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WREXHAM RURAL DISTRICT COUNCIL

ANNUAL REPORT

OF THE

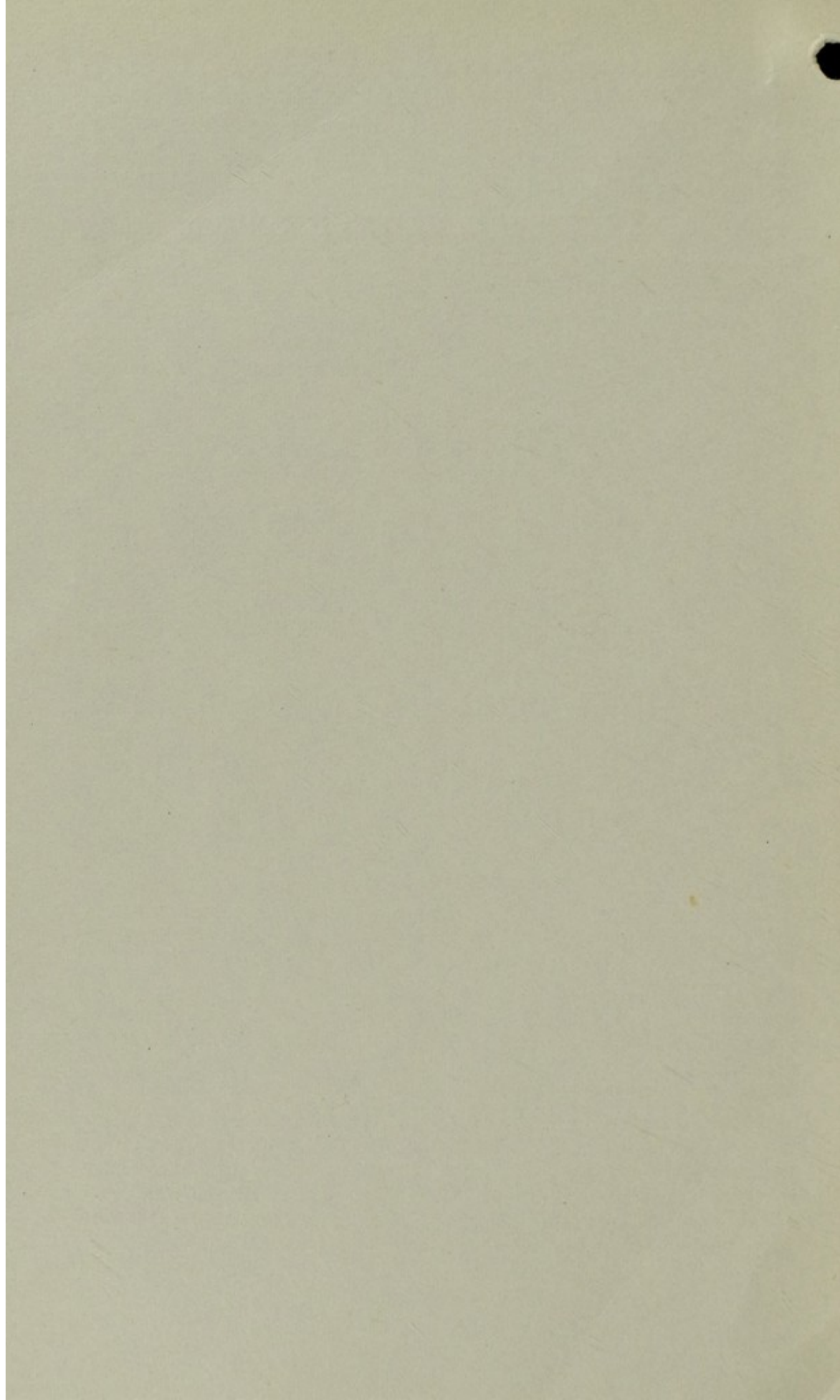
MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1946

T. P. EDWARDS,

M.D., B.S. (Lond.), D.P.H. (Cantab).



To the Chairman and Members of

THE HEALTH COMMITTEE.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present my 24th ANNUAL REPORT on the health and vital statistics of the Wrexham Rural District for the year ended 31st December, 1946.

The population of the district, as given to us by the Registrar General shows an increase from 59,730 to the figure of 61,230 for 1946.

Satisfaction will no doubt be felt that the Birth Rate has risen and remains, as before, above that for England and Wales.

The Still Birth Rate per 1000 population has diminished whereas the Death Rate remains practically identical with that of the previous year.

Another cause for satisfaction is the diminution in the Infantile Mortality Rate which is gradually approximating to that for the whole country.

For many years, now, the rate has been consistently above that for the country as a whole, and this reduction in the rate will, no doubt, be welcomed.

As regards Infectious Diseases, there has again been a marked diminution. The figure for Diphtheria is exceptionally low and constitutes a record figure for our area. No doubt the satisfactory diminution in the incidence of Diphtheria is closely correlated with the immunisation which is continually been put into effect in our area.

There is also a satisfactory diminution in the incidence of Scarlet Fever and Measles, but there is an increase in the incidence of Tuberculosis.

During the year a large amount of time, in Council and in Committees, was spent in the preparation and putting into effect schemes for the supply of water in various areas, and once these schemes have been completed, it is estimated that some 95 per cent. of the houses in our area will have facilities for the supply of water from the water mains.

The chief event during the year was the publication of a report by the Denbighshire County Council, on the water supply of the County, and this resulted in a conference of Local Authorities to discuss methods whereby recommendations of this report could be carried into effect.

Progress has also been made in providing accommodation for people resident in our area by the construction of houses. Under the abnormal circumstances in which we live, it was found necessary to provide a large number of temporary houses for accommodation, but steps are now being taken with a view of concentrating on the permanent type.

The Health Staff are now concentrating their energies on the Housing Survey of the whole area and this is a large problem to take into effect, considering the fact that there are more than 16,000 houses in our area.

I need hardly refer to the excellent work done by the Senior Sanitary Inspector and his Staff, and the Clerical Staff.

The Health Staff has during the year, been implemented by the return of young men from service with His Majesty's Forces, and no doubt their experiences during the period of hostilities will be invaluable to them in broadening their outlook of matters of Public Health.

I have the honour to be, Ladies and Gentlemen,

Your obedient Servant,

T. P. EDWARDS,

Medical Officer of Health.

STAFF OF THE PUBLIC HEALTH DEPARTMENT

Medical Officer of Health and Superintendent of the Isolation Hospital:

T. P. EDWARDS, M.D., B.S. (LOND.), D.P.H. (CANTAB).

Senior Sanitary Inspector:

D. THOMAS, C.M.I.

Sanitary, Housing and Petroleum Inspectors:

S. DAVIES, C.M.I.

H. C. D. JONES.

C. DAVIES. D. R. GEORGE.

J. M. EDWARDS.

Clerks:

C. H. WATKIN.

C. PARRY.

MISS O. M. DAVIES.

Engineer: D. E. EDWARDS, P.A.S.I.

Deputy Engineer: T. A. BOWEN, A.M.I. MUN. E.

Matron of Isolation Hospital: MISS H. M. DAVIES, S.R.N.

Assistant Matron: SISTER E. H. WEAVER, S.R.N.

HEALTH COMMITTEE (1946).

Chairman: P. GANDY, M.B., M.R.C.S.

Vice-Chairman: TUDOR WILLIAMS, Esq., Esclusham Below.

The Health Committee consists of the whole Council.

Clerk to the Council:

GEO. VERNON PRICE, Esq., M.B.E., F.R.I.S. (Retired 1946).

TREVOR L. WILLIAMS, Esq., LL.M. (Appointed 1946).

WREXHAM JOINT FEVER HOSPITAL COMMITTEE (1946).

Chairman: ALD. E. A. CROSS, Esq., M.B.E., J.P.

Vice-Chairman: MRS. G. HUGHES, Penycae.

1 GENERAL STATISTICS

Area (in acres)	72,370
Population R.G.'s estimate Mid-annual, 1946	61,230
Population Density per acre	0.84
Number of Inhabited Houses	16,619
Sum represented by a 1d. rate, 1945—1946	£707 18s. 1d.
Rateable Value 31.12.46	£191,111
Number of Parishes	25

2 VITAL STATISTICS.

Live Births.

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Legitimate	577	527	1104
Illegitimate	48	36	84
Total	625	563	1188

Birthrate 19.3 England and Wales 19.1.

Still Births.

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Legitimate	13	16	29
Illegitimate	3	2	5
Total	16	18	34

Still birth rate per 1000 Total Births 27.0
Still birth rate per 1000 Population 0.55. E. and W. 0.53.

Total Births (Live and Still).

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Legitimate	590	543	1133
Illegitimate	51	38	89
Total	641	581	1222

Deaths.

	<i>M.</i>	<i>F.</i>	<i>Total</i>
	407	353	760

Death rate per 1000 population 12.4. E. and W. 11.5.

Puerperal and post abortion sepsis	0
Other maternal causes	2
Total	2

Maternal Mortality Rate (per 1000 total births) 1.63, E. & W. 1.43.

Infantile Mortality.

	<i>M.</i>	<i>F.</i>	<i>Tot.</i>
Legitimate	38	17	55
Illegitimate	6	—	6
Total	44	17	61

Infantile Mortality Rate (per 1000 live births) 51.3 , E. & W. 43 .	
Male Legitimate I.M.R. per 1000 male legitimate births	22.5
Female Legitimate I.M.R. per 1000 female legitimate births	30.3
Male Illegitimate I.M.R. per 1000 male illegitimate births	62.5
Female Illegitimate I.M.R. per 1000 female illegitimate births	55.5
Total Legitimate I.M.R. per 1000 legitimate births	49.8
Total Illegitimate I.M.R. per 1000 illegitimate births	71.4

	<i>M.</i>	<i>F.</i>	<i>Tot.</i>
Deaths from Diarrhoea under 2 years of age	2	1	3
Diarrhoea rate per 1000 live births 2.52 , E. & W. 4.4 .			

	<i>M.</i>	<i>F.</i>	<i>Tot.</i>
Premature Births (deaths)	11	3	14
Congenital causes of deaths	16	7	23
Puerperal pyrexia notifications	2		
Rate per 1000 total births 1.63			E. & W. 8.5 .

WREXHAM RURAL DISTRICT COUNCIL. 1946.

TABLE I.

<i>Parish</i>	<i>Acreage</i>	<i>Number of Houses 1946*</i>	<i>Population (Estim.)</i>	<i>Density of Population per acre</i>	<i>Rateable Value 31.12.46</i>
Abenbury	1717	31	153	0. 09	£2802
Allington	3578	408	1396	0. 39	£5357
Bersham	1784	1207	4266	2. 40	£10,622
Bieston	1683	52	193	0. 12	£1345
Broughton	1089	1778	6697	6. 15	£15,217
Brymbo	2543	1113	4072	1. 60	£11,151
Burton	2869	208	761	0. 26	£4112
Cefn	1876	1768	6294	3. 35	£19,211
Erbistock	2919	125	448	0. 15	£1596
Erddig	287	9	38	0. 13	£347
Esclusham A.	3953	124	483	0. 12	£6987
Esclusham B.	1640	697	2597	1. 58	£10,033
Gresford	1099	447	1509	1. 37	£7849
Gwersyllt	2103	1583	5989	2. 85	£15,156
Holt	2912	278	1065	0. 37	£2414
Isycoed	3532	82	410	0. 11	£3013
Llangollen R.	9953	699	2543	0. 25	£8177
Llantysilio	5163	196	596	0. 11	£1922
Llay	2251	843	3382	1. 45	£11,244
Marchwiel	3389	197	584	0. 17	£4012
Minera	1393	326	1197	0. 86	£3260
Penycae	4694	553	2153	0. 45	£4321
Rhos	1441	2993	10,848	7. 53	£27,181
Ruabon	5906	825	3243	0. 55	£11,829
Sesswick	2596	77	313	0. 12	£1955
Total	72,370	16,619	61,230	0. 84	£191,111

* Includes Temporary Houses.

Product of 1d. Rate, 1945—46 = £707 18s. 1d.

TABLE I.A.
HOUSING AND POPULATION.

