalitis Lethargica.*—There were only four cases of encephalitis lethargica, two of them in Shrewsbury, one in Oakengates and one in Ellesmere.

*Acute Poliomyelitis.*—Dr. Gepp, in his report for the Atcham Rural District Council, says :—  
 “This disease, commonly known as infantile paralysis, and often the cause of serious permanent crippling of children, is infectious, but rarely in any sense epidemic. Two cases in children were notified in Cound parish in October, the second case being 14 days later in onset than the first. The children resided a mile apart, and attendance at the village school formed the only traced point of contact. Special treatment being essential in the early stages of these cases to prevent or lessen deformity, both children were removed to the Shropshire Orthopaedic Hospital within a few days of the onset, under arrangements made by the County Medical Officer. One of them was discharged in June of this year, improved and fit for school, the other is still in Hospital. Careful inquiry was made into the cases, and at the school for possible slight unrecognised cases, but no common source of origin was traced. The inquiry showed that in one of the infected families three children had had slight indefinite illness for a few days from a month to six weeks before the onset in the notified case. The symptoms included vomiting, headache, and pain and stiffness in the neck and back. These may have been slight or ‘carrier’ cases without paralytic effects. Disinfection was carried out in both cases, and the families supplied with spraying apparatus for disinfection of the throat and nose, the infection of this disease being considered to be carried in these air passages.”



RETURN OF INFECTIOUS DISEASES FOR THE YEAR 1922.

RURAL DISTRICTS.	Population Census 1921	SCARLET FEVER.	DIPHTHERIA (including Membranous Group).	ENTERIC (Typhoid Fever).	PUERPERAL FEVER.	ERYSIPELAS.	TUBERCU- LOSIS.		CEREBRO-SPINAL FEVER.	ACUTE POLIOMYELITIS.	OPHTHALMIA NEONATORUM.	MEASLES.	ENCEPHALITIS LETHARGICA.	PNEUMONIA.	MALARIA.	CHICKEN-POX.
							PULMONARY.	OTHER								
Atcham ..	21978	49	26	1	1	5	25	5	..	2	2	..	..	44	..	..
Bridgnorth ..	8569	18	1	..	1	..	11	4	..	..	1	..	..	13	..	..
Burford ..	1268	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chirbury ..	3193	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..
Church Stretton ..	4516	4	..	..	..	1	8	1	..	2	..	..	..	..	..	..
Cleobury Mortimer ..	7297	2	7	..	..	2	5	2	..	..	..	..	..	3	..	..
Clun ..	6243	4	2	..	..	2	6	..	..	..	..	..	..	3	..	..
Drayton ..	7156	4	3	..	1	3	3	4	..	..	..	..	..	12	..	..
Ellesmere ..	8008	10	11	..	..	3	11	2	..	..	..	..	..	6	..	..
Ludlow ..	8980	21	5	..	..	2	4	3	..	..	..	..	..	4	..	..
Newport ..	5747	9	2	..	1	..	8	3	..	..	..	..	..	4	..	..
Oswestry ..	16313	58	12	2	1	..	8	10	1	3	1	..	..	12	..	..
Shifnal ..	7666	2	3	..	..	1	8	2	..	2	..	..	..	..	..	..
Teme ..	1649	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Wellington ..	11207	9	5	3	..	..	23	13	..	..	..	..	..	11	1	..
Wem ..	8572	28	5	..	..	2	8	7	..	1	..	..	..	7	..	..
Whitchurch ..	2011	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
URBAN DISTRICTS.																
Bishop's Castle ..	1268	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Bridgnorth ..	5143	7	10	..	..	1	11	4	..	..	..	..	..	13	..	..
Church Stretton ..	1671	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Dawley ..	7386	18	33	..	..	4	13	1	..	4	..	..	..	..	..	..
Ellesmere ..	1831	..	..	..	1	..	2	..	..	..	..	1	..	2	..	..
Ludlow ..	5677	48	43	..	..	..	7	5	1	1	..	..	..	2	..	..
Market Drayton ..	4710	..	3	..	..	..	6	3	..	..	..	..	..	6	..	..
Newport ..	3056	..	..	..	..	..	5	2	..	..	..	..	..	16	..	..
Oakengates ..	11349	34	7	..	..	1	11	7	..	3	..	1	..	2	..	..
Oswestry ..	9790	73	6	..	1	1	13	8	..	5	..	..	..	..	..	..
Shrewsbury ..	31013	37	14	2	2	7	42	16	..	2	..	2	59	13	1	..
Wellington ..	8148	4	5	..	..	1	14	10	..	7	..	..	..	..	..	..
Wem ..	2176	3	..	..	2	..	1	..	..	2	..	..	..	..	..	..
Wenlock ..	13712	45	19	..	..	1	13	9	..	2	..	..	..	1	..	..
Whitchurch ..	5656	9	8	..	..	..	2	3	..	1	..	..	..	..	..	..
TOTAL ..	..	501	232	8	14	35	280	124	1	5	43	1	4	230	3	1



## MATERNITY AND CHILD WELFARE.

As I have previously stated, in the work under this scheme, there are two primary factors that should be emphasised—that this work is essentially educational and that teaching in the homes of the people by the Health Visitor is infinitely the most important part of it. Although Centres serve a most useful function, they are apt to loom too largely in the eyes of the public, and the really more important work of the Health Visitor in the homes of the people is apt to be forgotten. It is most necessary in these times of economy that we should form clear ideas of the relative values of services, otherwise we may easily economise in the wrong direction.

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

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

The future of Child Welfare depends upon the training, salary and status of the health visitor, and district nurse midwife.

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

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

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



*Notification of Births Act, 1907.*—In 1920 the births notified and discovered were 178 less than those registered; in 1921 they were 122 less than those registered.

*Notification of Births in the year 1922 :—*

Total births, exclusive of Shrewsbury .. .. .	4293
Notification of births by midwives .. .. .	3414
"    "    medical practitioners .. .. .	609
"    "    parents or other persons .. .. .	9
<hr/>	
Total notified .. .. .	4032
Discovered by Health Visitors .. .. .	27
Obtained from Registrar's Returns .. .. .	199
<hr/>	
	4258
<hr/>	
Excess of Births registered over Births notified or discovered	35
<hr/>	

In the Borough of Shrewsbury, 647 notifications were received, of which 483 were sent in by midwives, 31 by doctors, 102 were sent in by doctors and midwives, 17 by parents and 14 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. One of them is the Medical Officer to the Babies Home, Wellington. It is estimated that this work occupies about one-quarter of their time.

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

In addition, there are 59 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 1922 the visits paid by the Health Visitors were :—

	Under one year.				1 to 5 years.	Total.
	1st	2nd	3rd	Subsequent.		
Whole-time ..	3,381	3,692	3,482	6,449	14,178	31,182
Part-time ..	1,267	1,391	1,478	3,667	5,557	13,360
<hr/>						
	4,648	5,083	4,960	10,116	19,735	44,542
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and visits to expectant mothers numbered 3,902.

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

Houses visited.	Cases visited.	Cases without Doctor.	Cases doctor advised.
536	814	235	47



The visits by health visitors to cases of tuberculosis are given on page 28.

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

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

Inquiry is made into these cases and advice and pressure is brought to bear on the midwife and mother to continue natural feeding where this is desirable. During the year 58 notifications were received under this rule. The causes given for ceasing natural feeding were:—

*Mother.*

Illness of mother .. .. .	21
Insufficiency or absence of Milk .. .. .	21
Refusal to Breast Feed .. .. .	12
Depressed nipples .. .. .	2

*Baby.*

Delicate weakly Babies .. .. .	2
--------------------------------	---

Percentage of children at first visit of health visitor on—

	Breast feeding.	Artificial feeding.	Mixed feeding.
1918 .. .. .	82.5	13.5	3.8
1919 .. .. .	85.8	9.7	4.4
1920 .. .. .	84.0	11.9	3.9
1921 .. .. .	86.6	9.6	3.7
1922 .. .. .	85.6	11.0	3.2

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 73.6 per cent. were still breast-fed after three months and 68.9 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. Adderley and Norton-in-Hales; Cheswardine and Woodseaves; Chirbury, Marton and Middleton; Claverley; Clee Hill and Knowbury; Cound; Hopesay, Sibdon and Edgton; Peplow and Stoke-on-Tern; Richards Castle; Stanton; Stockton, Norton and Sutton Maddock; The Bog Mine and District; Uppington, Wroxeter and Eaton Constantine; Wistanstow and Halford; Worfield; and Worthen.

In the following districts the percentage of artificially-fed children was 25 per cent. or over: Clunbury, Leaton, Fitz and Preston Gubbalds, Lydbury North, Prees, and Woore.

The long-tube bottle—a most insanitary method of feeding, is disappearing, and was only found in 31 cases. The use of the dummy was recorded in 677 cases—probably a considerable under statement.

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

Water Supply.	Want of Ventilation.	Uncleanliness.	Dampness.	Overcrowding.	Nuisances.
24	153	171	66	111	35

*Maternity and Child Welfare Centres.*

These centres are open once a week, except for Ellesmere and Newport, which are open once a fortnight. In addition to these County Council Centres there is a Centre at Shifnal and one at Church Stretton, for which the County Council are in no way responsible.

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



ATTENDANCES AT MATERNITY AND CHILD WELFARE CENTRES  
FOR THE YEAR 1922.

