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MONMOUTHSHIRE COUNTY COUNCIL.

PUBLIC HEALTH
REPORT
FOR THE YEAR 1938.

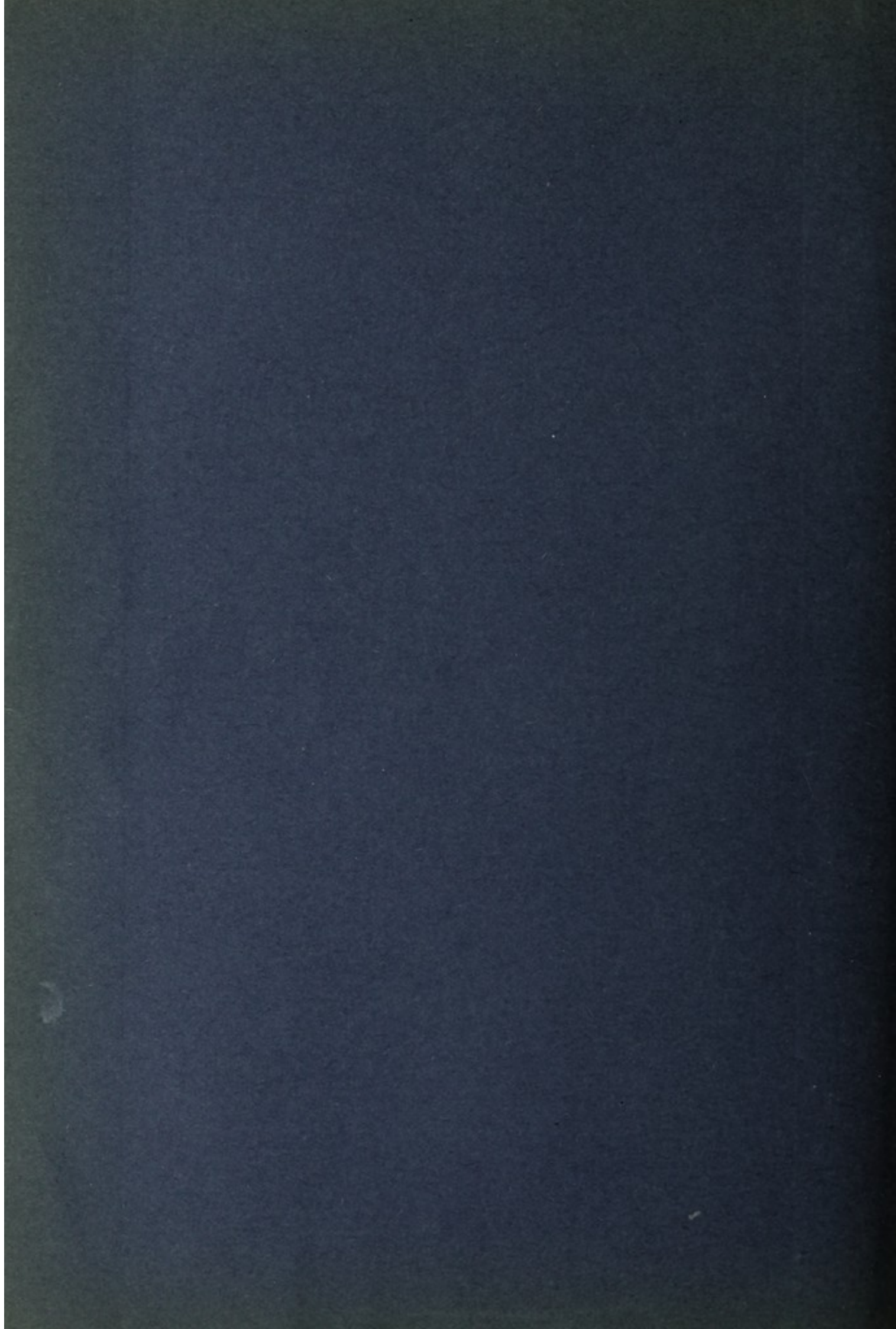
D. ROCYN JONES,

C.B.E., K.St.J., J.P., M.B., D.P.H.,

County Medical Officer.

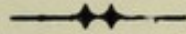
COUNTY HALL,
NEWPORT, MON.

11th OCTOBER, 1939.

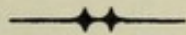




MONMOUTHSHIRE COUNTY COUNCIL.



PUBLIC HEALTH
REPORT
FOR THE YEAR 1938.



D. ROCYN JONES,

C.B.E., K.St.J., J.P., M.B., D.P.H.,

County Medical Officer.

COUNTY HALL,
NEWPORT, MON.

11th OCTOBER, 1939.

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REVIEW

OF THE

GENERAL SANITARY CONDITIONS

OF THE

COUNTY OF MONMOUTH,

For the Year ended December 31st, 1938.

SCOPE OF THE REPORT.

Under Article 17 (5) of the Sanitary Officers' (Outside London) Regulations, 1935, and in accordance with Circular 1728 (Wales) of the Ministry of Health (Welsh Board of Health), the Annual Reports for the year 1938 become the eighth of the series of Ordinary Reports. Reports of a full and detailed character known as "Survey Reports" are required by the Ministry of Health at intervals of not less than five years. The Report for the year 1930 was a "Survey Report", and completed the second series of Annual Reports.

The circular for the year 1938 has been followed as far as possible for the work for which the County Council is directly responsible. At the time of going to press very few of the Reports of the District Medical Officers have been received, consequently it has not been possible to deal fully with some of the subjects.

ALTERATIONS TO BOUNDARIES.

During the year 1935, as a result of the proposals of the County Council for the redistribution of county areas under the provisions of the Local Government Act, 1929, the urban areas of Abersychan, Panteg and Pontypool were combined into one urban district named the Pontypool Urban District; the urban areas of Llanfrechfa Upper and Llantarnam were combined into one urban district named the Cwmbran Urban District; and the rural areas of Magor and St. Mellons were combined into one rural district named the Magor and St. Mellons Rural District. These new county districts continue to function smoothly.

Cardiff Extension Bill.

During the year 1937 the Cardiff Extension Bill was deposited in Parliament and provided for the extension of the boundaries of the City of Cardiff. One

of the provisions of the Bill was to transfer the Parish of Rumney to the Cardiff City, and although this action was strenuously opposed by the Magor and St. Mellons Rural District Council and the County Council, the Bill passed a Select Committee of the House of Lords and the transfer took place as from the 1st April, 1938.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) before 1st April, 1938, 342,186.

do. after 1st April, 1938, 340,110.

Population (1931) Census, 345,755.

do. Estimated 1938, 305,300.

do. Modified estimate submitted by the Registrar-General for use with composite records of births, deaths and notifiable diseases, 306,470.

Rateable value, £1,106,597.

Sum represented by a penny rate, £3,980.

SOCIAL CONDITIONS.—The County of Monmouth is partly industrial and partly agricultural. The Rhymney, Sirhowy, Western and Eastern Valleys are thickly populated coal mining districts, in which are also Iron, Steel and Tinplate works. In addition there are coal by-product plants in some of these districts. The Eastern and Southern portions of the County are practically agricultural communities.

The Social conditions generally remain much the same. Extensive unemployment still exists in the industrial parts of the County.

Reference to the influence of a particular occupation on Public Health is given in the Report of the County Pathologist under the heading Laboratory Facilities.

The Collieries and Works have well organised medical arrangements. The District Hospitals and the Royal Gwent Hospital at Newport are well patronised by residents of the County, but do not meet the full needs of general hospital facilities.


VITAL STATISTICS.

The Vital Statistics for England and Wales for the year 1938, compiled by the Registrar-General, are as in the subjoined table. The Monmouthshire figures are given for the purpose of comparison.

VITAL STATISTICS FOR THE YEAR 1938.

DISTRICT	ESTIMATED POPULATION.	BIRTHS						GRAND TOTAL	Rate per 1000 of population	DEATHS			Rate per 1000 of population	INFANTILE MORTALITY.				Zymotic Death-rate per 1000 of estimated population.	Tubercular Death-rate per 1000 of estimated population.	Deaths from other causes per 1000 of estimated population.	Total Death-rate per 1000 of estimated population.	Medical Officer of Health
		LEGITIMATE		ILLEGITIMATE		TOTAL				Male	Female	Total		Deaths under 1 year of age.								
		Male	Female	Male	Female	Male	Female							Leg.	Illegitimate.	Total.	Rate per 1,000 births.					
URBAN.																						
Abercarn ...	18510	146	141	7	4	153	145	298	16.0	126	99	225	12.1	12	1	13	43.6	27	48	2.10	E. M. Griffith, M.D., Abercarn	
Abergavenny ...	7925	56	52	3	4	59	56	115	14.5	63	45	108	13.6	3	—	3	26.0	—	1.38	1.26	H. L. S. Griffiths, M.R.C.S., L.R.C.P., Abergavenny	
Abertillery ...	28320	237	241	7	7	244	248	492	17.3	172	143	315	11.1	30	2	32	65.0	07	70	91	T. Baillie Smith, M.B., Ch.B., D.P.H., Abertillery	
Bedwas and Machen ...	8385	77	52	3	2	80	54	134	15.9	63	51	114	13.5	10	—	10	74.6	23	143	1.31	C. E. P. Davies, L.M.S.S.A. Machen	
Bedwellty ...	28450	309	253	14	16	323	269	592	20.8	200	145	345	12.1	43	—	43	72.6	49	91	1.61	S. R. MacMillan, M.B., B.Ch., New Tredegar	
Blaenavon ...	9844	68	51	3	1	71	52	123	12.4	92	63	155	15.7	8	1	9	73.1	30	60	3.55	J. J. Crowe, L.A.N., Blaenavon	
Caerleon ...	3385	23	18	1	3	24	21	45	13.2	20	14	34	10.0	—	1	1	22.2	—	1.47	29	W. H. Reynolds, M.R.C.S., L.R.C.P., Caerleon	
Chepstow ...	4078	33	28	3	1	36	29	65	15.9	38	24	62	15.2	2	—	2	30.7	—	49	1.47	J. J. O'Reilly, M.B., B.Ch., B.A.O., Chepstow	
Cwmbran ...	10850	65	70	1	1	66	71	137	12.6	75	63	138	12.7	8	—	8	58.3	09	1.01	73	J. Fleming, M.B., Ch.B., Cwmbran	
Ebbw Vale ...	29750	318	246	8	9	326	255	581	19.5	202	175	377	12.6	50	2	52	55.0	20	90	87	F. M. Fonsica, F.R.C.S., D.P.H., Ebbw Vale	
Monmouth ...	4808	32	30	3	1	35	31	66	13.7	39	24	63	13.1	2	—	2	30.3	—	1.24	1.24	W. H. Williams, M.R.C.S., L.R.C.P., B.A., Monmouth	
Mynyddislwyn ...	13210	98	107	3	4	101	111	212	16.0	82	58	140	10.5	10	—	10	47.1	37	75	90	C. G. Mackay, M.B., Ch.B., Blackwood	
Nantyglo and Blaina ...	11590	100	61	1	5	101	66	167	14.4	107	70	177	15.2	16	1	17	101.7	34	77	94	F. M. Wallen-Gunn, M.R.C.S., L.R.C.P., Blaina	
Pontypool ...	40200	323	297	12	11	335	308	643	15.9	221	195	416	10.3	39	1	40	62.2	14	59	90	T. J. McAllen, M.B., Ch.B., Pontypool	
Rhymney ...	9437	85	88	5	1	90	89	179	18.9	73	53	126	13.3	5	—	5	27.9	—	1.05	87	R. V. de A. Redwood, F.R.C.S., L.R.C.P., Rhymney	
Risca ...	14840	120	100	4	4	124	104	228	15.3	90	80	170	11.4	9	—	9	39.4	06	40	87	N. N. Wade, M.D., Ch.B., Risca	
Tredegar ...	20890	143	158	4	7	147	165	312	14.9	142	115	257	12.3	17	1	18	57.6	14	57	1.72	E. T. H. Davies, M.D., M.S., F.R.C.S., L.R.C.P., Tredegar	
Usk ...	1228	7	12	1	—	8	12	20	16.2	14	15	29	23.6	—	—	—	—	—	4.07	2.44	J. C. H. Bird, M.B., Ch.B., Usk	
RURAL.																						
Abergavenny ...	8254	49	39	4	2	53	41	94	11.3	43	52	95	11.5	4	—	4	42.5	—	36	96	O. G. Griffiths, M.B., Ch.B., Abergavenny	
Chepstow ...	8678	58	73	1	4	59	77	136	15.6	62	51	113	13.0	9	—	9	66.1	23	57	80	J. J. O'Reilly, M.B., B.Ch., B.A.O., Chepstow	
Magor & St. Mellons ...	†12660	87	76	2	2	89	78	167	13.1	79	71	150	11.8	4	—	4	23.9	15	63	94	N. N. Wade, M.D., Ch.B., Risca	
Monmouth ...	5844	40	28	3	3	43	31	74	12.6	30	38	68	11.6	3	—	3	40.5	34	68	1.36	W. H. Williams, M.R.C.S., L.R.C.P., B.A., Monmouth	
Pontypool ...	5334	26	34	3	1	29	35	64	11.9	38	19	57	10.3	2	—	2	31.2	—	37	—	J. C. H. Bird, M.B., Ch.B., Usk	
Grand Totals, 1938 ...	†306470	2500	2255	96	93	2596	2348	4944	16.1	2071	1663	3734	12.1	266	10	276	55.8	18	75	1.22		
Totals for Year 1937 ...	315500	2466	2240	78	87	2534	2327	4861	15.5	2171	1773	3944	12.6	300	9	311	63.9	24	79	1.54		

† These figures are modified estimates submitted by the Registrar-General for use with composite records of Births, Deaths and Notifiable Diseases. The actual estimated population of the Magor and St. Mellons Rural District subsequent to the extension of the Cardiff City Boundary is 11,490, and of the Administrative County of Monmouth, 305,300.



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	Birth Rate per 1,000 of population.				Death Rate per 1,000 living.		Deaths under one year per 1,000 births	
	Live Births	Still Births	Live Births	Still Births				
ENGLAND & WALES ...	1938 15.1	1938 0.60	(1937) (14.9)	(1937) (0.60)	1938 11.6	(1937) (12.4)	1938 53.0	(1937) (58.0)
126 County Boroughs and Great Towns, including London ...	15.0	0.65	(14.9)	(0.67)	11.7	(12.5)	57.0	(62.0)
148 Smaller Towns (Estimated resident population 25,000 to 50,000 at census 1931) ...	15.4	0.60	(15.3)	(0.64)	11.0	(11.9)	51.0	(55.0)
London ...	13.4	0.48	(13.3)	(0.54)	11.4	(12.3)	57.0	(60.0)
MONMOUTHSHIRE ...	16.1	0.90	(15.5)	(0.90)	12.1	(12.6)	55.8	(63.9)

In all cases the estimated populations as supplied by the Registrar-General have been used for the purposes of this table.

BIRTHS.—The total number of births registered in the Administrative County during 1938 was 4,944, made up as follows:—

	Legitimate		Illegitimate		Total		Grand Total
	M.	F.	M.	F.	M.	F.	
Urban Districts ...	2240	2005	83	81	2323	2086	4409
Rural Districts ...	260	250	13	12	273	262	535
Total ...	2500	2255	96	93	2596	2348	4944

In 1937 there were 4,861 births; in 1936, 5,088 births; in 1935, 5,275 births; in 1934, 5,591 births; in 1933, 5,563 births; in 1932, 5,885 births; in 1931, 6,146 births; in 1930, 6,342 births; in 1929, 6,149 births; in 1928, 6,612 births; in 1927, 6,552 births; in 1926, 7,575 births; in 1925, 8,100 births; in 1924, 8,368 births; in 1923, 8,737 births; in 1922, 8,805 births; in 1921, 10,312 births; in 1920, 10,779 births; in 1919, 8,487 births; and in 1918, 8,948 births. The birth rate for 1938 was 16.1 per 1,000 persons living. In 1937 the rate was 15.5; in 1936, 15.9; in 1935, 16.12; in 1934, 16.49; in 1933, 16.29; in 1932, 17.1; in 1931, 17.6; in 1930,

17.6; in 1929, 17.8; in 1928, 18.3; in 1927, 17.5; in 1926, 20.3; 1925, 21.5; in 1924, 22.3; in 1923, 23.5; in 1922, 23.8; in 1921, 28.3; in 1920, 29.2; in 1919, 22.9; and in 1918, 24.8.

For the Urban Districts of the County the birth-rate was 16.5 per 1,000 for 1938, and for the Rural Districts, 13.1, as compared with 16.0 and 12.7 respectively in 1937 and 16.3 and 12.9 in 1936.

For the first time for several years the birth rate shows an increase, being .6 higher than the figure for the year 1937 (15.5). There were 83 more births in the Administrative County during the year 1938, as compared with 1937.

The number of births of illegitimate children was 189 which gives a rate of 38.2 per 1,000 of the total births, and .61 per 1,000 population. Last year the number was 165, equal to 38.2 per 1,000 births, and .52 per 1,000 of population. For the year 1936, the figures were 178 equal to 34.9 per 1,000 births, and .52 per 1,000 population.

The birth rate for England and Wales for the year 1938 was 15.1.

DEATHS.—The total number of deaths registered in the Administrative County as shown by the Registrar-General's table, was 3,734, as compared with 3,944 in 1937; 3,927 in 1936; 3,761 in 1935; 3,979 in 1934; 3,927 in 1933; 3,843 in 1932; 4,175 in 1931; 3,688 in 1930; 4,069 in 1929; 3,954 in 1928; 4,088 in 1927; 3,499 in 1926; 3,980 in 1925; 3,962 in 1924; 3,860 in 1923; 4,238 in 1922; 4,107 in 1921; 4,379 in 1920; 4,171 in 1919; and 4,943 in 1918.

The general death rate calculated upon the modified estimate of population submitted by the Registrar-General—306,470—works out at 12.1 per 1,000 living. In 1937 the rate was 12.6; in 1936, 12.2; in 1935, 11.5; in 1934, 11.7; in 1933, 11.49; in 1932, 11.1; in 1931, 12.01; in 1930, 10.2; in 1929, 11.3; in 1928, 10.9; in 1927, 11.0; in 1926, 9.4; in 1925, 10.6; in 1924, 10.6; in 1923, 10.4; in 1922, 11.4; in 1921, 11.3; in 1920, 11.9; in 1919, 11.7; and in 1918, 15.3. For the Urban Districts the rate for 1938 was 12.2; and for the Rural Districts, 11.8.

The County death rate of 12.1 per 1,000 of population shows a decrease on 1937, when the rate was 12.6; and is higher than that for England and Wales, 11.6.

STILLBIRTHS.—The number of stillbirths recorded during the year was 283, compared with 284 in 1937 and 309 in 1936. The rate per 1,000 of population for 1938 is .92; in 1937 it was .90; and in 1936, .96. This rate continues to compare unfavourably with that for England and Wales, which for 1938 was .60.

WOMEN DYING IN, OR IN CONSEQUENCE OF CHILDBIRTH.—

The number of deaths registered during the year from accidents and diseases of pregnancy and parturition was 38, 13 from Puerperal Sepsis and 25 from other causes associated with childbirth. This is equal to a rate of 7·68 per 1,000 live births, which shows a considerable increase compared with last year (4·52). The rate is still considerably higher than that of England and Wales, which for the year 1938 was 3·08 per 1,000 live births registered.

INFANTILE MORTALITY.—The total number of deaths under one year of age throughout the Administrative County was 276, 254 in the Urban Districts and 22 in the Rural Districts.

The rate per 1,000 births was 55·8, a decrease of 8·1 upon the figure for 1937, which was 63·9.

In the Urban Districts the rate was 62·7 per 1,000 births, and in the Rural Districts 41·1 per 1,000 births.

In 1937 the Infantile Mortality rate was 63·9; in 1936, 61·7; in 1935, 61·4; in 1934, 57·4; in 1933, 71·72; in 1932, 67·7; in 1931, 71·9; in 1930, 64·9; in 1929, 67·7; in 1928, 72·29; in 1927, 87·3; in 1926, 66·1; in 1925, 83·8; in 1924, 75·6; in 1923, 73·0; in 1922, 83·4; in 1921, 91·5; in 1920, 87·9; in 1919, 88·0; in 1918, 97·6; in 1917, 84·3; in 1916, 88·4; in 1915, 128·5; in 1914, 106; in 1913, 115; and in 1912, 105.

The rate for England and Wales was 53·0.

The average Infantile Mortality rate for the 25 years, 1891-1915, was 137·4. The average rate for the 23 years, 1916-1938, was 74·8.

The number of deaths of illegitimate children under one year of age was 10, or 2·0 per 1,000 of all births, and 52·9 per 1,000 of illegitimate births. Last year the number of deaths was 9, or 1·8 per 1,000 of all births, and 54·5 per 1,000 of illegitimate births.

The measures adopted by the County Council for the reduction of Infantile Mortality are fully dealt with in the Report upon Maternity and Child Welfare for the year 1938.

Number of deaths occurring during certain age periods in children under one year of age :—

	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 1 month	1—3 months	3—6 months	6—9 months	9—12 months	Total under 1 year
Urban Districts	79	25	16	16	136	47	26	25	21	255
Rural Districts	11	1	—	1	13	2	3	—	2	20
Totals	90	26	16	17	149	49	29	25	23	275

N.B.—The figures in the foregoing table were supplied by the District Medical Officers of Health.

CAUSES OF DEATH OF CHILDREN UNDER ONE YEAR OF AGE.

Causes of Death.	No. of Deaths.			Rate per 1000 Births— Administrative County.
	Urban Districts.	Rural Districts.	Administrative County.	
Infectious Diseases ...	6	1	7	1.4
Diarrhoeal Diseases ...	19	1	20	4.0
Wasting Diseases ...	144	14	158	33.9
Respiratory Diseases ...	54	1	55	11.1
Tubercular Diseases ...	3	1	4	.8
Other Causes ...	28	4	32	6.4
Totals ...	254	22	276	55.8

The number of deaths in the Administrative County from the following diseases was :—

Measles—all ages	...	...	...	...	6
Whooping Cough—all ages	...	...	...	...	10
Diarrhoea—under 2 years of age	...	...	...	...	22

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

COUNTY MEDICAL OFFICER OF HEALTH.

D. Rocyn Jones, C.B.E., K.St.J., J.P., M.B., Ch.M., D.P.H.

COUNTY BACTERIOLOGIST AND PATHOLOGIST.

Gwyn Rocyn Jones, M.A., M.D., B.Chir. (Camb.), L.R.C.P., M.R.C.S.,
D.P.H.

ASSISTANT COUNTY MEDICAL OFFICERS.

Mary Scott, M.B., Ch.B.

Mary H. M. Gordon, M.B., Ch.B., D.P.H.

Annie Roberts, M.A., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.

Teresa M. O'Riordan, B.A., M.B., B.Ch., D.P.H.

William Bowen Owen, B.Sc., M.R.C.S., L.R.C.P., D.P.H.

Evelyn D. Owen, M.B., M.R.C.S., L.R.C.P., D.P.H.

William Panes, M.R.C.S., L.R.C.P., D.P.H.

Alice M. S. Dewar, M.B., Ch.B., D.P.H.

Bernard Leo MacQuillan, M.B., B.Ch., B.A.O., D.P.H.

Harry V. M. Jones, M.B., B.S., D.P.H.

Winifred Evelyn Probert, M.R.C.S., L.R.C.P., D.P.H.

Mary Rose MacQuillan, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.

Mair Eluned Jones, M.R.C.S., L.R.C.P.

COUNTY TUBERCULOSIS OFFICERS.

J. Glyn Jones, M.A., M.B., B.Chir.

(West Monmouthshire Area) assisted by

H. A. Evans, M.B., B.S.

A. Carveth Johnson, M.A., M.B., B.Chir., M.R.C.S., L.R.C.P.

(East Monmouthshire Area) assisted by

F. W. Godbey, M.D., B.Ch., D.P.H.

The Tuberculosis Officers are engaged by the Welsh National Memorial Association, with whom the County Council has contracted for treatment of their Tuberculosis cases.

VENEREAL DISEASES OFFICERS (Part time).