<i>Parish</i>	<i>Houses %</i>	<i>Population %</i>	<i>Density Houses per Acre</i>	<i>Density Persons per House</i>
Abenbury	0.18	0.25	0.01	4.9
Allington	2.45	2.27	0.11	3.4
Bersham	7.26	6.96	0.68	3.5
Bieston	0.31	0.31	0.03	3.7
Broughton	16.11	10.93	1.63	3.8
Brymbo	6.69	6.65	0.43	3.6
Burton	1.25	1.24	0.07	3.6
Cefn	16.38	10.28	0.94	3.5
Erbistock	0.75	0.73	0.04	3.6
Erddig	0.05	0.06	0.03	4.2
Esclusham Above	0.74	0.79	0.03	3.9
Esclusham Below	4.19	4.24	0.42	3.7
Gresford	2.69	2.46	0.41	3.3
Gwersyllt	9.52	9.78	0.75	3.8
Holt	1.67	1.74	0.09	3.8
Isycoed	0.49	0.66	0.02	5.0
Llangollen Rural	4.20	4.15	0.07	3.6
Llantysilio	1.12	0.97	0.03	3.0
Llay	5.70	5.52	0.37	4.0
Marchwiel	1.18	0.95	0.06	3.0
Minera	1.96	1.95	0.23	3.6
Penycae	3.32	3.51	0.11	3.9
Rhos	18.01	17.75	2.08	3.6
Ruabon	4.96	5.29	0.14	3.9
Sesswick	0.46	0.50	0.03	4.0
Total R.D.C.	—	—	0.23	3.7

TABLE II.
ANALYSIS OF VITAL STATISTICS.

Parish	Es- tim- ated Pop. mid 1946	Births			Birth Rate per 1000 Pop.	Dths	Death Rate per 1000 Pop.	Dths un- der one year	Infan- tile Rate per 1000 births	Dths from Tu- ber- cul- osis	Dths from Can- cer	Dths from Pneu- monia	Dths from Bron- chitis	Deaths from Infectious D.				
		M.	F.	Tot										Diph- theria	Scarlet Fever	Erys- ipelas	Enteric Fever	Cer-S. Fever
Abenbury	153	1	—	1	6.5	2	13.1	—	—	—	—	—	—	—	—	—	—	—
Allington	1396	9	13	22	15.9	19	13.6	—	90.9	2	—	—	—	—	—	—	—	—
Bersham	4266	51	31	82	14.5	51	11.9	—	—	—	10	2	7	—	—	—	—	—
Bieston	193	2	—	2	10.3	2	10.3	—	—	—	—	—	1	—	—	—	—	—
Broughton	6697	74	61	135	21.0	76	11.3	6	44.4	—	8	2	2	—	—	—	—	—
Brymbo	4072	42	43	85	20.9	51	12.5	4	47.0	1	10	3	4	—	—	—	—	—
Burton	761	5	4	9	11.8	7	9.2	1	111.1	—	2	—	—	—	—	—	—	—
Cefn	6294	58	59	117	18.1	72	11.4	7	59.8	4	12	3	9	—	—	—	—	—
Erbistock	448	2	3	5	11.1	7	15.6	1	200	—	2	—	—	—	—	—	—	—
Erddig	38	—	—	—	—	3	79.0	—	—	—	—	—	—	—	—	—	—	—
Esclusham A.	483	2	4	6	12.4	4	8.3	—	—	—	1	—	2	—	—	—	—	—
Esclusham B.	2597	27	19	46	17.7	32	12.3	3	65.2	2	7	—	1	—	—	—	—	—
Gresford	1509	11	18	29	19.2	18	11.9	2	111.1	—	3	2	1	—	—	—	—	—
Gwersyllt	5989	75	80	155	25.8	81	13.5	7	45.1	2	12	3	8	—	—	—	—	—
Holt	1065	7	2	9	8.4	12	11.2	1	111.1	—	5	—	—	—	—	—	—	—
Isycoed	410	1	2	3	7.3	7	17.0	—	—	—	3	—	1	—	—	—	—	—
Llangollen R.	2543	15	29	44	17.3	34	13.3	—	—	5	6	—	1	—	—	—	—	—
Llantysilio	596	—	4	4	6.9	13	21.8	1	250	1	2	1	1	—	—	—	—	—
Llay	3382	55	43	98	29.0	26	7.7	3	30.6	2	3	2	6	—	—	—	—	—
Marchwiel	584	5	4	9	15.4	9	15.4	—	—	—	—	1	—	—	—	—	—	—
Minera	1197	18	16	34	28.4	8	6.7	1	29.4	1	—	—	1	—	—	—	—	—
Penycae	2153	21	14	35	16.2	31	14.4	2	57.1	2	4	3	2	—	—	—	—	—
Rhos	10,848	114	83	197	18.3	145	13.4	16	81.2	9	18	8	10	—	—	—	—	—
Ruabon	3243	29	30	59	18.2	48	14.8	4	133.3	1	12	4	1	—	—	—	—	—
Sesswick	313	1	1	2	6.4	4	12.7	—	—	—	2	—	—	—	—	—	—	—
Total	61,230	625	563	1188	19.3	760*	12.4	61	51.3	32†	127	35§	60‡	—	—	—	—	2†

*Includes Neonatal deaths.

†Includes 2 Infantile deaths.

‡Includes 12 Infantile deaths. §Includes 3 Infantile deaths.

†Inward transferable deaths (nil from Wrexham Isolation Hospital).

TABLE III. BIRTHS.

<i>Parish</i>	<i>Males</i>		<i>Females</i>		<i>Total</i>
	<i>Leg.</i>	<i>Illeg.</i>	<i>Leg.</i>	<i>Illeg.</i>	
Abenbury	1	—	—	—	1
Allington	8	1	11	2	22
Bersham	43	8	31	—	82
Bieston	2	—	—	—	2
Broughton	70	4	59	2	135
Brymbo	37	5	41	2	85
Burton	5	—	4	—	9
Cefn	52	6	53	6	117
Erbistock	2	—	3	—	5
Erddig	—	—	—	—	—
Esclusham Above	2	—	3	1	6
Esclusham Below	25	2	16	3	46
Gresford	11	—	16	2	29
Gwersyllt	71	4	75	5	155
Holt	6	1	2	—	9
Isycoed	1	—	2	—	3
Llangollen Rural	13	2	27	2	44
Llantysilio	—	—	4	4	4
Llay	50	5	40	3	98
Marchwiell	5	—	4	—	9
Minera	16	2	16	—	34
Penycae	19	2	12	2	35
Rhos	111	3	80	3	197
Ruabon	26	3	27	3	59
Sesswick	1	—	1	—	2
	577	48	527	36	1188

POPULATION OF THE RURAL DISTRICT.

The basis of all statistics is the population, and for this purpose an estimate is given to us by the Registrar-General each year.

The Mid-Annual Population for 1946 is 61,230, which is an increase of 1500 on the figure for 1945.

BIRTHS.

The number of live births registered during the year was 1188 as compared with 1127 for 1945. Of this number, 1104 were legitimate and 84 illegitimate. The percentage of illegitimate births as compared with the total births is 7 per cent., as compared with 8.7 per cent. for 1945. Of the 1188 births, 255 occurred at Gladwyn Maternity Home and 179 at Ruabon Maternity Hospital. These latter two figures refer to those births of Rural District mothers, and do not represent the total number of births at the two hospitals.

It may be of interest to note that in the two maternity hospitals 699 births occurred and of these 265 represent outward transferable births, that is in respect of mothers who are resident outside of our area.

One of the most surprising features is the number of births that have taken place in the Minera Parish. It is known that a small nursing home is in existence in this parish, and it may be that certain of the births occurred there.

BIRTH RATE.

The birth rate based on the number of live births in our area amounts to 19.3 per 1000 population as compared with 18.87 in 1945 and with 19.4 in 1944 and 20.1 in 1943.

The corresponding figure for England and Wales is 19.1. We are thus slightly above the average for the whole country, and the Birth Rate show a slight increase on the previous year.

On examining Table 2 certain interesting features will be noticed in reference to the Birth Rate for the various parishes.

The most outstanding features are firstly, the very low Birth Rate in the strictly agricultural parishes of Abenbury, Erddig, Holt, Isycoed, Llantysilio and Sesswick.

On the other hand the highest Birth Rate took place in Llay, and is closely followed by Minera.

High Birth Rates are also seen in Gwersyllt, Broughton and Brymbo for which parishes the rates are well over the 20.0 mark.

The remaining parishes, unmentioned (including Rhos), have all a Birth Rate between 10 and 20.

STILL BIRTHS.

During the year, 34 Still Births occurred, of which 29 were legitimate and 5 illegitimate. In 1945 there were 45 Still Births.

STILL BIRTH RATE.

The Still Birth Rate per 1000 population is 0.55 as compared with 0.75 for 1945 and 0.53 for England and Wales. The Still Birth Rate per 1000 total births is 27.0.

DEATHS.

During the year 760 deaths occurred as compared with 742 in 1945 and 668 in 1944. Thus there is a steady increase in the number of deaths during the last three years. This possibly may be explained by the increased average age of the population owing to the fall in the Birth Rate during the last few years and especially during hostilities.

Of the total deaths, 407 were males and 353 were females. It is of interest to note that the male deaths as compared with 1945 have increased by 60 whereas the female deaths have decreased by 42.

Table VI indicates the number of persons notified who have died from the 36 recognised causes, classified by the Registrar-General.

It will be noticed that no deaths occurred from Typhoid, Scarlet Fever, Diphtheria, Measles, Poliomyelitis, or Encephalitis.

Two deaths occurred from Cerebro-Spinal Fever, but none of these was a Fever Hospital patient.

Two girls died from Whooping Cough.

32 persons died from Tuberculosis, namely 24 Respiratory and 8 Non-Pulmonary.

127 persons died from cancer, of which 63 were males and 64 were females. There is an increase over the figure for 1945 of 15.

Cerebral Haemorrhage accounted for 93 deaths as compared with 129 in 1945. The fall is chiefly due to a reduction of 33 in the number of women who have died from this cause.

Heart diseases accounted for 183 deaths as compared with 177 in 1945, a reduction of 19 in the women being more than offset by an increase of 29 in the males.

Pneumonia was responsible for 35 deaths as compared with 39 in 1935.

DEATH RATE

The total death rate for the year was 12.4 as compared with 12.42 for 1945 and 11.1 in 1944. There is thus very little difference in the Death Rate.

The corresponding rate for England and Wales is 11.5.

In looking at the vital statistics, one is struck by the phenomenally high Death Rate of 79.0 in the parish of Erddig, where 3 deaths took place. This is a small parish consisting of some 38 persons and very few births or deaths mean a corresponding high Birth or Death Rate.

Another parish having a high Death Rate is Llantysilio, namely 21.8.

On the other hand low birth rates below 10.0 are seen in parishes of Burton, Esclusham Above, Llantysilio and Minera. It is of interest to note that Minera has an extremely low Death Rate which is an indication that it is a healthy parish, as can be expected from its position, high up on the mountain side.

High Death Rates are to be seen in Isycoed and Marchwiel and to a slight extent in Erbistock. The whole of the remaining parishes, not mentioned, have Death Rates between 10.0 and 14.0.

DEATHS FROM MALIGNANT DISEASES

As already been stated, there were 127 deaths from cancer and other malignant diseases. 63 were males and 64 were females.

In 1945 there were 102 deaths, so that there was an increase of 25 in 1946. The ratio of the deaths from cancer to the total number of deaths is 1 : 1.69 as compared with 1 : 7.3 in 1945.

The Malignant Diseases death rate per 1000 population is 2.08 as compared with 1.7 in 1945 and 1.6 in 1944.

Of the total cancer deaths, the largest number, namely 18 occurred in Rhos, 12 each occurred in Cefn, Gwersyllt and Ruabon, and 10 in Bersham and Brymbo.

In only four parishes were there no cancer deaths, viz., Abenbury, Erddig, Marchwiel and Minera.

Deaths from Malignant Diseases according to sites

	<i>M.</i>	<i>F.</i>	<i>Tot</i>
Buccal cavity and oesophagus (M) ; uterus (F)	9	4	13
Stomach and duodenum	20	19	39
Breast	—	9	9
All other sites	34	32	66
	63	64	127

INFANTILE MORTALITY

During the year 61 deaths of children under one year of age took place, as compared with 71 in 1945. Of the 61 cases 55 were legitimate and 6 illegitimate and 44 were males and 17 females.

It is of interest to note that all the illegitimate infantile deaths were males.

Of the total deaths more than a quarter, namely 16 occurred in the parish of Rhos. 7 each in Cefn and Gwersyllt and 6 in Broughton.

Here again the strictly agricultural parishes show a total absence of deaths under 1 year of age.

No doubt this can be partly explained by the fewness of births that have occurred in these parishes.