	INFANTS.						EXPECTANT MOTHERS.		
	Under 1 year.			Between 1 and 5 years.			New Cases.	Total Cases.	Total Attendances.
	New Cases.	Total Cases.	Total Attendances.	New Cases.	Total Cases.	Total Attendances.			
Wellington .. .. .	187	374	750	103	403	1112	48	52	217
Bridgnorth .. .. .	88	129	426	17	144	1089	10	30	50
Ironbridge .. .. .	138	260	1762	22	100	1242	30	38	90
Oakengates .. .. .	132	283	1306	207	210	1635	58	64	296
Oswestry .. .. .	108	129	1020	81	201	1216	19	28	83
Whitchurch .. .. .	58	103	832	15	97	804	12	17	78
Ludlow .. .. .	76	109	526	63	166	471	11	11	42
Ellesmere .. .. .	17	20	90	1	21	146	3	3	12
Newport .. .. .	74	134	520	19	39	121	26	26	39
<b>TOTALS ..</b>	<b>878</b>	<b>1541</b>	<b>7232</b>	<b>528</b>	<b>1381</b>	<b>7836</b>	<b>217</b>	<b>269</b>	<b>907</b>

*Addresses at the Centres.*—The Addresses were only commenced in the latter part of the year. They are now given regularly throughout the whole year. Addresses were given on the following subjects at the Centres:—Food Values, The Prevention of Spread of Infection, The Nursing of Infectious Diseases, Hygiene of the Home, Infant Clothing, The Care of Expectant Mothers, Value of Fresh Air, General Advice, The Difference between Human and Cows' Milk, Care of the Teeth, Breast Feeding, General Hygiene and Regular Habits in the Home, Advantages of Water Drinking and When to Drink, Vaccination, Advantages of Attendance at Infant Welfare Centres.

Centre.	Addresses given by	Total.	Average Attendance.
Bridgnorth .. .. .	Dr. Taylor .. .. .	1	12
Wellington .. .. .	Miss G. Thomas .. .. .	2	
	„ Simpson .. .. .	2	25
	„ Browne .. .. .	1	
Ironbridge .. .. .	Miss G. Thomas .. .. .	6	26
Whitchurch .. .. .	Dr. Taylor .. .. .	3	14
	Mrs. Lowrance .. .. .	3	
Oswestry .. .. .	Dr. Taylor .. .. .	3	18
	Miss Gorick .. .. .	1	



*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 number of cases in 1922 were :—  
Admitted 45, Discharged 40 ; Died 8.

The cases were diagnosed on admission as :—

Malnutrition 17 ; prematurity 7 ; marasmus 6 ; improper feeding 6 ; debility 3 ; Gastritis and gastro-enteritis 2 ; anaemia 1 ; broncho-pneumonia 1 ; admitted to restore breast feeding 2. Three healthy babies were taken in with the wet nurses.

Of the 40 infants discharged, 36 were reported as in good health, 1 as improved, and 3 no improvement.

The deaths were from the following causes :—Two were from marasmus, one from generalised tuberculosis, one from mongolism and heart-failure, one from bronchitis, multiple boils, and septic meningitis, one from prematurity and cardiac failure, one from generalised tuberculosis and tuberculous meningitis, and one from chronic gastro-enteritis and convulsions.

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

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

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

“ The work of the Institution has been carried out on the same principles as in previous years, the babies being kept in an open air shelter day and night all the year round, and the results have been as satisfactory as in the past.

“ During the year there have been 45 admissions, 40 discharges, and 8 deaths.

“ Of the discharged cases, 36 were in good health, 1 improved, and 3 showed no improvement.

“ The number of Inpatient days totals 3,732, an increase of 780 over last year, and the average duration of stay thus works out at 77.75 days for each baby.

“ It is to be pointed out that one cannot gauge the actual amount of labour, care, and constant vigil on the part of the nursing staff by a mere glance at the statistics of admissions and discharges.

“ Ailing babies such as we admit, are not set right by surgical treatment or a bottle of medicine, but have to undergo a long period of education and adjustment of a previously abused or congenitally weak digestive tract.

“ Hence their individual residence is prolonged, and the number dealt with annually is few.

“ All the available milk from wet Nurses is given to necessitous cases, and the remainder are fed on pasteurised cow's milk. Dried milk is sometimes used, but only in special cases of emergency.



"To supply the vitamins which are so important for healthy growth and nutrition, and which are liable to be destroyed or somewhat impaired by the process of pasteurisation, we administer separately those substances known to contain these very important food principles, and in this connection we should like it known that gifts of oranges and tomatoes in their respective seasons, would be very acceptable.

"It would be an acquisition to this Home if another small outdoor shelter could be provided, in which could be housed any case or cases that are infective in nature, as the occasion arose; such as measles, whooping cough, infective enteritis, or skin affections.

"We have some small accommodation for Mothers (with their babies), whose milk supply is beginning to fail, which we should attempt to restore by rest, freedom from worry, and a suitable dietary, but so far we have been unable to carry out this desirable object to any degree, because it is difficult to persuade such Mothers to leave their own homes, and perhaps other children, behind them.

"Now that it is becoming realised that Infant Welfare work is such a valuable branch of medicine from a national point of view, it is to be hoped that in the near future there will be available, many more Nurses who have completed their general training, and take up infant feeding as a speciality, our results, then, I am sure, would be even more satisfactory than they are at present."

#### *Orthopaedic Scheme.*

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

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

It is our constant endeavour to link up this after-care work as closely as possible with the child welfare and school work. The early discovery of the cases depends almost entirely upon the health visitor as regards children under five, and largely on the School Medical Officers as regards school children. Arrangements are being made so that the Orthopaedic and Child Welfare Centres shall always be on the same day. By this means the Child Welfare and School Medical Officers, and the Health Visitors should keep in close touch with this work.



## TREATMENT AT THE SHROPSHIRE ORTHOPAEDIC HOSPITAL.

Disease.	Cases paid for by the County Council.			Cases not paid for by the County Council.		
	Child Welfare, Tuberculosis and School Cases.			Child Welfare, Tuberculosis School and other Cases.		
	Under 5	5 to 14	Over 14	Under 5	5 to 14	Over 14
Tuberculosis of Bones and Joints ..	12	29	50	1	2	3
Tuberculous Peritonitis .. .. .	..	..	..	..	..	1
Poliomyelitis .. .. .	5	17	1	..	3	3
Rickets .. .. .	14	1	..	2	..	..
Knock Knee .. .. .	..	2	..	1	..	..
Scoliosis .. .. .	..	6	..	..	4	7
Kypho-Lordosis .. .. .	..	..	..	..	1	..
Congenital Deformities .. .. .	4	2	..	..	1	..
Flat Foot .. .. .	1	..	..	1	..	1
Club Foot and Claw Foot .. .. .	2	3	..	2	..	5
Osteo-Arthritis .. .. .	..	..	..	..	..	1
Osteomyelitis .. .. .	1	..	..	..	..	..
Osteo-chondritis .. .. .	..	2	..	..	..	..
Epiphysitis .. .. .	..	1	..	..	..	..
Rheumatoid Arthritis .. .. .	..	..	..	..	..	4
Arthritis .. .. .	1	..	..	..	1	..
Spastic Paraplegia .. .. .	3	3	..	3	1	1
Other Paralysis .. .. .	2	4	..	..	..	..
Fractures and Dislocations .. .. .	..	2	..	1	1	7
Un-united Fracture .. .. .	..	..	..	..	..	1
Calcaneo-Valgus .. .. .	..	1	..	..	..	..
Hallux-Valgus .. .. .	..	..	..	..	..	2
Functional Foot .. .. .	..	..	..	..	..	1
Other Accidents .. .. .	..	..	..	..	..	2
Other Diseases .. .. .	1	2	..	..	1	3
	46	75	51	11	15	42
	172			68		
	Total 240					

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

Analysing this table it will be seen that of the cases paid for by the County Council 91 were due to tuberculosis and were dealt with under that scheme; 34 were non-tuberculous children under five years, and were dealt with under the Maternity and Child Welfare Scheme; and 47 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—

	1922	1921	1920
Tuberculosis .. ..	42	44	37
Child Welfare .. ..	8	10	14
School .. ..	11	21	23

It is interesting to compare the average number of beds occupied for the last few years. This comparison appears to show that we are materially reducing the number of children requiring orthopaedic treatment.

The diminution, which is very gratifying, particularly when it is remembered that the scheme is dealing more completely than ever with the cases in the County is due to the lessening of the number of cases by prevention and early treatment and to the greater efficiency of the after-care scheme.

Analysis of cases according to causation :—

98	or 40.8	per cent.	were due to tuberculosis.
33	„ 13.7	„	„ poliomyelitis.
20	„ 8.3	„	„ rickets.
17	„ 7.1	„	„ congenital deformities.
21	„ 8.7	„	„ other deformities—postural or of doubtful causation.
12	„ 5.0	„	„ injuries and diseases arising at birth.
12	„ 5.0	„	„ infections other than tuberculosis.*
27	„ 11.2	„	„ other accidents and diseases.

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

This classification of cases in accordance with causation is extremely instructive. Tuberculosis, 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.

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

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

One hundred and six cases were received during the year 1922, and were admitted from the Borough of Wenlock—Ironbridge, Broseley, Madeley, Coalport, Coalbrookdale, Benthall, Much Wenlock; outside the Borough—Bridgnorth, Church Stretton, Wellington, Horsehay, Dawley, Leighton, Oakengates, Condover, Cressage, Montford (near Shrewsbury).