P. C. P. Ingram, M.B., B.S., M.R.C.S., L.R.C.P. (Men's Clinic).

Mary H. M. Gordon, M.B., Ch.B., D.P.H. (Women's Clinic).

All cases of Venereal Diseases are treated at the Royal Gwent Hospital, Newport, with which the County Council has an agreement therefor.

MEDICAL OFFICERS FOR MATERNITY AND CHILD WELFARE.

All the Assistant County Medical Officers devote a part of their time to the work of Maternity and Child Welfare. In addition the following part time Officers are engaged:—

E. M. Griffith, M.D., Abercarn, Mon.
 Guy W. Parry, M.R.C.S., L.R.C.P., Abergavenny.
 R. J. S. Verity, L.S.A., L.M.S.S.A., Garndiffaith.
 T. Baillie Smith, M.B., Ch.B., D.P.H., Abertillery.
 J. J. O'Reilly, M.B., B.Ch., B.A.O., Chepstow.
 F. M. Fonseca, L.A.H., F.R.C.S.I., D.P.H., Ebbw Vale.
 W. H. Williams, B.A., M.R.C.S., L.R.C.P., Monmouth.
 R. V. de Acton Redwood, F.R.C.S., L.R.C.P., Rhymney.
 E. T. H. Davies, M.D., M.S., F.R.C.S., Tredegar.

MEDICAL SUPERINTENDENTS.

Poor Law Institutions.

(1) Whole time.

John G. Owen, B.Sc., M.B., M.R.C.S., L.R.C.P., D.P.H., Ty Bryn Institution, Tredegar.

(2) Part time.

J. P. Jenkins, M.R.C.S., L.R.C.P., Coed-y-gric Institution, Griffithstown.
 F. W. Fawcett, M.A., B.Ch., Chepstow Institution.
 W. H. Williams, B.A., M.R.C.S., L.R.C.P., Monmouth Institution, Monmouth.

In the case of the Monmouth Institution, which has now been closed, the services of Dr. Williams have been retained for Casual ward cases only. The Abergavenny Institution is also closed and the appointment of a Medical Officer for Casual ward cases only is pending. Cambria House Institution is at present utilised for housing Basque refugee children.

Mental Hospital, Abergavenny.

N. R. Phillips, M.D., M.R.C.S., L.R.C.P., Medical Superintendent.

CONSULTANTS.

Orthopædic Surgeon (Part Time):

A. Rocyn Jones, M.B., B.S. (Lond.), F.R.C.S. (Eng.).
 D. N. Rocyn Jones, M.A., M.D., F.R.C.S. (Eng.).

Ophthalmic Surgeon (Part Time):

W. J. Roche, M.D., B.A.O.

Ear, Nose and Throat Surgeon (Part Time):

D. B. Sutton, M.B., B.S., F.R.C.S.

Obstetrician (Part Time):

G. I. Strachan, M.D., Ch.B., F.R.C.P., F.R.C.S. (Eng. and Edin.).

Physician in charge of Rheumatic Clinics (Part Time):

A. Goronwy Watkins, B.Sc., M.D., M.B., B.S., M.R.C.P., M.R.C.S.

DENTAL SURGEONS.

C. J. Hurry Riches, L.D.S., R.C.S. (Part Time).

C. G. Saxon, L.D.S., R.C.S. (Whole Time).

Eluned O. Jones, L.D.S. (Whole Time).

J. K. Noot, L.D.S., R.C.S. (Whole Time).

Elizabeth M. Young, L.D.S., R.C.S. (Whole Time).

DISTRICT MEDICAL OFFICERS UNDER THE POOR LAW ACTS.

Name and District.	Name and District.
Dr. D. Lyons, Abergavenny.	Dr. E. M. Griffith, Abercarn (Lower)
„ G. W. Parry, Llanarth.	„ R. W. Scanlon, Six Bells.
„ J. J. Crowe, Blaenavon.	„ C. G. MacKay, Mynyddislwyn.
„ J. H. Verwey, Nantyglo.	„ G. R. Strong, Magor.
„ F. M. Fonseca, Ebbw Vale (Part)	„ Cecil E. P. Davies, Bedwas and
„ J. McCaig, Ebbw Vale (Part).	Machen.
„ A. Franklyn, Ebbw Vale (Part).	„ G. E. Hull, Graig & Rogerstone
„ J. G. Owen, Tredegar.	„ A. L. Evans, Maesycwmmmer.
„ R. V. de Acton Redwood,	„ W. H. Reynolds, Caerleon and
Rhymney.	Christchurch.
„ S. R. MacMillan, New Tredegar.	„ W. Irwin, Marshfield.
„ W. F. Mulvey, Abertillery.	„ N. N. Wade, Risca.
„ W. McKendrick, Aberbargoed,	„ J. Fleming, Llantarnam, Llan-
Pengam and Rock.	frechfa Upper and Lower.
„ T. J. Davies, Argoed and Holly-	„ H. C. Conwy Joyce, St. Mellons.
bush.	„ J. P. J. Jenkins, Panteg.
„ F. W. Fawcett, Tintern, Chep-	„ R. J. S. Verity, Abersychan
stow and Shirenewton.	(North).
„ Owen T. Jones, Caldicot.	„ S. Mayers, Abersychan
„ W. M. Langdon, Raglan.	(Central).
„ G. H. Scott, Skenfrith,	„ J. C. H. Bird, Usk.
Grosmont and Llangua.	„ E. L. Frost, Llanhilleth.
„ M. Horan, Trelleck.	„ A. M. Brook, Beaufort.
„ P. G. Harvey, Monmouth.	„ K. S. Thom, Dukestown.
„ W. H. Williams, Rockfield.	„ T. J. McAllen, Pontypool.
„ M. J. Ryan, Abercarn (Upper).	„ P. J. Connelly, Abertysswg.
„ B. J. Carlin, Blaina.	„ H. A. Keane, Bettws.

PUBLIC VACCINATORS.

Name and District.	Name and District.
Dr. W. H. Reynolds, Christchurch (Part)	Dr. W. T. E. Blackmore, Llanarth.
„ M. J. Ryan, Abercarn (Upper).	„ O. G. Griffiths, Abergavenny.
„ E. M. Griffith, Abercarn (Lower)	„ T. J. Frost, Llanhilleth.
„ C. G. MacKay, Mynyddislwyn. (Part).	„ J. C. H. Bird, Usk.
„ G. R. Strong, Magor.	„ J. P. J. Jenkins, Coedygric Poor Law Institution and Panteg.
„ C. P. Davies, Bedwas.	„ R. J. S. Verity, Abersychan (N).
„ G. E. Hull, Graig & Rogerstone.	„ R. J. S. Verity, Abersychan (Central).
„ A. L. Evans, Maesycwmmmer.	„ T. J. McAllen, Pontypool.
„ W. H. Reynolds, Caerleon.	„ J. H. Verwey, Aberystroth (part)
„ W. Irwin, Marshfield.	„ F. M. Wallen-Gunn, Aberystroth (Part).
„ N. N. Wade, Risca.	„ F. M. Fonseca, Ebbw Vale (Part).
„ J. Fleming, Llantarnam.	„ J. McCaig, Ebbw Vale (Part).
„ H. A. Keane, Bettws.	„ A. Franklin, Ebbw Vale, (Part).
„ H. C. C. Joyce, St. Mellons.	„ J. Owen, Tredegar.
„ W. H. Williams, Monmouth and Rockfield.	„ R. V. de Acton Redwood, Rhymney and Abertysswg.
„ P. G. Harvey, Trelleck.	„ S. R. Macmillan, New Tredegar.
„ W. M. Langdon, Raglan.	„ W. F. Mulvey, Abertillery.
„ G. Hope Scott, Skenfrith.	„ T. J. Davies, Argoed and Hollybush.
„ E. W. Hardman, Chepstow, Shirenewton and Tintern.	„ S. R. Macmillan, Aberbargoed.
„ Owen T. Jones, Caldicot.	„ J. G. Owen, Bedwellty Poor Law Institution, Tredegar.
„ A. Brook, Beaufort.	„ W. McKendrick, Blackwood.
„ K. S. Thom, Dukestown. and Llechryd.	
„ G. Hope Scott, Grosmont and Llangua.	
„ A. H. James, Blaenavon.	

VETERINARY SURGEONS (Part Time).

G. Digby Watkins, M.R.C.V.S.,
Tredegar.
W. H. Williams, M.R.C.V.S.,
Abergavenny.
H. S. Robinson, M.R.C.V.S.,
Newport.
E. Armstrong, M.R.C.V.S., New-
port.

Veterinary service discontinued as
and from 1st April, 1938, under the
provisions of the Agriculture Act,
1937.

PUBLIC ANALYST.

G. Rudd Thompson, F.I.C., F.C.S., Newport.

COUNTY SANITARY INSPECTOR.

J. Jenkin Evans, M.R.S.I., F.S.I.A., Inspector of Meat and Other Foods.

INSPECTORS UNDER THE SALE OF FOOD AND DRUGS ACTS.

Gwyn C. Jenkins (Board of Trade Certificate).

T. R. Davies, ditto.

A. W. Prosser, ditto.

Each of the above Inspectors has an assistant.

VACCINATION OFFICERS.

Name and Districts.

J. Morgan, Blaenavon.

E. Rowland, Mynyddislwyn.

Name and Districts.

E. J. Winstone, Abertillery, Beaufort, Caerleon, Chepstow, Ebbw Vale, Llanhilleth, Llantarnam, Monmouth, Panteg, Pontypool, Rhymney, Rogerstone, Tredegar, Trelleck, Usk, Abergavenny, Llanarth, Llanfihangel Crucorney.

CHIEF INSPECTRESS OF MIDWIVES.

Dr. Mary Scott (M.B., Ch.B.).

DISTRICT SUPERVISORS OF MIDWIVES.

Nurses O. Griffiths, K. M. Walters and C. Davies.

INSPECTRESS UNDER THE MENTAL DEFICIENCY ACTS for the Rural portion of the County, After-care Sister (Orthopædic Scheme), and Infant Protection Officer.

Miss Olwen Griffiths, Special Training in After-Care Orthopædic Nursing and Mental Deficiency Work. Fever Hospital and General Training. C.M.B.

INSPECTRESS UNDER THE MENTAL DEFICIENCY ACTS for the Eastern, Western, Sirhowy and Rhymney Valleys of the County. Miss P. G. Waters.

VENEREAL DISEASES INQUIRY OFFICER.

Miss E. M. Walters, Special Training in V.D. Work and General Hospital Training. C.M.B.

ORTHOPAEDIC CLINIC MASSEUSE AND SISTER-IN-CHARGE.

Miss Gwenyth Dudley Evans, Registered and Certificated in Massage and Medical Electricity, C.S.M.M.G.

BLIND WELFARE OFFICER.

H. D. Bowden.

MEDICAL OFFICERS IN CHARGE OF ANTE-NATAL CLINICS.

Mary Scott, M.B., Ch.B. (Part Time).

Mary H. M. Gordon, M.B., Ch.B., D.P.H. (Part time).

Annie Roberts, M.A., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H. (Part time)

Evelyn D. Owen, M.B., M.R.C.S., L.R.C.P., D.P.H. (Part time).

SCHOOL MEDICAL OFFICERS.

All the Assistant County Medical Officers, with the exception of Dr. Mary Scott, devote a part of their time to the work of School Medical Inspection.

NURSING STAFF.

County Health Visitors :

T. M. Allan (Part time), Full Hospital Training. Sanitary Inspectors' Certificate.

D. L. Beacham, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

O. Colman, Full Hospital Training, C.M.B. Certificate.

E. M. Evans, Full Hospital Training, C.M.B. Certificate, and Health Visitors' Certificate.

R. Evans, ditto ditto

G. I. Golding, Full Hospital Training, C.M.B. Certificate.

E. M. Harris, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

C. I. Hiley, Full Hospital Training and C.M.B. Certificate.

A. W. Hopkins, Full Hospital Training and C.M.B. Certificate.

L. D. Howell, Full Hospital Training, C.M.B. Certificate, and Health Visitors' Certificate.

M. B. James, Full Hospital Training and C.M.B. Certificate.

H. M. Jones, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

I. E. Jones, Full Hospital Training and C.M.B. Certificate.

K. M. Jones, ditto ditto

W. Jones, ditto ditto

C. M. Lloyd, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

E. Lord, Full Hospital Training and C.M.B. Certificate.

C. Morgan, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

E. Morgan, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.

- E. A. Morgan, Full Hospital Training and C.M.B. Certificate.
- H. A. Morgan, ditto ditto
- C. M. Phillips, ditto ditto
- M. M. Pugh, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- M. Pulsford, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- M. Redwood, Full Hospital Training, and C.M.B. Certificate.
- N. Richards, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- M. Sainsbury, Full Hospital Training and C.M.B. Certificate.
- D. E. Seale, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- A. M. Spencer, ditto ditto
- M. Walters, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- M. Ware, Full Hospital Training and C.M.B. Certificate.
- P. G. Waters, Full Hospital Training, C.M.B. Certificate and Health Visitors' Certificate.
- G. M. Watkins, ditto ditto
- E. Webb, ditto ditto
- F. Williams, ditto ditto
- E. G. Wilmot, ditto ditto

COUNTY MIDWIVES.

INDUSTRIAL AREAS	OFFICIAL NO.	NAME	ADDRESS	TELEPHONE NO.
(a) RHYMNEY VALLEY :—				
Rhydney Bridge ...	1	Mrs. L. Baker ...	2, Church Street, Rhydney.	Rhydney 5
Tavarnaubach (Part) ...	2	Mrs. M. Jenkins ...	68, Forge Street, Rhydney.	do. 60
Rhydney ...	3	Mrs. J. M. Prytherch ...	2, Carnytyla, Abertyswg.	Pontlottyn 46
Abertyswg ...				
New Tredegar				
Cwnsyflog ...	4	Miss C. L. Davies ...	44, Jubilee Road, New Tredegar.	New Tredegar 56
Aberbargoed ...	5	Mrs. F. A. Price ...	Alpine Villa, Bedwellty Road, Elliotstown, New Tredegar.	do. 57
	6	Miss M. M. Rees...	Hillcroft, Aberbargoed.	Bargoed 117
	7	Mrs. E. E. Jenkins ...	7, School Street, Aberbargoed.	do. 213
Pengam ...	8	Miss. M. A. Curtis ...	4, Gellihaif Road, Fleur-de-Lis.	
Fleur-de-Lis ...	9	Mrs. A. M. Steele ...	15b, Bryn Road, Pengam.	Pengam 87
Cefn Forest ...	10	Mrs. A. L. Brown ...	67, Bedwellty Road, Cefn Forest, Blackwood.	do. 86
Maesycwmmr ...				
Bedwas				
Trethomas ...	11	Mrs. M. G. Dudden ...	Victoria House, Bedwas.	Bedwas 39
Machen ...	12	Mrs. C. Manning ...	1, Central Houses, Trethomas.	do. 8
	13	Mrs. M. Thomas ...	Penceae House, Commercial Road, Machen.	Machen 27
(b) SIRHOWY VALLEY :—				
Tredegar ...	14	Mrs. E. M. Griffiths ...	23, West Hill, Tredegar.	Tredegar 71
Trevil ...	15	Mrs. C. S. Prosser ...	100, Charles Street, Tredegar.	do. 86
Treodrhigwair ...	16	Mrs. M. L. Stanley ...	9, Walter Street, Tredegar.	do. 199
Tavarnaubach (Part) ...	17	Miss E. J. Lewis ...	31, Alexandra Place, Sirhowy.	do. 211
Bedwellty Pits ...				
Hollybush ...	18	Mrs. S. Cord ...	1, Lawrence Avenue, Markham, Blackwood.	Blackwood 178
Markham Village ...	19	Mrs. M. E. Pritchard ...	61, Penylan Road, Markham, Blackwood.	do. 188
Argoed ...				
Oakdale ...	20	Miss A. M. Mathews ...	40, Central Avenue, Oakdale, Blackwood.	Blackwood 136
Blackwood ...	21	Mrs. S. James ...	2, Woodbine Villas, Morris Lane, Blackwood.	do. 108
Pontlanfraith ...	22	Mrs. G. M. Morris ...	6, Penilyn Terrace, Pontlanfraith.	Pontlanfraith 42
Ynysddu ...	23	Mrs. M. J. Williams ...	23, Old High Street, Ynysddu.	Ynysddu 10
Wyllie ...	24	Mrs. M. Davies ...	67, Islwyn Street, Cwmfelinfach.	Ynysddu 12
Cwmfelinfach ...				
(c) WESTERN VALLEYS :—				
Ebbw Vale U.D. ...	25	Mrs. G. E. Rawlings ...	1, Radford Terrace, Beaufort.	Ebbw Vale 7
(i) Beaufort ...	26	Mrs. G. O. Lewis ...	2, The Walk, Ebbw Vale.	do. 205
(ii) Ebbw Vale ...	27	Mrs. K. Goodyer ...	123, Pennant Street, Ebbw Vale	do. 220
	28	Miss G. E. Blower ...	7, Station Terrace, Cwm.	
(iii) Victoria Cwm ...	29	Mrs. A. Gardner ...	23, Duffryn Road, Waunlwyd, Ebbw Vale.	Cwm 59
Nantyglo and Blaina U.D.				
(i) Nantyglo ...	30	Miss Eliz. Morgan ...	Brynhafryd, Coedcae, Nantyglo.	Brynmawr 336
(ii) Blaina... ...	31	Mrs. M. A. Eade ...	38, Lancaster Street, Blaina	Blaina 74
	32	Mrs. B. Savio ...	2, Stones Houses, Blaina.	Blaina 73
	33	Mrs. M. G. Drew ...	29, Granville Street, Abertillery.	Abertillery 190
Abertillery ...	34	Mrs. E. A. Phillips ...	71, Richmond Road, Six Bells, Abertillery.	do. 189
	35	Mrs. E. M. Price ...	23, Powell Street, Abertillery.	do. 188
	36	Miss I. M. Solloway ...	Oaklands, Crook Hill, Cwmtilery, Abertillery.	do. 191
Aberbeeg ...	37	Mrs. J. M. Dyke ...	16, Hafodarthren Road, Llanhilleth.	Llanhilleth 27
Llanhilleth ...	38	Mrs. W. R. Garrish ...	11, Brooklyn Terrace, Llanhilleth.	do. 17
Trinant ...				

COUNTY MIDWIVES—continued.

INDUSTRIAL AREAS	OFFICIAL NO.	NAME	ADDRESS	TELEPHONE NO.
Crumlin	39	{ Mrs. C. Griffiths	19, Commercial Road, Crumlin.	Crumlin 38
Hafodyrnyys, Kendon	40	{ Mrs. O. B. Small	7, Herbert's Terrace, Hafodyrnyys, Crumlin.	do. 11
Newbridge	41	{ Mrs. A. Ettwell ...	44, Greenfield Terrace, Newbridge.	Newbridge 10
Treowen	42	{ Mrs. M. Maiden	5, Treowen Road, Newbridge.	do. 69
Pentwynmawr				
Abercarn, Chapel-of-Ease, West End	43	{ Mrs. M. M. Williams	10, Persondy Terrace, Llanfach, Abercarn.	Abercarn 28
Pontywaun, Cwmcarn	44	{ Miss L. G. Norton	23, Caradoc Street, Cwmcarn.	Cross Keys 71
Cross Keys	45	{ Mrs. A. Fowler ...	106, North Road, Pontywaun, Cross Keys.	do. 28
Risca	46	{ Miss E. M. Rees	Brynhyfryd, New Cemetery Road, Risca.	Risca 7485
Pontymister	47	{ Miss M. G. Cockell	53, Commercial Street, Risca.	Risca 7491
Rogerstone	48	{ Mrs. E. K. Harley	"Craig-y-Nos," Bassaleg.	
Cefn				
Bassaleg				
(d) EASTERN VALLEYS :—				
Blaenavon	49	{ Mrs. E. O. Archer	4, New James Street, Blaenavon.	Blaenavon 279
Varteg	50	{ Mrs. E. A. O'Keefe	15, Charles Street, Blaenavon.	do. 278
Garndiffaith	51	{ Miss R. Smithy	Lasgarn House, Lasgarn Place, Abersychan.	Talywain 42
Abersychan	52	{ Mrs. F. Winstone	Hillcroft, New Road, Talywain.	do. 56
Pontnewynydd	53	{ (Vacant)		
Pantygasseg	54	{ Mrs. E. M. Hiley	Danycoed, St. John's Crescent, Pontypool.	Pontypool 333
Pontypool	55	{ Mrs. H. M. Jones	26, Fowler Street, Wainfelin, Pontypool.	do. 335
Wainfelin	56	{ Mrs. C. M. Cason	Clarence Villa, Osborne Road, Pontypool.	do. 336
Penygarn				
Pontymoile	57	{ Mrs. W. M. Bowen ...	Hazeldene, Fountain Road, Pontymoile.	do. 334
Cwmynyscoy				
Pontypool Road (New Inn)	58	{ Mrs. M. Phillips	13, Golf Road, Pontypool Road, Pontypool.	Griffithstown 40
Sebastopol	59	{ Mrs. L. Lloyd ...	"Grascote," Stafford Road, Griffithstown.	do. 48
Panteg				
Griffithstown				
Pontnewydd	60	{ Miss C. E. Heastie	48, Victoria Street, Cwmbran.	Cwmbran 7762
Llantarnam	61	{ Mrs. M. A. Perrett	10, Broadweir Road, Cwmbran..	do. 7764
Cwmbran	62	{ Mrs. M. Mayo ...	2, Clarkeville, Pontnewydd.	do. 7763
RURAL TOWNSHIPS :—				
Monmouth Urban	63	{ Mrs. L. E. Burnett	2, Monk Street, Monmouth.	Monmouth 221
Chepstow Urban	64	{ Miss M. A. Weston	The Manse, 4, Hardwick Avenue, Chepstow.	Chepstow 477
Caerleon Urban	69	{ Miss M. Goldsmith	16, High Street, Caerleon.	
PERIPATETIC :—				
	65	{ Miss A. L. Pritchard	2, King Edward Terrace, Rhymney.	Rhymney 59
	66	{ Miss L. M. Ashman	82, Wainfelin Avenue, Pontypool.	Pontypool 337
	67	{ Miss G. Hulbert	Buxton House, Newport Road Cwmcarn.	Abercarn 4
	68	{ Miss E. M. Cole	54, The Uplands, Rogerstone.	
	70	{ Miss A. V. Rice ...	37, Tynewydd Terrace, Newbridge.	

MIDWIVES ON THE STAFF OF THE MONMOUTHSHIRE NURSING ASSOCIATION.
(Subsidised by the County Council).

NAME OF DISTRICT ASSOCIATION	MIDWIFE	ADDRESS	TELEPHONE NUMBER
GOYTRE	Mrs. M. A. Price	Hillcrest, Penpelleny, Goytre, Nr. Pontypool.	Nantyderry 50
LLANFRECHFA	Miss Irene Richards	13, Ashford Close, Croesyceilog.	
LLANGATTOCK	Vacancy		
USK	Miss B. Clarke	"Arosfa," Monmouth Road, Usk.	Usk 84
LLANDOGO	Mrs. J. Skuse	The Cotlands, Treleck, near Monmouth.	Treleck 19
LLANDEILO			
CROSSENNY	Mrs. M. E. Cross	Graig Fach Farm, near Abergavenny.	Cross Ash 8
RAGLAN	Miss I. Prosser	Shearbrook House, Monmouth Road, Raglan.	Raglan 50
ITTON	Miss M. L. Rogers	1, The Row, Shirenewton, near Chepstow.	Shirenewton 21
LLANARTH	Mrs. C. Birch	The Bryn, Penpergwm, near Abergavenny.	Gobion 33
ST. MELLONS	Miss Muriel Taylor	Llandaff Square, St. Mellons.	
MARSHFIELD	Mrs. M. A. Cox	Brynteg, Marshfield Road, Castleton.	Castleton 69
TINTERN	Miss E. M. Preston	Devauden, near Chepstow.	Treleck 44
CAERWENT	Miss E. Morgan	Morgan Cottage, Caerwent.	
LANGSTONE	Miss C. H. Frampton	"Trelech," Langstone.	
MAGOR	Mrs. M. J. Porter	Channel View, Undy, near Magor.	Magor 19
CALDICOT	Miss G. E. Loader	Upper House, Caldicot.	
PANDY			
PORTSKEWETT	Miss O. M. Owen	8, Sudbrook Terrace, Sudbrook, near Chepstow.	Abergavenny 326
ABERGAVENNY	Miss M. Edwards	Bladon, Holywell Road, Abergavenny.	Abergavenny 59
	Mrs. M. Williams	3, New Houses, Llanfoist, near Abergavenny.	Ebbw Vale 53
EBBW VALE	Miss E. M. Rimmon	Nurses' Home, Ebbw Vale.	
	Miss Phyllis Llewellyn	Nurses' Home, Ebbw Vale.	
TREDEGAR	Miss G. C. Morgan	Nurses' Home, Tredegar.	Tredegar 48

LABORATORY FACILITIES.