INFANTILE MORTALITY RATE

The Infantile Mortality Rate per 1000 live births was 51.3 as compared with 63 in 1945 and 48.2 in 1944. The rate for England and Wales is 43.0.

There has thus been a reduction of 11.7 in the rate during the last year whereas the reduction in England and Wales was only 3.0.

Both the Illegitimate rates for the two sexes were high, and explains why the total rate is not very much lower than was actually the case.

The male legitimate infantile mortality rate show a phenomenally low figure of 22.0 and the female rate 30.3.

In reference to the parishes, the highest rate is in Erbistock, namely 200, where one death took place. In Ruabon the rate is 133.3 and in three parishes namely Burton, Gresford and Holt, the rate in each was 111.1. With the exception that the rate for Allington is 90.9; Rhos 81.2; Esclusham Below 65.2 and Cefn 59.8, the rate in the other parishes, where deaths have occurred were similar to the average for the whole area or lower.

TABLE IV
BIRTHS AT GLADWYN MATERNITY HOME, 1946.

<i>Parishes</i>	<i>Total Births</i>	<i>Males</i>		<i>Females</i>		<i>Total</i>		<i>Tot.</i>
		<i>Legit.</i>	<i>Illegit.</i>	<i>Legit.</i>	<i>Illegit.</i>	<i>Legit.</i>	<i>Illegit.</i>	
Abenbury	1	1	—	—	—	1	—	1
Allington	22	4	—	5	—	9	—	9
Bersham	82	19	—	7	—	26	—	26
Bieston	2	1	—	—	—	1	—	1
Broughton	135	12	—	8	—	20	—	20
Brymbo	85	9	—	8	2	17	2	19
Burton	9	1	1	2	—	3	1	4
Cefn	117	8	—	15	—	23	—	23
Erbistock	5	1	—	—	—	1	—	1
Esc. Below	46	5	—	2	—	7	—	7
Gresford	29	4	—	6	1	10	1	11
Gwersyllt	155	22	—	23	—	45	—	45
Holt	9	1	—	1	—	2	—	2
Llan. Rural	44	3	1	4	1	7	2	9
Llay	98	23	1	12	—	35	1	36
Marchwiel	9	1	—	3	—	4	—	4
Minera	34	5	—	4	—	9	—	9
Penycae	35	2	—	2	—	4	—	4
Rhos	197	6	—	9	—	15	—	15
Ruabon	59	4	—	4	—	8	—	8
Sesswick	2	1	—	—	—	1	—	1
Total whole R.D.	1188	133	3	115	4	248	7	255
Outward transferable births		55	27	81	29	136	56	192
Grand Total		188	30	196	33	384	63	447

TABLE V

BIRTHS AT RUABON MATERNITY HOSPITAL, 1946.

<i>Parishes</i>	<i>Total Births</i>	<i>Males</i>		<i>Females</i>		<i>Total</i>		
		<i>Legit.</i>	<i>Illegit.</i>	<i>Legit.</i>	<i>Illegit.</i>	<i>Legit.</i>	<i>Illegit.</i>	<i>Tot.</i>
Allington	22	—	—	1	—	1	—	1
Bersham	82	7	1	8	—	15	1	16
Broughton	135	13	—	11	—	24	—	24
Brymbo	85	5	—	6	1	11	1	12
Burton	9	1	—	—	—	1	—	1
Cefn	117	10	1	10	2	20	3	23
Esc. Above	6	—	—	1	—	1	—	1
Esc. Below	46	3	—	2	—	5	—	5
Gresford	29	—	—	1	—	1	—	1
Gwersyllt	155	10	1	13	—	23	1	24
Isycoed	3	—	—	1	—	1	—	1
Llan. Rural	44	1	—	6	—	7	—	7
Llay	98	5	1	5	1	10	2	12
Minera	34	5	—	—	—	5	—	5
Penycae	35	6	—	4	—	10	—	10
Rhos	197	16	1	10	—	26	1	27
Ruabon	59	3	1	5	—	8	1	9
Total whole R.D.C.	1188	85	6	84	4	169	10	179
Outward transferable Births		36	6	27	4	63	10	73
Grand Total		121	12	111	8	232	20	252

TABLE VI
CAUSES OF DEATH

<i>Causes of Death</i>			<i>All Ages</i>		<i>Total</i>
			<i>M.</i>	<i>F.</i>	
1.	Typhoid and Paratyphoid Fevers		—	—	—
2.	Cerebro-spinal Fever		1	1	2
3.	Scarlet Fever		—	—	—
4.	Whooping Cough		—	2	2
5.	Diphtheria		—	—	—
6.	Tuberculosis of respiratory system		11	13	24
7.	Other forms of Tuberculosis		5	3	8
8.	Syphilis Diseases		1	—	1
9.	Influenza		1	5	6
10.	Measles		—	—	—
11.	Acute Polio-myelitis and Acute Polio-encephalitis		—	—	—
12.	Acute Infectious Encephalitis		—	—	—
13.	Cancer of Buc. Cav. and Oesophagus, M. ; Uterus				
	F.		9	4	13
14.	Cancer of stomach and duodenum		20	19	39
15.	Cancer of Breast		—	9	9
16.	Cancer of all other sites		34	32	66
17.	Diabetes		1	—	1
18.	Intracranial vascular lesions		42	51	93
19.	Heart Disease		102	85	187
20.	Other diseases of circulatory system		7	9	16
21.	Bronchitis		36	24	60
22.	Pneumonia		21	14	35
23.	Other respiratory diseases		6	3	9
24.	Ulcer of stomach and duodenum		5	3	8
25.	Diarrhoea under 2 years		2	1	3
26.	Appendicitis		—	—	—
27.	Other digestive diseases		9	7	16
28.	Nephritis		11	9	20
29.	Puerperal and post-abortion sepsis		—	—	—
30.	Other maternal causes		—	2	2
31.	Premature Birth		11	3	14
32.	Congenital malformation, birthing, infant. dis.		16	7	23
33.	Suicide		3	2	5
34.	Road Traffic accidents		4	—	4
35.	Other violent causes		8	9	17
36.	All other causes		41	36	77
Totals			407	353	760

PREVALENCE OF, AND CONTROL OVER NOTIFIABLE INFECTIOUS DISEASES

During the year 1946, 661 cases of notifiable infectious diseases were notified to the Public Health Department as compared with 1333 in 1945.

The decrease is explained by the decreases in the notifications of Diphtheria, Scarlet Fever, and especially Measles, where the reduction amounted to 648. One cause for satisfaction will be felt in the enormous decrease in the number of cases notified as Diphtheria. In 1946 only 4 cases occurred and no deaths took place, whereas in 1945, 40 cases were notified with one death.

Once again there were no notifications of Smallpox, Enteric Fever, or Encephalitis.

The Scarlet Fever notifications diminished from 145 in 1945 to 65 in 1946.

I have already indicated that measles notifications have diminished from 953 to 305. On the other hand there has been an increase in the whooping cough notifications from 35 in 1945 to 97 in 1946.

The pneumonia notifications amounted to 67 as compared with 61 in 1945.

There were 107 notifications of Tuberculosis as compared with 82 in 1945. Of these 91 were Pulmonary and 16 Non-Pulmonary. Of the total number of notifications namely 661, 275 occurred in the parish of Cefn and this figure includes 180 cases of Measles and 38 of Whooping Cough. Gwersyllt was responsible for 69, Broughton for 59 and Rhos for 56. In 1945, 353 notifications were from Rhos, so that there has been a very substantial drop in the number of notifications received.

In this Parish there were only 6 cases of measles as compared with 282 in 1945.

The 4 cases of Diphtheria occurred in Cefn, Gresford and Gwersyllt.

In reference to Scarlet Fever, the greatest incidence occurred in Cefn, and Gwersyllt, with very few in the other parishes, with none from the seven agricultural parishes.

Of the 97 Whooping Cough cases, 38 occurred in Cefn and 19 in Rhos, and 9 in Broughton. Of the 304 cases of Measles, 180 occurred in Cefn, 27 in Gwersyllt, 20 in Llangollen Rural, 19 in Broughton, and 18 in Esclusham Below.

There were 14 cases of Erysipelas, of which 8 came from Broughton. Only 2 cases of Puerperal Pyrexia occurred during the year. One from Cefn and one from Llangollen Rural. 67

cases of Pneumonia were notified. 19 from Cefn, 17 from Gwersyllt and 8 from Broughton.

In past Annual Reports, I have referred to the non-notification of cases of Pneumonia. It would appear that there is a definite improvement this year, but in the parishes of Penycae, Rhos and Ruabon there is definite evidence of some required improvement in notifying. In Penycae 3 cases of pneumonia were notified, but there were also 3 deaths. In the parishes of Rhos only 4 cases were notified but there were 8 deaths from this disease. In Ruabon 4 cases were notified and there were 4 deaths. I have already indicated in past reports that, owing to the advance in Medical Science, such as the treatment of pneumonia by sulphanilamides, there should be cases which do not die, and when one sees in a parish such as Rhos that the number of deaths are twice the number of notifications received, there is strong evidence that not all cases are notified, and a similar line of reasoning would hold for Penycae and Ruabon, where all the cases notified had died. In these parishes one is almost certain, that cases suffered from pneumonia and recovered.

Of the 661 cases notified, 178 occurred in children between the ages of 3 and 4 years and this figure includes 116 cases of Measles, 40 of Whooping Cough and 15 Scarlet Fever.

In the age group 5—9 years, there were 156 notifications, which include 90 Measles, 27 Scarlet Fever and 21 Whooping Cough. In the age group 1—2 years there were 108 cases of which 72 were Measles and 26 were Whooping Cough. Of the 67 cases of Pneumonia 12 were persons between 15 and 25 years of age, and 33 were older than 25 years. Of the 91 cases of Pulmonary Tuberculosis, 74 occurred over the age of 15 years.

SCARLET FEVER

During the year there were 65 cases of Scarlet Fever as compared with 145 in 1945. Of these, 42 occurred between the age of 5 and 14 years and 15 between 3 and 4 years. The greatest number namely 14 occurred in Cefn and 6 in Gwersyllt. Of these cases 60 were admitted to the Isolation Hospital and there were no deaths during the year. The case rate per 1000 population was 1.44 as compared with 1.38 for England and Wales.

DIPHTHERIA

The number of cases notified reached the low record of 4 as compared with 40 in 1945, 71 in 1944 and 78 in 1943. Of these 4, 2 occurred over the age of 15 years and 2 occurred in Gwersyllt and 1 each in Cefn and Gresford. It is satisfactory to note that thickly populated parished such as Broughton, Bersham, Brymbo, Llay. Penycae, Rhos, and Ruabon did not have a single case during

the year. All the cases notified had not been immunised. All were admitted to the Fever Hospital and there were no deaths. The case rate per 1000 population is 0.06 as compared with 0.65 in 1945 and 0.28 for England and Wales.

ENTERIC FEVER

There were no notifications of Enteric Fever.

ENCEPHALITIS LETHARGICA

There were no notifications of Encephalitis Lethargica.

ACUTE POLIOMYELITIS

There were no notifications of Acute Poliomyelitis.

ERYSIPELAS

14 cases of Erysipelas were notified during the year as compared with 13 in 1945. Of the 14, 8 came from Broughton. Only 4 of the cases were admitted to the Fever Hospital and there were no deaths during the year.

CEREBRO-SPINAL MENINGITIS

In view of the large epidemic of Spotted Fever that has occurred during the last eight years it is satisfactory to note that during the year there was only one notification and this was admitted to the Fever Hospital. There were no deaths in the Fever Hospital, but 2 other cases occurred namely inward transferable deaths.

PUERPERAL PYREXIA

Two cases were notified during the year as compared with 1 in 1945. The two came from Cefn and Llangollen Rural.

PNEUMONIA

I have already indicated that there were 67 cases notified during the year. Of these 19 came from Cefn, and 17 from Gwersyllt. There were 35 deaths of which 8 took place in Rhos and 4 in Ruabon.

WHOOPING COUGH

The Whooping Notifications have risen from 35 in number in 1945 to 97 in 1946. Of these 66 occurred between the ages of 1 and 4 years and 21 between 5 and 10 years. Of the cases, 19 occurred in Rhos, 9 in Broughton and 7 in Penycae. There were two deaths during the year.