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

*Maternity Beds at Newport Nursing Home.*—Two beds are always available here. The County Council pays an annual fee of £10 per bed towards their maintenance.

Seventeen cases were admitted in 1922—9 from Newport Urban District, 3 from Pickstock, 1 from Sutton, 1 from Gnosall, 1 from Wellington, 1 from Outwoods, and 1 from Knighton.

During 1922 four new associations were formed, viz. :—Glazeley and District, Llanyblodwel and District, Maesbury, Morda and District, and Whitchurch Urban District. Since the end of 1922, two more new associations have 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 suggested are put in brackets :—

	Association formed
1.—Albrighton, Astley, Battlefield and St. Alkmond .. .. .	—
2.—Westbury and Wollaston .. .. .	1920
3.— <i>Church Pulverbatch</i> and Smethcott ( <i>Longden</i> ) .. .. .	1920
4.—†Morville, Upton Cressett, Aston Eyre, Tasley and Astley Abbots .. .. .	—
5.—†Chelmarsh, Eardington and Oldbury .. .. .	—
6.— <i>Chetton, Middleton Scriven, Deuxhill, Glazeley, Billingsley and Sidbury</i> .. .. .	1922
7.—Wistanstow, Sibdon Carwood, and Halford Ecclesiastical Parish .. .. .	1917
8.—Stottesdon .. .. .	—
9.—Kinlet .. .. .	—
10.— <i>Hopton Wafers, Part of Cleobury Parish, Farlow, Part of Cleeton St. Mary, and Part of Silvington</i> .. .. .	1923
11.—Clun .. .. .	1917
12.—Newcastle and Bettws-y-Crwyn .. .. .	—
13.—Clungunford, <i>Hopton Castle, Bedstone, and Bucknell</i> .. .. .	1919
14.—Welshampton, Lyneal and Colemere .. .. .	—
15.—Bitterley Ecclesiastical Parish, Hopton Cangeford and East Hamlet .. .. .	—
16.—Knowbury Ecclesiastical Parish .. .. .	1920
17.—Cold Weston, Heath, Clee St. Margaret, Stoke St. Milborough and Abdon .. .. .	—
18.—§Kinnerley and Molverley .. .. .	1920
19.— <i>Llanyblodwell</i> and Sychtyn. .. .. .	1922
20.—Trefonen Ecclesiastical Parish .. .. .	—
21.—East Part of Oswestry Rural Parish, Maesbury, Morda, Aston, Woolston, Middleton, and Sweeney .. .. .	1922
22.—Badger, <i>Beckbury, Kemberton, Ryton, and Boningale</i> .. .. .	1917
23.—Sheriffhales, Boscobel and Tong .. .. .	—
24.—*Kinnerley, Preston-on-the-Weald Moors and Hadley .. .. .	1920
25.—†Lee Brockhurst and Weston and Wixhill ( <i>Lee Brockhurst in Shawbury, Weston in Hodnet</i> ) .. .. .	—
26.—Whitchurch Rural— <i>Western part, Tilstock</i> .. .. .	1917

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

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

§ Knockin is now included with Kinnerley and Molverley.



*Additional Districts formed since 1916 :—*

The Bog Mine—part of Shelve, Wentnor and Minsterley Parishes	..	..	..	..	..	..	..	..	1916
Hope—parts of Hope and Shelve Parishes	..	..	..	..	..	..	..	..	1917
Hopesay and Aston-on-Clun	..	..	..	..	..	..	..	..	1919
Donnington Wood Ecclesiastical Parish	..	..	..	..	..	..	..	..	1920
Child's Ercall, Hinstock and Sambrook	..	..	..	..	..	..	..	..	1920
Ironbridge, Coalbrookdale, Jackfield, Broseley, Benthall, Madeley and Coalport	..	..	..	..	..	..	..	..	1920
Oakengates Urban District	..	..	..	..	..	..	..	..	1920
Wellington Urban District	..	..	..	..	..	..	..	..	1920
Llanymynech—Parish of Llanymynech and parts of Moreton and Llanyblodwell Parishes (very small part)	..	..	..	..	..	..	..	..	1921
Shawbury, Moreton Corbet, and Lee Brockhurst	..	..	..	..	..	..	..	..	1921
Claverley	..	..	..	..	..	..	..	..	1921
Whitchurch Urban District	..	..	..	..	..	..	..	..	1922
Munslow, Brockton, Holdgate, Tugford, and a small part of Stanton Long Parish	..	..	..	..	..	..	..	..	1923
Edstaston, Whixall and Coton Association has been divided into two Associations— 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. One hundred and ninety-one claims were sent in during the year, and £410 17s. 2d. 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 real preventive work of great value.

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

*Hostels for unmarried Mothers and their Infants.*—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.

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

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



## OPHTHALMIA NEONATORUM.

Thirty-nine 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.

Statement showing how the confinements were attended :—

Number of cases attended by midwives .. .. .	30
Number of cases attended by medical practitioners .. .. .	9

How the cases were nursed :—

By nurse-midwives assisted by mothers .. .. .	8
By relatives .. .. .	—
By Health Visitors .. .. .	19
At Eye, and Ear Hospital, Shrewsbury .. .. .	11
At Lady Forester Hospital .. .. .	1

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

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

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

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

In addition, arrangements have been made with the Shropshire Nursing Federation for the nursing of measles, whooping cough, pneumonia and influenza.

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, the following letter has been sent to all practitioners in the County :—

“ I give below a copy of two resolutions dealing with ophthalmia neonatorum passed by the Public Health Committee.

“ That a circular letter be sent to all the medical men in the County informing them that there have been several disasters to eyesight following on Ophthalmia Neonatorum and that in the opinion of the Public Health Committee all cases of this disease should be treated in the Shropshire Eye, Ear and Throat Hospital. The County Council will send an ambulance on application for removal of mother and child, free of charge.

If through the absolute refusal of the mother to allow the baby to be removed or some other insurmountable reason, the child is not removed to the Hospital, nursing assistance will be provided by the County Council. Practitioners should ask for this assistance by wire or telephone rather than by letter.”

(The Hospital will now admit the infant without the mother, if the removal of the mother is impossible.)

“ That trained midwives be supplied with nitrate of silver to be dropped into the eyes immediately on the birth of the child. For this purpose it will be necessary to supply  $\frac{1}{2}$  gr. tablets of nitrate of silver and a dropper.”



As a preventive measure, all trained midwives are being supplied with half grain tablets of nitrate of silver and a dropper, with the following directions:—

During the labour one tablet of Nitrate of Silver and 50 minims of boiled water should be put in a minim glass, and stirred until completely dissolved. Immediately on the birth of the child a few drops of the solution should be put into each eye with the pipette.

## 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		Notifica-tions of death of mother or child with no medical man in attendance.	Notifica-tion of Artificial Feeding by Midwives.	Notifica-tion of Midwives' Liability to be a source of Infection.	Notifica-tion by Midwives of having laid out a Dead Body.
				By Mid-wives.	By Parish Clerks.				
1918	234	477	478	73	59	8	..	..	..
1919	227	482	519	56	88	16	57	..	..
1920	240	651	733	70	73	8	60	9	23
1921	240	675	734	76	..	10	66	11	28
1922	218	635	682	75	..	6	58	19	39

*Routine Work under the Act:—*

The returns sent in by the certified midwives, although incomplete, show that they attended 3,897 births in 1922, out of a total of 4,904, leaving less than 1,007 or 20 per cent. to be attended by medical men and uncertified midwives.

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

*For Mother.*

During pregnancy .. .. .	70
Haemorrhage .. .. .	16
Threatened abortion .. .. .	42
Accident .. .. .	—
Varicose veins .. .. .	4
Convulsions .. .. .	2
Deformity .. .. .	—
Other causes .. .. .	6
At Labour .. .. .	424
Premature labour .. .. .	8
Uterine inertia and prolonged labour .. .. .	238
Abortions, miscarriages and still-births .. .. .	9
Abnormal presentation .. .. .	35
Placenta praevia .. .. .	5
Haemorrhage .. .. .	17
Convulsions .. .. .	1
Ruptured perinaeum .. .. .	81
Adherent placenta and retained membranes .. .. .	23
Other causes .. .. .	7



After Labour .. .. .	46
Rise of temperature .. .. .	39
Other causes .. .. .	7
	—
<i>For Child</i> .. .. .	142
Feebleness .. .. .	62
Malformation .. .. .	12
Discharge from eyes .. .. .	58
Convulsions .. .. .	3
Other causes .. .. .	7

Analysis of the 75 notifications of still-births sent in by midwives shows that—  
42 were at full time ; 32 premature ; in 1 no statement.

The condition of the child pointed to—

Death during labour or shortly before in 37 ; death some time before labour in 37 ;  
in 1 there was no indication given.

The presentations were :—head 42, breech 22. In 11 cases the presentations were not  
mentioned.

The sex of the children was as follows :—males 34, females 40 ; 1 not stated.

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

*Puerperal Fever.*—Sixteen cases were notified, compared with 14 in 1921. Ten cases were  
attended by trained midwives, and 6 by medical practitioners alone. There were no fatal cases.

*Other Accidents of Parturition.*—There were 10 deaths of women registered under this heading  
during the year.

*Present Supply of Midwives.*—In June, 1922, there were 218 midwives registered as prac-  
tising in the County, compared with 240 at a corresponding period in 1921.