The Laboratory facilities are utilised by the Monmouthshire County Council Public Health Department and School Medical Service; by the District Hospitals; Isolation Hospitals; Public Assistance Hospitals in Monmouthshire; and by the Medical Practitioners in the Administrative County of Monmouth. Certain work is also carried out for the Silicosis Board of Great Britain.

During 1938 the Laboratory undertook, in addition, to provide facilities for the Ministry of Agriculture, South Wales Division, the Urban District of Brynmawr and the Borough of Brecon.

The facilities which the Laboratory provides comprise Bacteriology, General Pathology, Water examinations, Milk examinations, Autopsies and a Blood Transfusion Service.

The Laboratory Staff consists of the County Pathologist, together with six technical Assistants, one clerk, one animal-house attendant and one glassware cleaner.

The accompanying table shows the number of specimens examined at the Laboratory during the year 1938 and also in the year 1937.

The County Pathologist reports that:—

The total number of specimens examined at the County Laboratory during the year 1938 shows a decrease of 637 as compared with the year 1937. This decrease is more than covered by the smaller number of swabs examined for Diphtheria than last year. After allowing for the diminution in the number of Diphtheria swabs examined, it will be noted that there is an increase of 2,896 other examinations. The decrease in the number of Diphtheria swabs is to be welcomed as evidence of the success of immunisation against Diphtheria now carried out generally throughout the County.

Under the Venereal Diseases Group, most of the specimens came from the Treatment Centre at the Royal Gwent Hospital, Newport. The number of exudates from sores yielding a positive result for the *Spironema Pallidum* is 12, as compared with 13 for 1937. These 12 cases were all males. The figures for Gonorrhoeal smears and urines show a marked increase in the number examined, and a correspondingly larger number of positive findings is recorded than in the year 1937. The number of Wassermann Tests for Syphilis show a slight decrease compared with last year, a smaller number of positive findings being obtained. Complement Fixation Tests for Gonorrhoea were increased both in total numbers and in positive results.

Table showing nature of specimens submitted for examination and the results thereof:—

Nature of Specimen.		1938.			1937.		
		No. Pos.	No. Neg.	Total Exm'd.	No. Pos.	No. Neg.	Total Exm'd.
Venereal Diseases.	Wassermann Test for Syphilis ...	811	1442	2253	901	1451	2352
	Complement Fixation Test for Gonorrhoea	257	418	675	201	312	513
	Smears and Urines for Gonococcus	558	2814	3372	409	1980	2389
	Serum for Spirochaeta Pallidum	12	41	53	13	46	59
	Sputum—						
Bacteriological Examinations.	For Tuberculosis Physicians for T.B.	450	1210	1660	421	1158	1579
	County Cases for T.B. (General Practitioners)	64	374	438	66	420	486
	Concentration Method for T.B.	—	—	—	—	—	1
	For Cultivation as well as T.B.	—	—	57	—	—	67
	Throat, Nasal and Ear Swabs for Diphtheria	1121	5691	6812	1404	8941	10345
	Cerebro-Spinal Fluid	—	—	95	—	—	91
	Widal Reaction for Typhoid Fever, etc.	20	91	111	10	72	82
	Hairs for Ringworm	3	7	10	2	14	16
	Secretions from Eye	—	—	36	—	—	32
	Urine (complete examination)	—	—	296	—	—	286
	Pus	—	—	94	—	—	71
	Effusion	—	—	40	—	—	45
	Vaccine	—	—	65	—	—	54
	Blood Culture	—	—	15	—	—	28
	Miscellaneous	—	—	797	—	—	424
	Urine	—	—	400	—	—	345
	Blood Count	—	—	353	—	—	319
	Autopsy	—	—	33	—	—	29
	Cerebro-Spinal Fluid	—	—	67	—	—	65
	Blood Grouping	—	—	33	—	—	22
Pathological Examinations.	Tissue for Microscopical Examination	—	—	131	—	—	105
	Blood-Sugar Estimation	—	—	133	—	—	130
	Blood-Urea Estimation	—	—	40	—	—	29
	Urine-Sugar Estimation	—	—	181	—	—	204
	Urine-Urea Estimation	—	—	87	—	—	44
	Test Meal	—	—	35	—	—	48
	Miscellaneous	—	—	173	—	—	108
	Water for Bacteriological Examination	—	—	153	—	—	68
	Water for Bacteriological and Chemical Examination	—	—	123	—	—	34
	Milk—						
Water and Milk Supplies.	Retail Roadside and School samples	—	—	1325	—	—	1129
	Graded Samples	—	—	465	—	—	420
	For Chemical Examination	—	—	188	—	—	184
	In connection with T.B. investigations at farms	—	—	125	—	—	320
	For Ministry of Agriculture, Microscopical exam. for T.B.	—	—	56	—	—	—
	For Ministry of Agriculture, Biological exam. for T.B.	—	—	241	—	—	—
	Miscellaneous Milk Samples	—	—	191	—	—	210
	Miscellaneous	—	—	5	—	—	—
	Animal Inoculations	—	—	2109	—	—	1412
Total		—	—	23496	—	—	24135

The number of sputum specimens examined for the Tuberculosis Physicians increased somewhat on the previous year and show a slightly larger number of positive results with regard to the B. Tuberculosis. Similar specimens from the general practitioners, however, show a smaller number of examinations and also of positive findings.

Of the 131 tissues for section, 30 were grouped as malignant growths; 24 were cancers of various regions of the body such as breast, uterus, intestine, skin, etc., and 6 were sarcomas. There was also one Rodent Ulcer; 9 were tuberculosis.

MILK EXAMINATIONS.—A total of 2,561 milk samples were examined during 1938, compared with 2,263 in 1937 showing a considerable increase.

The County Laboratory undertook the periodical examination of milk samples under the Milk (Special Designations) Order, 1936, and in addition to the samples examined for the Monmouthshire County Council, examinations of similar samples are carried out for other Authorities, for which payment is made to the County Council.

It is a practice of the Laboratory to submit to a biological test for the presence of living tubercle bacilli every sample of milk received which is consumed or produced in the Administrative County and also certain other samples contracted for with outside Authorities. Until 31st March, 1938, in the event of a positive test for tubercle bacilli being obtained, the farm or farms implicated were visited by the County Sanitary Inspector, County Veterinary Surgeon and officials of the Local Authority. Clinical examination of the cattle was carried out and samples of milk collected from individual cows and groups of cows for further examination at the Laboratory, this resulting in the elimination of the infected animals. On April 1st, 1938, Part IV of the Agricultural Act, 1937, concerning the elimination of tuberculosis from milking herds came into force, and the onus of detecting tuberculous cattle in milking herds fell upon the Animal Health Division of the Ministry of Agriculture. The County Laboratory has been appointed by the Ministry of Agriculture to carry out all the biological, and at first the microscopical, examinations of samples of milk collected by their Veterinary Surgeons during investigations at farms subsequent to the discovery of tubercle bacilli in a milk supply, and also during their own routine examinations of herds. The Laboratory has been allotted this work not only for the County of Monmouth but also for the Counties of Glamorgan, Radnor, Brecon, Carmarthen and Pembroke. Payment is made to the Monmouthshire County Council by the Ministry of Agriculture for all such examinations.

ACCREDITED AND TUBERCULIN TESTED MILK.—During the year 1938, 199 samples of Accredited and Tuberculin Tested Milk from producers in the

Administrative County were examined, and of these samples 160, or approximately 80 per cent., conformed to the standard laid down for them. The bacillus Tuberculosis was discovered in four of the samples by means of the animal inoculation test. The subsequent investigations with regard to tuberculous cows involved the visiting of four farms, all of these being undertaken by the Animal Health Division of the Ministry of Agriculture. Satisfactory measures were taken to deal with the offending animals. During 1937 the bacillus Tuberculosis was discovered twice biologically and four farms were visited by our officers in consequence.

SCHOOL MILK SAMPLES.—The provision of milk to school children under the Milk Marketing Board Scheme and the County Malnutrition Scheme has engaged the special attention of the Public Health Department, and the milk supplied to each School in the Administrative County is examined three times a year at the County Laboratory with regard to general cleanliness, tuberculosis and fat content. Under this heading 248 milk samples were examined during 1938. 74 samples were Pasteurised milk and 64 of these, or 86%, conformed to the standard laid down for Pasteurised milk. 174 samples were untreated milk, and of these 87, or 50%, were of satisfactory standard of bacteriological purity judging by Accredited Milk standard; 63, or 36%, were bacteriologically unsatisfactory; while 25 samples, or 14%, were fairly satisfactory and formed a borderline group. During the examination of these 248 samples of milk, the bacillus Tuberculosis was discovered biologically on two occasions, this involving the investigation of two farms by the Animal Health Division. The fat content in each case was satisfactory.

PASTEURISED MILK SAMPLES.—Samples of Pasteurised milk are examined by a bacterial plate count; and in addition, a Phosphatase test is always carried out, the purpose of this test being to ascertain whether the process of Pasteurisation has been effectively carried out or whether raw milk has been added after the heating process. Tests by animal inoculation for the presence of living Tubercle bacilli were negative in every sample of Pasteurised milk.

ROUTINE ROADSIDE MILK SAMPLES.—The routine examinations of undesignated milk samples collected in the course of their delivery to the consumer were continued during 1938, the object of the investigations being not so much to determine the quality of the milk in regard to its chemical composition—a line of work which properly belongs to the County Analyst's Department, and which is dealt with under the Sale of Food and Drugs Acts—but to ascertain by bacteriological methods the degree of cleanliness and wholesomeness of the milk at the time of its being sold to the consumer.

The examinations undertaken in the case of each sample have been:—

1. The Methylene Blue Decolourisation test.
2. The estimation of the coliform bacillus content,

3. The microscopical examination of the centrifugalized deposit for the detection of starch granules, gross particles of dirt, pus, blood, etc.
4. The microscopical examination of the cream and centrifugalized deposit for Tubercle bacilli.
5. Cultural examination for Diphtheria, Typhoid, Paratyphoid and Dysentery bacilli.
6. Guinea-pig inoculation for the presence of Tubercle bacilli.
7. In addition, the common antiseptics were always tested for qualitatively, as naturally the presence of any of these bodies would have had an influence on the bacterioscopic picture. These were never found.

1056 "retail roadside samples" were collected and examined during the year, nearly every milk supply in the County being examined once in twelve months. During 1938 all the 23 Rural and Urban areas were sampled, and opportunities were given for the re-examination of supplies which did not reach a proper standard of cleanliness. From the results obtained, these 1056 "routine roadside samples" can be classified as follows:—

1. Those which conform to the bacteriological standard laid down for Accredited Milk	529
2. Those which are distinctly below the standard laid down for Accredited Milk	391
3. Those which are on the borderline either as regards the time required for the decolourisation of methylene blue or containing coliform bacilli in .01 ml.	136

Therefore, of these 1056 samples of mixed milk as retailed to the consumer, 529, or approximately 50 per cent., were of a satisfactory standard of bacteriological purity; 391, or approximately 37 per cent., were unsatisfactory, whilst 136, or approximately 13 per cent., formed a borderline group.

The percentage of milk samples showing a satisfactory standard of bacteriological purity is the same as last year.

In no instance were the bacilli of Diphtheria, Typhoid, Paratyphoid or Dysentery isolated, whilst with respect to the bacillus Tuberculosis, this was discovered on 27 occasions by means of the animal inoculation test during the examination of the "retail roadside" samples. This figure for 1937 was 21. The number of farms involved was 69, as compared with 64 in 1937. 19 of the farms were visited by our officers during the year prior to 1st April and after that date 50 farms were investigated by the Animal Health Division of the Ministry of Agriculture. The infected animals were dealt with satisfactorily.

OTHER MILK SAMPLES.—During the year, a number of milk samples were examined on behalf of other Authorities and the bacillus Tuberculosis was discovered by means of the animal inoculation test on three occasions in undesignated samples, and once each in a Tuberculin Tested (Certified) sample and an Accredited sample. Most of these milk supplies were produced in the County of Monmouth and the ten farms involved were investigated by the Animal Health Division and satisfactory measures taken to eliminate the offending animals. On two occasions investigations were carried out at farms by our officers following notification by an outside authority that the bacillus Tuberculosis had been discovered by them in milk samples sold in their area, and which had been produced in Monmouthshire. Here again the infected animals were satisfactorily dealt with.

WATER SAMPLES.—The Laboratory carries out the bacteriological and chemical examination of drinking water. Following a recent outbreak of Typhoid Fever in England, and the receipt of Circular No. 1684 from the Ministry of Health, special facilities were offered to the Urban and Rural District Councils in the Administrative County for the examination of water supplies, and it is gratifying to note that of the 23 Councils approached, 21 accepted, and from July 1st, 1938, an increased number of water samples were submitted by the District Sanitary Inspectors for examination. This accounts for the marked increase noted in the number of samples of water, and as the scheme was only in operation for half the year under review the figure will undoubtedly show a further increase in the subsequent year.

MISCELLANEOUS WORK.—The diagnosis of pregnancy by means of animal inoculation is carried out at the Laboratory for the County Maternity and Child Welfare Clinics, the Hospitals in the County and Medical Practitioners. Nine of these tests were done during the year.

In 1938, the total number of Autopsies performed at the request of the Coroner was 33. Of these, 21 were carried out on miners suspected to have died directly as the result of Silicosis of the lungs, and who had been employed for long periods on hard ground boring. The post-mortem examinations were performed at the following places: 6 at Oakdale; 2 at Caerphilly; 3 at Aberbargoed; 2 at Blaina; 2 at Abertillery, and one each at Trelleck, Blaenavon, Abergavenny, Abercarn, Ebbw Vale and Tredegar. The question of Silicosis continues to engage the earnest attention of the Government Mines Department, the Colliery Owners' and Miners' Organisations, who are doing their utmost to introduce safeguarding devices (such as respirators, dust traps, etc.), with a view to protecting the workmen, and so mitigating as far as possible the evil consequences of working on ground containing a high percentage of Silica.

Diabetes supervision is carried out by the Laboratory. Diabetic patients

attend the Laboratory for the requisite pathological examinations to ensure that their regime is being adequately controlled.

Tests for the diagnosis of Cancer by serological examinations are occasionally performed. It should be noted, however, that this particular test has not, up to now, been placed on a reliable basis.

Blood Transfusions are catered for in Newport and Monmouthshire by the Newport and Monmouthshire Blood Transfusion Service. The service is run on voluntary lines, but two members of the Monmouthshire County Council Public Health Committee are members of the Committee of the Blood Transfusion Service, so that the County Council is actively interested in this work. During the year 1938 there were 17 persons on the panel, and donors were supplied on several occasions. Reports have been received from the hospitals concerned that the transfusions have been invaluable to the recipients.

ANIMAL INOCULATION.—2,109 experiments were carried out on animals under 39 and 40 Vic. Cap. 77, Certificate A1, licences for which have been granted by the Home Secretary. Most of the experiments were for the detection of B. Tuberculosis, but 218 were for Virulence Tests for Diphtheria. This compares with 156 for 1937. Some experiments were carried out for diagnosis of pregnancy. Particulars of the animal experiments were reported to the Home Secretary on 31st December, 1938. The noticeable increase in the number of animal experiments carried out is largely due to work carried out for the Animal Health Division of the Ministry of Agriculture, and which has been dealt with under the heading of Milk Examinations. There is now accommodation for 400 laboratory animals in the animal house.

GENERAL.—During the year under review income was received by the County Laboratory for the examination of specimens from the following Authorities: The Administrative County of Monmouth, the Monmouthshire Education Committee, most of the Urban and Rural District Councils of Monmouthshire, the Ministry of Agriculture, the County Borough of Newport, the Borough of Brecon, and Brynmawr Urban District Council, together with fees which were paid to the County Pathologist. These receipts amounted to approximately £2,000.

The work at the Laboratory is increasing both in amount and in variety. The Council are taking steps to provide adequate facilities for the work and the Local Authorities, together with the medical practitioners, are making increasing use of the facilities available.

NURSING IN THE HOME.

District nursing is provided under the scheme of the Monmouthshire Nursing Association, of which Lady Mather Jackson is the Honorary Secretary. At the present time there are 46 constituent Associations affiliated to the Monmouthshire Nursing Association, and 70 nurses employed by them. General and tuberculosis nursing is undertaken. The County Council makes a grant of £260 a year to the Association for this work. Midwifery nursing in the rural areas is undertaken by the Association on behalf of the County Council, a further grant being made by the County Council for the purpose.

The home nursing of infectious diseases is not carried out in any district of the County as a general practice, but has been resorted to in exceptional circumstances.

AMBULANCE FACILITIES.

(a) For infectious cases:—

The County Council has an Ambulance which was used chiefly during the year for the purpose of removing Public Assistance cases to Hospitals and Institutions and women to Maternity Hospitals; also for the removal of special cases of infectious disease.

Ambulances are in use at the Isolation Hospitals of the Bedwellty, Tredegar and Monmouth Urban District Councils.

The Newport Borough Ambulance is available upon terms for the County cases which are admitted to the Borough Isolation Hospital.

(b) For non-infectious and accident cases:—

All the collieries within the County maintain ambulances which are used for colliery accident cases and under certain arrangements for the transport to hospital of dependants of the workers.

Motor Ambulances are also available at the District General Hospitals, while at Monmouth there is a town ambulance available through the generosity of the local division of the British Red Cross Society.

There is a motor ambulance, the property of the Bedwas and Machen Urban District Council, which is kept for general use in that district.

For Non-Infectious, Accident and Maternity Cases the Bedwellty Urban District Council has provided two fully equipped Motor Ambulances for the purpose of dealing with accidents, or other urgent disability cases. The Ambulance is available at any time—day or night.

The Cwmbran Urban District Council now owns a new fully equipped 18 h.p. "Austin" motor ambulance which is available for the general use of the district.

The motor ambulance of the Joint Committee of the Order of St. John and the British Red Cross Society, which is kept at Crosskeys, is available for use anywhere in the County for non-infectious and accident cases.

A scheme is now under consideration for the provision of ambulance facilities for accident cases occurring within the County.

CLINICS AND TREATMENT CENTRES.

The County Council has established 43 Maternity and Child Welfare Centres in the County and 16 Ante-Natal Clinics. Full details are given in the County Maternity and Child Welfare Report.

The County Education Committee has provided 11 School Clinics, details of which are set out in the School Medical Inspection Report.

There are no day nurseries in the County.

The Tuberculosis Visiting Stations are detailed later in this Report.

There is one Treatment Centre for Venereal Diseases—at the Royal Gwent Hospital, Newport, details of which will be found later in this Report.

The County Council has established seven Clinics for the treatment of Orthopædic cases, at Newport, Pengam, Crumlin, Tredegar, Pontypool, Monmouth, Chepstow. The Central Orthopædic Clinic is at Newport, at which massage, electrical treatment, and remedial exercises are given.

A scheme is now under consideration for the establishment of a major central clinic near Newport, and for six clinics at the following centres: Blackwood, Crumlin, Tredegar, Pontypool, Rhymney and Aberbargoed. Preliminary plans and details have been prepared by the County Architect and submitted to the Commissioner for Special Areas and the Welsh Board of Health. It is estimated that the total cost will be in the region of £50,000.

HOSPITALS.

Full details of the Hospital Services, Public and Voluntary, have already been given in the Survey Report for 1930. No change of any note has taken place since that year, but minor alterations and increased accommodation has been effected in certain of the Hospitals. In some of the other hospitals additions and alterations have been carried out and grants towards the cost have been paid by the District Commissioner for Special Areas. The money has been utilised in providing additional operating theatre equipment, ward accommodation and staff accommodation as well as improvements in the administrative and domestic sections of the hospitals. Details of the Lydia Beynon Maternity Home (The Coldra) will be found under the heading "Maternity and Nursing Homes".

FULL TIME MEDICAL OFFICERS OF HEALTH OF COUNTY DISTRICTS.

The draft scheme which had been prepared under Section 111 of the Local Government Act, 1933, for dividing the County into areas, both urban and rural, with a view to making the necessary arrangements for securing that Medical Officers of Health shall not engage in private practice has been under discussion during the year and consultations have taken place between representatives of the local authorities and the County Council and also with the Welsh Board of Health. The scheme, when finally completed, must receive the approval of the Minister of Health. Details of the scheme when this approval have been received will be given in the report for 1939.

LOCAL GOVERNMENT ACT, 1929.—Detailed information regarding the transferred Poor Law Institutions arising from the Survey of the Institutions within the Administrative County of Monmouth, and dealing more especially with the Institutional accommodation available for the sick inhabitants of the area was included in the Annual Report for the year 1930. The administration of this service is supervised by the County Medical Officer of Health.

Several of the suggestions and recommendations contained under this heading in the 1930 Report have now been put into operation.

In the case of the Abergavenny and Monmouth Poor Law Institutions, these premises, with the exception of the Casual Wards, have now been closed. The Caerleon Institution is at present utilised for housing Basque refugee children.

POOR LAW MEDICAL OUT RELIEF.

A table showing the medical out-relief districts in the Administrative County

was included in the Report for the year 1930. A decision has not yet been made in regard to the proposed re-organisation of out-relief districts.

The association of the Public Health Department with public assistance work continues to grow and much time is devoted to the provision of facilities for special medical out-relief.

Mr. D. N. Rocyn Jones, M.A., M.D., F.R.C.S., was appointed Consultant Orthopaedic Surgeon for fracture and orthopaedic work coming under the purview of the Public Assistance Committee. Since his appointment he has held clinics alternately at Newport, Ty Bryn Hospital, Tredegar, Pontypool, Monmouth, Pengam, Crumlin and Chepstow. 30 new cases were examined by him and the old cases were periodically re-examined. The total number of examinations made was 215. 7 cases were admitted to hospital during the year, and 11 were treated at the Orthopaedic Clinic, Newport. Special visits have also been paid to the homes of patients who have been unable to attend the recognised clinic centres, and to the hospitals of Public Assistance Institutions when cases have needed urgent attention. When necessary patients have been removed to hospitals offering special facilities for examination and treatment under the Consultant Orthopaedic Surgeon.

Dental and defective vision cases are properly dealt with and examinations of patients for trusses, abdominal belts, etc., etc., are made by the County Medical Officer.

The County Ambulance is available for the transfer of medical and surgical cases to hospital, etc.

Consultations with Consultant Eye, Ear and Skin Specialists are arranged when necessary, also X-ray examinations of special cases.

The new cases dealt with through the Health Department in the year 1938, were as follows:—

The other figures are given for the purpose of comparison.