MEASLES

304 notifications were received as compared with 953 in 1945 ; 18 in 1944 ; 251 in 1943, and 450 in 1945. There were no deaths. Of these cases 180 came from Cefn ; 27 from Gwersyllt ; 19 from Broughton ; 20 from Llangollen Rural ; 18 from Esclusham Below and 13 from Rhos. Of the cases, 116 occurred between the ages of 3 and 4 years and 197 under 5 years of age. 90 occurred between 5 and 10 years of age and 2 occurred in adults over 25 years of age.

SMALLPOX

There were no notifications of smallpox.

OPHTHALMIA NEONATORUM

These cases are primarily notified to the County Council, it being the Maternity and Child Welfare Authority for the Rural District, and any notifications received by the County Health Department are notified to us, but we have had no intimation of any cases notified during the year.

TUBERCULOSIS

107 cases were notified during the year as compared with 82 in 1945 and 89 in 1944. Of these 91 were Pulmonary and 16 were Non-Pulmonary. Of the Pulmonary Tuberculosis, 74 occurred over the age of 15 and of the Non-Pulmonary, 4 occurred between 5 and 10 years of age and 2 were under the age of 1 year. Of the Pulmonary Tuberculosis, 17 were from Cefn, 15 from Rhos, 9 each from Broughton and Holt and 8 from Ruabon.

Of the 16 Non-Pulmonary 5 were from Rhos, 4 from Cefn and 3 from Holt. With reference to Holt, it is of interest to note that the only cases of infectious disease notified, that is 12, were Tuberculosis.

TABLE VII.
INCIDENCE OF ALL NOTIFIABLE DISEASES ACCORDING TO PARISHES.

Parish	Diphtheria	Scarlet Fever	Cerebro Spinal Men.	Whooping Cough	Measles	Acute Polio-myelitis	Erysipelas	Puerperal Pyrexia	Pneumonia	Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis	Tot.	Admitted to Isol. Hos.				Tot
Abenbury	—	1	—	—	—	—	—	—	3	—	—	4	—	—	—	—	1
Allington	—	2	—	3	—	—	—	—	—	—	—	5	—	—	—	—	2
Bersham	—	2	—	—	7	—	—	—	3	4	—	16	—	—	—	—	—
Bieston	—	—	—	—	1	—	—	—	—	1	—	2	—	—	—	—	—
Broughton	—	5	—	9	19	—	8	—	8	9	—	58	—	—	—	3	8
Brymbo	—	4	1	1	4	—	1	—	—	5	—	16	—	—	1	—	5
Burton	—	—	—	—	1	—	—	—	—	2	1	4	—	—	—	—	—
Cefn	1	14	—	38	180	—	1	1	19	17	4	275	1	14	—	—	15
Erbistock	—	1	—	1	2	—	—	—	—	—	—	2	—	1	—	—	1
Erddig	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Esc. Above	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Esc. Below	—	5	—	—	18	—	—	—	2	3	1	27	—	4	—	—	4
Gresford	1	1	—	—	1	—	1	—	17	3	1	10	1	1	—	1	3
Gwersyllt	2	6	—	16	27	—	—	—	—	9	3	12	2	6	—	—	8
Holt	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Isycoed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Llan. Rural	—	3	—	3	20	—	—	1	4	2	1	34	—	3	—	—	3
Llantysilio	—	—	—	—	5	—	—	—	—	1	—	1	—	—	—	—	—
Llay	—	4	—	—	—	—	—	—	—	6	—	15	—	4	—	—	4
Marchwiel	—	5	—	—	—	—	—	—	—	1	—	6	—	5	—	—	5
Minera	—	1	—	—	—	—	—	—	—	2	—	3	—	1	—	—	1
Penrycae	—	2	—	7	—	—	—	—	—	2	—	14	—	2	—	—	2
Rhos	—	5	—	19	6	—	2	—	4	15	5	56	—	3	—	—	3
Ruabon	—	3	—	—	13	—	1	—	4	8	—	29	—	3	—	—	3
Sesswick	—	1	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1
Total	4	65	1	97	304	—	14	2	67	91	16	661	4	60	1	4	69

TABLE VIII
NOTIFIABLE DISEASES

<i>Diseases</i>	<i>Total Cases Notified</i>	<i>Cases ad- mitted to Hospital</i>	<i>Total Deaths</i>
Small Pox	—	—	—
Diphtheria	4	4	—
Scarlet Fever	65	60	—
Enteric Fevers	—	—	—
Cerebro-spinal Meningitis	1	1	2
Measles	304	—	—
Whooping Cough	97	—	2
Pneumonia	67	—	35
Encephalitis Lethargica	—	—	—
Polio-encephalitis	—	—	—
Erysipelas	14	4	—
Polio-myelitis (Acute)	—	—	—
Tuberculosis	107	—	32
Puerperal Pyrexia	2	—	—
Total	661	69	71

TABLE IX
**INCIDENCE OF INFECTIOUS DISEASES ACCORDING TO
AGE**

	<i>Under 1 year</i>	<i>1—2</i>	<i>3—4</i>	<i>5—9</i>	<i>10—14</i>	<i>15—24</i>	<i>25—</i>	<i>Total</i>
Diphtheria	—	—	—	1	1	2	—	4
Scarlet Fever	—	3	15	27	15	4	1	65
C. S. Fever	—	—	1	—	—	—	—	1
Measles	9	72	116	90	12	3	2	304
Whooping Cough	9	26	40	21	1	—	—	97
Ac. Polio-myelitis	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	4	10	14
Pneumonia	9	4	3	4	2	12	33	67
Puerperal Pyrexia	—	—	—	—	—	—	2	2
Pulm. Tuberculosis	—	1	2	9	5	34	40	91
Non.-pulm. Tuberculosis	2	2	1	4	2	3	2	16
Total	29	108	178	156	38	62	90	661

TABLE X

INFECTIOUS DISEASES NOTIFICATION DEATH RATES

	Notific- ations	Rates per 1000 Population		Deaths R.D.C.	Rates per 1000 Population	
		R.D.C.	E. A.W.		R.D.C.	E. A.W.
Small Pox	—	—	0.00	—	—	0.00
Typhoid	—	—	0.01	—	—	0.00
Paratyphoid	—	—	0.02	—	—	0.00
Scarlet Fever	65	1.04	1.38	—	—	0.00
Diphtheria	4	0.06	0.28	—	—	0.01
Whooping Cough	97	1.58	2.28	2	0.03	0.02
Measles	304	4.9	3.92	—	—	0.00
Erysipelas	14	0.22	0.22	—	—	—
C.S.F.	1	0.00	0.05	2	0.03	—
Pneumonia	67	1.09	0.89	35	0.57	—

TABLE XI

INFECTIOUS DISEASE IN COUNCIL HOUSES

	Cases Notified					Removed to Hospital				
	Diphtheria	Scarlet Fever	Erysipelas	Pneumonia	Tot	Diphtheria	Scarlet Fever	Erysipelas	Pneumonia	Tot
Bersham	—	1	—	—	1	—	1	—	—	1
Broughton	—	—	1	—	1	—	—	—	—	—
Brymbo	—	—	—	—	—	—	—	—	—	—
Cefn	—	4	—	5	9	—	4	—	—	4
Escl. Below	—	2	—	—	2	—	2	—	—	2
Gresford	—	—	—	—	—	—	—	—	—	—
Gwersyllt	—	—	—	7	7	—	—	—	—	—
Llay	—	1	—	—	1	—	1	—	—	1
Marchwiell	—	4	—	—	4	—	4	—	—	4
Penycæ	—	—	—	—	—	—	—	—	—	—
Rhos	—	—	—	2	2	—	—	—	—	—
Ruabon	—	—	—	1	1	—	—	—	—	—
Total	—	12	1	15	28	—	12	—	—	12

DIPHTHERIA PROPHYLAXIS

The arrangements for the immunisation of children are carried out by the County Health officials in the various Maternity and Child Welfare Clinics and also in the schools.

In addition to this, I personally immunised children who came to me for this purpose.

During the year 870 children, under the age of 5 years received their primary immunisation and 342 school children between the ages of 5 and 15 years, making a grand total of 1212 children immunised during the twelve months.

In addition to these, 1622 children were given a reinforcing dose in order to keep up their state of immunisation, which had been produced by primary injections five or more years previously.

The protection against Diphtheria by immunisation requires such reinforcing doses to be given every five years.

On the 31st December, 1946, the number of children, under the age of 5 years that had been immunised was 2939, out of a total estimated population for the same age group of 5070 children. This represents a percentage of 57.9.

In respect to children aged 5 to 15 years, 8138 children had been immunised out of a total school children population of 8840, that is, a percentage of 92.0.

Thus in all 11,077 children out of a child population of 13,910 have been immunised, making a percentage of 79.9.

TABLE XII

Tuberculosis notifications arranged according to age, also total deaths from Tuberculosis according to age

Age Group	New Cases				Total Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 yr.	—	—	1	1	—	—	1	1
1—4	1	2	1	2	—	—	—	—
5—9	4	5	2	2	1	—	1	1
10—14	1	4	1	1	—	—	—	—
15—19	6	11	—	2	1	1	—	1
20—24	5	12	—	1	—	4	—	—
25—34	10	7	1	1	2	2	1	1
35—44	6	3	—	—	3	5	1	—
45—54	5	3	—	—	2	1	—	—
55—64	5	1	—	—	1	—	—	—
65, etc.	—	—	—	—	1	—	—	—
Total	43	48	6	10	11	13	4	4

ISOLATION HOSPITAL

On the 1st January, 1946, only 9 patients remained in the hospital, and they were 6 Scarlet Fever cases and 3 Diphtheria cases, and all had been admitted from the Wrexham R.D.C. area. During the year 140 patients were admitted as compared with 285 in 1945 and 356 in 1944. This number of admissions must be a record for our hospital.

Of the admissions 86 were Scarlet Fever and 23 Diphtheria, but 18 others were also admitted as Diphtheria, but were found to be suffering from Croup or Tonsilitis. Two cases of Cerebro-Spinal Meningitis were admitted and two others for observation. Of the 140 cases, 85 came from the Wrexham R.D.C. area, which included 5 Diphtheria. This must be a low record of admissions of Diphtheria cases from our area and indicates the success of the immunisation campaign, which has been carried out by the Denbighshire County Council Health Staff on our behalf by arrangement.

During the last few years one of the most satisfactory features of the work of the Isolation Hospital has been the progressive drop in cases of Diphtheria and this drop is incident with the campaign of immunisation against Diphtheria which is thus showing its results. There still remains a certain amount of prejudice and opposition to immunisation, but all the cases of Diphtheria admitted to the Isolation Hospital from our area and also from the Wrexham Borough had not been immunised.

61 cases of Scarlet Fever were admitted, but this included a few observation cases and one case of Surgical Scarlet Fever. 33 cases were admitted from the Borough of Wrexham and this included 13 cases of Scarlet Fever and 4 cases of Tonsilitis. 11 cases were admitted from the Ruthin Rural District, which included 8 cases of Scarlet Fever, 2 cases came from Llangollen and 1 from Overton, and the rest, viz., 8 were admitted from outside Authorities such as Towyn, Ceiriog, Dolgelley, Llanrwst and even Barmouth.

The Llanrwst case was an interesting one, and was admitted on the advice of the County Medical Officer of Health. It was a case of a young child reported to be suffering from Acute Appendicitis and Measles, and requiring an immediate operation. The case, on admission was examined by myself, and also by the Surgical Specialist from the E.M.S. Hospital, who decided that there was no evidence of appendicitis, and that the case did not require an operation.

The patient made an uninterrupted recovery and was then discharged to Llanrwst.

145 cases were discharge during the year. This number included 90 Scarlet Fever cases, 24 Diphtheria, 17 Tonsilitis and 6

Erysipelas. Of these, 92 were discharged to the Wrexham Rural District; 31 to the Wrexham Borough; and 11 to the Ruthin Rural District.

At the end of the year there were only 4 cases left in the hospital, viz., 2 Scarlet Fever cases from the Wrexham Rural District and 2 cases of Diphtheria from the Borough of Wrexham.

It is satisfactory to note that no deaths occurred during the year.

Continuation has been made of the facilities offered by the Emergency Public Health Laboratory at Conway for the examination of swabs from Diphtheria patients and also in respect of other pathological material obtained from other infectious diseases. Use is also made, on the advice of the Welsh Board of Health of the laboratory facilities at the E.M.S. Hospital, where a fully qualified specialist is in command, and I can only pay tribute to the manner in which the pathologist at the E.M.S. Hospital has been only too willing to co-operate with us on any investigation found necessary.