#### MIDWIVES GROUPED ACCORDING TO NUMBER OF CONFINEMENTS THEY ATTENDED IN 1922.

Midwives who have not sent in returns of confinements .. .. .	2
Number who have attended no confinements .. .. .	20
" " " " less than 10 confinements .. .. .	73
" " " " between 10 and 20 confinements .. .. .	63
" " " " " 20 and 30 " .. .. .	26
" " " " " 30 and 40 " .. .. .	12
" " " " " 40 and 50 " .. .. .	7
" " " " " 50 and 60 " .. .. .	6
" " " " " 60 and 70 " .. .. .	6
" " " " " 70 and 100 " .. .. .	3
" " " " " over 100 " .. .. .	0

Three midwives were brought before the Local Supervising Authority during the year.  
Two of these were cautioned and one severely censured. Three midwives were asked to send in  
their resignations owing to age and inability to carry out the rules. These resignations have  
been received.



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

	Trained by County Council and Shropshire Nursing Federation.		Taken over from Rural Midwives Association and paid for by County Council and Shropshire Nursing Federation.	
1916	..	..	9	2
1917	..	..	12	4
1918	..	..	6	3
1919	..	..	7	2
1920	..	..	13	2
1921	..	..	14	0
1922	..	..	13	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 prevention. This will not be re-stated, but reference can be made to the annual report for 1920, pages 21 and 22.



TABLE V.  
NOTIFICATIONS CLASSIFIED FOR AGE AND SEX.

Age Periods.	Notifications on Form A.												Total Notifica- tions on Form A.
	Number of Primary Notifications.												
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up- wards.	Total Primary Notifi- cations.	
Pulmonary Males .. ..	1	2	3	11	9	19	23	33	16	6	5	128	133
" Females .. ..	2	3	7	5	12	25	44	22	14	8	1	143	150
Non-pulmonary Males ..	4	8	13	8	8	6	3	3	2	1	..	56	58
" Females .. ..	1	12	7	14	7	5	10	3	1	2	..	62	64

Age Periods.	Notifications on Form B.				Total Notifica- tions on Form B.	Number of Notifications on Form C.	
	Number of Primary Notifications.			Total Primary Notifica- tions.		Poor Law Institutions.	Sanatoria.
	Un- der 5	5 to 10	10 to 15				
Pulmonary Males .. ..	..	..	..	..	..	..	63
" Females .. ..	..	..	..	..	..	..	61
Non-pulmonary Males ..	..	..	..	..	..	..	20*
" Females .. ..	..	..	..	..	..	..	12*

\*These numbers do not represent the cases of non-pulmonary tuberculosis admitted to sanatoria. The numbers are 34 males and 30 females. The sanatorium concerned has frequently failed to notify the Medical Officers of Health of the Districts from which the cases were admitted. This is now being properly carried out.



TABLE VI.

## PERCENTAGES OF PATIENTS KNOWN TO BE ALIVE AT END OF :—

Year of Notification.	The Year of Notification.											10th year after 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.	10th year after Notification.		
1912	63.5	53.1	49.3	47.3	46.4	44.4	44.2	43.8	43.1	42.8		
1913	64.4	59.6	56.7	55.9	52.3	50.7	49.6	48.7	48.3			
1914	58.2	53.5	51.1	48.0	45.5	44.6	43.6	43.2				
1915	61.9	57.0	52.8	49.0	46.7	46.4	45.2					
1916	65.8	59.9	56.5	55.3	53.6	51.9						
1917	64.3	56.8	54.3	52.9	50.8							
1918	67.1	63.0	60.1	59.3								
1919	72.2	65.5	61.3									
1920	60.7	53.8										
1921	78.2											
1922	66.9											

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

TABLE VII.  
AFTER-HISTORY OF NOTIFIED CASES SINCE 1912.

Year	No. of cases notified in year	Number of cases that died in years															Known to be alive at end of years										Left County and wrongly diagnosed.	Unac-counted for.
		Number of cases that died in years															Known to be alive at end of years											
		1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922					
1912	439	117	36	43	15	8	4	8	1	1	1	3	306	266	222	205	197	193	185	184	179	178	7	17				
1913	290	50	51	12	8	2	2	9	4	3	2	1	236	236	183	167	159	156	145	140	137	133	12	3				
1914	267	73	73	34	12	6	1	8	6	1	2	1	188	188	149	137	131	123	116	113	110	109	12	3				
1915	381			89	49	17	7	14	12	7	1	2	286	286	225	206	206	189	174	165	164	158	27	5				
1916	392				81	44	4	20	11	4	6	4	297	297	297	297	298	243	209	200	192	184	34	4				
1917	403					90	5	44	29	5	6	6	306	306	251	241	241	209	200	195	185	185	38	1				
1918	425						6	93	42	6	10	2	252	252	229	204	228	229	241	228	223	223	49	..				
1919	341					67	67	67	67	90	11	11	223	223	229	204	204	223	223	204	187	187	36	..				
1920	325										30	18	186	186	161	161	161	161	161	161	161	161	26	..				
1921	318										66	44	172	172	172	172	172	172	172	172	172	172	17	..				
1922	274										85	85	172	172	172	172	172	172	172	172	172	172	17	..				



Comparison of Pulmonary Tuberculosis with previous years :—

Years	Cases notified.	Deaths.	Years	Cases notified.	Deaths.
1906	.. 2	.. 253	*1912	.. 439	.. 208
1907	.. 3	.. 236	1913	.. 320	.. 146
1908	.. 33	.. 230	1914	.. 295	.. 204
1909	.. 32	.. 225	1915	.. 379	.. 214
1910	.. 19	.. 206	1916	.. 364	.. 206
1911	.. 103	.. 216	1917	.. 406	.. 199
			1918	.. 425	.. 222
			1919	.. 341	.. 171
			1920	.. 325	.. 138
			1921	.. 318	.. 144
			1922	.. 274	.. 175
	Average	228		Average	184

\* Compulsory notification commenced in 1912.

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

Analysis of the cases notified during the year shows that 12 were notified after death, 4 on day of death, 7 less than a week before death, 4 between 1 and 2 weeks before death, 12 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.

Thirty-one of the cases were notified by the Tuberculosis Officers.

ANNUAL DEATHS FOR THE SEVEN YEARS 1916—1922 INCLUSIVE, CLASSIFIED IN AGE PERIODS, SEX, AND URBAN AND RURAL DISTRICTS.

URBAN DISTRICTS.

RURAL DISTRICTS.

Year	All ages.						All ages.																	
	0—		15—		25—		45—		65—		All ages.		0—		15—		25—		45—		65—			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1916	48	58	2	3	8	8	28	32	8	14	2	1	52	48		4	3	11	24	21	21	9	4	3
1917	55	52	4	7	7	10	24	24	18	10	2	1	44	48	1	4	6	13	19	27	14	8	4	
1918	62	52	6	6	8	12	32	25	12	7	4	2	47	61	1	4	13	21	17	28	15	8	1	
1919	52	42	1	5	10	14	15	18	19	3	7	2	42	35	2	3	14	9	19	17	6	6	1	
1920	47	28	5	3	3	7	21	8	14	6	4	4	32	36		3	6	10	15	16	8	6	3	1
1921	40	34		3	6	7	12	14	22	9		1	39	37	2		9	12	20	19	8	5		1
1922	51	46	2		6	11	26	27	12	8	5		39	46	2	4	8	10	13	16	14	14	2	2
Average	50	44	3	4	7	10	23	21	15	8	3	2	42	44	1	3	8	12	18	21	12	8	2	1

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



POSITION OF SCHEME.—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 now attends at the Pensions Board for one half-day per week, and one of the Tuberculosis Officers (Dr. Elliott) has superintendent duties in connection with the Shirlett Sanatorium and the Prees Heath Hospital for advanced cases of consumption.

#### ATTENDANCES AT DISPENSARIES.

No. of Cases.	Dispensaries.	Notified Cases.			Non-notified Cases.		Total.
		Insured.	Non-Insured.	School Children	School Children	Other	
SHREWSBURY.							
392	Number of patients who attended in 1922 for the first time .. ..	13	4	1	57	98	173
	Attendances during 1922 .. ..	625	190	249	259	260	1583
OSWESTRY.							
238	Number of patients who attended in 1922 for the first time .. ..	5	5	2	88	57	157
	Attendances during 1922 .. ..	162	94	96	210	135	697
WELLINGTON.							
555	Number of patients who attended in 1922 for the first time .. ..	35	10	14	154	133	346
	Attendances during 1922 .. ..	559	292	987	392	249	2479
<i>Examination Centres (open once a month).</i>							
WHITCHURCH.							
40	Number of patients who attended in 1922 for the first time .. ..	5	—	2	13	9	29
	Attendances during 1922 .. ..	27	4	55	24	11	121
LUDLOW.							
58	Number of patients who attended in 1922 for the first time .. ..	14	4	—	13	9	40
	Attendances during 1922 .. ..	48	6	12	24	23	113



## VISITS BY THE TUBERCULOSIS MEDICAL OFFICERS FOR 1922.

TO INSURED PATIENTS.					TO NON-INSURED PATIENTS.					TO SCHOOL CHILDREN.				
Notified cases.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.	On notification.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.	On notification.	Con-tacts.	Sus-pects.	On discharge from Sanatorium.	On other occasions.
95	15	26	36	471	52	30	44	12	238	21	92	111	8	81
		643					376					313		
							1332							

*Visits by Health Visitors to Phthisis Houses in 1922.*

To Insured Patients.	To Non-Insured Patients.	To School Children.	Total.
1489	904	688	3081

*King Edward VII. Sanatorium* (Shirlett).—The number of patients admitted to the Sanatorium in 1922 was 107, and consisted of:—

Insured patients—Males .. .. .	46
"    "    —Females .. .. .	25
Non-insured patients—Males .. .. .	8
"    "    —Females .. .. .	28

*Length of Stay in Sanatorium.*

	<i>Length of stay in days.</i>
35 Cases in which permanent recovery may usually be anticipated .. .. .	166
51 Cases in which temporary though possible prolonged improvement may be anticipated .. .. .	183
22 Cases admitted for educational purposes .. .. .	37
All patients .. .. .	151.4

The percentage of cases discharged as "arrested," and without tubercle bacilli in the sputum was 36, compared with 48 in 1920, 49 in 1919, 56 in 1918.