Nature of Case.	No. of cases dealt with.							
	1938	1937	1936	1935	1934	1933	1932	1931
Dental	453	515	484	341	217	92	63	32
Vision	393	435	392	329	263	171	122	70
Trusses, Abdominal Belts	76	49	86	49	57	53	33	18
Orthopaedic	38	30	54	53	38	25	24	22
Miscellaneous Medical	48	55	60	52	47	34	29	12
Tuberculosis Cases	17	15	9	1	Nil	Nil	3	Nil
Examinations by County Medical Officer as to fitness for appointment as Nurses, etc., at Public Assistance Institutions	35	36	17	32	31	17	5	—
Number of cases removed to Hospital and Institutions by the M.C.C. Ambulance	52	70	41	47	36	70	28	18

INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

The incidence of mental deficiency in the County is as follows:—

	Under 7 years.			7—16 years.			16—30 years.			Over 30 years.			Grand Totals.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Idiots	3	4	7	6	4	10	7	7	14	...	4	4	16	19	35
Imbeciles	8	16	24	37	19	56	29	45	74	17	33	50	91	113	204
Low Grade Feeble-minded ... ..	...	...	...	7	3	10	34	41	75	15	45	60	56	89	145
Medium Grade Feeble-minded ... ..	...	...	...	...	...	...	44	47	91	21	31	52	65	78	143
High Grade Feeble-minded ... ..	...	...	...	...	...	...	57	50	107	35	17	52	92	67	159
Moral Defectives ... ..	...	...	...	...	...	...	9	4	13	...	1	1	9	5	14
Epileptics and Mentally Defectives ... ..	...	...	...	...	...	...	6	10	16	5	9	14	11	19	30
Epileptic only ... ..	...	...	...	...	...	...	1	1	2	1	3	4	2	4	6
Totals	11	20	31	50	26	76	187	205	392	94	143	237	342	394	736

N.B.—This table does not include the defectives who are at Certified Institutions, but it includes 32 males and 25 females who are detained at the County Mental Hospital, and 6 males and 12 females who are inmates of the County Public Assistance Institutions.

There are also 41 males and 34 females over 16 years of age, referred by School Medical Inspectors, awaiting examination for classification.

Included in the above statement of defectives are 12 males and 3 females which have been under institutional care and have been discharged with their condition improved.

There are four defectives under guardianship, all males, one in Kent, two in Hertfordshire, and one at home with his parents. There are also five male defectives on licence with farmers in Monmouthshire, and one male defective on licence on trial with his parents. The local authority have also recommended the placing on licence with his parents of another male defective.

A defective on licence with a Monmouthshire farmer absconded from the farm on the 8th December, 1938. He was apprehended by the police on the 24th December and returned to Bentry Colony. His case will be reviewed by the Medical Superintendent and this Committee in six months' time with a view to his being given another chance on licence.

The defectives on licence in Monmouthshire are regularly visited by Miss Averay Jones, who is the Joint Mental Hospitals' Boarding-Out Officer for this area. The defectives receive pocket money and the Committee are encouraging the payment of an increased amount so that the defectives can start banking accounts. Arrangements have been made with local practitioners for periodical medical examinations of the defectives.

There was one death at a Certified Institution.

At the present time there are no children at schools for mental defectives. Accommodation for these cases is very difficult to obtain.

During the year 5 boys and 9 girls were transferred from the school side to the Mental Deficiency Committee.

There is still difficulty in finding accommodation suitable for mental defectives.

The admissions to institutions during the year were as follows:—

				Males.	Females	Total.
Princess Christian's Farm Colony	...	...	...	1	—	1
Bentry Colony, Bristol	...	...	...	1	—	1
Caersws Colony, Montgomeryshire	...	...	...	—	2	2
Hortham Colony, Bristol	...	...	...	4	1	5
Stoke Park Colony, Bristol	...	...	...	4	6	10
Coedygric Institution, Griffithstown	...	...	...	—	1	1
				10	10	20

One feeble-minded adult male was admitted to Rampton State Institution from Cardiff Prison. The petition in this case was presented upon the direction of the Court of Assize held at Monmouth, the defective being convicted of attempted murder and arson.

The Commissioners of the Board of Control paid a visit to Coedygic Certified Institution on the 10th June, 1938. In their report they stated that they were well satisfied with the welfare of the mental defectives at the Institution.

Subsequently the Board of Control requested the Local Authority to give consideration to the advisability of transferring certain defectives named to other Certified Institutions where there are fuller facilities for training on progressive lines, and in a few other cases they recommend hostel training.

Steps are being taken on these lines and vacancies for several of the defectives have been obtained at Stoke Park Colony, Bristol, and the Royal Fort Home, Bath.

At the periodical examination by the Visitors of another defective at Coedygic they recommended the Local Authority to reconsider the case with a view to her transfer if possible, also to the Royal Fort Home, and this course has been adopted.

Although the Committee are still of the opinion that the need for a Colony for mental defectives in the County is urgent, no further steps have been taken in the matter of the selection of the site because of the financial commitments involved, but an application was made to the District Commissioner for the Special Areas for a grant towards the provision of a Colony. The Commissioner was informed that it was difficult in the absence of a selected site to give a prior estimate of the cost of the establishment of a Colony, but that it was anticipated if the proposed Colony was based upon accommodation for 500 defectives, the amount should be approximately £150,000.

The following table shows the institutional accommodation available and in use at the end of the year for defectives from the Administrative County:—

Name of Institution.	Type of Defective.	No. of beds available.		No. of beds occupied on 31/12/38		Total.	Present charge per head per week
		M.	F.	M.	F.		
Brentry, Bristol	All classes (males over 18).	46	...	51	...	51	27/-
Coedygric, Griffithstown	All classes (females over 16 years).	...	55	...	55	55	25/7d.
Etloe House, Leyton	F.M. Roman Catholic Girls (over 16 years).	as vacancies arise		...	2	2	17/-
House of Help, Bath.	Fallen F.M. Girls (Moral Defectives up to 26 years of age).	ditto		...	2		16/6d.
Stoke Park Colony.	All classes, under 16 years of age. Females all ages.	ditto		19	36	55	23/4d. Low Grade 19/10d High Grade.
Caersws Certified Institution, Montgomeryshire.	All classes, under 14 years.	ditto		2	5	7	23/4d. Cotcases 32/8d.
Besford Court, R.C.	Males 16-18 years.	ditto		2	...	2	34/7d.
Durran Hill R.C. Training School	All Classes	ditto		...	1	1	20/-
Hortham Colony, Almondsbury	Special Cases	ditto		7	7	14	36/-
St. Joseph's Home Sudbury, Suffolk.	ditto	ditto		...	1	1	21/-
The Hermitage, Training Home, Uckfield.	ditto	ditto		...	1	1	20/-
St. Mary's Home, Painswick.	ditto	ditto		...	1	1	21/-
Total				81	111	192	

There are also the following County cases in State Institutions: Moss Side, 5 males and 2 females; Rampton 1 male and 5 females.

The amount paid for Institutional treatment during the year 1938 was £11,226 17s. 2d.

MIDWIVES.

The number of Midwives upon the County Roll at the 31st December, 1938, was 150.

MIDWIVES ACT, 1936.

The Midwives Act, 1936, came into operation in Monmouthshire on the 1st October, 1937. The County Council, as the Local Supervising Authority had already prepared a scheme for the general reorganisation of the midwifery services and for the appointment of full-time salaried midwives. This scheme subsequently received the approval of the Minister of Health. The Monmouthshire Nursing Association administers the scheme in the rural districts and rural townships, for which it is subsidised by the County Council. 70 Midwives (including 6 midwives who have been appointed for peripatetic duties) are employed by the County Council, and 22 nurse-midwives of the Monmouthshire Nursing Association are subsidised by the County Council. Fuller details will be found in the Maternity and Child Welfare Report for 1938.

MATERNAL MORTALITY.

Full particulars respecting Maternal Mortality will be found in the County Maternity and Child Welfare Report for 1938.

HEALTH VISITING.

This matter is dealt with fully in the County Maternity and Child Welfare Annual Report for 1938.

CHILD LIFE PROTECTION.

Particulars regarding this work will also be found in the County Maternity and Child Welfare Report for 1938.

ORTHOPAEDIC TREATMENT.

Full details of the scheme in operation for the treatment of school children will be found in the County Education Annual Report for the year 1938. The treatment of children under the age of 5 years is dealt with in the County Maternity and Child Welfare Annual Report for the year 1938.

The orthopaedic treatment facilities are extended to adult cases, and arrangements are made for the attendance of Mr. A. Rocyn Jones, F.R.C.S., at the Central Orthopaedic Clinic, Newport, one day per month, where cases are examined by him. Visits to special cases are made when requested.

The services of Mr. D. N. Rocyn Jones, M.A., M.D., F.R.C.S., are available for Public Assistance Cases.

The cost of hospital treatment is recovered from patients according to a scale which has been made by the County Council.

HOSTEL FOR UNMARRIED MOTHERS.

The Maternity Home and Hostel at Nantyderry continues its good work. There are 10 beds at the Institution, and the number of girls admitted during the year was 10, the average duration of stay being 115.1 days. Nine babies were born, and there was one stillbirth. The total number of inmates during the year (including those who were admitted in the previous year) was 12 and 10 babies.

Eleven girls were discharged, of whom 5 went to relatives, 5 to Homes, and 1 to a situation. Of the babies discharged, 5 went to relations and 4 to Homes.

Of the girls resident in the Hostel during the year, 10 were from the County of Monmouth and 2 from Glamorgan.

The object of the Hostel is to make provision during pregnancy and confinement for unmarried women who have borne good characters, but were expecting a first baby, thus giving them the chance of privacy which they could not secure in a public institution and enabling them to preserve their self respect.

Generally, the girls are admitted one month before their confinement and remain for three months after the birth of the child. As far as possible the mother and child are not separated for at least the first three months of the infant's life.

During their stay at the Hostel the mothers are trained to undertake some useful work when they leave and arrangements are made when necessary for the boarding out of the baby.

The work at Nantyderry is carried out economically and on practical lines and the results justify the vast amount of time given to it by the Committee and the Honorary Secretary, Lady Mather Jackson.

MATERNITY AND NURSING HOMES.

The Nursing Homes Registration Act, 1927, is re-enacted, with minor alterations, in the Public Health Act, 1936, which came into operation on the 1st October, 1937. The Act provides for the Registration and the inspection of Nursing Homes, and the making of Bye-Laws. The County Council is the supervising Authority under the Act. The following schedule is submitted in accordance with the Circular received from the Ministry of Health;—

No. of Homes registered	4
No. of orders made refusing or cancelling registration	Nil
No. of appeals against such Orders	Nil
No. of cases in which such Orders have been :—	
(a) Confirmed on appeal, and	Nil
(b) Disallowed	Nil
No. of applications for exemption from registration ...	9
No. of cases in which exemption has been—	
(a) Granted	9
(b) Withdrawn	Nil
(c) Refused	Nil

The Homes Registered are situated as follows :—One at Tredegar (Maternity and Nursing), one at Nantyerry (Maternity), one at Highfield, Bassaleg (Nursing), and one at Hereford Road, Abergavenny (Maternity).

Bye-Laws have been made by the County Council in respect of Nursing Homes, and these were allowed by the Minister of Health in November, 1928. The Bye-Laws deal with the keeping of Registers under the Act, the notification of infectious diseases and the notification of births and deaths at the Institutions.

The Act provides for exemption of certain Hospitals and Institutions, but the exemption shall only remain in force for one year from the date on which it is granted. Exemptions were granted during the year 1938 in respect of the following Hospitals :—

Monmouth Hospital, Monmouth; Tredegar Park Cottage Hospital; Ebbw Vale and District Voluntary Hospital; Pontypool and District Hospital; Cefn Ila Convalescent Home, Usk; Ebbw Vale Hospital; Abergavenny and District Hospital, Abergavenny; Blaenau and District Hospital, Nantyglo; and Chepstow and District Hospital.

Powers of inspection are granted to the County Medical Officer, and are carried out by Dr. Mary Scott, who has been appointed Inspectress of these Maternity and Nursing Homes.

There were no applications made to the County Council for the delegation of their powers to a District Council under Section 9 (2) of the Act of 1927.

LYDIA BEYNON MATERNITY HOSPITAL.

The Coldra, together with $7\frac{1}{2}$ acres of land, was gifted to the Monmouthshire County Council by Sir John Beynon, Bart., C.B.E., on the 30th November, 1924, for the purpose of a Maternity Hospital in memory of his mother. The adaption of the Coldra as a Maternity Hospital under the County

has for years been discussed but on each occasion it has been held up through the financial distress of the County. Very sympathetic consideration of the County Council's scheme was given by Captain Geoffrey Crawshay, the District Commissioner, and the County Council were very pleased to receive in May, 1935, a letter informing them that Captain Geoffrey Crawshay was prepared to make a grant of 75 per cent. of the financial approved costs entailed.

The work of equipping the Coldra is well in hand and it is expected that the Hospital will be opened during the latter months of 1939 as an up-to-date Maternity Hospital.

This Hospital would have been opened much earlier but it had been found necessary to reorganise the whole of the sewerage and sewage disposal arrangements for the Hospital. Negotiations for the acquisition of the land and the right of way have caused delay, but the contracts for this work have now been let and the work is in hand.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER SUPPLY.

From the accompanying table it will be seen that the rainfall for the year 1938, was very slightly above the average. Precautionary restrictive measures were adopted in some areas so as to conserve the water supply.

Detailed information regarding water supply schemes in the County will be found in the Appendices to the Annual Report for the year 1937.

As regards the Rhymney Valley Water Board, the rainfall for the year ending December, 1938, as recorded at Rhymney Bridge Reservoir, was 60·71 inches, compared with 52·32 inches and 66·14 inches in 1937 and 1936 respectively. The average rainfall for the last ten years is 63·79 inches whilst the average taken over 22 years is 62·54 inches. The three driest consecutive months during the year were February, March and April, the rainfall for the three months being 4·48 inches. There were 142 days without rain during the year compared with 151 days in 1937 and 126 days in 1936. The maximum rainfall recorded for any one day was 2·04 inches on the 12th November. 1·00 inches or more fell on nine days and 0·50 inches or more on 46 days. By the Taf Fechan Water Supply Act, 1937, the minimum quantity of water to be taken or paid for by the Rhymney Valley Water Board was reduced from 1,750,000 gallons to 1,550,000 gallons a day. The quantity of water taken in excess of the minimum was 95,962,000 gallons. The total quantity of water taken from the Taf Fechan Supply Board during the year was 659,010,000 gallons. The maximum taken on any one day was 3,107,000 gallons. Rhymney Bridge No. 1 Reservoir, which was repaired in 1934, supplemented the Rhymney Bridge No. 2 Reservoir supply to the extent of 27,000,000 gallons. During the year a six-inch diameter main was laid from Ystrad Mynach to connect to the existing main at Pwllypant and a 15,000 gallon storage tank was

Part

Appended is a table giving the rainfalls in inches in various localities in the County during the year under review, and also for a series of past years.

Name of place at which records were taken.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Abergavenny ...	47·87	23·79	33·19	40·37	49·17	41·50	35·22	43·48	43·09	46·47	46·07	—	39 10	28·24	37·01	41·91	43·37	37·53	36·89
Abersychan, Glansychan House ...	69·10	38·98	56·47	63·37	70·40	60·54	53·93	67·86	64·44	62·83	66·69	58·51	61·32	42·97	55·53	59·83	—	—	—
Abertillery ...	71·24	40·99	52·47	55·75	71·19	60·79	54·67	63·82	62·87	62·96	67·37	62·75	63·70	8·88	56·94	62·17	76·0	55·38	58·72
Chepstow, The Cedars	42·12	23·55	37·85	35·85	49·28	38·00	35·31	44·00	44·55	40·42	Not taken	taken	Not taken	Not taken	Not taken	—	—	—	—
Cwmearn ...	64·15	33·91	49·16	51·83	67·58	52·39	45·30	56·99	56·99	58·92	62·13	54·56	53·93	30·63	51·03	57·59	58·37	50·6	55·37
Ebbw Vale	75·21	43·11	54·51	53·17	68·36	56·49	52·71	65·85	72·55	76·30	72·85	65·92	73·67	51·83	65·75	73·55	77·57	62·43	79·79
Henllys, Pantyreos Reservoir ...	63·93	37·57	55·64	58·26	74·91	55·56	51·20	63·07	69·42	65·10	64·46	58·26	59·19	40·22	53·10	62·61	57·28	50·13	60·15
Little Mill, nr. Ponty-pool ...	46·26	25·94	27·42	50·21	50·24	50·25	36·0	43·46	43·007	43·48	50·24	—	—	—	—	—	—	—	—
Ynysfiro nr. Newport ...	—	—	—	—	—	—	—	—	46·67	40·90	42·59	38·42	40·32	28·70	34·74	44·03	41·17	38·92	39·23
Nantpyrydd nr. Newport	—	—	—	—	—	—	—	—	51·70	48·04	46·63	43·38	45·07	30·46	39·22	51·60	48·84	40·25	39·76
Pontypool, Snatchwood Park ...	69·10	37·57	57·83	63·42	72·62	60·21	56·53	69·08	Not taken	taken	Not taken	taken	Not taken	taken	Not taken	taken	—	—	—
Tredegar, Redesdale House ...	51·70	27·49	45·82	60·73	65·67	57·02	52·45	62·86	59·08	54·83	63·21	56·79	49·39	42·59	57·36	60·52	64·20	52·56	57·47
Wentwood, Newchurch Gathering Ground	49·85	29·33	47·22	45·04	62·26	47·34	44·29	53·83	54·04	50·03	49·41	43·88	46·09	32·26	40·39	50·42	49·26	41·11	41·98
Wentwood Reservoir Llanvaches ..	46·13	25·71	42·52	41·88	57·16	41·47	39·32	46·24	46·41	44·41	42·50	40·25	42·44	27·94	35·84	47·65	45·42	37·38	39·79

erected at Bedwas. These works materially improved the supply to the higher levels of Bedwas and Caerphilly. The main is 7,088 yards in length and with the tank and subsidiary mains cost £6,550, towards which a substantial grant was received from the District Commissioner for Special Areas. The works were carried out by direct labour. The supplies were fully maintained throughout the Board's area though there were still some complaints of intermittent supplies due to incrustated joint galvanised iron services. Where joint iron services have been disconnected and new separate lead services laid from the main, complaints have ceased. Samples of water from all sources are sent for analysis to the Cardiff and County Public Health Laboratory. Every assistance is readily afforded by Mr. John H. Sugden, M.Sc., F.I.C., Chemist and Bacteriologist and his staff.

Dealing with the Abertillery and District Water Board, the rainfall at the Board's Grwyne Fawr Reservoir, Breconshire, during the year 1938 was 49.97 inches as compared with 57.77 inches in 1937 and 61.09 inches in 1936. The Board's district has been well supplied with water during 1938 except for a short period during the summer when restrictions were in force. Subsidence through colliery workings is a source of trouble in providing a constant supply of water throughout the area, the mains being frequently affected and large quantities of water are sometimes lost through burst pipes and leakages, requiring constant watching and attention on the part of the Board's workmen and officials. To improve the distribution of the Board's water, several main schemes have been submitted to the District Commissioner for Special Areas. Grant schemes to the value of about £27,000 have been granted by the Commissioner for this work and the new mains were laid in the Abertillery, Abercarn, Risca and Mynyddislwyn Areas. This work was completed during 1938. Further schemes were submitted last year and a grant has been received from the Commissioner. These schemes are now in hand.

The following is a brief resumé of the remaining water supplies to the County of Monmouth.

Abergavenny. The district is served by the Corporation Waterworks. The water is obtained from springs and conveyed by cast iron main to a Service Reservoir of approximately 7,500,000 gallons capacity and which allows for a daily yield of about 260,000 gallons.

Blaenavon. The Blaenavon Council are themselves the water authority for this area. The supplies of water are obtained from local springs and have an average daily quantity of 380,000 gallons. There are three reservoirs for storage.

Chepstow. The whole of the district is served by the Chepstow Water Board. The supply is obtained from springs and borings for the lower levels

and from a stream for upper levels. Both supplies are filtered and chlorinated. Several small reservoirs for storage are in use.

Ebbw Vale. The water supply of the Ebbw Vale district is taken from two Reservoirs situated on the Llangynidr Mountain, and conveyed to the town by cast iron gravitating mains. The water is of a soft character, and is therefore liable to plumbo solvent action in contact with lead, but the use of lead pipes to carry the water supply has been almost entirely superseded by galvanised iron, which obviates the risk of contamination from this cause. The condition of the water is satisfactory, and the supply is copious and constant.

Monmouth. The Severn Valley Gas and Water Co. supplies water to the town of Monmouth from springs within a catchment area adjoining the old Hereford Road; the water is filtered and chlorinated. A certain amount of water is also taken from the River Wye and pumped to some of the higher levels; this water is also treated. Owing to unsatisfactory reports on the water samples, the catchment area was inspected during the year by the County Public Health staff in company with the staff of the Severn Valley Gas and Water Co. and certain suggestions were made with a view to protecting the springs and gathering grounds. The works carried out have resulted in some improvement.

Pontypool. The Pontypool Urban Area is supplied by the Pontypool Gas and Water Co. The sources of supply are wells, boreholes, springs and brooks.

Tredegar. With regard to the supply of water to the Tredegar Urban Area, this is obtained from the Shon Sheffrey spring, which has always proved satisfactory, both as regards quality and quantity. A modern filtration and treatment plant is installed to safeguard the water supply.

Usk. Usk is supplied partly by the Pontypool Gas and Water Co., the supply of which is obtained from springs. There are also numerous private wells from which supplies are obtained.

Rural Areas. The water supplies to the rural areas vary considerably, due to the scattered nature of the population. When portions of the rural areas are in close proximity to the more populous areas water is obtained from the urban supplies. Generally speaking, it is correct to state that the rural authorities depend in the main for their water upon wells, springs, boreholes and numerous minor storage and distributing arrangements.

In the Abergavenny Rural District, a scheme for the supply of water to the Parish of Llanfihangel Crucorney, which includes the village of Pandy, has been prepared by the Rural District Council and a Ministry of Health enquiry has been held into it. As it is an expensive scheme, application for

assistance towards the cost has been made to the County Council, which has consented to make a grant in accordance with the financial conditions which it has applied to such sewerage and water schemes in rural areas. This scheme will make provision for an adequate water supply to the proposed new school at Cwmyoy.

Chepstow Rural District Council obtains supplies from several sources. The water supply from the Severn Tunnel to Caldicot and the surrounding district has now been discontinued and the new supply is by means of service mains from the Chepstow Water Board. Several other schemes for the supply of water have also been inaugurated.

Portions of the Magor and St. Mellons Rural District receive water from the Newport Corporation supplies.

The Monmouth Rural District Council have carried out extensive improvements to the water supply to Raglan and the scheme has proved of great value to the district. A scheme has also been prepared by the Council for the provision of an adequate water supply to the village of Trelleck and the greater part of the United Parish of Trelleck. The scheme has been submitted to the Minister of Health and a local enquiry held by one of the Ministry of Health engineering inspectors. The cost is expected to be somewhere in the region of £18,000.

Generally, the Rural District Councils pay strict attention to the water supplies of their districts. This attention is showing itself in the improved bacteriological condition of the supplies. Samples of water are periodically taken for analysis. Arrangements are made with the Laboratory by the District Sanitary Inspectors, and the samples are examined by the County Pathologist. Samples are also collected by the County Sanitary Inspector. Water supplies found to be polluted are investigated and usually the cause of pollution is removed.

DRAINAGE AND SEWERAGE.

Detailed information regarding sewage disposal schemes in the County will be found in the Appendices to the Annual Report for the year 1937.

The Constituent Authorities of the Rhymney Valley Sewerage Board are : Caerphilly and Gellygaer Urban District Councils in the County of Glamorgan; and Rhymney, Bedwellty and Bedwas and Machen Urban District Councils in the County of Monmouth. The Board deals with the sewage of the Constituent Authorities in the Rhymney Valley and also deals with the sewage of a portion of the Parish of Van in the area of the Cardiff Rural District Council, and with the sewage from a portion of the Parishes of Lower Machen in the area of the Magor and St. Mellons Rural District Council. The Main Trunk Sewer of the Board extends from Rhymney to the sea Outfall at Peterstone Wentloog with a 2½ million gallons capacity storage tank at St. Mellons. The whole of the

subsidiary Sewers in the Rhymney Valley are now connected to the Trunk Sewer, the subsidiary sewer from Bute Town in the Gellygaer Area being connected during the year. The Rhymney river, when in flood, continues to cause damage to the river banks and in consequence extensive protective works have to be constructed from time to time, counterforts and groynes being erected to prevent undermining of the sewer. Extensive Housing development continues in the area of the Magor and St. Mellons Rural District Council, and the additional properties are being drained through the Council's subsidiary sewers into the Board's Trunk Sewer.