We are continually being asked to admit cases from outside our official area, including cases from Merionethshire, where there is no Infectious Disease Hospital. It is perhaps unfortunate that owing to the shortage of staff we have been unable to admit only a very few of such cases, seeing that we have to make provision, primarily for patients from our own contributory areas. It is perhaps fortunate for us that admissions have been as low as they have been. Our nursing staff has been reduced to a very dangerous limit, in my opinion, and the condition would be a serious one were a sudden outbreak to occur, if we were not able to implement the numbers on our nursing staff. The number of nurses on our staff is so low that there are many occasions when only one nurse is on duty at one time, and even then she may have to go out with the ambulance to bring in a case from outside, necessitating the matron having to act in the wards.

Another unfortunate feature is the fact that only one nurse is available for duty at night, and I, personally, have always held the opinion that there should be at least two on duty at night in order to provide against emergency, which may arise.

The shortage of nurses is not confined to our hospital, but appears to be common throughout the whole country, even though the conditions of employment and their remuneration have been very much improved following the recommendation of the Rushcliffe Committee. It is quite evident that at present the improved conditions have not resulted in an influx of suitable young women into the nursing profession. I need hardly refer once again to the excellent work carried out by Matron, Assistant Matron, Sister, and other members of the Nursing Staff at the hospital

during the year. Their work has been most efficient and conscientious.

At the time of preparing this Report, the Matron has tendered her resignation on her forthcoming marriage, and I wish to pay tribute to the excellent work carried out by her during the twelve years she has held office under the Joint Fever Hospital Committee.

No doubt, during the next year or so, our Hospital will be absorbed into the Hospital Regional Scheme, consequent to the passing of the new Health Insurance Act, and at the present we are living in a state of uncertainty as to what will be the future. It must, however, be pointed out that there is a necessity for an Isolation Hospital in our area, seeing that the nearest, of any size, to us is at St. Asaph or Chester.

The enquiries from outside authorities make one consider whether our contributory area should not be widened to include parts of Merionethshire.

It seems, on the face of it, unfortunate that cases of acute infection such as Diphtheria from the Dôlgelley area should have to be sent, either to Aberystwyth or Caernarvon, both generally through very difficult country when such cases, had we the staff available, could be admitted to our hospital. Enquiries have also been received, on rare occasions, from parts of Flintshire—in the Hawarden Rural area, even though they have a small hospital of their own at Buckley.

Wherever possible, we are only too willing to assist these outside Authorities in their difficult task of obtaining hospital accommodation, provided there is no interference with the facilities offered to our own cases.

AMBULANCE SERVICE.

The motor ambulances of the Isolation Hospital travelled a distance of 4479 miles during the year, as compared with 6441 miles during 1945.

WORK DONE AT THE ISOLATION HOSPITAL LABORATORY DURING THE YEAR.

<i>Result</i>	<i>Submitted by Doctors</i>			<i>Hospital</i>	<i>Total Swabs Submitted</i>
	<i>Wrexham R.D.C.</i>	<i>Wrexham Borough</i>	<i>Overton</i>		
Negative	45	33	1	56	135
Positive	3	1	0	10	14
Totals	48	34	1	66	149

TABLE XIII.

ISOLATION HOSPITAL REPORT FOR YEAR ENDING 31st DECEMBER, 1946.
PARTICULARS OF ADMISSIONS, DISCHARGES, etc.

	Wrex- ham R.D.	Wrex- ham Bor.	Llan- gollen U.D.	Over- ton R.D.	Ceir- iog R.D.	Ru- thin R.D.	Dol- gelley R.D.	Pen- nal Par.	Towyn U.D.	Llan- rwst U.D.	Bar- mouth U.D.	Total
Remaining in Hospital, Dec. 31, 1945												
Scarlet Fever	6	—	—	—	—	—	—	—	—	—	—	6
Diphtheria	3	—	—	—	—	—	—	—	—	—	—	3
Total	9	—	—	—	—	—	—	—	—	—	—	9
Admitted during year January 1st to December 31st, 1946												
Scarlet Fever and Obs. Cases	61	13	2	1	1	8	—	—	—	—	—	86
Diphtheria	5	12	—	—	—	1	1	1	3	—	—	23
Croup	1	—	—	—	—	—	—	—	—	—	—	1
Tonsillitis	11	4	—	—	—	2	—	—	—	—	—	17
Erysipelas	4	2	—	—	—	—	—	—	—	—	—	6
Cerebro-Spinal Meningitis	—	2	—	—	—	—	—	—	—	—	—	2
Obs. C.-S.M.	2	—	—	—	—	—	—	—	—	—	—	2
Polio Myelitis	—	—	—	—	—	—	—	—	—	—	1	1
Measles	—	—	—	—	—	—	—	—	—	1	—	1
Rubella	1	—	—	—	—	—	—	—	—	—	—	1
Total	85	33	2	1	1	11	1	1	3	1	1	140

TABLE XIII (continued)

	Wrex- ham R.D.	Wrex- ham Bor.	Llan- gollen U.D.	Over- ton R.D.	Ceir- tog R.D.	Ru- thin R.D.	Dol- gelley R.D.	Pen- nal Par.	Towyn U.D.	Llan- rust U.D.	Bar- mouth U.D.	Total
Discharged from Hospital January 1st to Dec. 31st, 1946.												
Scarlet Fever and Obs. Cases	65	13	2	1	1	8	1	1	3	—	—	90
Diphtheria	8	10	—	—	—	1	—	—	—	—	—	24
Croup	1	—	—	—	—	—	—	—	—	—	—	1
Tonsillitis	11	4	—	—	—	2	—	—	—	—	—	17
Erysipelas	4	2	—	—	—	—	—	—	—	—	—	6
Cerebro-Spinal Meningitis	—	2	—	—	—	—	—	—	—	—	—	2
Obs. C. S. M.	2	—	—	—	—	—	—	—	—	—	—	2
Polio Myelitis	—	—	—	—	—	—	—	—	—	—	1	1
Measles	—	—	—	—	—	—	—	—	—	—	—	1
Rubella	1	—	—	—	—	—	—	—	—	—	—	1
Total	92	31	2	1	1	11	1	1	3	1	1	145
Remaining in Hospital on December 31st, 1946.												
Scarlet Fever	2	—	—	—	—	—	—	—	—	—	—	2
Diphtheria	—	2	—	—	—	—	—	—	—	—	—	2
Total	2	2	—	—	—	—	—	—	—	—	—	4
Deaths in Hospital during year ending December 31st, 1946												
Nil	—	—	—	—	—	—	—	—	—	—	—	Nil

HOSPITALS, INSTITUTIONS AND NURSING SERVICES AVAILABLE FOR THE DISTRICT.

HOSPITAL ACCOMMODATION.

(1) GENERAL.

(a) Wrexham and East Denbighshire War Memorial Hospital	136 beds
(b) Croesnewydd Hospital (under the control of the Denbighshire C.C.	171 beds
(c) E.M.S. Hospital, Croesnewydd	350 beds

(2) TUBERCULOSIS.

(a) Llangwyfan Sanatorium	250 beds
(b) Talgarth Sanatorium	286 beds
(c) Meadowslea Hospital	59 beds
(d) Emergency Sanatorium (Government Pavilions) attached to Llangwyfan Sanatorium	150 beds
(e) Highland Moors Convalescent Home, Llandrindod	60 beds
(f) Home for Girls; Penhesgwyn Open Air Home, Menai Bridge	16 beds

(3) INFECTIOUS DISEASES.

Wrexham Isolation Hospital—92 beds, 12 cots. This Hospital is owned by the Wrexham Rural District Council, and administered by a joint committee of representatives from the following authorities—Wrexham Rural District Council; Wrexham Borough Council; Llangollen Urban District Council; Overton Rural District Council; Hiraeathog Rural District Council and Ruthin Rural District Council, for all of which authorities beds are available.

(4) MATERNITY CASES.

(a) Ruabon Maternity Hospital	12 beds
(b) Gladwyn Maternity Hospital	28 beds

(5) SMALLPOX.

Rhydtalog Hospital, Flintshire	12 beds
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(6) ORTHOPAEDIC.

Robert Jones and Agnes Hunt Orthopaedic Hospital, Gobowen.

The diagnosis and after-care treatment of orthopaedic cases is carried out at the County Health Clinic, Grosvenor Road, Wrexham, supplemented by institutional treatment at the Hospital.

(7) ARTIFICIAL LIGHT CLINIC.

Established at the local Tuberculosis Dispensary.

(8) PRIVATE NURSING HOMES.

There are three private nursing homes in the area, two at least, of which take in maternity cases.

AMBULANCE FACILITIES.

(1) INFECTIOUS DISEASES.

Two motor ambulances, attached to the Wrexham Isolation Hospital are available for the transporting of cases suffering from infectious diseases.

(2) NON-INFECTIOUS DISEASES.

Motor Ambulances, attached to the Wrexham Branch of the St. John Ambulance Corps, are available from the transporting of casualties and non-infectious cases to and from hospitals in the district. The Llay, Rhos, and Cefn Branches of the Corps also have ambulances available for that purpose.

LABORATORY FACILITIES.

(1) ISOLATION HOSPITAL LABORATORY.

For Diphtheria Swabs.

(2) EMERGENCY PUBLIC HEALTH LABORATORY, CONWAY.

For typing of Diphtheria Bacilli; investigations in reference to infectious diseases; milk samples; water samples and food samples.

(3) E.M.S. PATHOLOGICAL LABORATORY, CROESNEWYDD HOSPITAL.

For pathological investigations.

(4) Samples of milk are also sent to the Pathological Department of samples are also sent to the University College of North Wales (School of Agriculture), Bangor.

(5) Milk samples for Resazurin and Methylene Blue Test are also sent to the Ministry of Agriculture and Fisheries Laboratory at Rhosymedre.

CLINICS.

(1) MATERNITY AND CHILD WELFARE CLINICS.

These are established in the following areas—Rhos, Llay, Southsea, Brymbo, Rhostyllen, Gwersyllt, Coedpoeth, Broughton and Cefn.

(2) SCHOOL CLINICS.

The nine child welfare clinics, in the above areas, are used as minor ailments clinics.

(3) TUBERCULOSIS CLINIC.

The consultation clinic under the control of the King Edward VII Welsh National Memorial Association is situated in Grosvenor Road, Wrexham. The clinic is open two days a week, though appointments are made at other times.

(4) VENEREAL DISEASES CLINIC.

This is situated in the Wrexham War Memorial Hospital, and is under the control of the Denbighshire County Council.

NURSING SERVICES.

(1) GENERAL.

Voluntary Nursing Associations are established in the following areas, with the object of providing one or more nurses for the home visiting of the sick, infectious diseases excluded :

Esclusham	1 nurse.	Gresford	1 nurse*
Brymbo	1 nurse.	Holt	1 nurse*
Broughton	2 nurses.	Llay	2 nurses.
Coedpoeth	1 nurse.	Rossett	1 nurse*
Gwersyllt	2 nurses.	Rhos	1 nurse.
Cefn	2 nurses.	Trevor	1 nurse.
Bwlchgwyn	1 nurse.	Ruabon	1 nurse.

* Gresford, Rossett, and Holt Nursing Association amalgamated in December, 1946, and the three areas are now served by two nurses.

(2) INFECTIOUS DISEASES.

There are no arrangements, either voluntary or official, for the nursing of home cases of infectious diseases, except as may be decided in emergencies by the District Council.

(3) MIDWIVES.

There are 27 midwives practising in the rural district, under the control of the Denbighshire County Council, as follows :

Brynteg	1	Cefn	2	Overton Bridge	1
Garth	1	Acrefair	1	Rhos	4
Ruabon	3	Holt	1	Brymbo	1
Rossett	1	Llay	2	Summerhill	1
Bwlchgwyn	1	Broughton	1	Rhostyllen	1
Coedpoeth	2	Gresford	1	Froncysyllte	1
Gwersyllt	1				

(4) HEALTH VISITORS.

There are six Health Visitors and School Nurses employed in the rural district on Maternity and Child Welfare and School Medical work. They are under the control of the Denbighshire County Council.

VACCINATION RETURNS.

The following figures relating to Smallpox Vaccination in the District were supplied to me by Dr. H. Arwel Thomas, the County Medical Officer of Health.

1946.

Successfully vaccinated	544
Insusceptible	1
Conscientious objections	746
Died Unvaccinated	50
Postponed by Medical Certificate	84
Removed	262
Unaccounted for	272

PUBLIC HEALTH OFFICERS OF THE WREXHAM RURAL DISTRICT COUNCIL.