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

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

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

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



The following is an analysis of the cases admitted to Shirlett Sanatorium from its opening in 1911 until the end of 1922 :—

*Shirlett Sanatorium, 1911—1922.*

Year	Patients Treated.	Known to be Alive.	Known to be Dead.	Left County.	Unaccounted for.	Cases notified.	Percentage treated at Shirlett.
1911	38	11	19	7	1	..	..
1912	74	39	27	5	3	439	16.8
1913	80	38	35	6	1	290	27.5
1914	114	50	57	6	1	267	42.6
1915	133	64	55	14	..	381	34.9
1916	158	78	62	18	..	392	40.3
1917	164	101	54	9	..	403	40.6
1918	124	72	33	19	..	425	29.1
1919	123	77	28	18	..	341	36.0
1920	120	81	32	7	..	325	36.9
1921	121	97	21	3	..	318	38.0
1922	107	86	16	5	..	274	39.0
Total	1356	794	439	117	6	3855	34.2

*Incidence.*—During the year 274 cases of pulmonary tuberculosis and 118 cases of other forms of tuberculosis were notified. There were 175 deaths from pulmonary tuberculosis and 22 deaths from other forms of tuberculosis.

*Shropshire Orthopaedic Hospital.*—Ninety-one cases were sent to this Hospital by the County Council in 1922. The average length of stay of these cases was 168 days, and the average number of beds occupied 42. The cases were :—

Tuberculosis of the hip 32, spine 29, knee 10, other joints and bones 20.

Further details are given in the table on page 16.

The number of cases under supervision at the various after-care centres was 721 in September, 1922.



*Shelters.*—There are at present over 112 shelters in the County. The County Council have provided 94; Shrewsbury Borough 4; Atcham Rural District Council 2; Whitchurch Urban District Council 2; Drayton Rural and Urban District Councils 2; Chirbury Rural District Council 1; the Ludlow Care Committee 5; in addition, several have been provided by private individuals.

In the treatment and prevention of tuberculosis, shelters should be used for—

- (1) The accommodation of early cases to aid in their recovery.
- (2) The accommodation of advanced cases to prevent infection.
- (3) Sleeping accommodation for children in a crowded phthical home.

The two latter are the most important from a public health point of view.

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

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

*Disinfection of Houses.*—The position is as stated in last year's report.

*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. The details of examinations in 1922 were as follow:—

No. of Patients.	Cases examined.		Cases in which there was no sputum.	Not Examined.	In Institutions (Bicton, &c.)
	Positive.	Negative.			
272	122	49	46	35**	20

\*\* Of the 35 cases not examined, there was objection by the Private Practitioners concerned in 8 cases; in 12 cases the Notifications were received after death; and the remaining 15 patients have died or left the County.

*SUGGESTION<sup>c</sup> FOR IMPROVING SCHEME.*—The suggestions here made are principally for the protection of households, particularly of the children against infection from advanced and dangerously infectious cases.

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

Analysis of the home conditions shows that of the patients visited for the first time in 1922—  
 129 had separate bedrooms.  
 30 shared bedrooms but had a separate bed.  
 67 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.



In order further to cope with this question, I strongly advise, after consultation with the Tuberculosis Officers, that provision be made at Prees Heath Sanatorium for 12 more patients. This recommendation is made owing to the fact that it will be many years before the original scheme for the isolation of advanced cases of consumption can be carried out, and notwithstanding the objections that there are to the spending of money on a hospital, which is primarily for small-pox, in order to provide for cases of tuberculosis.

In the meantime a strong effort should be made to get every phthisical patient to sleep in a separate bed. This will mean, that in certain cases, where local effort fails, the County Council will have to supply the bed. I also recommend that efforts should be made to get children boarded away from a home where there is a dangerously infectious case, or as an alternative that shelters be supplied in such cases if it can be arranged for the children to sleep in them. The complete embargo on the provision of shelters should now be removed.

The provision of an open air convalescent home or school should be reconsidered as soon as circumstances are more favourable.

The following statement taken from my last two years' reports deals with such an important matter that it is again repeated:—

#### *Milk Supply in Country Districts.*

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

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

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

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

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

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

As a sufficient supply of good clean milk is one of the most important parts of the treatment of tuberculosis, it appears desirable that the Sanatorium should take a prominent part in popularising the keeping of goats. This might be done by keeping one or more goats at the Sanatorium so as to familiarise the patients with the management of goats and the benefits to be derived



from keeping them. If a proportion of patients discharged from the Sanatorium could be persuaded to keep goats, a great impetus would be given to the movement, with undoubted benefit not only to the consumptive person but the community generally.

A commencement has been made at the Sanatorium.

### · VENEREAL DISEASE.

No additions have been made to the scheme described in my report for 1917, 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 so far been started.

During the year a specialist part-time officer has been appointed in Shrewsbury in place of the previous arrangements, and an orderly has been appointed for the purpose of supervising irrigation and generally helping in the Clinic. These alterations have increased the efficiency of the Clinic.

As pointed out in my last report there are still many ways in which the scheme can be improved.

One of the most important is the utilisation of the Child Welfare Centres for enquiry and diagnosis. Perhaps an equally important matter is the training of Midwives in the knowledge of venereal disease, the significance of miscarriage, and what steps to take.

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

There is distinct evidence that venereal disease has very materially diminished during the last two years.

#### CASES OF VENEREAL DISEASE TREATED DURING 1922.

Shrewsbury Clinic.			Wolverhampton and Staffordshire General Hospital. Shropshire Patients.			Kidderminster Infirmary. Shropshire Patients.		
	Cases.	Attendances		*Cases.	Attendances		*Cases.	Attendances
Syphilis	226	1635	Syphilis	14	..	Syphilis	2	..
Gonorrhoea	166	3238	Gonorrhoea	13	..	Gonorrhoea	0	..
Other conditions	36	104	Other conditions	15	..	Other conditions	2	..
Total	428	4977		42	1491		4	18

\* At these Clinics the number of cases refers only to those attending for the first time in 1922.



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

Pathological material sent to Birmingham University for examination during 1922 :—

Nature of Test.	Number of Tests.
For detection of gonococci .. ..	224
For detection of spirochetes .. ..	1
For Wassermann reaction .. ..	493
Gonococcus Complement Fixation Tests .. .. .	12

*Cleveland House, Wolverhampton.*—This Hostel is for girls without homes, and pregnant women suffering from venereal disease. 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 21 cases were admitted from this County, 12 of pregnant women and 9 of girls without suitable homes. Eight patients were suffering from syphilis, 11 from gonorrhoea, and 2 from both diseases.

*Propaganda.*—The work of the Branch has been curtailed this year owing to financial restrictions. Arrangements, however, were made for the travelling cinema to visit some of the villages and small towns in the County. The organiser—Mrs. Adney—as a preliminary, met the members of local committees and made the necessary arrangements for the showing of the films “The Gift of Life” and “Waste.” Although the audiences were small, those attending were very much interested.

The provision made by the County Council for the treatment of these diseases has been extensively advertised, posters being put up in lavatories and other suitable places.

### CANCER.

The increase of cancer during the last 60 years, during which time the death-rate has increased fourfold, is the one outstanding failure of preventive medicine.

This increase is to a small extent due to a larger proportion of old persons living now than in times gone by. This same cause explains, as the following figures show, the fact that Shropshire has a higher death-rate from cancer than the rest of England and Wales.

#### DEATH-RATES FROM CANCER.

Year	County of Salop.	England and Wales.	Year	County of Salop.	England and Wales.
1894-1905	.978	.816	1914	1.22	1.069
1906	1.019	.917	1915	1.23	1.121 <small>Civilians only</small>
1907	1.013	.909	1916	1.35	1.166 do.
1908	1.082	.909	1917	1.35	1.210 do.
1909	1.159	.952	1918	1.55	1.218 do.
1910	1.195	.967	1919	1.39	1.145
1911	1.07	.993	1920	1.27	1.161
1912	1.08	1.019	1921	1.28	1.215
1913	1.18	1.064	1922	1.42	—

Registration County, 1894—1911. Urban and Rural Districts, 1912—1922.



In this County the urban rates have been consistently higher than the rural rates, notwithstanding the larger proportion of old people in the rural districts.

In my report for the year 1912 I stated :—

“ Taking the 13-year period it will be noticed (1) that the rural districts had a lower rate than the urban districts, (2) that the highest rates were in the old towns of Ludlow, Newport, Bridgnorth and Ellesmere, (3) that there was no markedly excessive prevalence of cancer in any district.”