The Western Valleys (Mon.) Sewerage Board deals with the sewage of eight urban districts, *namely*, Abertillery, Ebbw Vale, Tredegar, Nantyglo and Blaina, Abercarn, Risca, Bedwellty and Mynyddislwyn, together with portions of the Magor and St. Mellons Rural District. The Trunk Sewer, which was completed in 1910, has worked well, although trouble has been experienced from time to time owing to the subsidence due to underground colliery workings. A scheme was submitted to the District Commissioner for Special Areas to re-lay the Trunk Sewer between Crumlin and Newbridge. A grant of about £19,000 was received and this work is at present proceeding.

A scheme is now under consideration for a joint main trunk sewer from Blaenavon to Ponthir under a joint board, on similar lines to those obtaining in the Western and Rhymney Valleys, the constituent authorities of which will be the Blaenavon, Pontypool and Cwmbran Urban District Councils. A public enquiry into the question of the formation of the sewerage board has already been held by the Minister of Health, and preliminary plans and estimates of the sewerage scheme have been prepared. The scheme makes provision for a main trunk sewer starting in the higher reaches of Blaenavon and picking up in its course the subsidiary sewers which now empty direct into the Afon Llwyd and its tributaries. The partial treatment disposal works of the Cwmbran Council at Llanfrechfa will be linked up with the scheme and will be used for the purpose of dealing with surplus sewage due to storm. The main trunk sewer will discharge into complete modern sewage purification works to be established at Ponthir, and the resultant effluent which will comply with all the necessary standards of purity will be discharged ultimately into the Afon Llwyd. This scheme will be carried out with the assistance of grants to be made by the Commissioner for the Special Areas.

In the Abergavenny Rural District, the sewerage scheme for the Mardy, including the sewer from Maindiff Court, and the Council's sewage disposal works, has been completed. There is no public drainage in the rest of the district, but the sewage from all the Council houses is treated in the disposal works at the site of the houses; and in all houses recently erected by private enterprise a septic tank and filter is installed, allowing 4 cubic feet capacity in the septic tank, and 1 cubic yard of filtering media per adult.

The Coldra Estate has made considerable development and the Council has constructed a sewer and septic tank to deal with the sewage from these houses and any that may be erected in the future. The development, however, has been so rapid that the facilities already mentioned will have to be materially increased. The Caerleon Council are now proposing to construct a further length of sewer and a new and larger septic tank on a new site to deal with this added development. The new system will also provide for the drainage from the Lydia Beynon Maternity Hospital, the County Council making a contribution towards the increased expenditure.

The dry earth closet system is in use practically throughout the Magor Parish of the Magor and St. Mellons Rural District.

The slop water (house waste) is disposed of :—

- (1) Some of the villages have main drains conveying slop water into ditches and over the land.
- (2) In part of Christchurch it is conveyed into sewers.
- (3) Into cesspools which are emptied when necessary.

The populous and closely built parts of the Magor and St. Mellons Rural District are served by efficient sewerage systems. A scheme has been prepared for effective sewerage arrangements to deal with Castleton and Marshfield. This provides for the construction of a new sewer with a suitable channel outfall. The scheme will make adequate provision for the increased development around Marshfield.

In the Monmouth Rural District, a new percolating filter plant and sprinkling beds were laid at Raglan at a cost of approximately £700.

RIVERS AND STREAMS.

The rivers in the agricultural portion of the County still remain free from serious pollution with the exception of the lower portion of the river Usk, and speaking generally, it may be said that so far as sewage pollution is concerned, there is no serious pollution above the point at which the Afon Llwyd enters the river Usk. Since the completion of the scheme for the treatment of the sewage from the parishes of Llantarnam and Llanfrechfa Upper, an improvement has been observed in the condition of the Avon Llwyd. The rivers passing through the industrial portion of the County are still heavily polluted by coal dust, etc., from coal washeries and other industrial concerns situated along their banks. In the Rhymney, Western and Sirhowy Valleys the main trunk sewers have practically removed the whole of the river pollution by sewage. When completed the main trunk sewer scheme for the Eastern Valley will have a similar effect as in the Rhymney, Western and Sirhowy Valleys.

CLOSET ACCOMMODATION.

Progress still continues to be made in the conversion of privies, pail closets, etc., into water closets, this being possible where subsidiary sewers have been provided by the various local authorities.

PUBLIC CLEANSING.

The collection of house refuse varies according to the conditions prevailing in the various districts. Usually the refuse is collected two or three times in the week. In most instances the work is done by motor lorries fitted with suitable covers. The provision of adequate sewerage arrangements, and the conversion of the old closets into water closets, have now practically eliminated the necessity of making special collections of night soil, especially in the urban areas. There is improvement in the care and condition of the refuse tips in the various districts, when and if possible all inflammable and decomposing matter should receive special attention.

A very good instance of what can be done by way of modern refuse tips is seen at the Abertillery refuse tip at the side of the Abertillery—Blaina road, where controlled tipping on modern lines is being carried out in a highly satisfactory manner. The Abertillery Council are to be complimented upon the manner in which they are dealing with the refuse upon this site.

SANITARY INSPECTIONS OF THE AREA.

It is again observed that the District Sanitary Inspectors have displayed considerable activity in their respective areas.

Inspections of premises under the various Public Health and Housing Acts have been made, and where nuisances or defects are noted, informal and statutory notices have been served. In the majority of cases the notices were complied with, and in very few instances were legal proceedings necessary.

Mr. J. Jenkin Evans, M.R.S.I., F.S.I.A., the County Sanitary Inspector, assists the County Medical Officer in his sanitary investigations. Where the local Council is involved, he is accompanied by the Sanitary Inspector for the district concerned. Mr. Evans is also qualified as an Inspector of Meat and Other Foods. His duties may be summarised as follows:—

Investigations of Sanitary conditions of Schools, Pollution of Rivers and Streams, Causation of Outbreaks of Infectious Disease, Water Supplies of the County, and Tuberculosis in Cattle.

Nuisances arising from Drainage, Sewerage and Sewage Disposal, Refuse Collection and Disposal, The Keeping and Slaughtering of Animals, etc., Offensive Trades.

Inspections of Dairies and Cowsheds, Diseased Foodstuffs (at the request of the District Sanitary Inspectors), dwellings where insanitary conditions, overcrowding, etc., are reported.

Taking of samples of water, milk and sewage effluent for bacteriological and chemical examination at the County Laboratory; the disinfection of premises; attendance at Enquiries, etc.

During the year 1938 all schools closed on account of infectious disease were disinfected by the County Sanitary Inspector.

Under the County Medical Officer's Scheme for securing a clean and wholesome milk supply, the County Sanitary Inspector had much of his time taken up with milk investigations of various kinds, as well as with the collection of samples under the terms of the Milk (Special Designations) Order, relating to "Accredited" and "Tuberculin Tested" licences.

Until the Agriculture Act, 1937, came into operation on the 1st April, 1938, all special investigations arising from the "informal" milk sampling scheme of the County Medical Officer, and also under the Milk and Dairies Acts and Orders, were attended to by the County Sanitary Inspector, who also attended at the post mortem examination of any animals slaughtered under the Tuberculosis Order, and the Orders already referred to.

During the year under review the Milk Marketing Board's Roll of Accredited Milk Producers' Scheme continued in operation and 85 licences were issued to producers of Accredited milk and 42 licences to producers of Tuberculin Tested milk to qualify them for entry upon the Milk Board's Roll under the special schemes. The farm premises generally were inspected and, where necessary alterations were required, revisits were made. Pre-licence samples and quarterly samples of milk were collected from each producer for bacteriological and other analysis. This has necessitated a great deal of extra work.

Under the Milk (Special Designations) Order, 1936, the County Council became the Licensing Authority for both "Accredited" and "Tuberculin Tested" licences. Further details relative to this Order will be found later in this Report.

SHOPS.

Improvements are still being effected under the various legislatures for the improvement of the health and comfort of workers in shops. The Factories

Act, 1937, which came into operation on the 1st July, 1938, will secure a general improvement in the conditions of factories and workplaces.

SMOKE ABATEMENT.

No special reference to this subject is made in the Reports of the District Medical Officers which have been received.

SWIMMING BATHS AND POOLS.

New swimming baths and pools in the County are on modern lines with up to date filtration and cleansing plants. Facilities are available at the County Public Health Laboratory for the examination of water from Swimming Baths and Pools.

ERADICATION OF BED BUGS.

The infestation of human dwellings by the bed bug continues to present a serious problem. Where rehousing is carried out under the Housing Acts arrangements are made for disinfection of furniture, etc., before tenants take up their new abodes.

OTHER SANITARY CONDITIONS REQUIRING NOTICE.

There is very little change regarding the burial grounds in the County, and the demand for new ground for this purpose is still pronounced, more especially in those areas where there has been recent increases in the population. In the Survey Report issued for the year 1930, the disposal of the dead by means of cremation was advocated by the County Medical Officer of Health. He is still of the opinion that this method is the one most suitable, especially in the overcrowded areas of the County.

SCHOOLS.

The sanitary condition of schools is subject to district sanitary inspections, while the School Medical Officers and the County Sanitary Inspector also deal with it at their periodical visits to the schools. The special survey by the School Medical Officers of school buildings which commenced in 1925, was continued, and during the year 1938 all school buildings visited by School Medical Officers were inspected and a summary of the reports is given in detail in the County Education Annual Report for the year 1938. The prevailing type of school building is stone built with slate roof. There are also in use buildings of brick with slate roof. In two or three districts pending the erection of new premises, some of the departments are accommodated in galvanised iron buildings. These schools are on the corridor and central hall system and are substantial, commodious, airy and well

lighted. All the conditions found to be unsatisfactory at the schools were notified to the County Sites and Buildings Committee. Generally, the sanitary conditions of the schools can be termed satisfactory. The water supplies to the schools in the whole of the industrial portions of the County are taken from the mains of the local authorities. This also applies to portions of the rural areas adjoining the townships. In the rural areas, where an adequate water supply cannot be obtained from the Council's mains, the supply is obtained from wells and springs. Samples of water from these supplies are periodically taken, also under special circumstances, and are analysed at the County Laboratory. Should the water supply prove to be unsuitable, alternative supplies are examined, and in practically every instance a suitable supply of pure water has been obtained. It is unfortunate, however, that in some cases this may be some distance away from the school premises. Disinfection of school premises following outbreaks of infectious disease is carried out by the County Sanitary Inspector, the whole of the interior and lavatory accommodation being thoroughly sprayed with a suitable disinfectant. With regard to the spread of infectious disease amongst school children, close co-operation exists between the District Medical Officers and the County Medical Officer. During the year the County Sanitary Inspector, in company with the District Sanitary Inspectors inspected all the schools at the time of their closure, on account of infectious disease, and any defects found were reported to the appropriate department. Any sanitary defects reported by the School Medical Officers are dealt with by the County Sanitary Inspector.

HOUSING

The Circular issued by the Ministry of Health which deals with the preparation of the Annual Report of the County Medical Officer, points out that the Section under the heading "Housing," which calls for detailed information does not apply to County Councils. It is, however, noticed that stimulated by the Housing Acts of recent years extensive building operations by local authorities and private enterprise has continued. The majority of the houses erected are of modern good class urban type, whilst most of the better class are of a modern type and semi-detached. A housing scheme has been planned on the Coldra Estate in the parish of Christchurch (near Newport), and also at Langstone. There are few special difficulties in providing suitable building sites. In the thickly populated areas of the County the housing question cannot be regarded as settled, as from the reports received from the District Medical Officers of Health and from other observations there is still a shortage of houses for the working classes. Many of the older types of houses are in a condition only fit for demolition, but it is unfortunate that most of these houses are to be found in the areas where industrial depression has been most keenly felt and the tenants, in most cases, are not in a position to avail themselves of better housing accommodation, even when provided. The houses erected by the Local Authority under the Housing Acts, have been designed for the occupation by one family

only, and are not in any way suitable for dual occupation. It is regretted that a number of these houses are now occupied by more than one family, and the practice of allowing this double occupation should be discouraged as much as possible by the Local Authority, as there is the danger that the houses so occupied will soon become little more than slum property. It is noted that the Sanitary Inspectors in the districts paid considerable attention to the inspection of houses under the Public Health and Housing Acts, and notices are served for the abatement of nuisances and the repairs necessary. The general character of the defects found to exist in unfit houses dealt with were mainly defective roofs, damp walls and defective windows and floors, and in some of the older type of back to earth cottages inadequate lighting and ventilation, and insufficient height of bedrooms.

The Housing Act, 1930, came into operation on the 15th August, 1930, and is to be construed with the Housing Act, 1925, and which is the principal act. It was an Act to make further and better provision with respect to the clearance or improvements of unhealthy areas, the repair or demolition of insanitary houses and the housing of persons of the working classes. The Housing Act, 1930, materially altered the powers of Local Authorities with respect to slum properties and re-housing, and contained provisions relative to the clearance or improvement of unhealthy areas, whilst imposing on the Local Authority definite obligations as to re-housing. Slum clearance and improvement area schemes have been placed before the Minister of Health by some of the Local Authorities in the County, and local enquiries have been held by the Ministry Inspectors. Sections of the Act of 1930 deal expressly with the housing conditions in rural districts and the duty of the Rural District Councils and the County Council. It was laid down that it shall be the duty of every County Council to have constant regard to the housing condition of persons of the working classes, the extent to which overcrowding or other unsatisfactory housing conditions exist and the sufficiency of the steps which the Council of the Rural District have taken or are proposing to take to remedy those conditions and to provide further housing accommodation. During the year special inspections have been carried out in the districts regarding houses unfit for human occupation with a view to proceeding with clearance and improvement schemes under the Housing Acts. A number of clearance schemes have been carried out in many districts.

HOUSING (RURAL WORKERS) ACT, 1926.

The object of the Act, which is administered by the County Council, is to secure a contribution to the improvement of housing conditions for agricultural labourers and other country workers by facilitating the reconditioning of old houses in such a way as to bring them up to modern standards of comfort

and sanitation and by the conversion into dwellings of buildings not previously used for that purpose.

To this end the Act provides for assistance both by grants (towards which Exchequer contributions are available) and by loans, to be made available by the County Council to owners who are willing to undertake the carrying out of approved works.

The Act attaches conditions to the grant of public money which are designed to secure that the benefits shall go practically entirely to the tenants and not to the landlords. The Act directs attention to the necessity for preserving any historic, architectural or artistic interest in buildings dealt with under the Act, and to the importance of securing that the dwellings when completed will be in all respects satisfactory.

The Act is temporary; the period for which assistance is made available is extended to the 30th September, 1942.

During the year 12 applications for assistance relating to 14 dwellings were received, and grants were made in 12 instances, affecting 13 dwellings. The value of grants made was £1,120/13/4 and the value of loans £130.

HOUSING ACTS, 1935 AND 1936.

The Housing Act, 1935, gave local authorities new powers and imposed upon them new duties with relation to the abatement of overcrowding and the re-development of congested areas. In addition, it made certain extensions and alterations to the Housing (Rural Workers) Act. Broadly speaking, the chief matter dealt with in the Act are (1) the prevention and abatement of overcrowding; (2) the redevelopment of overcrowded areas; and (3) the consolidation of housing contributions accounts and other financial provisions. From a public health standpoint the most urgent matter concerning the district councils is that under the heading "Prevention and abatement of overcrowding". Under Section 1 of the Act, it was the duty of every local authority to cause an inspection of their district to ascertain what dwelling houses within their district are overcrowded, and to prepare and submit to the Minister of Health a report showing the result of the inspection and the number of new houses required in order to abate overcrowding in their district, and in addition to prepare and submit to the Minister proposals for the provision of the necessary houses.

The Ministry of Health has issued a comprehensive report dealing with the Overcrowding Survey in England and Wales and based upon the reports of the local authorities upon the detailed survey carried out. Taking Monmouthshire as a whole, the percentage of working class houses overcrowded is given as 3·4, and the number of overcrowded families is given at 2,411.

More detailed information regarding the working of the Act and the percentage of overcrowding in the various county districts will be found in the Report for the year 1936.

The Housing Act, 1936, which came into operation on the 1st January, 1937, does not include any new legislative requirements, but merely repeals and re-enacts in consolidated form the provisions of the Housing Acts of 1925, 1930 and 1935. Owing to the numerous and important amendments made by the Act of 1930 in the Act of 1925, and by the Act of 1935 in both the earlier Acts, the position of housing legislation had become extremely complicated, and the new Act assembles, in appropriate sequence, the provisions relating to repair, demolition or closure of individual unfit houses, clearance areas, prevention and abatement of overcrowding, and other aspects of the housing code previously distributed among the three earlier Acts. Any amendments effected by this Act are of a minor character.

The Housing conditions in Monmouthshire are on the whole satisfactory, but in certain localities overcrowding and insanitary conditions still obtain. The authorities are handicapped for the moment—in spite of their progressive policies—by site difficulties, financial considerations and changes in the industrial outlook. A Report of the Medical Officer upon an Inquiry made into the housing conditions in one of the County districts is reprinted as an Appendix to the Report for the year 1937. There also appears as an Appendix to that Report a paper by T. Mervyn Jones, B.A., LL.B., on "Housing and Public Health in County Districts—Supervisory Powers of the Minister of Health and the County Council."

The following table shows the number of houses which had been erected under the various Housing Acts and were owned by the district councils on the 31st December, and also the numbers of houses in the course of erection and for which sanction to build had been given by the Minister of Health on the 31st December, 1938.

County District	Total No. of Houses owned on 31/12/38.	No. of Houses in course of erection on 31/12/38.	No. of Houses for which sanction has been given but not commenced on 31/12/38.
URBAN.			
Abercarn	312	30	30
Abergavenny	184	—	—
Abertillery	175	20	—
Bedwas and Machen	358	—	—
Bedwellty	749	96	—
Blaenavon	194	—	58
Caerleon	66	—	—
Chepstow	78	—	—
Cwmbran	308	66	32
Ebbw Vale	590	186	—
Monmouth	156	—	—
Mynyddislwyn	354	4	—
Nantyglo and Blaina	274	—	24
Pontypool	1,435	42	10
Rhymney	92	—	—
Risca	728	52	134
Tredegar	377	10	36
Usk	—	—	—
RURAL.			
Abergavenny	50	—	4
Chepstow	75	2	—
Magor & St. Mellons	217	2	—
Monmouth	36	—	11
Pontypool	23	—	—
Totals	6,831	510	339

In addition, numerous schemes had been submitted to the Minister but sanction to proceed with the schemes had not been given on the 31st December, 1938.

The following table shows the progress which has been made during the year in the construction of new dwellings by the district councils, and also by private enterprise under the various Housing Acts :—

District.	Total Number of Houses completed during year ended 31st Dec., 1938.		Total
	By Local Authority.	Private Enterprise.	
URBAN.			
Abercarn ...	54	9	63
Abergavenny ...	—	6	6
Abertillery ...	—	4	4
Bedwas and Machen	30	3	33
Bedwellty ...	22	7	29
Blaenavon ...	—	—	—
Caerleon ...	—	40	40
Chepstow ...	—	4	4
Cwmbran ...	50	24	74
Ebbw Vale ..	36	65	101
Monmouth ..	74	6	80
Mynyddislwyn ..	—	—	—
Nantyglo and Blaina	52	—	52
Pontypool ...	56	44	100
Rhymney ...	—	—	—
Risca ...	40	—	40
Tredegar ...	48	5	53
Usk ..	—	12	12
RURAL.			
Abergavenny ...	12	5	17
Chepstow ...	32	99	131
Magor & St. Mellons	—	77	77
Monmouth ..	14	5	19
Pontypool ...	—	14	14
Totals	520	429	949

INSPECTION AND SUPERVISION OF FOOD

(a).—MILK SUPPLY.

The scheme inaugurated by the County Medical Officer for the taking of "informal" samples of milk sold in the County is still being operated. In conjunction with the scheme, Part IV of the Milk and Dairies Order, 1926, which deals with the health and inspection of cattle, was carried out. During the year 1938 "informal" samples of milk were taken which is an increase of 134 when compared with the figure for the previous year. This is due in part to the sampling at the schools in the County where milk is supplied to the children under the Milk to Schools Scheme. As in previous years, it can again be said, that the working of the scheme has had far reaching effects upon the purity of the milk supply in the districts in which operations have so far been carried out. The scheme has been in operation for a number of years, and although at the outset difficulty was experienced in obtaining the co-operation of milk vendors and the producers, it can now be recorded that the difficulties have been overcome and that the scheme is appreciated by those concerned with the milk trade generally.

The scheme has been put into operation in every district of the County, and during 1938, the procedure adopted was to take a number of samples of milk from as many districts as possible in the year. By this method the benefits of the scheme are fully maintained. During the year samples were taken from all the urban and rural districts in the County. Samples are collected by the County Sanitary Inspector, accompanied by the District Sanitary Inspector, and District Sanitary Inspectors also take samples in their own areas. These samples are examined at the County Laboratory by the County Bacteriologist. In addition to the bacteriological examination for evidence of tubercle, zymotic diseases and dirt contamination, animal inoculations are made for the purpose of definitely ensuring against any possible infection by Tuberculosis. Up to the 1st April, 1938, should this be found to be present, the farm producing the milk was visited and the herd submitted to veterinary examination, individual samples being taken from any cow regarded as suspicious. The milk from suspected cows is ordered to be excluded from that of the herd until the bacteriological examination has been made. In the event of an individual sample proving tuberculous, arrangements were made for the slaughtering of the animal under the Tuberculosis Order, 1925, in which case the district Sanitary Inspector in company with the County Sanitary Inspector was present at the slaughtering so that the carcase, or parts of the carcase, where necessary, could be condemned as unfit for human consumption. In such cases where the Sanitary Inspector was not qualified to deal with meat inspection, a Veterinary Surgeon, or the County Sanitary Inspector attended at the slaughtering of the animal. The tuberculin test was employed in cases where bacteriological examination of the sample proved to be suspicious but

did not show definite evidence of Tuberculosis, also a close watch was kept upon the cow before its milk was again allowed to be mixed with that of the herd. With regard to the slaughter of infected animals, it was found that action taken under the Tuberculosis Order by the Veterinary Inspectors appointed under the Diseases of Animals Acts was better than utilising the Milk and Dairies (Consolidation) Act, 1915; much overlapping was thus eliminated. During the first three months of 1938, the dairy herds at 21 farms were inspected by the County Veterinary Surgeon, in company with the County Sanitary Inspector, and 316 cows were examined. The number of samples of milk taken from the cows examined was 100 and in every instance the Department was successful in locating the cow or cows affected with Tuberculosis, and which were giving milk containing tubercle bacilli. Notices were given under the Tuberculosis Order regarding these cows and they were examined after slaughter by the District Sanitary Inspector and the County Sanitary Inspector. The post-mortem examination of the carcasses proved in each instance the bacteriological examination of the milk at the County Laboratory by the County Bacteriologist. Every carcase examined was condemned as unfit for human consumption and destroyed. Since the 1st April, 1938, when the Agriculture Act, 1937, came into operation, whenever Tuberculosis is found in milk the cases are referred to the Divisional Inspector of the Ministry of Agriculture, whose duty it is to arrange for the slaughter of the offending animals. Any samples of milk which the Divisional Inspector deems advisable during the necessary investigations are examined at the County Laboratory.

Copies of all reports upon the bacteriological examination of "informal" samples are sent to the local Sanitary Inspectors, and where evidence pointing to want of care in handling the milk after it has left the cow, or to its contamination in other ways is reported, a warning is sent to the offender by the Clerk to the Local Sanitary Authority, which, in practically every case has had the effect of an immediate improvement in the condition of the milk. In some of the districts of the County, the Sanitary Inspectors take "informal" samples and test the milk by means of a Minit Tester, for the purpose of demonstrating to the retailer and producer the presence or otherwise of dirt or other gross foreign matters. Dairies, Cowsheds and Milkshops have been periodically inspected, and there is further improvement to be noted in the general condition of these premises, but there is still room for more improvement. In some of the districts trouble is experienced in obtaining general improvements in the structural condition of Cowsheds on account of the owners who are not the tenants not being prepared to expend anything upon the work. However, although some progress has been made in reconstruction, every effort is still being made to instill into these cow-keepers the absolute necessity for scrupulous cleanliness, and education on this matter has been attempted rather than legislation, with beneficial results.