There was no change in the number of Public Health Staff during the year. The Sanitary Inspectors and Clerks who had enlisted in His Majesty's Forces during the period of hostilities were demobilised and resumed their duties in the Public Health Department.

One of the temporary clerks ceased her employment, owing to the return of Mr. C. H. Watkin.

The Sanitary Staff is under the control of the Senior Sanitary Inspector, Mr. D. Thomas, who has allocated duties and localities to each Inspector.

WATER SUPPLY.

A large amount of work was done during the year in reference to the water supply of our area. There are four water companies supplying water to various parts of the district. In addition there is the Holt Town Trust and also two other schemes for supplying water by the Wrexham Rural District Council, namely for the Garth and Vroncysyllte areas.

A large amount of work was done by the Water Supplies Committee in effecting the extensions to the existing water supply, and also in reference to new schemes, which had been previously sanctioned, and one can safely state that at the end of the year the water supply in our area showed a greater improvement than was the case in the past.

When the new schemes are completed in their entirety, it is estimated that some 95 per cent of our inhabited houses and farms will have been supplied with water from various companies and from schemes administered by our Council.

WREXHAM & EAST DENBIGHSHIRE WATER COMPANY.

During the year two samples of water were taken from this Company's supply and showed a satisfactory nature. One of the samples was very satisfactory. The Company was, during the year, busily engaged in dealing with extensions to their mains in many localities.

(a) Isycoed.

This Scheme to supply water in a large agricultural area from Ridley Wood and Cross Lanes, including the Sutton Green area was completed. During the winter of 1946—47 we had a long period of excessively cold weather and I have been informed that had the extensions to this area not been completed, the water supply to the various farms and houses would have presented a serious problem.

(b) Erbistock.

This is a large scheme involving extensions to the mains from Marchwiell and Packsaddle to another large agricultural area, supplying the localities of Pentre Mailyn, Eyton, Overton Bridge, Erbistock, Park Eyton, Gyfelia and Clwt.

This scheme has not yet been completed, but very important progress has taken place. The water company has already laid down mains from Packsaddle to Gyfelia, supplying the small area of Clwt, which is actually in the area of supply of the Ruabon Water Company, which would find it very difficult to give a satisfactory water supply from their mains, and an arrangement was made, that the supply should be made by the Wrexham and East Denbighshire Water Company.

(c) Abenbury.

This scheme has not yet been completed, but will be put in hand when the Holt Water Scheme is dealt with. This scheme, though small in nature, would with the Isycoed and the Erbistock Schemes complete the water supply to the whole of the eastern part of our area, south of the Holt main road.

(d) Holt and Common Wood Area.

Common Wood has no adequate water supply and up to the present the village of Holt itself, together with properties along the Holt main road from Wrexham has been supplied by the Holt Town Trust, using water from boreholes near Hugmore. This water is sedimented in tanks, but is not filtered or chlorinated. It is also extremely hard, and there is evidence that the supply of water to the village is handicapped owing to the blockage of the pipes.

Following discussions with the Holt Town Trust, the Trust has given up its powers to supply water and in the near future the Wrexham and East Denbighshire Water Company will be extending their mains to supply the Holt parish, including the Common Wood and Francis Lane areas.

It is important that Holt should have a satisfactory and sufficient supply of water seeing that the Council are shortly to erect 56 houses within the confines of the village, and at the present there has not been a water carriage system of any sort for drainage.

This matter is being attended to, and will necessitate an additional supply of water, not only for the new Council Houses, but also for the drainage system, which no doubt will be established for the whole village.

(e) Burton and Golly.

The extensions to Burton and Golly in the parishes of Allington and Burton have been completed. This was a necessary improvement in Golly, the inhabitants of which had to be, in the past, supplied by water from wells, which had been examined and found to be most unsatisfactory and contaminated.

(f) Frondeg Area.

A scheme for the supply of water to the Frondeg and Aberoer area was sent up to the Welsh Board of Health for sanction. After a prolonged period and discussions between officials of the Welsh Board of Health and our Council, the Board intimated that the scheme so prepared was much too expensive, taking in view the small number of farms and houses which would be supplied and at the present no consent has been given. This is a difficult area to supply, containing some thirty farms and houses, scattered in nature, on a hillside rising from 500 to 1050 feet above sea level. The supply of water for this area is still receiving discussion and consideration, and it is to be hoped that in the near future an agreed scheme will be completed and thus avoid a continuance of a certain amount of unpleasantness, which has arisen in reference to this supply. Part of this area is being supplied by the Brymbo Water Company, which cannot supply the whole area, even if it was in their area of supply.

The dual responsibility of supply of water in this area is another indication of the view I have repeatedly made out that there should be either one water undertaking for the whole rural district or intimate co-operation and direction between the various companies. The day is fast coming when the smaller water undertakings will disappear, especially in view of the discussions which have taken place with the County Council for the supply of water in our area.

GENERAL REMARKS.

In my report for the year 1945, I referred to the situation in the Minera Mountain which was used for training purposes by His Majesty's Forces. It is satisfactory to note that the Welsh Board of Health has come to an arrangement with the military authorities whereby the use of this area by His Majesty's Forces ceases. This is an improvement in the matter, seeing that the water supply affects some 30,000 persons, including areas in Flintshire, Chester Rural, and Tarvin Rural which are supplied with water from this source. The Minera Mountain is of a very porous limestone nature, and any pollution by human beings would effect the purity of the water of our area and would entail a more stringent method of purification.

The water supplied by this Company is purified under strictly scientific methods and with very few exceptions shows consistently a very satisfactory nature.

During the year the factories in the Marchwiell area commenced their activities, and no doubt when further firms develop their schemes additional supplies of water will be required.

Up to the present, except in periods of exceptional drought, there has been an ample supply of water supplied by this Company, but owing to the extensions which have occurred in the agricultural parishes of Isycoed and Erbistock, together with the manufacturing needs, the Company will no doubt have to consider the possibility of extending their reservoir system. Schemes for this have been made in reference to the Ty Mawr and Pant Glas areas, though the Pant Glas Scheme has been completed, the Water Company do not appear to have received much benefit owing to the lack of excessive rainfall.

No doubt, in the near future, the proposed additional reservoir in the Minera Mountain near Onnen Fawr Farm will be completed.

BRYMBO WATER COMPANY.

Two samples of water were taken from the mains of this Company, and both were found to be satisfactory. Discussions have taken place with reference to the extension of the mains for Minera and Aberoer area. This area is partly in the area of supply of the Wrexham and East Denbighshire Water Company, but partly in the supply of the Brymbo Water Company. A scheme for the supply of water to the area, covering both Companies was submitted to the Welsh Board of Health, who found that the scheme was not economically satisfactory, and the matter is still under consideration and it is to be hoped that in a year or two a satisfactory solution will be found to a most important matter in Public Health.

RUABON WATER COMPANY.

During the year one sample of water was taken of filtered and chlorinated water. It is regretted that the sample was unsatisfactory and there was evidence of recent excretal pollution. During the year the Company was engaged in the extension of their mains from Rhosmadoc to Dinhunlle and Penylan. This was urgently required as all the water supplied in that area was heavily contaminated. During the year 2 samples were taken from a farm and a parsonage and both samples were heavily contaminated with faecal pollution. The scheme was completed in 1947. Another scheme, which the Company have been asked to undertake is the supply of water to Tainant, a small hamlet situated on the Ruabon Mountain and at such a height above sea

level that it would be impossible to supply water from the Water Company's Works except by pumping to a storage tank. The Wrexham and East Denbighshire Water Company were also asked whether they could supply water to this area, but the Company were unable to do so. I understand that the Ruabon Water Company have this Scheme under consideration and they have instructed their Engineer to go into the matter. It is urgent that the scheme be put into operation as early as possible, even though the hamlet is a small one, but requires consideration in the interest of Public Health.

CEFN WATER COMPANY.

During the year three samples were taken. One was returned as suspicious and the other two as unsatisfactory. Of these two latter specimens, one was obtained from chlorinated water from the mains, and the other from raw water from mains the water in which had not been filtered or chlorinated. The question of purchase of this Company by our Council has been and still is being discussed, and it does appear that progress is now being made with reference to negotiations for transfer. During parts of the year climatic conditions necessitated the temporary cutting off of water supplies and this is a serious matter for a population of over 7000 and still more so for important industries which require adequate and wholesome supplies of water, such as is the case with the pasteurising plant of the Cefn and District Co-operative Society. One can only state that when the Company is transferred to our Council, and the necessary improvements carried out, a very substantial benefit will have been brought to the long suffering inhabitants of the area.

GARTH AND VRON

The Council possesses two small water schemes for the supply of water to Garth and Vron, a heritage from the Llangollen Rural District, which was absorbed into our area in 1935. The water for Garth is supplied from the Oerog Springs and is pumped to an enclosed reservoir at Blackwood, from which, water is supplied by gravitation to the village of Garth. Two samples were taken during the year. One was unsatisfactory and the other was suspicious, but there was no evidence of recent excretal pollution. The question of the supply of water to Garth is closely linked up with that of Cefn and the question of purchasing the Oerog Springs by our Council is now under consideration which no doubt, will be of considerable benefit to the area and would also assist in the difficulty of supplying water to Cefn Parish. The neighbouring area between the Panorama Walk and Sun Bank contains several small cottages which require a better supply of water than is supplied at the moment, and no doubt a satisfactory supply

could be obtained for this area from the Garth Reservoir, once the Oerog Springs have been purchased by the Council.

In Vron a sample was taken and showed a heavy contamination and recent excretal pollution and unsuitability for domestic use in its present state. This area again requires a more satisfactory supply of water and, no doubt, when the Garth Scheme has been dealt with extensions can be arranged to supply the hamlet of Vron from this same source, and thus obviate the use of excretally polluted water from mountain farms.

PANORAMA WALK AND SUN BANK AREA

A sample of water was taken from a stream near the Panorama Walk and shows no evidence of gross pollution, and the bacteriological results are surprisingly good, though there is the presence of some excremental organisms.

It is doubtful whether in a prolonged drought there would be sufficient water in this area to make a satisfactory supply from this stream. As this water comes from the Eglwyseg Rocks, which is limestone in character, it is of interest to note the high temporary hardness.

LLANTYSILIO AREA

During the year eight samples of water were taken in this parish. Two of these was from a private school, and three from water supplying a farm opposite Glyndyfrdwy village. Another sample was taken from the Pentredwr area and two samples from the River Dee in reference to investigations that have taken place to supply water to this parish. There are a large number of streams in this parish, most of which dry up during a prolonged drought period and most of them, if not all, are polluted with excremental organisms. It is almost certain that when a scheme is prepared and sanctioned, use will be made of the water from the river Dee, which, however, will require purification. Continual investigations are carried out by the Engineering Staff with the cooperation of the Health Department in reference to a scheme of water supply for this parish, and it is to be hoped that a satisfactory solution will be obtained in the near future.

In addition to the above supply of water, a large number of samples has been taken from various wells, scattered throughout our area. Particulars of these are given in the Table of water samples, and most of these have some reference to the schemes of water supply which have been completed or, it is hoped, will be completed in the very near future.

An important event, during the year, was a publication by the Denbighshire County Council of a report on the existing and

the future water supply of the County of Denbighshire, prepared by Messrs. Sanford Fawcett and Partners, Consulting Engineers. This report indicates the present supply of water and proposes its improvement by construction of reservoirs and new mains. The schemes suggested are very comprehensive, and no doubt, were they carried out, would be the means of producing supplies of water far greater than is at present available, and no doubt would counteract any interference with adequate supplies of water of numerous small water concerns, were a severe drought to occur.

The publication of the report was followed by a conference at Ruthin of all local authorities with the County Council and a special committee was appointed to go into further details and merits of the schemes proposed by the consulting engineers.

TABLE XIV. WATER SUPPLY
BACTERIOLOGICAL EXAMINATION REPORTS ON SAMPLES SUBMITTED TO THE EMERGENCY PUBLIC HEALTH
LABORATORY, CONWAY, DURING 1946.