Since that time the same excess of urban rates over rural rates has continued.

Notwithstanding prolonged and intensive research the only fact proved with certainty is that chronic irritation is a predisposing cause and the only suggestion for prevention or amelioration is the removal of all source of chronic irritation and the early recognition of symptoms followed by prompt treatment. Propaganda work on these lines should be undertaken. It is hoped that research will be pushed on vigorously and will not be limited to laboratory research, but will include exhaustive inquiry into the incidence of cancer in different parts of the world and in our own country in the different social grades, occupations and localities. A study of this incidence in connection with the habits, mode of life, food supply and general environment should throw some light, if not upon the essential nature or cause of cancer, yet upon those favouring influences which may determine, whether cancer shall be comparatively rare or very prevalent.

#### HEART DISEASE.

Four hundred and fifty-four deaths were attributed to heart disease during the year, about 47 per cent. more than those due to all forms of tuberculosis. This bare statement, which is often used to emphasise the importance of work directed to the prevention of heart disease, and particularly to the prevalence of rheumatism which is the common cause of heart disease in the young, is very misleading. There were no deaths from heart disease under five years of age, only 3 per cent. of the total deaths were under 25, and only 7 per cent. under 45. Seventy per cent. of the deaths from heart disease were over 65 years of age. The vast majority of these were probably in no way connected with rheumatism, but were degenerative in character or secondary to disease of the lungs. Nevertheless it is most desirable that efforts should be made to lessen heart disease, particularly by the prevention and treatment of rheumatism. Some effort has been made through the school medical service to educate teachers and parents in the early signs of rheumatism, but the larger problem of general education of the public can only be solved as part of general health propaganda. The important rule with regard to the care of the heart is that it should be rested whilst it is being damaged by infection, and freely exercised at other times. The difficulty, of course, is to know when the influence of infection has passed off. The necessity for some open-air residential school accommodation for children with weakened hearts due to rheumatism and other infection is most desirable. The time has arrived too, when “ acute rheumatism ” or “ rheumatic fever ” should be made notifiable. This would be a small measure entailing little trouble or expense, but it would permit of the investigation of the relation of rheumatism to the various conditions of environment and would probably soon demonstrate the favouring causes and their relative importance.

#### GOITRE.

In my school reports I have dealt with the question of goitre and its prevention. This disease is very prevalent in many parts of the County, and it is most desirable that our knowledge of its cause and prevention should be fully utilised. The evidence is very strong that minute doses of iodine will prevent this condition and cure it in its early stages. Probably the most satisfactory scheme of prevention will be one in which the whole population of a district is given along with food or water a small quantity of an iodine salt either continuously or several times a year. The amount necessary is so small that it cannot possibly do any harm. The most practical method in a country district is to give the iodine in table salt. For this purpose a salt containing iodine should be put on the market. This salt can then be recommended for general use in certain families and districts. In a town the necessary amount of iodine can very easily and without any danger be added to the water at stated intervals. This has already been done in America.



## BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

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

Quarters of 1922.	For Typhoid Fever. Widal's Reaction.			For Diphtheria.			For Phthisis.	
	Positive.	Negative	Doubt-ful.	Positive.	Negative	Doubt-ful.	Positive.	Negative
First .. .. .	0	2	0	67	223	0	21	114
Second .. .. .	1	11	0	53	131	1	23	91
Third .. .. .	4	25	3	43	154	0	22	94
Fourth .. .. .	1	5	0	79	192	0	19	94
Whole year .. .. .	6	43	3	242	700	1	85	393
		52			943			478

Nine other disease products were examined and reported on.

Three hundred and twenty-four specimens of sputum were examined at the Tuberculosis Dispensary with the following results:—71 positive and 253 negative; also 2 specimens of discharge from glands, both proving positive.

## THE PREVENTION OF DENTAL CARIES.

The following leaflet has been drawn up and adopted by the Society of Medical Officers of Health:—

## PREVENTION OF DECAY OF TEETH.

(Leaflet for the Use of Parents).

This leaflet, which has been approved by the Council of the Society of Medical Officers of Health, reads as follows:—

Decay of teeth is caused by the fermentation of food that sticks on or between the teeth after meals. Acid is formed from the food, and this acid eats a hole into the teeth. It is only the "starchy" and "sugary" foods (see below) that form acid in the mouth.

It is most important that the jaws should be well grown and the teeth regular. This is brought about by breathing through the nose from birth onwards and by chewing and gnawing. If the jaws are small and the teeth overcrowded, mastication (chewing) cannot be properly performed, and the food will be left clinging to the teeth after meals and the teeth will decay.

In order that the jaws and teeth shall grow properly and the teeth kept clean and free from decay, you should observe the following rules:—

(1) As soon as an infant needs food other than milk (8 to 9 months) give it in a solid form, such as crusty bread, twice baked bread, or crisp toast, thus compelling mastication. Do not give bread soaked in milk or milk thickened with flour or other starchy foods, such as most patent foods. Encourage the child to chew and see that it breathes through its nose. In these ways good habits of mastication will be formed.



(2) As the child grows up you should still give most of the food in a solid form, compelling mastication. Food, other than milk, should rarely be taken in a liquid form. Vegetables and meat should not be minced and soaked in gravy. Bread should not be eaten new, and it should have plenty of good firm crust.

(3) After the first two or three years of life the child should have three meals a day and no food between.

(4) It is not advisable to drink at meal times, but plenty of water should be taken between meals. Milk is a food, and should only be taken at meal times, and must be followed by a tooth cleansing food.

(5) All meals should be finished with a cleansing food (see below).

(6) Sweets, chocolates, and biscuits are very harmful to the teeth, if taken the last thing at night. They should only be taken at meal times, and should be followed by a cleansing food. The custom of giving milk and biscuits the last thing at night should not be allowed.

(7) Correct feeding and chewing are the best means of preventing decay of the teeth, though the intelligent use of the toothbrush will be found helpful.

If decay of the teeth or tenderness of the gums is noticed, the child should be taken to a dentist. Such conditions prevent mastication and bring about further decay. It is important for the sake of the child that the nursing and expectant mother should also go to the dentist if her teeth are in a bad condition.

#### EXAMPLES OF FOOD REFERRED TO ABOVE.

*Starchy Foods.*—Potatoes; rice, tapioca, sago; bread, biscuits, &c.; oatmeal porridge; most patent foods.

*Sugary Foods.*—All foods to which sugar is added; sweets of all kinds; honey, syrup, jams, marmalade; milk.

*Tooth Cleansing Foods.*—Fresh fruits: apples, oranges, nuts; raw vegetables: lettuce, watercress, celery, radishes, onions; crusts of bread,<sup>1</sup> crisp toast, twice-baked bread; meat, fish, bacon.

<sup>1</sup> The coarse whole-meal flour is best for this purpose.

This teaching is looked upon as one of the most important duties of Health Visitors.

#### ALCOHOL AND PUBLIC HEALTH.

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

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

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

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



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

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

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

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

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

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

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

### EDUCATION IN HEALTH.

In my last two reports, I attempted to show how by a neglect of public health education, and notwithstanding our excellent public health work, the physique of the people was most unsatisfactory, and that education and training in healthy living and the provision of means by which the people could themselves put this teaching into practice, were by far the most urgent of all public health work. In other words the principal factor in a person's health is his own conduct, and knowledge is necessary for correct conduct.

This view is rapidly gaining ground, and it is probable that very soon 'health education' will be one of the important duties of health authorities.

In my school report I have described in some detail the part that the school doctors should play in the education of school children.



The Child Welfare Centres are valued almost entirely as educational factors.

The principal part of the work of the Health visitor in the homes of the people is educational.

The district nurse should always be an educator, and for this reason should have a good training in hygiene based on physiology. This aspect of the training of nurses was dealt with fully in my report for 1920, and communications were sent to The General Nursing Council, The Ministry of Health, County Medical Officers of Health Association, The Queen Victoria Nursing Institute of Nurses, and The Shropshire Nursing Federation. It is shortly to be brought before the General Nursing Council by the Association of County Medical Officers of Health.

The best work under the scheme for the prevention of tuberculosis is undoubtedly the educational work, and this has to be constantly borne in mind and reiterated or it is apt to be forgotten and not acted upon.

The Venereal Disease scheme, through its propaganda committee, has also contributed to the teaching of the laws of health.

There remains the great question of direct education of the public through newspapers, cinemas, lectures, pamphlets, etc. This could be made a real power with the help of the Ministry of Health. Isolated effort without central assistance and encouragement is difficult.

Whenever it is found possible to establish the great system of continuation classes set out in the Education Act, 1918, education in health will become comparatively easy. I am confident that these continuation classes, although not designed for this purpose, will become a great health measure.

### ISOLATION HOSPITALS.

There has been no alteration of the isolation accommodation in the County for small-pox and other diseases since the statement in my report for 1920. Reference should be made for details to pages 40 and 41 of that report.

The Medical Officer of Health for the Borough of Shrewsbury states:—

“The Shrewsbury and Atcham Joint Hospital Board still maintains Monkmoor Hall, as the alterations in the new buildings will not be complete for a few months. The need for larger premises is often experienced, as the present building offers little scope for dealing with complicated cases or those who require to be kept separate under observation.”