MILK (SPECIAL DESIGNATIONS) ORDERS, 1936 AND 1938.

The Milk (Special Designations) Order, 1936, came into operation on the 1st June, 1936, and superseded the Milk (Special Designations) Order, 1923. The new Order prescribes the following special designations for milk :—

"*Tuberculin Tested*", which is milk from cows which pass a six monthly tuberculin test and veterinary examination; it has to satisfy certain prescribed bacteriological tests. The licensing authority is the County Council.

"*Accredited*", which is milk from cows which pass a three monthly veterinary examination; it has to satisfy the same bacteriological tests as are prescribed for "*Tuberculin Tested*" milk. The licensing authority is the County Council.

"*Pasteurized*", which is milk which has been heated for 30 minutes at 145°F. The licensing authority is the local sanitary authority.

The standards for Tuberculin Tested and Accredited milks are :

Methylene Blue Reduction Test. 1st November to 30th April. Period for decolourisation not less than 5½ hours.

1st May to 31st October. Period for decolourisation not less than 4½ hours.

Coliform Bacillus—absent from 1/100 millilitre.

The standard for Pasteurized milk is : 100,000 bacteria per millilitre.

Bonuses are paid by the Milk Marketing Board to producers of Tuberculin Tested and Accredited milk.

On the 31st December, 1938, there were in operation in this County 42 licences to produce Tuberculin Tested milk, 23 Accredited producers qualifying during the year for the Tuberculin Tested licence. Nine bottling licences were issued.

The Milk Marketing Board under the provisions of the Milk Act, 1934, put forward a scheme for the establishment of a Roll of Accredited Producers. The scheme came into operation in May, 1935, and was, in fact, part of the Milk (Special Designations) Order, 1923. Before a producer can become qualified to be entered upon the Roll of Accredited Producers by the Milk Marketing Board, it is necessary for him to obtain a licence from the County Council to produce "*Accredited*" milk in accordance with the terms of the Milk (Special Designations) Order, 1936. To assist in making the new scheme a success and more especially with a view to improving the quality and cleanliness of the liquid milk supply, the County Council have taken very advanced steps. Before a producer can obtain a licence his premises must be improved, the cattle clinically inspected, his methods of working and storing satisfactory, and in addition, an approved sterilising equipment installed; lastly, two samples of

milk must be submitted to the County Laboratory for bacteriological examination with a view to ascertaining if the producer is and can continue to produce milk of the requisite cleanly standard laid down. The pre-licence costs entailed, with the exception of the bacteriological analysis of the samples of milk, are borne by the producer. After a licence has been issued by the County Council all the costs are borne by the County Council. These include the cost of the collection, etc., and examination of the milk samples at the County Laboratory.

The number of new licences to produce "Accredited" milk in operation on the 31st December, 1938, was 85, 7 producers also having qualified for bottling licences, 23 Accredited licencees qualified for Tuberculin Tested licences during the year. The inauguration of the scheme has meant much increased work at the County Laboratory. All the premises of applicants for 'Accredited' licences are inspected by the County Sanitary Inspector, and reports thereon are made, together with suggestions for improvements. This has entailed very much increased work. It is pleasing to note that there is a marked tendency towards an improvement in the bacteriological standard of the milk produced. Furthermore, the increased sampling of the milks, which, in addition to being examined bacteriologically, are all examined for the presence of tubercle bacilli, has resulted in the finding of tuberculosis in certain samples of milk which might not have been found under other circumstances, and the elimination and destruction of the offending cattle at the farms.

MILK IN SCHOOLS.

The scheme for the provision of milk to the children attending schools within the County has been continued during the year. Arrangements are made by local milk vendors for the supply of milk to the schools in $1/3$ pint bottles complete with a sterilised straw for the child to drink the milk with. The cost of the milk is 1d. per $1/3$ pint, of which the child pays $1/2$ d., the remaining $1/2$ d. being contributed by the Milk Marketing Board from the funds at their disposal. Before the milk can be supplied to the schools the approval of the County Medical Officer is necessary, this being given after local investigations into the source of supply and the quality of the milk to be supplied. Surprise samples of the milk are taken and are tested at the County Laboratory with a view to ascertaining whether or not a satisfactory standard is being maintained.

AGRICULTURE ACT, 1937.

Part IV of the Act came into operation on the 1st April, 1938, and deals with the health and inspection of cattle and two panels of veterinary inspectors, one full-time and one part-time, have been appointed by the Ministry of Agriculture and Fisheries in an effort to eradicate tuberculosis and other diseases from herds of the country.

(b).—MEAT AND OTHER FOODS.

The following tables show the quantities of meat and other foods condemned in the various Urban and Rural Districts of the County during the year, and it will be noticed from the figures that great attention is being given to this important section of public health work :—

DISTRICT	Fish.	Bottled and Tinned Goods	Bacon.	Offal, etc.	Cooked Meat.	Vegetables and Fruit.	Mis- cellaneous
URBAN							
Abercarn ...	159 lbs.	345	170 lbs.	360 lbs.	—	206 lbs.	224 lbs. Foreign & chilled meat
Abergavenny ...	—	59	—	—	—	—	—
Abertillery ...	—	51	—	72 lbs. & 9 sheep's Plucks	53 lbs.	1 Barrel Apples	7 Rabbits
Bedwas and Machen ...	42 lbs.	39	28 lbs.	15,912 lbs.	9 lbs.	16 lbs.	11 lbs.
Bedwellty ...	18 lbs.	464	—	305 lbs.	249 lbs.	1,327 lbs.	—
Blaenavon ...	56 lbs.	121	—	1,280 lbs.	—	—	32 Eggs
Caerleon ...	—	—	—	—	—	—	—
Chepstow ...	—	—	—	—	—	—	—
Cwmbran ...	—	—	—	—	—	—	—
Ebbw Vale ...	75 lbs.	586	95 lbs.	1,100 lbs.	70 tins	380 lbs.	420 lbs.
Monmouth ...	—	24	—	—	—	—	—
Mynyddislwyn ...	34 lbs.	359	—	725 lbs.	—	120 lbs.	66 lbs. & 76 Eggs.
Nantyglo and Blaina ...	—	—	—	—	—	—	—
Pontypool ...	52 lbs. & 6 boxes	1221	134½ lbs.	809 lbs.	141 lbs.	140 lbs.	247 lbs., 20 Rabbits & 144 Eggs
Rhymney ...	—	75	5 lbs.	152 lbs.	41 lbs. Ham	—	10 Heads & Tongues
Risca ...	112 lbs.	99	43 lbs.	276 lbs.	—	56 lbs.	49 lbs.
Tredegar ...	30 lbs.	851	18 lbs.	15,584 lbs.	15 lbs.	131 lbs.	276 lbs.
Usk ...	14 lbs.	648	—	140 lbs.	42 lbs.	286 lbs.	—
RURAL							
Abergavenny ...	—	—	—	—	—	—	—
Chepstow ...	—	—	—	—	—	—	—
Magor & St. Mellons ...	—	59	41 lbs.	539 lbs.	—	—	53 lbs.
Monmouth ...	—	—	—	—	—	—	—
Pontypool ...	—	16	—	186 lbs.	—	—	—

MEAT.

URBAN.

RURAL.

		Abercarn	Abergavenny	Aberthaw	Bedwas & Machen	Bedwell	Blaina	Caerleon	Chepstow	Cwmbran	Ebbw Vale	Monmouth	Mynyddislwyn	Nantyglo & Blaina	Pontypool	Rhymney	Risca	Tredeggar	Usk	Abergavenny	Chepstow	Major & St. Mellons	Monmouth	Pontypool
NUMBER KILLED IF KNOWN.	Cattle, excluding Cows	142	172	342	2261	110	143	23	...	...	...	...	65	...	1427	102	95	704	135	...	...	130	159	...
	Cows	377	...	60	432	565	24	9	333	...	...	...	71	346	50	1	300	957	72	...	...	12	...	...
	Calves	223	16	126	1111	161	63	147	87	...	...	...	95	282	656	46	185	870	61	...	...	105	40	...
	Sheep and Lambs	4617	1918	2989	15882	3876	2727	735	3360	...	2350	...	1103	2668	14186	1131	3494	14082	1941	...	...	1330	972	...
	Pigs	667	3063	681	5238	981	569	135	542	...	1175	...	532	764	3101	425	1371	4308	895	...	...	640	118	...
NUMBER INSPECTED.	Cattle, excluding Cows	142	172	321	1666	100	139	20	...	...	...	370	65	...	1138	95	48	782	121	...	35	119	157	...
	Cows	377	...	56	324	505	24	9	...	...	800	...	71	346	50	1	150	928	65	...	5	10	...	...
	Calves	223	16	92	834	105	63	110	...	...	104	71	95	282	491	41	92	804	49	...	3	89	35	67
	Sheep and Lambs	4617	1918	2332	11911	3300	2583	559	...	...	2350	561	1103	2668	10115	1017	1747	9806	1883	...	24	1008	587	752
	Pigs	667	3063	593	3928	920	558	100	...	...	1175	443	532	764	2450	410	685	4123	804	...	44	593	108	784
ALL DISEASES EXCEPT TUBERCULOSIS WHOLE CARCASSES CONDEMNED.	Cattle, excluding Cows	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...
	Cows	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
	Calves	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sheep and Lambs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pigs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
CARCASSES OF WHICH SOME PART OR ORGAN WAS CONDEMNED.	Cattle, excluding Cows	2	...	...	213	...	7	...	...	...	...	...	13	...	110	6	...	7	4	...	1	10	53	...
	Cows	14	...	7	125	62	5	...	...	...	69	...	21	2	27	1	8	29	...	...	1	4	...	...
	Calves	...	...	...	6	9	...	...	...	...	3	...	...	...	30	...	...	2	6	...	...	1	...	...
	Sheep and Lambs	60	1	9	649	102	145	20	...	...	149	1	83	2	436	45	9	974	21	...	2	41	30	...
	Pigs	16	12	1	173	9	19	...	...	...	9	...	19	...	108	...	19	71	33	...	...	29	...	...
PERCENTAGE OF THE NUMBER INSPECTED AFFECTED WITH DISEASE OTHER THAN TUBERCULOSIS	Cattle, excluding Cows	1.4	...	...	12.7	...	5.0	...	...	...	...	...	21.5	...	9.6	6.3	...	9	3.3	...	2.8	9.2	33.1	...
	Cows	3.9	...	12.5	38.8	12.2	25.0	...	...	...	9.0	...	29.5	...	54.0	100.0	5.3	3.5	...	...	20.0	...	40.0	...
	Calves	...	...	...	7	8.5	...	...	...	...	3.8	...	...	...	4.6	...	...	3	12.2	...	...	1.1	...	...
	Sheep and Lambs	1.3	...	...	5.4	3.1	5.5	3.6	...	...	6.4	...	8.1	...	4.3	4.4	...	9.9	1.1	...	12.5	4.2	5.1	...
	Pigs	2.3	...	...	4.4	9.8	3.4	...	...	...	1.0	...	3.9	...	4.4	...	2.9	1.7	4.1	...	2.2	5.0	...	...
TUBERCULOSIS ONLY. WHOLE CARCASSES CONDEMNED.	Cattle, excluding Cows	2	4	...	7	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cows	...	...	...	1	15	2	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...
	Calves	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sheep and Lambs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pigs	...	...	...	4	...	...	...	...	...	4	...	4	1	...	...	...	16	...	...	...	2	...	...
CARCASSES OF WHICH SOME PART OR ORGAN WAS CONDEMNED	Cattle, excluding Cows	6	2	...	98	1	7	...	...	...	...	6	4	...	3	...	...	9	1	...	1	5	...	...
	Cows	28	...	5	75	20	...	...	...	...	91	...	12	3	2	...	9	168	2	...	1	...	2	...
	Calves	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sheep and Lambs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pigs	21	...	...	247	15	...	...	...	...	52	...	11	1	13	9	7	422	1	...	...	5	4	...
PERCENTAGE OF THE NUMBER INSPECTED AFFECTED WITH TUBERCULOSIS	Cattle, excluding Cows	5.6	3.4	...	6.3	1.0	5.7	...	...	...	...	1.0	6.1	...	7	1.0	...	1.2	8	...	5.7	5.0	...	...
	Cows	8.7	...	10.7	27.7	4.3	...	...	100.0	...	12.3	...	19.6	1.1	8.0	...	6.0	21.4	4.6	...	20.0	...	20.0	100.0
	Calves	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sheep and Lambs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pigs	3.1	...	...	6.3	1.6	2.3	...	...	...	4.7	...	6	2.8	...	6	2.1	1.0	10.6	...	...	1.1	3.6	...

Complete records of animals slaughtered and carcasses inspected are not kept in some districts.

Name		Address		City		State		Country	
Mr. J. H. Smith		123 Main St.		New York		New York		U.S.A.	
Mrs. A. B. Jones		456 Elm St.		Los Angeles		California		U.S.A.	
Mr. C. D. Brown		789 Oak St.		Chicago		Illinois		U.S.A.	
Mr. E. F. Green		101 Pine St.		San Francisco		California		U.S.A.	
Mr. G. H. White		202 Cedar St.		Boston		Massachusetts		U.S.A.	
Mr. I. J. Black		303 Maple St.		Philadelphia		Pennsylvania		U.S.A.	
Mr. K. L. Gray		404 Birch St.		Seattle		Washington		U.S.A.	
Mr. M. N. Hall		505 Spruce St.		Portland		Maine		U.S.A.	
Mr. O. P. King		606 Willow St.		Denver		Colorado		U.S.A.	
Mr. Q. R. Lee		707 Ash St.		San Diego		California		U.S.A.	
Mr. S. T. Young		808 Hickory St.		Austin		Texas		U.S.A.	
Mr. U. V. Wright		909 Walnut St.		Nashville		Tennessee		U.S.A.	
Mr. W. X. Adams		1010 Chestnut St.		Columbus		Ohio		U.S.A.	
Mr. Y. Z. Baker		1111 Locust St.		Kansas City		Missouri		U.S.A.	
Mr. A. B. Carter		1212 Olive St.		St. Louis		Missouri		U.S.A.	
Mr. C. D. Evans		1313 Madison St.		Indianapolis		Indiana		U.S.A.	
Mr. E. F. Harris		1414 Monroe St.		Cincinnati		Ohio		U.S.A.	
Mr. G. H. King		1515 Taylor St.		Cleveland		Ohio		U.S.A.	
Mr. I. J. Lee		1616 Washington St.		Pittsburgh		Pennsylvania		U.S.A.	
Mr. K. L. Young		1717 Lincoln St.		Buffalo		New York		U.S.A.	
Mr. M. N. Adams		1818 Jefferson St.		Rochester		New York		U.S.A.	
Mr. O. P. Baker		1919 Adams St.		Syracuse		New York		U.S.A.	
Mr. Q. R. Carter		2020 Franklin St.		Albany		New York		U.S.A.	
Mr. S. T. Evans		2121 Madison St.		Schenectady		New York		U.S.A.	
Mr. U. V. Harris		2222 Monroe St.		Troy		New York		U.S.A.	
Mr. W. X. King		2323 Taylor St.		Watkinsville		Georgia		U.S.A.	
Mr. Y. Z. Lee		2424 Washington St.		Macon		Georgia		U.S.A.	
Mr. A. B. Young		2525 Lincoln St.		Savannah		Georgia		U.S.A.	
Mr. C. D. Adams		2626 Jefferson St.		Augusta		Georgia		U.S.A.	
Mr. E. F. Baker		2727 Madison St.		Milledgeville		Georgia		U.S.A.	
Mr. G. H. Carter		2828 Monroe St.		Waynesboro		Georgia		U.S.A.	
Mr. I. J. Evans		2929 Taylor St.		Americus		Georgia		U.S.A.	
Mr. K. L. Harris		3030 Washington St.		Milledgeville		Georgia		U.S.A.	
Mr. M. N. King		3131 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. O. P. Lee		3232 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. Q. R. Young		3333 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. S. T. Adams		3434 Monroe St.		Americus		Georgia		U.S.A.	
Mr. U. V. Baker		3535 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. W. X. Carter		3636 Washington St.		Americus		Georgia		U.S.A.	
Mr. Y. Z. Evans		3737 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. A. B. Harris		3838 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. C. D. King		3939 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. E. F. Lee		4040 Monroe St.		Americus		Georgia		U.S.A.	
Mr. G. H. Young		4141 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. I. J. Adams		4242 Washington St.		Americus		Georgia		U.S.A.	
Mr. K. L. Baker		4343 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. M. N. Carter		4444 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. O. P. Evans		4545 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. Q. R. Harris		4646 Monroe St.		Americus		Georgia		U.S.A.	
Mr. S. T. King		4747 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. U. V. Lee		4848 Washington St.		Americus		Georgia		U.S.A.	
Mr. W. X. Young		4949 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. Y. Z. Adams		5050 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. A. B. Baker		5151 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. C. D. Carter		5252 Monroe St.		Americus		Georgia		U.S.A.	
Mr. E. F. Evans		5353 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. G. H. Harris		5454 Washington St.		Americus		Georgia		U.S.A.	
Mr. I. J. King		5555 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. K. L. Lee		5656 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. M. N. Young		5757 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. O. P. Adams		5858 Monroe St.		Americus		Georgia		U.S.A.	
Mr. Q. R. Baker		5959 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. S. T. Carter		6060 Washington St.		Americus		Georgia		U.S.A.	
Mr. U. V. Evans		6161 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. W. X. Harris		6262 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. Y. Z. King		6363 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. A. B. Lee		6464 Monroe St.		Americus		Georgia		U.S.A.	
Mr. C. D. Young		6565 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. E. F. Adams		6666 Washington St.		Americus		Georgia		U.S.A.	
Mr. G. H. Baker		6767 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. I. J. Carter		6868 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. K. L. Evans		6969 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. M. N. Harris		7070 Monroe St.		Americus		Georgia		U.S.A.	
Mr. O. P. King		7171 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. Q. R. Lee		7272 Washington St.		Americus		Georgia		U.S.A.	
Mr. S. T. Young		7373 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. U. V. Adams		7474 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. W. X. Baker		7575 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. Y. Z. Carter		7676 Monroe St.		Americus		Georgia		U.S.A.	
Mr. A. B. Evans		7777 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. C. D. Harris		7878 Washington St.		Americus		Georgia		U.S.A.	
Mr. E. F. King		7979 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. G. H. Lee		8080 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. I. J. Young		8181 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. K. L. Adams		8282 Monroe St.		Americus		Georgia		U.S.A.	
Mr. M. N. Baker		8383 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. O. P. Carter		8484 Washington St.		Americus		Georgia		U.S.A.	
Mr. Q. R. Evans		8585 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. S. T. Harris		8686 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. U. V. King		8787 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. W. X. Lee		8888 Monroe St.		Americus		Georgia		U.S.A.	
Mr. Y. Z. Young		8989 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. A. B. Adams		9090 Washington St.		Americus		Georgia		U.S.A.	
Mr. C. D. Baker		9191 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. E. F. Carter		9292 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. G. H. Evans		9393 Madison St.		Waynesboro		Georgia		U.S.A.	
Mr. I. J. Harris		9494 Monroe St.		Americus		Georgia		U.S.A.	
Mr. K. L. King		9595 Taylor St.		Waynesboro		Georgia		U.S.A.	
Mr. M. N. Lee		9696 Washington St.		Americus		Georgia		U.S.A.	
Mr. O. P. Young		9797 Lincoln St.		Waynesboro		Georgia		U.S.A.	
Mr. Q. R. Adams		9898 Jefferson St.		Americus		Georgia		U.S.A.	
Mr. S. T. Baker		9999 Madison St.		Waynesboro		Georgia		U.S.A.	

Of the 30 Sanitary Inspectors in the Administrative County, 17 hold a special certificate, and are qualified Inspectors of Meat and Other Foods. The Districts whose Sanitary Inspectors are in possession of the certificate for meat and food inspection are: Abercarn, Abertillery Bedwellty (2), Blaenavon, Ebbw Vale (2), Mynyddislwyn, Pontypool (3), Rhymney, Risca, and Tredegar (2), Urban, and Chepstow (2) Rural. The County Sanitary Inspector also holds the special certificate and is qualified as an Inspector of Meat and Other Foods. His services are available whenever called upon to assist the Inspectors in the various districts. This assistance has readily been accepted on numerous occasions.

In several districts the Medical Officers of Health and the Sanitary Inspectors have recommended to their Councils the desirability of providing public slaughterhouses which would be under the direct control of the local authority. Difficulty is experienced by practically all the sanitary inspectors who are responsible for the inspection of meat in their areas, in carrying out in a satisfactory manner this important branch of their public health duties. A difficulty arises owing to the occasional slaughter of animals at places other than slaughterhouses. It is obvious that the provision of a public abattoir would tend greatly to eliminate the difficulty mentioned. All the slaughtering would be centralised, and systematic and proper supervision could then be obtained, the risk to the consumer lessened and the purity of the meat improved by being slaughtered, cooled and stored under hygienic and wholesome conditions.

The Sanitary Inspectors of the County are continually concentrating upon the provisions of the Public Health (Meat) Regulations, and these have been applied as far as possible in the County. All butchers' shops and meat stalls in the County are regularly inspected to ensure compliance with the Regulations. The existence of stalls in market streets in the form allowed by the Regulations is countenanced because it is thought their existence enables meat to be sold at competitive prices, and so tends to bring down the prices generally at which meat is sold to the public. That the Regulations governing the sale of meat are reasonable is indicated by the very ready response on the part of the vendors to remedy any temporary omission, either on their part or on the part of their assistants. In very few instances has it been necessary to serve notices for breach of the Regulations.

ADULTERATION, ETC.

Samples of foodstuffs, including butter, milk, margarine, etc., are sent to Mr. G. Rudd Thompson, F.I.C., Dock Street, Newport, who is the Public Analyst appointed for the County. At a meeting of the Works and General Purposes Committee, held on the 13th July, 1920, it was decided that the

County Medical Officer should exercise general supervision over the action to be taken in pursuance of the Acts and Regulations under the Sale of Food and Drugs Acts, and that he, the County Analyst, and, if necessary, the Clerk, should confer as to the details necessary to secure observance of the Acts and Regulations. The Administrative County is divided into three districts for the purposes of these Acts, as follows:—

District "A," under the supervision of Inspector G. C. Jenkins, with an Assistant, and comprising the Municipal Boroughs of Abergavenny and Monmouth, the Urban Districts of Blaenavon, Cwmbran (Part), Pontypool and Usk, and the Rural Districts of Abergavenny, Monmouth and Pontypool.

District "B," under the supervision of Inspector A. W. Prosser, with two Assistants, and comprising the Urban Districts of Abertillery, Bedwellty, Ebbw Vale, Mynyddislwyn (part), Nantyglo and Blaina, Rhymney and Tredegar.

District "C," under the supervision of Inspector T. R. Davies, with an Assistant, and comprising the Urban Districts of Abercarn, Bedwas and Machen, Caerleon, Chepstow, Cwmbran (part), Mynyddislwyn (part), and Risca, and the Rural Districts of Chepstow, Magor and St. Mellons.

The following is the report of the County Analyst, Mr. G. Rudd Thompson for the year 1938.

"During this period 1,047 samples have been analysed which were submitted to me as under:—

Division "A"	385
Division "B"	334
Division "C"	328

Of the above 111 were informal or trial samples.

The details of the samples examined are as follows:

810 Milk in course of delivery, 26 Milk "Appeal to Cow", 2 Separated Milk, 1 Condensed Milk, 3 Cream, 12 Butter, 2 Cheese, 1 "Grox," 3 Beef Suet, 11 Lard, 1 Margarine 11 Sugar, 1 Lemon Cheese, 2 Table Jelly, 1 Trifle Mixture, 1 Desiccated Coconut, 2 Pearl Barley, 1 Cremo Oats, 1 Cream Sponge, 11 Flour, 10 rice, 2 tapioca, 2 Sago, 1 "Table Cream," 1 Yeast, 4 Baking Powder, 3 Custard Powder, 3 Egg Substitute Powder, 1 Blancmange Powder, 1 Essence of Almond, 1 Vanilla Essence, 2 Essence of Lemon, 4 Currants, 5 Raisins, 7 Sultanas, 1 Fruit Sauce, 10 Pepper, 1 Mustard, 1 Seasonit, 1 Ground Nutmeg, 5 Mixed Spice, 1 Ground Mace, 2 Ground Ginger, 9 Malt Vinegar, 5 Vinegar, 2 Gravy Browning, 1 Gravy Powder, 1 Vita Gravy, 1 Cocoa, 1 Coffee,

TABLE SHOWING THE NUMBER OF SAMPLES TAKEN IN EACH DISTRICT.