<i>Nature of Sample and where taken</i>	<i>Plate Count Yeastrel Agar 3 days 22°C Aerobically per ml</i>	<i>Plate Count Yeastrel Agar 2 days 37°C Aerobically per ml</i>	<i>Probable No. Coliform Bacilli, MacConkey 2 days 37°C per 100 ml</i>	<i>Faecal Coli per 100 ml</i>	<i>Ministry of Health Class- ification</i>	<i>Remarks</i>
Filtered and Chlorinated water taken from Wrexham and East D. Water Coy. by pass pipe (7.1.46)	ca 480	8	1	0	Class 2	Satisfactory
Raw Water taken from Llantysilio Hall Private School—Tap-stor- age cistern (16.1.46)	44	4	130	2		Unsatisfactory
Filtered water taken from Llantysilio Hall Private School. From tap-storage cistern (16.1.46)	1	1	0	0		Very satisfactory
Water from River Dee (13.3.46)	100	80	1800+	1800+		Large amount of recent faecal pollution
Raw water taken from Erbistock Hall woods; pipe leading from collecting tank (13.3.46)	40	5	0	0		Very satisfactory
Raw Water taken from lower Twinning Hill; pipe in hedge bank (13.3.46)	800	8	50	0		Suspicious

TABLE XIV. WATER SUPPLY—(continued)

<i>Nature of Sample and where taken</i>	<i>Plate Count Yeastrel Agar 3 days 22°C Aerobically per ml</i>	<i>Plate Count Yeastrel Agar 2 days 37°C Aerobically per ml</i>	<i>Probable No. Coliform Bacilli, MacConkey 2 days 37°C per 100 ml</i>	<i>Faecal Coli per 100 ml</i>	<i>Ministry of Health Class- ification</i>	<i>Remarks</i>
Raw Water taken from Mount Pleasant, Aberoer, 18 ins. earthenware pipe (14.3.46)	30	7	10	7		Evidence of recent faecal pollution. Unsatisfactory
Filtered and Chlorinated water from Cefn Water Co. (17.6.46)	230	100	5	5	Class 3	Suspicious
Raw Water pumped from Bron Haul, Garth; pumped from spring (17.6.46)	0	10	8	0	Class 3	No evidence of recent faecal pollution
Filtered and chlorinated water (Brymbo Water Company) from tap at Llewelyn Rd., Coedpoeth (17.6.46)	20	2	0	0	Class 1	Very satisfactory
Raw water taken from pump on well in kitchen at Bryn, Penylan—Parsonage (15.7.46)	450	87	1800+	1800+		Evidence of faecal pollution
*Raw water from tap. Spring to galvanised iron cistern, Pentre-dwr, Llangollen (27.8.46)	48	64	900	350		Unsatisfactory

TABLE XIV. WATER SUPPLY—(continued)

<i>Nature of Sample and where taken</i>	<i>Plate Count Yeastrel Agar 3 days 22°C Aerobically per ml</i>	<i>Plate Count Yeastrel Agar 2 days 37°C Aerobically per ml</i>	<i>Probable No. Coliform Bacilli, MacConkey 2 days 37°C per 100 ml</i>	<i>Faecal Coli per 100 ml</i>	<i>Ministry of Health Class- ification</i>	<i>Remarks</i>
Raw water taken from well in rock at Penybryn Quarry, Minera (6.9.46)	9	15	25	1		Suspicious
Raw water from tap at Tyddyn Squire, Wern (2.10.46)	260	238	600	130		Unsatisfactory
Raw water from tap in Efenechtyd Farm Yard. From pipe surface well (17.10.46)	168	240	1800 +	0	Class 4	Unsatisfactory
Raw water taken from spout situated on mountain stream at Tyddyn Squire, Wern (21.10.46)	84	600	1800 +	13	Class 4	Unsatisfactory
Raw water from stream at Top Eisteddfod (5.11.46)	300	184	1600	80		Unsatisfactory for domestic use
Raw water from spring below Vownog Farm, Bersham (18.11.46)	54	9	25	13		Evidence of recent faecal pollution. Unsuitable for drinking purposes in the untreated state
Raw water taken from well at Efenechtyd (20.11.46)	1000	500	1800 +	0		Unfit for domestic or dairy purposes

TABLE XIV. WATER SUPPLY (continued)

<i>Nature of Sample and where taken</i>	<i>Plate Count Yeastrel Agar 3 days 22°C Aerobically per ml</i>	<i>Plate Count Yeastrel Agar 2 days 37°C Aerobically per ml</i>	<i>Probable No. Coliform Bacilli, MacConkey 2 days 37°C per 100 ml</i>	<i>Faecal Coli per 100 ml</i>	<i>Ministry of Health Class- ification</i>	<i>Remarks</i>
Filtered and chlorinated water from tap at Burton Terrace, Ac- refair, Cefn Water Co. (4.12.46)	35	6	90	0	Class 4	Unsatisfactory
Raw water from tap at Council Houses, Vron (4.12.46)	50	10	900	20		Unsuitable for domestic use
Raw water from tap at Meirionfa, Garth (4.12.46)	37	25	17	0	Class 4	Unsatisfactory
Filtered and chlorinated water from Brymbo Water Co., tap in High St., Southsea (4.12.46)	3	3	1	0	Class 2	Satisfactory
Filtered and chlorinated water from tap at High Street, Johns- town, Ruabon Water Company (4.12.46)	60	28	160	13	Class 4	Unsatisfactory
Filtered and chlorinated water from tap in Cafe, Pentre Bych- an, Wrexham Water Company (4.12.46)	0	0	0	0	Class 1	Very satisfactory
Raw water from Pump at Smith- field Green, Holt (14.5.46)	56	62	0	0	Class 1	Very satisfactory

RAINFALL

We have been supplied with the following rainfall figures taken at Cae Llwyd by the Wrexham and East Denbighshire Water Company, and I wish to express appreciation of the manner in which the Company supplies us with this information yearly.

1946

<i>January</i>	<i>3.65 inches</i>	<i>May</i>	<i>3.40 inches</i>	<i>September</i>	<i>4.38 inches</i>
<i>February</i>	<i>6.67 inches</i>	<i>June</i>	<i>2.85 inches</i>	<i>October</i>	<i>2.09 inches</i>
<i>March</i>	<i>1.37 inches</i>	<i>July</i>	<i>2.33 inches</i>	<i>November</i>	<i>6.12 inches</i>
<i>April</i>	<i>0.86 inches</i>	<i>August</i>	<i>6.20 inches</i>	<i>December</i>	<i>4.65 inches</i>

Total Rainfall, 1946 = 44.57 inches.

Average Monthly Rainfall, 1946 = 3.7 inches.

MILK

A large amount of time is devoted by the Health Department to the supervision of milk supplies in our area. Attention is paid to the various farms, and improvements are continually being obtained in the methods of production and preparation of milk.

The question of milk supply is closely linked up with that of water supply, and there is ample evidence, especially in the Cefn area of the necessity for some improvement in the water supply, if the milk supply is to be safeguarded.

I have already referred to a large number of schemes, which have been completed, or are in progress of completion, or are being discussed for our area and no doubt when all these schemes have been completed substantial benefit will have been accrued by agricultural premises producing milk in our area.

SEWERAGE AND DRAINAGE

No scheme of sewerage was completed during the year, but a large amount of work was carried out in reference to schemes which should be put in hand.

The most important of these is the scheme for the Bwlchgwyn area and other schemes which should be considered are those for Marchwiell, Holt, Lavister and Burton.

The sewerage scheme for Marchwiell should not be a difficult proposition, seeing that part of the village, consisting of the Council Houses, has already been joined to the Wrexham Sewage Works at Five Fords, Marchwiell, and one can only emphasise the advisability that the whole village should be completed.

As regards Holt, this is closely linked up with the question of water supply which in the near future will be carried out by extending the mains of the Wrexham and East Denbighshire Water Company.

At the present time there is no system of drainage in Holt, where it is proposed to construct a small estate of 56 houses, which will require a water carriage system of sanitation.

The attention of the engineering staff is now being directed towards an extension of the drainage facilities for Lavister and Burton. These are long overdue.

I have already stated that many schemes for the supply of water to hamlets in our area have been put into effect and some are completed, and others will be completed in the near future. It is quite possible that some of these areas will require sewerage facilities and some of these localities include such places as Penylan and Erbistock.

One cannot emphasise too much the importance of having efficient drainage facilities in our area, and no doubt the installation of these facilities would be a means of assisting developments in our area to the fullest extent.

HOUSING.

During the year, 182 houses were completed. This number consists of 8 houses completed by private enterprise, and 174 by the Council.

The latter category consists practically entirely of Temporary Accommodation and under this heading 150 houses have been completed.

REPORT OF MR. D. THOMAS, SENIOR SANITARY INSPECTOR.

SANITARY INSPECTION OF DISTRICT.

The following Table gives a detailed list of the actual work done by the Sanitary Inspectors in the Rural District during the year.

TABLE XV.

DWELLINGS.

Number of houses re-roofed	5
Number of houses repaired—roofs, walls, etc.	387
Number of houses furnished with eaves gutters and downspouts	112
Number of houses otherwise treated to prevent dampness	119
Number of houses provided with more light and ventilation	17
Number of houses cleansed (on notice)	5
Number of houses in which defective floors were renewed	60
Number of houses provided with new pavements in back yards	2
Number of houses in which old pavements were repaired	31
Number of houses in which cellar floors were renewed	1
Number of food store provided	4
Number of new kitchen grates and washing boilers provided	377

DRAINAGE.

Number of new cesspools constructed	1
Number of cesspools repaired	2
Number of cesspools emptied on notice	21
Number of kitchen sinks provided	6
Number of new drains laid to old premises	110
Number of drains repaired	307
Number of house drains discontinued from road drains	3
Number of new slop gullies constructed	43
Number of old slop gullies repaired	62
Number of septic tanks and filter beds	5

SANITARY CONVENIENCES.

Number of waste pipes renewed	212
Number of house drains trapped and ventilated	11
Number of new water closets provided	133
Number of old water closets repaired	126
Number of old water closets furnished with flushing cisterns	140
Number of new pail closets constructed	2
Number of privies converted into water closets	11
Number of deep midden privies abolished	13
Number of privies repaired	22
Number of portable ashbins provided	583
Number of new urinals	1

WATER SUPPLY.

Number of old premises supplied	44
Number of service pipes repaired	398
Number of old wells closed	4

DAIRIES, COWSHEDS and MILKSHOPS.

Number of persons on register on December 31st, 1946	717
Number of persons registered during the year	26
Number of persons discontinued	18
Number of cowsheds repaired and improved	39
Number of new cowsheds erected	1
Number of visits and inspections	1162

FACTORIES AND WORKSHOPS.

Number of Workshops registered during 1946	5
Number of workshops on register	135
Number of workshops cleansed (on notice)	9
Number of new sanitary conveniences erected	7
Number of visits and inspections	88

QUARRY FENCING ACT, 1887.

Number of dangerous quarries fenced	5
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REFUSE REMOVAL.

Number of offensive accumulations removed upon notice	103
Number of nuisances, arising from keeping animals, abated	15

CLERICAL WORK.

Number of Intimatory Notices issued	1510
Number of Intimatory Notices complied with	1234
Number of Statutory Notices issued	100
Number of Statutory Notices complied with	31
Total number of visits and inspections	17,888

PUBLIC HEALTH ACT, 1936.

NUISANCES.

1510 nuisances were found to exist on various premises and of this number 1234 were abated by informal action. In 100 cases it was found necessary to issue Statutory Notices under the Public Health Act, and 31 of these were complied with.

HOUSE DRAINAGE.

New drains were laid to 110 premises and the drainage of 307 houses was repaired and improved.

5 Septic Tanks and Filter Beds were constructed and 23 cesspools were emptied and cleansed. In this connection considerable difficulty is experienced by property owners in dealing with the overflowing cesspools and septic tanks, and arrangements have been made by the Department with the Borough Engineer to empty the cesspools, the cost being borne by the property owners.

SANITARY CONVENIENCES.

The sanitary conveniences of 266 houses have been improved and 133 new Water Closets have been provided and 126 Water Closets repaired. 2 new pail closets have been constructed.

PUBLIC CLEANSING.

The removal of refuse which includes the emptying of privies and pail closets was undertaken by the Council in all the Urban parishes. As in previous years the work was carried out under contract in the parishes of Bersham, Brymbo, Marchwiel and Penrycae.

The Health Committee considered a report on the existing methods of refuse collection and disposal and proposals for substituting an uniform system throughout the whole area. The Committee met on several occasions and due to the difficulty of securing the necessary plant decided to defer the matter for further consideration.

In this connection, it may be of interest to note that as the result of an inspection of the district made by a Medical Officer of the Local Government Board, similar proposals were being discussed as far back as 1905.

A Special Committee was appointed to investigate the matter and among recommendations submitted to the Council were (1) that the work should be undertaken in the whole of the Council's area, (2) and that specially constructed and covered vehicles be purchased by the Council.