### WATER SUPPLIES.

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

The following are the principal references to water supplies in the District Medical Officers' Reports that have been received:—

*Atcham Rural District.*—“*Meole Brace.* An alteration in the pumping arrangements at Moat Hall Colliery has been carried out in connection with Meole Brace water supply. Under this arrangement the old pumps have been removed from the water lodge in No. 6 shaft and new ones installed in No. 7 shaft, up which all the water is pumped and taken over the ground by a 3-inch pipe to the reservoir. The use of the old winding tub has been discontinued, and a new pumping plant substituted for raising the sump water: thus, the drinking water and the sump water are entirely separated and there is no possibility of contamination. Moreover, there are no men engaged in this part of the workings.”



*Ludlow Rural District.*—“There is every probability that the new bore well at Craven Arms will provide the town with a constant and efficient supply of water during the coming year. The inquiry by the Ministry of Health was held in April for permission to borrow £4,800 for the sinking of the well, the erection on site agreed on of engine house, and the installing of 10 h.p. petrol engine and three-throw pump together with the rising main to reservoir. The water is of good quality, and there is no evident source of possible pollution. I think there can be little doubt that the unsatisfactory water supply has retarded the development of much of the land in the neighbourhood.”

*Wellington Rural District.*—“The Council have had under consideration the water supply at New Dale, where a group of 25 houses take their water from a spring, piped about 400 yards under arable land. I was asked to report on the supply and found that there was evidence of contamination, and that the amount at times was insufficient. Later after the land had been manured, and during the period of hot weather, the evidence of pollution was very marked and the water quite unfit for potable purposes. The estimate for laying on the main from Lawley School to the Hamlet was £350, and the Council on the grounds of economy, declined to do the work. The condition is, in my view, a serious one, for at certain periods of the year the pollution is so gross, that it is capable of causing an epidemic of dysentery, and the postponement of this work is very undesirable.”

“At New Works a group of 20 houses, eight of which on one side of the road are in the Wenlock Borough and the remaining twelve on the opposite side in the Wellington Rural District, are dependent for their supply of drinking water on a well situated at Huntington, which is a mile away. It is obvious that a joint scheme between the two Councils is called for. Negotiations are now in progress with a view to dealing with this matter.”

#### HOUSING ACCOMMODATION.

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

A statement was made in last year's report showing the number of houses built up to the end of 1921. The number of houses built since then has been small, but I have not the exact figures.

*Ludlow Rural District.*—“There is a considerable demand for houses at Craven Arms; evidence of this is the serious amount of overcrowding that exists there. Two or three families in a house is a common occurrence, and the difficulty in dealing with these cases is very great. It is to be hoped that it will be possible to remedy this under the new Housing Act, or that private enterprise will be able to build at a profit on the Government Subsidy.”

*Oakengates Urban District.*—“There are a number of cottages in the district in bad repair and out of date that cannot be profitably put in repair on the small rents that they are let at, and the owners prefer to submit to a Closing Order rather than incur an expenditure on which there is no prospect of any return.”



*Shrewsbury Borough.*—"In concluding this report some reference to HOUSING is required. Much has been done, much more remains undone. The municipal housing schemes have provided limited accommodation for certain of the working classes such as clerks, artisans and railway men. The poorly paid working classes have not been touched, because they cannot afford to pay the rent of the recently erected houses.

"The Public Health and Housing Committees have carefully considered the needs of these people, but do not see how it is possible in the present conditions to provide them with houses at an economic rent. The town really needs one or more improvement schemes, but it is futile to discuss such a problem till accommodation can be provided for those who will be displaced.

"In the meantime the patching of houses continues, a most unsatisfactory procedure for owners, occupiers and Public Health Officials.

"In any case these temporising measures do not affect the overcrowding. Probably few people realise that many of the inhabitants never sleep in a bed, or if they do, they share it with several adults or children.

"This is unpleasant when the various members of one family are concerned, but disgusting when two or more families are involved."

*Wellington Urban District.*—"I think it is questionable whether the increased demand for houses in the district has been entirely met by the municipal building or by private enterprise; it is certain that the difficulty in getting a house is just as great as before. A further instalment of the Council's original housing scheme of 150 would be a great boon, and it is to be hoped it will shortly be possible with Government assistance and the falling prices of material and lower wages."

#### MEAT INSPECTION.

In order to improve the training of the Sanitary Inspectors throughout the County in meat inspection, arrangements were made for 10 lectures and demonstrations on meat inspection to be given in Shrewsbury in connection with the Shrewsbury Public Abbatoirs. These were held in the months of January, February, and March, and proved highly successful. I have evidence that the lectures have not only increased the knowledge and efficiency of many of the Sanitary Inspectors, but have greatly stimulated their interest in this work.

Inspectors from the following districts attended:—The Rural Districts of Atcham, Chirbury, Ludlow, Oswestry, Shifnal, Wellington, Wem, and Whitchurch, and the Urban Districts of Bishop's Castle, Church Stretton, Dawley, Ludlow, Newport, Oakengates, Shrewsbury, Wenlock and Whitchurch. I am of opinion that these lecturers should be repeated early next year.



## FOOD AND DRUGS.

Return of samples taken by members of the Shropshire Constabulary for analysis under the Food and Drugs Act during 1922 :—

Nature of Sample.	Number taken.	Genuine.	Adulterated.	Remarks.
Milk .. ..	223	200	23	13 Cautions. 3 Dismissed. 1 Fined £5. 1 Fined £5. 1 Fined £4 18s. 4d. 1 Fined £7 12s. 6d. 1 Fined £1 5s. od. 1 Fined £5. 1 Fined £2.
Butter ..	1	1	—	

Of 219 samples of milk analysed :—

52	contained fat	above	4 per cent.	
70	"	"	between	3.5 per cent. and 4 per cent.
69	"	"	"	3.0 " 3.5 "
22	"	"	"	2.5 " 3.0 "
6	"	"	below	2.5 "
72	"	non-fatty solids	above	9 per cent.
120	"	"	between	8.5 per cent. and 9 per cent.
27	"	"	below	8.5 per cent.

Report of administration in connection with the Public Health (Milk and Cream) Regulations, 1912, for the year ended December, 1922 :—

1. Milk and Cream not sold as Preserved Cream—

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk .. ..	219	<i>Nil.</i>
Cream .. ..	<i>Nil</i>	<i>Nil.</i>

2. Cream sold as Preserved Cream—*Nil.*

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

(i) Correct statements made	..	..	..	—
(ii) Statements incorrect	..	..	..	—

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

(i) Above 35 per cent.	..	..	..	—
(ii) Below 35 per cent.	..	..	..	—
Not stated	..	..	..	—



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 1922.

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

Financial stringency still continues to prevent the carrying out of any extensive sanitary schemes, and also is impeding the ordinary routine work of improvement and repair. It is difficult, however, to understand why works of great importance to the public health should be held up on account of expense, whilst other works are undertaken at the public expense for the express purpose of giving employment. In developing schemes for the unemployed, the importance of carrying out some of the much delayed public health schemes might well be considered.

Under such circumstances the energies of those responsible for public health should be turned to the most important and at the same time the most economical of all public health work, viz., the education of the public in the laws of healthy living.

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

I am, Gentlemen,

Your obedient Servant,

JAMES WHEATLEY.

PUBLIC HEALTH DEPARTMENT,  
COUNTY BUILDINGS, SHREWSBURY,  
October, 1923.



FOOD AND DRUG

...by order of the Board of Health and Drug Administration...

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

I have the honor to acknowledge the receipt of your letter of the 12th inst. regarding my Annual Report for 1924.

The various schemes for the improvement of the public health and welfare of the county are being considered, but not yet decided upon. It is also a matter of importance to understand any works of great importance to the public health and welfare of the county, whilst other works are undertaken of the public health and welfare of the county. In the event of any works of great importance to the public health and welfare of the county, the importance of carrying out some of the much desired public health and welfare schemes might well be considered.

Under such circumstances the energies of those responsible for public health should be directed to the most important and at the same time the most economical of all public health work, viz. the education of the public in the art of health.

The training of all those in a position to be of service to the public, particularly in the case of health officers, is a matter of the greatest importance.

Yours obedient servant,  
JAMES WHALLEY

Public Health Department,  
County Buildings, Shrewsbury.

...



## 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 1922 is 244,056. This is used for calculating all death-rates and birth-rates.

## POPULATION OF THE URBAN AND RURAL DISTRICTS.

URBAN DISTRICTS.	Census population, 1921	Population at middle of 1922 as estimated by Registrar-General.	RURAL DISTRICTS.	Census population 1921	Population at middle of 1922 as estimated by Registrar-General.
Bishop's Castle M.B. ..	1268	1281	Atcham .. ..	21978	22120
Bridgnorth M.B. ..	5143	5108	Bridgnorth .. ..	8569	8524
Church Stretton ..	1671	1470	Burford .. ..	1268	1251
Dawley .. ..	7386	7503	Chirbury .. ..	3193	3265
Ellesmere .. ..	1831	1846	Church Stretton	4516	4468
Ludlow M.B. .. ..	5677	5654	Cleobury Mortimer	7297	7412
Market Drayton ..	4710	4721	Clun .. ..	6243	6234
Newport .. ..	3056	3084	Drayton .. ..	7156	7198
Oakengates .. ..	11349	11670	Ellesmere .. ..	8008	8012
Oswestry M.B. .. ..	9790	9852	Ludlow .. ..	8980	8920
Shrewsbury M.B. ..	31013	31240	Newport .. ..	5747	5812
Wellington .. ..	8148	8146	Oswestry.. ..	16313	16460
Wem .. ..	2176	2223	Shifnal .. ..	7666*	7619
Wenlock M.B. .. ..	13712	13780	Teme .. ..	1649	1667
Whitchurch .. ..	5656	5637	Wellington .. ..	11207	11250
			Wem .. ..	8572	8582
			Whitchurch .. ..	2011	2056

\* 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 1922 was 1,879, compared with 2,050 in 1921, 2,440 in 1920, and 2,387 in 1919.