	URBAN. Abercarn	Abergavenny	Abertillery	Bedwas and Machen	Bedwellty	Blaenavon	Caerleon	Chepstow	Cwmbran	Ebbw Vale	Monmouth	Mynyddislwyn	Nant-glo and Blaina	Pontypool	Rhynney	Risca	Tredegear	Usk	TOTAL URBAN	RURAL. Abergavenny	Chepstow	Magor and St. Mellons	Monmouth	Pontypool	TOTAL RURAL	GRAND TOTAL
Aspirins	1	...	...	1	...	...	...	...	...	...	1
Aspros	1	...	...	1	...	...	...	...	...	...	1
Back and Kidney Pills	1	...	...	...	...	1
Baking Powder	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	...	...	...	...	...	4
Beans (Tinned)	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Beef Suet	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...	2
Bicarbonate of Soda	1	...	1	...	...	...	...	...	...	1
Blancmange Powder	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Bloater Paste	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Brisling	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	4	...	...	...	...	...	...	4
Butter	2	...	1	...	1	...	...	...	1	...	...	...	1	...	2	...	8	...	2	2	...	...	4	12
Camphorated Oil	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Cheese	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Chocolate Laxative	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Cocoa	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Coffee	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2
Cokernut	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Condensed Milk (Unsweetened)	2	...	1	...	...	...	...	1
Cream	1	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1	...	...	2	4
Cream Sponge	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Custard Powder	1	...	...	...	1	...	...	...	...	...	...	...	3	...	...	...	...	...	...	3
Currants	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	4	...	...	...	...	...	...	4
Demerara Sugar	1	...	...	...	...	1	...	...	...	...	...	2	2	...	1	2	...	...	3	5
Egg Powder	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	1
Egg Substitute	1	...	...	1	...	...	...	...	...	...	1
Essence of Almond	1	...	1	...	...	...	...	...	...	1
Essence of Lemon	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Eucalyptus Oil	2	...	1	...	...	...	1
Fish (Tinned)	2	2	...	...	...	4	4
Fish Paste	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Flavouring Essence	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Flour	3	...	1	...	1	...	...	...	...	1	...	...	...	1	...	2	...	9	...	1	1	...	...	2	11
Fruit Sauce	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Ginger	1	...	1	...	...	...	...	...	...	1
Glycerine	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	2	...	...	...	...	...	...	2
Gravy Browning	1	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	2
Gravy Powder	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Ground Ginger	1	...	...	1	...	...	...	...	...	...	1
Ground Mace	1	...	1	...	...	...	...	...	...	1
Ground Nutmeg	1	...	...	1	...	...	...	...	...	...	1
Grox Gravy Maker	1	...	...	...	1	1
Jelly	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	2
Kaputine Head and Nerve Powder	1	...	...	1	...	...	...	1
Kipper Snacks	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Lard	2	...	1	...	1	...	...	...	1	...	...	...	1	...	1	...	7	...	2	2	...	...	4	11
Lemonade Powder	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Lemon Cheese	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Malt Vinegar	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	3	...	2	2	...	...	4	7
Margarine	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Meat Paste	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	1	...	...	...	...	1	3
Milk (new)	...	52	31	12	80	47	40	25	46	70	66	81	31	97	...	42	21	34	776	...	22	11	...	...	33	809
Milk (Appeal to Cow)	...	7	...	...	...	...	...	...	4	...	...	...	...	3	...	...	...	...	14	...	...	...	...	...	...	14
Milk (in course of delivery)	...	2	...	...	...	...	...	...	1	...	1	...	...	10	...	...	...	16	...	...	...	...	...	...	...	16
Milk (Skimmed)	2	...	...	...	2	...	...	...	...	...	...	...	2
Mixed Spice	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	4	...	2	...	...	...	2	6
Mustard	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1

Some samples taken in Mynyddislwyn area are included in the Bedwellty area return.
do. do. Cwmbran do. do. Caerleon do.

TABLE SHOWING THE NUMBER OF SAMPLES TAKEN IN EACH DISTRICT --CONTINUED.

	URBAN. Abercarn	Abergavenny	Aberillery	Bedwas and Machen	Bedwelty	Blaenavon	Caerleon	Chepstow	Cwmbran	Ebbw Vale	Monmouth	Mynyddislwyn	Nantyglo and Blaina	Pontypool	Rhymney	Risca	Tredeggar	Usk	TOTAL URBAN	RURAL. Abergavenny	Chepstow	Magor and St. Mellons	Monmouth	Pontypool	TOTAL RURAL	GRAND TOTALS
Oats	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Olive Oil	1	...	1	...	...	...	...	...	...	1
Paste	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Pearl Barley	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Peas	1	...	...	...	...	...	...	1	...	...	1	...	1	...	6	...	1	...	...	...	1	7
Pepper	...	1	2	...	1	...	1	...	...	...	...	1	...	...	...	...	1	...	7	...	1	2	...	...	3	10
Phos. of Quinine	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	1
Raisins	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	4	...	...	1	...	...	1	5
Rice	2	...	...	...	1	...	...	...	...	1	...	...	1	...	1	...	6	...	2	2	...	...	4	10
Sago	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	2
Salmon	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Sardines	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	2
Sausage	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Seaz unit	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Senna Leaves	1	...	1	...	...	...	...	...	...	1
Soup	1	...	...	...	...	...	...	1	...	...	1	...	...	1	2
Stomach Powder	1	...	...	1	1
Suet	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Sugar	3	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	6	...	...	...	...	...	...	6
Sultanas	...	2	1	...	...	...	...	...	...	...	...	1	...	...	1	1	...	6	...	...	1	...	...	...	1	7
Syrup of Fgs	1	...	1	...	...	2	...	...	2	3
Tapioca	1	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	2
Tincture of Iodine	1	...	...	1	...	...	2	...	...	2	3
Trifle Mixture	1	...	1	...	...	...	...	...	...	1
Vanilla Essence	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Veron Cube	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Vinegar	...	1	3	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	7	...	...	...	...	...	...	7
Vita Gravy	1	...	1	...	...	...	...	...	1	1
Wine Essence	1
Yeast	1	...	...	1	1
TOTALS	...	73	81	12	91	48	56	25	51	70	67	96	31	112	16	53	45	35	962	...	45	41	...	...	86	1048

Some samples taken in Mynyddislwyn area are included in the Bedwelty area return.
do. do. Cwmbran do. do. Caerleon do.

1 Coffee Mixture, 1 Lemonade Powder, 1 Wine Essence, 1 Olive Oil, 1 Phosphorus and Quinine Tonic, 1 Eucalyptus Oil, 1 Chocolate Laxative, 2 Glycerine, 3 Syrup of Figs, 1 Aspro Tablets, 3 Tincture of Iodine, 1 Camphorated Oil, 1 Kidney and Back Pills, 1 Senna Leaves, 1 Sodium Bicarbonate, 1 Aspirin, 1 Stomach Powder, 1 "Kaputin" Head and Nerve Powder, 11 Tinned Fish, 5 Potted Meat, 4 Fish Paste, 1 Sausage, 1 Verox Cubes, 1 Tinned Beans, 2 Tomato Soup and 7 Peas.

MILK. Of the total number, 810 were samples of Milk purchased from Vendors, and of these 757 were found on analysis to conform to the requirements of the Sale of Milk Regulations, but 53 samples failed to satisfy the Regulations. Of this number 35 samples were reported as adulterated, but in the case of the remaining 18 samples, subsequent "Appeal to Cow" samples showed that the milk yielded by the animals was below standard and these 18 samples were therefore reported as being of abnormal composition. Consequently, the percentage of adulterated milk samples amounted to 4.32%.

Particulars of the Milks failing to conform to the regulations are as under :—

Thirteen samples were deficient in Solids not Fat to the extent of 26.24 per cent., 16.82 per cent., 15.65 per cent., 15.41 per cent., 12.12 per cent., 8.71 per cent., 6.59 per cent., 5.76 per cent., 4.82 per cent., 4.82 per cent., 4.12 per cent., 2.59 per cent., and 2.47 per cent., respectively. Twenty-four samples were deficient in Fat to the extent of 65.67 per cent., 24.00 per cent., 24.00 per cent., 23.33 per cent., 22.33 per cent., 20.00 per cent., 20.00 per cent., 19.00 per cent., 18.00 per cent., 16.33 per cent., 15.67 per cent., 15.33 per cent., 15.00 per cent., 14.67 per cent., 14.67 per cent., 14.67 per cent., 14.33 per cent., 13.33 per cent., 12.67 per cent., 12.67 per cent., 12.67 per cent., 12.67 per cent., 12.67 per cent., 12.00 per cent., 9.00 per cent., 7.00 per cent., 7.00 per cent., 5.33 per cent., 5.00 per cent., 5.00 per cent., 4.00 per cent., 2.33 per cent., 1.33 per cent., and 1.33 per cent., respectively, and six samples were deficient in both Solids not Fat and Fat to the extent of 30.71 per cent., Solids not Fat and 26.00 per cent. Fat, 11.65 per cent. Solids not Fat and 2.33 per cent. Fat, 9.76 per cent. Solids not Fat and 26.00 per cent. Fat, 2.12 per cent. Solids not Fat and 12.67 per cent. Fat, 1.67 per cent. Solids not Fat and 18.67 per cent. Fat, and 1.76 per cent. Solids not Fat and 18.00 per cent. Fat respectively. Every sample of milk submitted has been examined for the presence of preservatives and added colouring matter which were found to be absent in every case. Classified in my usual manner, the following details show the composition of milk as sold to the public :—

According to Content of Fat.

Under 3%	3—3.49%	3.5—3.99%	4—4.49%	4.5% and over
41	343	296	102	28

According to Content of Solids not Fat.

Under 8.5%	8.5—8.69%	8.7—8.89%	8.9—9.09%	9.1% and over
19	202	274	241	74

The average composition of all above milk samples is:—

Fat 3.53%; Solids not Fat 8.79%; Total Solids 12.32%
and this average is very close to that of the average over the past nine years, as will be seen from the Table below:—

Year.	Fat.	Solids not Fat.	Per cent. of adulteration.
1929	3.55%	8.89%	4.05
1930	3.65%	8.83%	2.82
1931	3.66%	8.77%	2.89
1932	3.60%	8.71%	5.06
1933	3.59%	8.69%	5.37
1934	3.49%	8.67%	2.88
1935	3.47%	8.73%	2.64
1936	3.55%	8.75%	7.77
1937	3.54%	8.83%	8.56
1938	3.53%	8.79%	4.32

In addition to the above, 26 "Appeal to Cow" samples have been taken during the course of the year and of these, 16 samples conformed to the requirements of the Sale of Milk Regulations, but the remaining 10 were below standard.

Two samples of Separated Milk were taken for analysis during the year and both these were found to be genuine.

The sample of Condensed Milk was in accordance with the Regulations and the three samples of Cream contained a satisfactory proportion of milk fat and were free from preservatives and from thickening agents.

The 12 samples of Butter were free from admixture with fats other than that of milk, contained no preservatives and the percentage of water was in each case less than the legal maximum.

Both samples of Cheese were quite satisfactory with regard to the percentage of fat and were entirely free from metallic contamination.

All three samples of Beef Suet were perfectly genuine and the percentage of added starch was not excessive.

The Lard samples, 11 in number, were composed of genuine pig fat free from water and excessive acidity, and the Margarine was of wholesome composition, free from preservatives and from excessive water.

Each of the 11 samples of Sugar consisted of the genuine article in a highly refined condition, and the samples of Lemon Cheese, Table Jelly, and Trifle Mixture were free from preservatives and from the prohibited colouring matters.

The 11 samples of Flour were all of first class quality and the 10 Rice samples consisted of well grown grain and were all entirely free from "facing" ingredients.

The samples of Tapioca and Sago were also of good quality.

The samples of Baking Powder were all of satisfactory strength and free from deleterious ingredients, and the samples of Custard Powder and Egg Substitute Powder were of wholesome composition.

The samples of Currants, Raisins and Sultanias were all free from excessive amounts of sulphur dioxide and the Flavouring Essences submitted during the year were genuine and free from any deleterious ingredient.

The samples of Pepper, Mustard Compound, Spices, Nutmeg and Mace were all genuine and of good quality and the Ground Ginger was in accordance with the requirements of the British Pharmacopoeia.

Of the nine samples sold as Malt Vinegar, eight were found on analysis to be genuine but the remaining sample proved to be an artificial product.

The five samples sold as Vinegar were all of satisfactory strength and free from metallic contamination.

The samples of Cocoa and Coffee were quite satisfactory and the Coffee mixture contained a suitable proportion of Coffee.

Twenty samples of Drugs and Pharmacopoeial preparation have been submitted for analysis during the year and of these 19 were found to be satisfactory from the point of view of purity and free from any contamination of an undesirable nature. One sample, however, Tincture of Iodine, was deficient in Iodine to the extent of 22.45 per cent.

The 11 samples of Tinned Fish were all in perfectly wholesome condition and free from contamination by tin or lead, and the specimens of Potted Meat, Fish Paste, and Sausage, were all of satisfactory composition and free from preservatives.

The seven samples of Peas were free from any trace of added copper.

The remaining samples submitted during the year call for no comment, so that of a total of 1,047 articles analysed, 37 were found to be adulterated, this number amounting to 3.53 per cent. of the samples examined.

NUMBER OF SAMPLES FOUND TO BE ADULTERATED.

District.	Milk.	Milk "in Course of Delivery"	Malt Vinegar	Milk appeal to cow	Tincture of Iodine	Totals.
URBAN:						
Abercarn	—	—	—	—	—	—
Abergavenny	4	2	1	2	—	9
Abertillery	—	—	—	—	—	—
Bedwas and Machen	—	—	—	—	—	—
Bedwellty	4	—	—	—	—	4
Blaenavon	1	—	—	—	—	1
Caerleon	3	—	—	—	—	3
Chepstow	11	—	—	—	—	11
Cwmbran	1	1	—	—	—	2
Ebbw Vale	11	—	—	—	—	11
Monmouth	1	—	—	—	—	1
Mynyddislwyn	4	—	—	—	—	4
Nantyglo and Blaina	—	—	—	—	—	—
Pontypool	4	2	—	2	—	8
Rhymney	—	—	—	—	—	—
Risca	2	—	—	—	—	2
Tredeggar	—	—	—	—	—	—
Usk	—	—	—	—	—	—
RURAL:						
Abergavenny	—	—	—	—	—	—
Chepstow	8	—	—	—	—	8
Magor and St. Mellons	—	—	—	—	1	1
Monmouth	—	—	—	—	—	—
Pontypool	—	—	—	—	—	—
Totals	54	5	1	4	1	65

The following schedule gives details of the samples taken for analysis, and in which action was taken, arranged according to the respective districts :-

District in which sample was taken.	Nature of Sample.	Extent of adulteration, etc of sample.	Action taken.
URBAN:			
Abergavenny ..	Milk	Deficient in Fat 14.67%	Vendor and the producer cautioned by the Clerk of the Council.
"	"	" " 1.33%	
"	"	" " 2.33%	
"	"	" " 2.67%	
"	"	" " 18.00%	Cautioned by Clerk.
"	"	" " 12.67%	Case dismissed.
"	"	" " 15.33%	Case dismissed.
"	"	" " 2.67%	
"	Malt Vinegar		Vendor fined £1/0/0 and £2/2/0 and costs.
Bedwellty ..	Milk	Deficient in Solids not Fat 16.82%. Added Water 13.20%	Dismissed under the Probation of Offenders Act, and ordered to pay £4/0/0 costs.
"	"	Deficient in Solids not Fat 6.59%. Added Water 6.00%	See repeat sample below.
"	"	Deficient in Solids not Fat 4.12%. Added Water 4.70%	Repeat of above sample. See result of Court proceedings below.
"	"	Deficient in Solids not Fat 8.71%. Added Water 8.30%	Repeat of above two samples. Proceedings instituted against producer. Dismissed under Probation of Offenders Act, and ordered to pay £4/4/0 costs.
Blaenavon ...	"	Deficient in Fat 5.00%	Cautioned by Clerk.
Caerleon ...	"	Added Water 15.65%	Fined £5/0/0 including costs.
"	"	" " 17.40%	In course of delivery. Proceedings withdrawn. Reserve bottles accidentally destroyed.
"	"	" " 12.10%	

District in which sample was taken.	Nature of Sample.	Extent of adulteration, etc. of sample.	Action taken.
Chepstow ...	Milk	Deficient in Fat 18.67% Deficient in Solids not Fat 1.74%	Costs £1/5/0.
"	"	Deficient in Fat 7.00%	Repeat sample of above.
"	"	" " 5.33%	"Appeal to Cow." See above two samples.
"	"	" " 12.67% Deficient in Solids not Fat 2.12%	Cautioned by Clerk.
"	"	Deficient in Fat 15.00%	Repeat of above sample.
"	"	" " 9.00%	See above two samples.
"	"	" " 20.00%	In course of delivery.
"	"	" " 4.00%	Cautioned by Clerk.
"	"	" " 24.00%	Costs £1/5/0.
"	"	" " 20.00%	Repeat of above sample.
"	"	Added Water 9.76%	Repeat of above two samples.
"	"	Deficient in Solids not Fat 5.76%	Fined £2/2/0 and £1/0/0 costs. See sample below.
Cwmbran ...	"	Deficient in Fat 12.67%	See above sample.
"	"	" " 7.00%	Case against producer dismissed. In course of delivery and "Appeal to Cow" samples genuine.
Ebbw Vale ...	"	Deficient in Solids not Fat 4.82%	Warning issued by Clerk.
"	"	Added Water 9.00%	Repeat of above sample.
"	"	Deficient in Solids not Fat 2.59%	"In course of delivery" of above two samples.
"	"	Deficient in Solids not Fat 2.47%	Dismissed under the Probation of Offenders Act and ordered to pay £2/2/0 costs in respect of each sample. Total £4/4/0.
"	"	Deficient in Fat 5.33%	Warning issued by Clerk.
"	"	" " 12.67%	"In course of delivery" sample of above.
"	"	" " 15.33%	Warning issued by Clerk.
"	"	" " 5.00%	"In course of delivery." sample of above sample.
"	"	" " 14.33%	"Appeal to Cow" of above samples.
"	"	" " 16.33%	"Appeal to Cow" of above samples.
"	"	" " 2.00%	
"	"	" " 18.33%	

District in which sample was taken.	Nature of Sample.	Extent of adulteration, etc. of sample.	Action taken.
Monmouth ...	Milk	„ „ 65.67%	Ordered to pay 14/- costs.
Mynyddislwyn ...	„	„ „ 12.67%	Costs £2/2/0.
„	„	„ „ 15.67%	Costs £2/2/0.
„	„	„ „ 1.33%	Repeat of above sample.
„	„	„ „ 18.00%	Costs £2/2/0.
Pontypoo. ..	„	Added Water 4.82%	These samples related to a vendor and a producer, and owing to the abnormal state of the milk the Clerk issued a very sharp caution. The producer has since given an undertaking that he has now ceased to produce milk. It was established in this case that the vendor was the innocent party.
„	„	„ „ 14.00%	
„	„	Deficient in Solids not Fat 9.65%	
„	„	Deficient in Solids not Fat 12.12%	
„	„	Deficient in Fat 14.67%	
„	„	Deficient in Solids not Fat 10.67%	
„	„	Deficient in Fat 26.00%	
„	„	Deficient in Solids not Fat 30.70%	
„	„	Deficient in Fat 24.00%	
Risca ...	„	„ „ 20.00%	Costs £1/0/0.
„	„	„ „ 13.33%	Cautioned by Clerk.
RURAL:			
Chepstow	Milk	Deficient in Fat 14.67%	Court costs 4/-.
„	„	„ „ 3.33%	“Appeal to Cow” sample of above.
„	„	„ „ 12.00%	Cautioned by Clerk.
„	„	„ „ 33.33%	“Appeal to Cow” sample of above.
„	„	„ „ 19.00%	Cautioned by Clerk.
„	„	„ „ 8.92%	“Appeal to Cow” sample of above.
„	„	„ „ 22.33%	Cautioned by Clerk.
„	„	„ „ 23.33%	Repeat sample of above.
Magor & St. Mellons	Tincture of Iodine	Deficient in Iodine	Not enough in stock for official analysis.

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.

Full details in connection with the above will be found under the heading " Laboratory Facilities " and " Adulteration, etc.," in this Report.

NUTRITION.

During the year 1931 a Special Enquiry into the state of nutrition of school children in Monmouthshire was made, and a full and comprehensive report upon the results of this Enquiry is given, together with Charts, etc., as an Appendix to the County Education Report for the year 1931. A further special enquiry was made during the year 1934, and an enquiry was also made with regard to pupils attending the Junior Instructional Centres. Detailed reports upon these investigations are given in the County Education Report for the year 1934. The service for the provision of infant foods, etc., is dealt with in detail in the County Maternity and Child Welfare Report for 1938.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

ISOLATION HOSPITALS.

The position as regards Isolation Hospitals within the Administrative County of Monmouth has been commented upon in these reports for a number of years. No additional facilities were available during the year 1938, the position remaining much the same as in the previous year. Under Section 63 of the Local Government Act, 1929, it is the duty of the County Council as soon as may be after the commencement of the Act to make a survey of the hospital accommodation for the treatment of infectious diseases in the County.

At a Special Meeting of the County Public Health Committee, held on the 22nd July, 1932, a Special Report upon the Provision of Isolation Hospital Facilities was submitted and was the detailed report on the survey by the County Medical Officer of Health and the Provisional Scheme of the County Council.

The report is based on a general survey by the County Medical Officer, accompanied by the County Sanitary Inspector, of the hospital accommodation for infectious diseases in the County as a whole and upon a careful inspection of the Isolation Hospitals, in company with the District Medical Officers of Health, and the District Sanitary Inspectors.

The following scheme for the provision of Hospital Accommodation for the treatment of Infectious Disease in the County has now been approved by the Minister of Health :—

PART I.—INFECTIOUS DISEASES OTHER THAN SMALL-POX.

1. With a view to the provision in the County of Monmouth of adequate hospital accommodation for the treatment of infectious disease other than small-pox, the County shall be divided into areas consisting of the County Districts specified in the second column of the subjoined table, and there shall be provided for each such area not less accommodation than that specified in the third column, and placed opposite to the number and description of that area.

No. of Area.	County Districts Comprised in Area.	Minimum Accommodation in beds.
1	Rhymney Urban Tredegar Urban Ebbw Vale Urban Nantyglo and Blaina Urban Bedwellty Urban Abertillery Urban Mynyddislwyn Urban Abercarn Urban Bedwas and Machen Urban Risca Urban Blaenavon Urban Pontypool Urban Cwmbran Urban	120
2	Chepstow Urban Chepstow Rural Caerleon Urban Magor and St. Mellons Rural	34 (and 4 cots)
3	Monmouth Borough Monmouth Rural Usk Urban	17
4	Abergavenny Borough Abergavenny Rural Pontypool Rural	22

2. The Council of every County District comprised within the aforesaid areas numbers 1 to 4 shall

(a) as soon as may be initiate action and carry through any proceedings that may be necessary on their part with a view to the formation of a united district for each such area upon such terms and conditions as they shall themselves agree pursuant to the provisions of Section 6 of the Public Health Act, 1936; or

(b) contract, under Section 181 of the Public Health Act, 1936, for the provision of the accommodation required by Clause 1 of this Scheme in accordance with Clause 3 of this Scheme.

3. Any accommodation required to be provided by Part I of this Scheme in respect of each of the areas number 1 to 4, shall (unless proceedings are carried through in accordance with Clause 2 (a) of this Scheme) be provided by the District Councils named in the second column of the subjoined table and every other District Council within each area shall contract under Section 181 of the Public Health Act, 1936, with the District Council or Councils providing the accommodation of persons in their district who are suffering from infectious disease other than small-pox.