It would appear, however, that the recommendations of the Committee did not meet with the approval of the Council who decided to make application for Urban Power under Section 42 of the Public Health Act, 1875, to undertake this work in certain specific parishes and to declare the cost in respect of the removal of house refuse from premises and the cleansing of earth closets and privies, etc., to be special expenses for such parishes.

The Order was made by the Local Government Board on the 5th January, 1906. In the following October the Council accepted the first tenders for carrying out this work in the parishes (excepting Minera) where the work is now undertaken. The tenders accepted ranged between 1/6d. and 4/6d. per house, the Contractors in many instances finding a suitable site for the disposal of refuse.

In comparing the position today with that of 40 years ago it must be acknowledged that the progress of this important aspect of public health has been slow, in relation to the advancement made in other phases of hygiene.

It is sincerely hoped that in the near future this service will be improved as regards methods of collection and disposal, which will add further to the well-being of the community.

HOUSING.

It must be acknowledged, at the present time, that the provision of new houses should be given priority by all, but concern must be felt regarding the general standard of existing houses. Many of these, due to neglect and the fact that it has not been possible for 7 years to carry out repairs and improvements, are fast approaching a level which under present conditions cannot be "rendered fit at a reasonable cost." The time has arrived when this type of house should be given consideration and where possible brought up to a reasonable standard of fitness.

It will be appreciated that there are in the area over 1000 houses which were earmarked for demolition by the Housing Sub-Committee in 1939. These are still occupied, and their condition, which is very often aggravated by overcrowding and the fact that one could not be justified in asking for any repairs, excepting those of an urgent nature must produce conditions of discomfort both mental and physical, which are prejudicial to the health of the occupants.

Property owners, however willing, cannot immediately make good maintenance arrears and the future may compel Local Authorities to undertake repairs and reconstruction of suitable houses in default of the owners.

The Health Department has been able to exercise some control over the repairs and maintenance of property by issuing Civil Building Licences. During the year 627 licences covering an expenditure of £36,863 have been granted. This work has been of an urgent nature such as repairing of roofs, provisions and improvement of sanitary conveniences, and drainage, and the reinstatement of works which might cause injury.

OVERCROWDING.

Overcrowding is still very acute in the area, although the exact extent cannot be assessed until the Rural Housing Survey now being carried out is completed. The following table shows the conditions existing on the Council's estates, and it will be appreciated that while many houses are overcrowded there are others which are not occupied to their full capacity, which would indicate the need for the erection of a smaller type of house to accommodate the elderly people.

TABLE XVI. 1946. OVERCROWDING SURVEY OF COUNCIL'S HOUSES.

Parish	Two Bedroomed Houses occupied by Persons											Families				Three Bedroomed Houses occupied by Persons														
	One	Two	1	2	3	4	5	6	7	8	9	One	Two	Three	Four	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Allington	2	—	—	—	2	—	—	—	—	—	—	96	16	—	—	—	23	19	31	19	11	3	3	1	1	1	—	—	—	—
Bersham	18	4	1	4	5	6	5	1	—	—	—	72	18	—	—	—	2	7	14	30	10	11	9	5	1	1	—	—	—	—
Broughton	16	6	3	7	5	2	4	—	1	—	—	144	62	5	1	—	—	21	40	43	39	26	21	7	7	3	—	3	1	1
Brymbo	33	3	2	17	5	8	4	—	—	—	—	110	32	4	—	—	3	10	24	33	30	22	12	7	4	1	—	—	—	—
Burton	2	—	—	—	1	—	1	—	—	—	—	7	1	—	—	—	—	3	—	2	1	1	1	—	—	—	—	—	—	—
Cefn	27	5	4	4	11	7	2	3	1	—	—	172	48	10	—	—	2	24	46	42	38	28	17	15	10	3	4	—	1	—
Erbistock	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	5	2	1	—	—	—	—	—	—	—	—	—	—
Fslusham B.	—	—	—	—	—	—	—	—	—	—	—	126	38	4	—	—	3	17	31	46	22	23	6	14	4	1	—	—	1	—
Gresford	—	—	—	—	—	—	—	—	—	—	—	33	2	1	—	—	—	4	10	4	7	4	4	2	1	—	—	—	—	—
Gwersyllt	22	8	3	5	9	2	3	1	3	3	1	290	91	11	—	—	4	37	56	87	67	53	39	19	20	4	3	2	—	1
Llay	13	1	—	2	5	2	1	—	—	—	—	161	37	—	—	—	3	16	37	47	39	26	13	9	5	2	—	1	—	—
Marchwiel	—	—	—	—	—	—	—	—	—	—	—	23	3	—	—	—	1	4	8	4	6	—	1	2	—	—	—	—	—	—
Penycae	9	1	1	—	4	4	—	1	—	—	—	41	21	4	—	—	4	6	12	14	14	2	7	1	4	2	—	—	—	—
Rhos	42	10	4	12	16	10	3	4	2	1	—	241	97	13	1	—	—	21	51	64	82	51	39	16	18	6	2	2	—	—
Ruabon	9	1	—	2	3	2	3	—	—	—	—	122	23	1	—	—	1	20	40	39	20	17	6	2	1	—	—	—	—	—
Llangollen R.	—	—	—	—	—	—	—	—	—	—	—	23	7	—	—	—	1	3	—	11	4	2	4	—	—	—	—	—	—	—

TABLE XVI. 1946. OVERCROWDING SURVEY OF COUNCIL'S HOUSES—(continued)

Parish	Number of Four Bedroomed Houses occupied by													
	Families				Persons									
	One	Two	Three	Four	1	2	3	4	5	6	7	8	9	10 11 12 13 14
Bersham	6	2	—	—	—	—	—	1	1	1	1	2	1	—
Broughton	3	—	1	—	—	—	—	—	—	2	—	1	1	—
Brymbo	11	—	1	—	—	—	—	2	1	2	3	1	2	1
Cefn	8	5	1	—	—	—	—	1	—	1	4	—	4	2
Esclusham Below	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Erbistock	2	—	—	—	—	—	—	—	—	—	2	—	—	—
Gwersyllt	5	2	1	2	—	—	—	—	2	4	—	—	—	2
Penycae	1	2	1	—	—	—	—	—	1	—	—	1	—	—
Rhos	10	1	1	—	—	2	1	1	2	—	1	2	—	1

REQUISITIONED PROPERTY.

The Council has requisitioned 25 houses for the purpose of re-housing people inadequately housed. 22 of these were the subject of Demolition Orders made prior to 1939.

LICENSED HOUSES.

31 houses which were included in confirmed Demolition Orders have been licensed by the Council for re-occupation. It will be appreciated that these houses were in an unsatisfactory condition prior to 1939.

Little has been done to improve their condition, which has resulted in a general deterioration of the property and 50 families are condemned to reside under conditions which must be detrimental to health, and the question of re-housing these people must be considered at an early date.

FOOD AND DRUGS ACT, 1938.

The following table gives particulars of samples of Food and Drugs taken during the year by Mr. Wynne Griffiths, Food and Drugs Inspector of the Denbigh County Council.

TABLE XVII.

Fish	.....	.....	.....	.....	.....	133 tins.
Butter	.....	.....	.....	.....	.....	107½ lbs.
Margarine and Dripping	.....	.....	.....	.....	.....	110 lbs.
Cheese	.....	.....	.....	.....	.....	150½ lbs.
Bacon and Ham	.....	.....	.....	.....	.....	153 lbs.
Potted Paste	.....	.....	.....	.....	.....	3 tins.
Soups	.....	.....	.....	.....	.....	8 tins.
Pickles	.....	.....	.....	.....	.....	81 bottles.
Suet	.....	.....	.....	.....	.....	3 packets.
Malt	.....	.....	.....	.....	.....	2 jars.
Cordial Drinks	.....	.....	.....	.....	.....	6 bottles.
Custard Powder	.....	.....	.....	.....	.....	720 packets.
Pudding	.....	.....	.....	.....	.....	223 packets.
Confectionery	.....	.....	.....	.....	.....	19½ lbs.
Tea	.....	.....	.....	.....	.....	28 lbs.
Coffee	.....	.....	.....	.....	.....	1 tin.
Sugar	.....	.....	.....	.....	.....	5 lbs.
Flour	.....	.....	.....	.....	.....	560 lbs.
Sauce	.....	.....	.....	.....	.....	2 bottles.
Fish Cakes	.....	.....	.....	.....	.....	120
Meat	.....	.....	.....	.....	.....	171 tins.
Beans	.....	.....	.....	.....	.....	67 tins.
Peas	.....	.....	.....	.....	.....	208 tins.
Tomatoes	.....	.....	.....	.....	.....	45 tins.
Cereals	.....	.....	.....	.....	.....	128 packets.
Jam	.....	.....	.....	.....	.....	32 jars.
Milk	.....	.....	.....	.....	.....	440 tins.

The following foodstuffs have been examined and found to be unfit for human consumption and have been destroyed.

TABLE XVIII.
FOOD AND DRUGS ACT, 1938.

Particulars of samples of food and drugs, taken under the above Act, in the Wrexham Rural District during the year ended 31st December, 1946.

<i>Article</i>	<i>Number Taken</i>	<i>Genuine</i>	<i>Not genuine or sub- standard</i>
Milk	102	79	23
Beer	1	1	—
Rum	1	1	—
Sweet Spirit of Nitre	3	2	1
Pepper	1	1	—
Butter	8	8	—
Cheese	2	2	—
Sausages	6	6	—
Condensed Milk	1	1	—
Margarine	1	1	—
Coffee and Chicory Essence	1	1	—
Jam	2	1	1
Ice Cream	4	4	—
Bread	1	1	—
Dried Milk	1	1	—
Potted Paste	1	1	—
Totals	136	111	25

The major portion of the milk samples shown as “not genuine” or sub-standard were only slightly below the legal standard, or were eliminated by comparison samples, and in one instance only was any trace of water detected.

An informal sample of jam was $2\frac{1}{2}$ per cent. below the agreed standard for fruit.

An informal sample of Sweet Spirit of Nitre was deficient in active principle, but a subsequent formal sample proved genuine.

All other samples were certified to be genuine, and free from all prohibited preservatives and colouring matter.

ICE CREAM.

3 premises were registered during the year for the manufacture, storage and sale of ice-cream, making a total of 14 licences issued by the District Council. 19 samples were taken; 8 were satisfactory and 11 unsatisfactory.

MILK AND DAIRIES ORDER, 1936.

The number of dairies and cowsheds on the register at the end of 1946 is 717.

26 premises were registered during the year and 18 discontinued. One new cowshed was erected, 39 were repaired and improved and the visits paid to cowsheds, dairies and milk-shops was 1162.

Periodical samples of milk were taken during the year. 378 samples of Accredited milk were submitted for analysis, 365 were found to be satisfactory and 13 unsatisfactory. 55 samples of Tuberculin Tested milk were examined; 2 of these were found to be unsatisfactory and 53 satisfied the test.

Pasteurised Milk.

One licence has been granted by the Council to the Cefn and District Co-operative Society, Ltd., Rhosymedre, to use the designation "pasteurised" to heat-treated milk. The method adopted is the high-temperature short-time pasteurising plant.

In addition, two supplementary licences have been granted to firms retailing pasteurised milk within the Council's area.

33 samples of pasteurised milk were submitted for analysis and each sample complied with the standard laid down in the Milk (Special Designations) Order, 1938.

FACTORIES AND WORKSHOPS ACT.

The number of premises, including bakehouses, registered under the Factories and Workshops Act is 135. 5 were registered during the year. 9 workshops were cleansed on notice and in 7 instances new sanitary accommodation was provided. The total number of visits paid was 88.

RATS AND MICE DESTRUCTION ORDER.

During the year a survey has been carried out of the sewers vested in the local authority. The methods carried out were those suggested by the Ministry of Food. The results proved that the infestation of sewers was slight and it is hoped that the second treatment eliminated the pests.

160 minor infestations were found during a survey of private dwellings. These infestations were treated successfully.

Regular visits have been made to the Council's Refuse Tips and treatment carried out when found necessary.

INVESTIGATION BY BED BUGS.

51 premises were found to be infested with bed bugs, and I would draw the attention of the Council to the fact that there seems to be a gradual increase in the number treated each year. This, in my opinion, is due to the tenants being more ready to report infestations. All premises and furniture have been treated with Zaldecide with very satisfactory results.

OFFENSIVE TRADES.

There are 3 Offensive Trades established in the area; 2 Knacker's Yards and 1 Gut Scraper. Regular visits are paid to these premises, all of which are found to be conducted satisfactorily.