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

Year.	Births.	Deaths.	Natural Increase.
1913 ..	5245	3012	2233
1914 ..	5205	3556	1649
1915 ..	4917	3532	1385
1916 ..	4682	3231	1451
1917 ..	4059	3232	827
1918 ..	4283	3702	581
1919 ..	4264	3441	823
1920 ..	5943	2952	2991
1921 ..	5318	3000	2318
1922 ..	4904	3295	1609



















THE JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

No.	Length of skull		Breadth of skull		Length of face		Breadth of face		Height of face		Remarks
	mm	in	mm	in	mm	in	mm	in	mm	in	
1	140	5.5	110	4.3	100	3.9	100	3.9	100	3.9	...
2	145	5.7	115	4.5	105	4.1	105	4.1	105	4.1	...
3	150	5.9	120	4.7	110	4.3	110	4.3	110	4.3	...
4	155	6.1	125	4.9	115	4.5	115	4.5	115	4.5	...
5	160	6.3	130	5.1	120	4.7	120	4.7	120	4.7	...
6	165	6.5	135	5.3	125	4.9	125	4.9	125	4.9	...
7	170	6.7	140	5.5	130	5.1	130	5.1	130	5.1	...
8	175	6.9	145	5.7	135	5.3	135	5.3	135	5.3	...
9	180	7.1	150	5.9	140	5.5	140	5.5	140	5.5	...
10	185	7.3	155	6.1	145	5.7	145	5.7	145	5.7	...
11	190	7.5	160	6.3	150	5.9	150	5.9	150	5.9	...
12	195	7.7	165	6.5	155	6.1	155	6.1	155	6.1	...
13	200	7.9	170	6.7	160	6.3	160	6.3	160	6.3	...
14	205	8.1	175	6.9	165	6.5	165	6.5	165	6.5	...
15	210	8.3	180	7.1	170	6.7	170	6.7	170	6.7	...
16	215	8.5	185	7.3	175	6.9	175	6.9	175	6.9	...
17	220	8.7	190	7.5	180	7.1	180	7.1	180	7.1	...
18	225	8.9	195	7.7	185	7.3	185	7.3	185	7.3	...
19	230	9.1	200	7.9	190	7.5	190	7.5	190	7.5	...
20	235	9.3	205	8.1	195	7.7	195	7.7	195	7.7	...
21	240	9.5	210	8.3	200	7.9	200	7.9	200	7.9	...
22	245	9.7	215	8.5	205	8.1	205	8.1	205	8.1	...
23	250	9.9	220	8.7	210	8.3	210	8.3	210	8.3	...
24	255	10.1	225	8.9	215	8.5	215	8.5	215	8.5	...
25	260	10.3	230	9.1	220	8.7	220	8.7	220	8.7	...
26	265	10.5	235	9.3	225	8.9	225	8.9	225	8.9	...
27	270	10.7	240	9.5	230	9.1	230	9.1	230	9.1	...
28	275	10.9	245	9.7	235	9.3	235	9.3	235	9.3	...
29	280	11.1	250	9.9	240	9.5	240	9.5	240	9.5	...
30	285	11.3	255	10.1	245	9.7	245	9.7	245	9.7	...
31	290	11.5	260	10.3	250	9.9	250	9.9	250	9.9	...
32	295	11.7	265	10.5	255	10.1	255	10.1	255	10.1	...
33	300	11.9	270	10.7	260	10.3	260	10.3	260	10.3	...
34	305	12.1	275	10.9	265	10.5	265	10.5	265	10.5	...
35	310	12.3	280	11.1	270	10.7	270	10.7	270	10.7	...
36	315	12.5	285	11.3	275	10.9	275	10.9	275	10.9	...
37	320	12.7	290	11.5	280	11.1	280	11.1	280	11.1	...
38	325	12.9	295	11.7	285	11.3	285	11.3	285	11.3	...
39	330	13.1	300	11.9	290	11.5	290	11.5	290	11.5	...
40	335	13.3	305	12.1	295	11.7	295	11.7	295	11.7	...
41	340	13.5	310	12.3	300	11.9	300	11.9	300	11.9	...
42	345	13.7	315	12.5	305	12.1	305	12.1	305	12.1	...
43	350	13.9	320	12.7	310	12.3	310	12.3	310	12.3	...
44	355	14.1	325	12.9	315	12.5	315	12.5	315	12.5	...
45	360	14.3	330	13.1	320	12.7	320	12.7	320	12.7	...
46	365	14.5	335	13.3	325	12.9	325	12.9	325	12.9	...
47	370	14.7	340	13.5	330	13.1	330	13.1	330	13.1	...
48	375	14.9	345	13.7	335	13.3	335	13.3	335	13.3	...
49	380	15.1	350	13.9	340	13.5	340	13.5	340	13.5	...
50	385	15.3	355	14.1	345	13.7	345	13.7	345	13.7	...
51	390	15.5	360	14.3	350	13.9	350	13.9	350	13.9	...
52	395	15.7	365	14.5	355	14.1	355	14.1	355	14.1	...
53	400	15.9	370	14.7	360	14.3	360	14.3	360	14.3	...
54	405	16.1	375	14.9	365	14.5	365	14.5	365	14.5	...
55	410	16.3	380	15.1	370	14.7	370	14.7	370	14.7	...
56	415	16.5	385	15.3	375	14.9	375	14.9	375	14.9	...
57	420	16.7	390	15.5	380	15.1	380	15.1	380	15.1	...
58	425	16.9	395	15.7	385	15.3	385	15.3	385	15.3	...
59	430	17.1	400	15.9	390	15.5	390	15.5	390	15.5	...
60	435	17.3	405	16.1	395	15.7	395	15.7	395	15.7	...
61	440	17.5	410	16.3	400	15.9	400	15.9	400	15.9	...
62	445	17.7	415	16.5	405	16.1	405	16.1	405	16.1	...
63	450	17.9	420	16.7	410	16.3	410	16.3	410	16.3	...
64	455	18.1	425	16.9	415	16.5	415	16.5	415	16.5	...
65	460	18.3	430	17.1	420	16.7	420	16.7	420	16.7	...
66	465	18.5	435	17.3	425	16.9	425	16.9	425	16.9	...
67	470	18.7	440	17.5	430	17.1	430	17.1	430	17.1	...
68	475	18.9	445	17.7	435	17.3	435	17.3	435	17.3	...
69	480	19.1	450	17.9	440	17.5	440	17.5	440	17.5	...
70	485	19.3	455	18.1	445	17.7	445	17.7	445	17.7	...
71	490	19.5	460	18.3	450	17.9	450	17.9	450	17.9	...
72	495	19.7	465	18.5	455	18.1	455	18.1	455	18.1	...
73	500	19.9	470	18.7	460	18.3	460	18.3	460	18.3	...
74	505	20.1	475	18.9	465	18.5	465	18.5	465	18.5	...
75	510	20.3	480	19.1	470	18.7	470	18.7	470	18.7	...
76	515	20.5	485	19.3	475	18.9	475	18.9	475	18.9	...
77	520	20.7	490	19.5	480	19.1	480	19.1	480	19.1	...
78	525	20.9	495	19.7	485	19.3	485	19.3	485	19.3	...
79	530	21.1	500	19.9	490	19.5	490	19.5	490	19.5	...
80	535	21.3	505	20.1	495	19.7	495	19.7	495	19.7	...
81	540	21.5	510	20.3	500	19.9	500	19.9	500	19.9	...
82	545	21.7	515	20.5	505	20.1	505	20.1	505	20.1	...
83	550	21.9	520	20.7	510	20.3	510	20.3	510	20.3	...
84	555	22.1	525	20.9	515	20.5	515	20.5	515	20.5	...
85	560	22.3	530	21.1	520	20.7	520	20.7	520	20.7	...
86	565	22.5	535	21.3	525	20.9	525	20.9	525	20.9	...
87	570	22.7	540	21.5	530	21.1	530	21.1	530	21.1	...
88	575	22.9	545	21.7	535	21.3	535	21.3	535	21.3	...
89	580	23.1	550	21.9	540	21.5	540	21.5	540	21.5	...
90	585	23.3	555	22.1	545	21.7	545	21.7	545	21.7	...
91	590	23.5	560	22.3	550	21.9	550	21.9	550	21.9	...
92	595	23.7	565	22.5	555	22.1	555	22.1	555	22.1	...
93	600	23.9	570	22.7	560	22.3	560	22.3	560	22.3	...
94	605	24.1	575	22.9	565	22.5	565	22.5	565	22.5	...
95	610	24.3	580	23.1	570	22.7	570	22.7	570	22.7	...
96	615	24.5	585	23.3	575	22.9	575	22.9	575	22.9	...
97	620	24.7	590	23.5	580	23.1	580	23.1	580	23.1	...
98	625	24.9	595	23.7	585	23.3	585	23.3	585	23.3	...
99	630	25.1	600	23.9	590	23.5	590	23.5	590	23.5	...
100	635	25.3	605	24.1	595	23.7	595	23.7	595	23.7	...