Area.	Accommodation to be Provided by
1	The Urban District Council of Bedwelty.
2	The Urban District Council and the Rural District Council of Chepstow jointly.
3	The Town Council of Monmouth.
4	The Town Council of Abergavenny and the Rural District Council of Abergavenny jointly.

4. Any agreement made in pursuance of this Scheme under Section 181 of the Public Health Act, 1936, shall be upon such terms as may in each case be agreed between the parties, or in default of agreement determined by a single arbitrator, subject to the provisions of the Arbitration Act, 1899, or any statutory re-enactment or modification of the same for the time being in force.

5. Every Authority maintaining a hospital in accordance with the provisions of this Scheme shall, if in the opinion of the County Medical Officer of Health, circumstances so require, and accommodation is available, admit patients from districts within the County, from which they are not, under the foregoing provisions of the Scheme, required to receive patients, the terms of admission to be such as may be agreed between the Authorities concerned and approved by the County Council, or in default of agreement as may be determined by the County Council.

PART II—SMALL-POX.

6. With a view to the provision of adequate hospital accommodation for the treatment of small-pox, the County Council shall provide a hospital or hospitals with a total minimum accommodation of 16 beds for the reception of persons suffering from small-pox. The hospital or hospitals so provided shall be available for every person in the Administrative County.

INFECTIOUS DISEASES, 1938

The seven principal Zymotic Diseases are Small-pox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (including Typhus, Enteric, and Continued Fevers), and Diarrhoea (under 2 years).

These diseases caused 58 deaths and gave a Zymotic death-rate of $\cdot 18$ for the County, as compared with a rate of $\cdot 24$ for the year 1937; $\cdot 26$ for 1936; $\cdot 34$ for 1935; $\cdot 46$ for 1934; $\cdot 36$ for 1933; $\cdot 37$ for 1932; $\cdot 36$ for 1931; $\cdot 30$ for 1930; $\cdot 51$ for 1929; $\cdot 451$ for 1928; $\cdot 377$ for 1927; $\cdot 30$ for 1926; $\cdot 73$ for 1925; $\cdot 38$ for 1924; $\cdot 85$ for 1923; $\cdot 46$ for 1922; $\cdot 94$ for 1921; $1\cdot 15$ for 1920; $\cdot 61$ for 1919; $1\cdot 26$ for 1918; $\cdot 96$ for 1917; $\cdot 72$ for 1916; $1\cdot 05$ for 1915; $1\cdot 73$ for 1914; $1\cdot 29$ for 1913; and $1\cdot 86$ for 1912.

Table showing death rate and attack (notification) rate of Zymotic Diseases in the County of Monmouth during the year 1938.

Population for death-rate and attack (notification) rate, 306,470.

Disease	No. of Deaths.	Death Rate per 1000 of population.	No. of notifications.	Attack Rate per 1000 of population.	England & Wales death rate per 1,000 of population
Small Pox	—	—	—	—	—
Measles (including German Measles)	6	$\cdot 01$	Not notifiable	—	$\cdot 04$
Scarlet Fever	2	$\cdot 006$	1198	$3\cdot 90$	$\cdot 01$
Diphtheria (including Membranous Croup) ..	18	$\cdot 05$	368	$1\cdot 20$	$\cdot 07$
Whooping Cough	10	$\cdot 03$	Not notifiable	—	$\cdot 03$
Fever (including Typhus, Enteric and Continued Fevers)	—	—	11	$\cdot 03$	$\cdot 00$
Diarrhoea (under 2 years)	22	$\cdot 07$	Not notifiable	—	Not available
Totals	58	$\cdot 18$	1577	$5\cdot 14$	—

COMPARISON OF INFECTIOUS DISEASES DEATH RATES IN MONMOUTHSHIRE

				Measles and German Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria	Typhoid.	Small-pox
Average for years 1907- 1913 inclusive				·43	·07	·92	·13	·09	...
1914	...	...	...	·47	·13	·12	·17	·03	...
1915	...	...	...	·71	·09	·33	·19	·03	...
1916	...	...	...	·04	·06	·21	·12	·04	...
1917	...	...	...	·30	·02	·11	·06	·079	...
1918	...	...	...	·53	·03	·30	·08	·02	...
1919	...	...	...	·003	·06	·28	·07	·03	...
1920	...	...	...	·51	·06	·16	·18	·01	...
1921	...	...	...	·02	·03	·17	·12	·01	...
1922	...	...	...	·03	·02	·17	·11	·01	...
1923	...	...	...	·41	·01	·22	·09	·01	...
1924	...	...	...	·03	·03	·07	·1	·02	...
1925	...	...	...	·20	·02	·21	·1	·02	...
1926	...	...	...	·02	·008	·07	·06	·01	008
1927	...	...	...	·097	·005	·09	·035	·008	...
1928	...	...	...	·11	·002	·11	·055	·013	·002
1929	...	...	...	·10	·008	·20	·07	·016	005
1930	...	...	...	·03	·01	·07	·08	·005	...
1931	...	...	...	·15	·02	·01	·05	·008	...
1932	...	...	...	·05	·05	·07	·09	·002	...
1933	...	...	...	·06	·03	·07	·11	·00	...
1934	...	...	...	·05	·03	·08	·21	·00	...
1935	...	...	...	·08	·01	·05	·10	·00	...
1936	...	...	...	·01	·01	·07	·05	·01	...
1937	...	...	...	·05	·003	·03	·04	·01	...
1938	...	...	...	·01	·006	·03	·05	...	...

The following is a summary of the weekly notifications of infectious diseases received during the year from the Local Medical Officers of Health:—

DISTRICTS	Estimated Population, 1937	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pneumonia.	Erysipelas.	Encephalitis. Lethargica.	Ophthalmia Neonatorum.	Puerperal Pyrexia.	Acute Polio- myelitis.	Cerebro Spinal Fever	Chicken Pox	Malaria	Dysentery	Measles	Acute Polio- Encephalitis	Meningococcal
URBAN.																	
Abercarn	18,510	68	29	2	...	1	...	...	...	...	1	...	...	...	...	...	...
Abergavenny	7,925	10	6	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Abertillery	28,320	172	29	1	4	1	...	4	3	1	8	...	...	...	...	...	...
Bedwas and Machen	8,385	31	2	...	20	2	...	...	1	...	...	...	...	1	...	...	...
Bedwellty	28,450	101	42	...	27	14	...	6	8	...	2	...	...	1	...	...	...
Blaenavon	9,844	3	12	...	1	2	...	...	...	...	...	...	...	...	...	...	...
Caerleon	3,385	16	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...
Chepstow	4,078	12	2	...	2	...	...	1	...	...	...	...	...	...	...	...	...
Cwmbran	10,850	44	1	...	4	2	...	...	1	...	...	...	...	...	...	...	...
Ebbw Vale	29,750	200	36	2	65	20	...	5	7	1	5	...	...	...	...	...	...
Monmouth	4,808	14	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mynyddislwyn	13,210	30	52	1	3	...	...	...	3	...	1	...	...	...	...	...	...
Nantyglo and Blaina	11,590	31	11	...	15	...	...	...	...	...	10	...	...	...	...	...	...
Pontypool	40,200	135	68	5	13	8	...	3	5	1	4	...	...	...	...	...	...
Rhynney	9,437	24	7	...	...	7	...	...	3	...	1	...	...	...	...	...	...
Risca	14,840	152	3	1	14	3	...	...	3	...	...	...	...	...	...	...	...
Tredegarr	20,890	90	46	...	58	34	...	2	9	1	1	...	...	...	...	...	...
Usk	1,228	3	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...
Totals, Urban	265,700	1,136	352	12	230	95	...	21	44	4	35	...	...	2	...	...	...
RURAL.																	
Abergavenny	8,254	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chepstow	8,678	40	6	...	3	...	...	...	1	...	...	...	...	...	...	...	...
Magor & St. Mellons	12,660	45	7	...	5	1	...	1	...	...	...	...	...	...	...	...	...
Monmouth	5,844	8	5	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Pontypool	5,334	6	...	...	1	...	...	...	2	...	...	2	...	...	...	...	...
Totals, Rural	40,770	100	19	...	9	1	...	1	4	...	...	2	...	...	...	...	...
Grand Totals	306,470	1,236	371	12	239	96	...	22	48	4	35	2	...	2	...	...	...

The number of cases of infectious diseases removed to Hospitals during the year, was as follows:—

CASES REMOVED TO HOSPITAL												
DISTRICT	Small Pox	Diphtheria	Erysipelas	Scarlet Fever	Tuberculosis	Ophthalmia Neonatorum	Cerebro-Spinal Fever	Acute Poliomyelitis	Enteric Fever	Chicken Pox	Pneumonia	Encephalitis Lethargica
Urban--												
Abercarn	16	...	...	...	...	2	...	1	...	...	...
Abergavenny	4	...	7	...	...	1	...	...	...	...	...
Abertillery	1	...	...	...	...	9	1	...	...	...	...
Bedwas and Machen	1	...	...	...	...	...	...	1	1
Bedwellty	44	...	...	...	...	3	...	...	...	...	...
Blaenavon
Caerleon	5	...	...	...	...	...	...	...	...
Chepstow	2	...	12	...	...	...	...	...	...	...	...
Cwmbran	2	...	...	...	...	...	...	...	...
Ebbw Vale	31	...	2	...	...	5	...	2	...	...	...
Monmouth	3	2	19	...	...	...	...	...	...	...	...
Mynyddislwyn	16	...	3	...	...	1	...	...	...	...	...
Nantyglo and Blaina	10	...	...	...	...	...
Pontypool	20	1	8	...	1	3	...	5	...	...	...
Rhymney	1	...	...	...	...	1	...	...	...	...	1
Risca...
Tredegar	54	...	36	...	...	3	...	1	...	...	4
Usk
Rural—												
Abergavenny	1	...	1	...	...	...	...	...	...	...	...
Chepstow	7	...	40	...	...	...	...	...	...	...	...
Magor & St. Mellons	1	...	3	...	...	...	...	...	...	...	...
Monmouth	4	...	1	...	...	...	...	...	...	...	...
Pontypool
Totals	205	3	140	...	1	38	1	9	...	...	6

Included in the Bedwellty figures are cases admitted to the Bedwellty Isolation Hospital from other areas.

The above has been compiled from the returns submitted by the District Medical Officers of Health.

Analysis of the Total Cases and Deaths from Notifiable Diseases according to Age Groups.

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Disease	CASES NOTIFIED.													DEATHS.												
	AGE GROUPS.													AGE GROUPS.												
	Under 1 year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Total all ages	Under 1 year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Total all ages
Diphtheria	1	4	15	12	22	161	79	27	33	9	2	...	365	...	1	...	3	3	8	3	...	...	...	...	...	18
Scarlet Fever	8	30	54	105	142	478	242	71	48	26	5	1	1210	...	...	...	...	1	...	1	...	...	...	...	...	2
Euteric Fever	...	...	...	...	1	...	3	4	1	1	1	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	19	16	6	13	7	24	13	14	47	28	48	14	244	37	9	3	...	1	2	1	2	12	11	44	45	167
Cerebro Spinal Fever	...	...	...	...	2	11	6	4	6	5	2	...	36	...	...	...	...	...	4	...	2	3	6	1	...	16
Acute Poliomyelitis	...	...	2	...	...	1	1	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Dysentery	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	28	...	...	...	...	...	...	...	...	...	...	...	28	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	...	...	...	...	...	...	...	6	37	9	...	...	52	...	...	...	...	...	...	1	10	6	...	...	...	17
Erysipelas	1	...	1	...	...	1	2	4	13	20	34	21	97	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	57	50	78	130	174	676	346	131	185	98	87	36	2048	37	10	3	3	5	14	5	5	26	23	45	45	221

Particulars respecting Tuberculosis cases will be found later in this report.

The table has been compiled from returns received from the District Medical Officers of Health.

SMALL-POX.

The epidemic of Small Pox which commenced in 1927 disappeared entirely towards the end of the year 1931. Particulars respecting the number of cases notified and the action taken generally with regard to the isolation and treatment of the cases discovered has been fully dealt with in the Annual Reports issued since 1927. The "Beeches" Isolation Hospital was closed throughout the year. Details of the scheme approved by the Minister of Health for the provision of hospital accommodation for the treatment of small-pox in the County of Monmouth will be found under the heading "Isolation Hospitals."

VACCINATION.

Under the Local Government Act, 1929, the functions relating to Vaccination came under the control of the County Council as and from the 1st April, 1930, as one of the functions relating to infant life protection and public health, and which were formerly discharged by the Poor Law Authorities. This has the effect of making it obligatory to discharge vaccination functions under Public Health and not Poor Law powers. Since the transfer of these functions the work has been administered by the County Medical Officer, and all reports relating to Vaccination are submitted to him. According to the instructions of the Registrar-General, the following is a summary of the returns made by the Vaccination Officers relating to children whose births were registered during the year 1937.

	Per cent.
Successfully Vaccinated	18.8
Insusceptible to Vaccination .....	.06
Had Small-pox	Nil
Declaration of Conscientious Objection received	69.0
Died Unvaccinated	4.6
Postponement by Medical Certificate .....	.6
Removal to districts, the Vaccination Officers of which have been duly apprised .....	.8
Removal to places unknown	1.9
Number of cases not included under any of the above-named headings	3.9

The Registrar-General asks that the attention of the Council be drawn to the number of children who have not been duly vaccinated or otherwise accounted for as regards Vaccination, viz., 190 or 3.9 per cent., and he desires action to be taken.

From the reports which have been received from the District Medical Officers of Health, it would appear that no primary vaccinations or re-vaccinations have been performed by the Medical Officers of Health under the Public Health (Small Pox) Regulations, 1917.

The following is a return showing the number of persons successfully vaccinated and re-vaccinated at the cost of the rates by the Medical Officers of Poor Law Institutions and the Public Vaccinators during the year ended 30th September, 1938.

District No.	Name of Poor Law Institution or Vaccination District.	Name of Medical Officer or Public Vaccinator	Number of successful Primary Vaccinations of Persons :—			No. of successful Re-vaccinations i.e., successful Re-vaccinations of persons who had been successfully vaccinated at some previous time.
			Under one year of age.	One year and upwards.	Total.	
		Drs. :—				
1	Christchurch (part) ...	W. H. Reynolds ...	1	1	2	...
3	Abercarn Upper ...	M. Ryan ...	17	2	19	...
4	Abercarn Lower ...	E. M. Griffith ...	6	1	7	2
5	Mynyddislwyn ...	C. G. Mackay ...	27	12	39	...
6	Magor ...	G. R. Strong ...	4	2	6	...
7	Bedwas & Machen ...	C. P. Davies ...	24	...	24	...
8	Rogerstone ...	G. E. Hull ...	13	1	14	2
9	Maesycwmmmer ...	A. L. Evans ...	...	2	2	...
10	Caerleon ...	W. H. Reynolds ...	8	1	9	...
11	Marshfield ...	W. Irwin ...	1	...	1	...
12	Risca ...	N. N. Wade ...	27	9	36	2
13	Llantarnam ...	J. Fleming ...	47	4	51	2
14	Bettws ...	H. A. Keane ...	...	...	...	...
15	St. Mellons ...	H. C. Conwy Joyce ...	7	...	7	...
16	Monmouth ...	W. H. Williams ...	16	10	26	2
17	Rockfield ...	W. H. Williams ...	9	...	9	...
19	Trelleck ...	P. G. Harvey ...	3	...	3	...
20	Raglan ...	W. M. Langdon ...	8	...	8	1
21	Skenfrith ...	G. H. Scott ...	1	...	1	...
22	Chepstow ...	E. W. Hardman ...	10	...	10	...
23	Shirenewton ...	E. W. Hardman ...	2	...	2	...
24	Caldicot ...	Owen T. Jones ...	20	4	24	...
25	Tintern ...	E. W. Hardman ...	...	...	...	...
26	Beaufort & Rassau ...	A. Brook ...	3	4	7	...
27	Dukestown & Llechryd ...	K. S. Thom ...	12	1	13	1
28	Grosmont ...	G. H. Scott ...	7	1	8	...
29	Blaenavon ...	A. H. James ...	12	1	13	...
30	Llanarth ...	W. T. E. Blackmore ...	2	1	3	...
31	Abergavenny ...	O. G. Griffiths ...	37	4	41	...
33	Llanhilleth ...	T. J. Frost ...	10	4	14	1
34	Usk ...	J. C. H. Bird ...	29	4	33	7
35	Coedygrioc P.L. Inst. ...	J. Powell Jenkins ...	...	...	...	...
36	Panteg ...	J. Powell Jenkins ...	32	3	35	2
37	Abersychan (North) ...	R. J. S. Verity ...	10	2	12	...
38	Abersychan (Central) ...	R. J. S. Verity ...	...	...	...	...
39	Pontypool ...	T. J. McAllen ...	8	7	15	3
40	Nantyglo ...	J. H. Verwey ...	4	5	9	4
41	Blaina ...	F. M. Wallen-Gunn ...	11	6	17	...
42	Ebbw Vale, No. 1. ...	F. M. Fonseca ...	51	4	55	4
43	Ebbw Vale, No. 2. ...	J. McCaig ...	13	...	13	...
44	Ebbw Vale, No. 3. ...	A. Franklin ...	20	...	20	...
45	Tredegarr ...	J. G. Owen ...	83	5	88	2
46	Rhymney ...	R. V. de Acton-Redwood ...	93	2	95	3
47	New Tredegarr ...	S. R. MacMillan ...	63	1	64	...
48	Abertyswg ...	Ivor Thomas ...	17	2	19	...
49	Abertillery ...	W. F. Mulvey ...	19	7	26	1
50	Argoed & Hollybush ...	T. J. Davies ...	19	3	22	2
51	Aberbargoed & Pengam ...	S. R. MacMillan ...	56	4	60	3
52	Bedwellty P.L.Inst. ...	J. G. Owen ...	47	19	66	...
53	Blackwood ...	W. McKendrick ...	6	5	11	...
		Totals ...	915	144	1059	44

Summary of returns under the Vaccination Acts, 1867—1907, and Vaccination Order, 1930, during the year ended 31st December, 1938 :—

Vaccination Officer.	District.	No. of Cases on birth list.	No. of Certs. of Vaccination received	No. of Certs. of postponement.	No. of Conscientious objections.	No. of Cases.	
						Parents removed out of District	Otherwise not found
E. J. Winstone	Abergavenny	205	54	4	143	5	3
	Usk	51	22	3	27	5	...
	Caerleon	76	6	3	58	1	...
	Trelleck	59	22	1	28	...	1
	Abertillery	320	18	9	283	4	1
	Blaina	73	12	...	56	...	...
	Nantyglo	148	11	...	117	5	2
	Ebbw Vale	513	101	7	364	4	4
	Rhymney	528	231	12	259	2	17
	Tredegar	633	227	6	385	18	13
	Llanhilleth	147	14	3	105	2	3
	Pontypool	522	22	1	409	2	8
	Panteg	205	23	4	145	2	6
	Monmouth	67	3	...	46	4	...
	Chepstow	198	29	2	91	1	2
J. Morgan E. Rowland	Llantarnam	81	57	4	36	...	3
	Rogerstone	311	59	4	255	2	3
	Blaenavon	134	11	...	115	2	...
	Mynydd'Iwyn	590	81	4	487	26	...
Totals	...	4861	1003	67	3409	85	66

SCARLET FEVER.

There has been a further increase in the number of cases of Scarlet Fever during the year, 1,198 cases being notified, as compared with 890 in 1937; 841 in 1936; 867 in 1935; 1,253 in 1934; 1,580 in 1933; 1,513 in 1932; and 1,323 in 1931. In 1938 there were 2 deaths; in 1937, 1 death; in 1936, 5 deaths; 1935, 6 deaths; in 1934, 11 deaths; in 1933, 11 deaths; in 1932, 20 deaths; and in 1931, 9 deaths. Immediately upon receipt of a notification the Sanitary Inspectors of the County visit the case and issue instructions to the person in charge regarding isolation and treatment. Enquiries are also made as to the possible source of infection, and the sanitary conditions of the houses are investigated. At the termination of the case the house, bedding, etc., is thoroughly disinfected. Disinfectants are supplied to the home during the period of infection. Extreme difficulty is experienced in dealing effectively with Scarlet Fever owing to the inadequate isolation hospital accommodation. It is, however, hoped that in the near future, a general scheme for the whole of the County will be put into operation, with the probable effect of checking the spread of infection. The "Dick" test does not appear to have been carried out in any of the Districts of the County.

DIPHTHERIA.

The number of cases of Diphtheria notified during the year 1938 was 368, which is a decrease compared with the figure for the previous year, when the number was 444. During 1936, 362 cases were notified; in 1935, 438 cases; in 1934, 835 cases; in 1933, 459 cases; in 1932, 478 cases; and in 1931, 455 cases. The number of deaths recorded in 1938 was 18; in 1937, 14; in 1936, 19; in 1935, 34; in 1934, 74; in 1933, 40; in 1932, 33; and in 1931, 23. Examination of swabs taken from the nose and throat of children attending school is carried out for the purpose of discovering "carriers." These examinations are conducted at the County Laboratory, Newport, by the County Pathologist, Dr. Gwyn Rocyn Jones, and all "carriers" found are excluded from school. In most of the districts provision is made for the free supply of anti-toxin and can be obtained by the medical practitioners either from the Local Medical Officer of Health or from the Sanitary Inspector. Where possible cases of Diphtheria are isolated and treated in isolation hospitals, but as this provision is inadequate all the cases cannot be removed. The cases are regularly visited by the District Sanitary Inspectors, disinfectants are supplied, and observations made. At the termination of the case the premises are disinfected thoroughly. Where the local authority has the necessary facilities the bedding and clothing are removed for disinfection by means of a disinfecting apparatus. There are not many districts in the County in possession of a steam disinfecter. The County Laboratory was called upon to deal with a considerable number of swabs and during the year 1938, 6,812 swabs were examined. The attention of the general practitioners in some districts has been called by the District Medical Officers to the facilities provided by the Monmouthshire County Council for bacteriological confirmation of this disease free of charge. Special investigations have been made among the school and pre-school children of certain districts where there were outbreaks of Diphtheria during the years 1933 and 1934. Full and detailed reports, together with the results of the "Schick" testing of the children in these areas will be found in the Education Reports for this County for the years 1933 and 1934. A full report upon immunisation is given in a joint address delivered by Dr. W. R. Nash, Medical Officer of Health, Caerphilly U.D.C., and Dr. W. Panes, Assistant Medical Officer to this County, and which appeared in full in the Education Report for this County for the year 1936. That there can be no doubt as to the success of the immunisation campaign in this County is demonstrated in the reports of the Medical Officers of Health for the districts which have accepted the facilities for immunisation offered by the County Council, and which are also included in the Education Report for the year 1936. As yet these facilities have only been extended to children of school age and it is felt that the work will not be complete until the same protection is given to children of pre-school age and active immunisation established as a permanent public health service.

IMMUNISATION AGAINST DIPHTHERIA—1938.

During the year under review the work of Active Immunization against diphtheria was carried out in the following districts: Bedwas and Machen, Caerleon, Ebbw Vale, Risca and Tredegar Urban Districts, and Chepstow and Pontypool Rural Districts.

The result of the year's work is set out in the table below.

	No. of Children 9 yrs. or over Schick Tested.	No. positive (+) (Susceptible)	No. Negative (—) (Immune)	No. under 9 yrs. who received injections.	Total No. who received injections.	Final Schick Test.	
						+	—
Bedwas and Machen U.D. ...	113	53	60	262	†315	Not tested	
Caerleon U.D. ...		Immunised	in 1937			31	149
Ebbw Vale U.D. ...	270	150	120	741	891	28	*356
Risca U.D. ...		Immunised	in 1937			12	641
Tredegar U.D. ...		Immunised	in 1937			35	394
Chepstow R.D. ...		Immunised	in 1937			16	436
Pontypool R.D. ...	34	22	12	89	111	—	*28

† Final Inoculations in 1939.

* Testing not completed.

Thus it will be seen that 417 children of 9 years and over were Schick Tested (Primary test); of these 225 were found to be positive or susceptible to diphtheria and 192 were negative or immune. That is, 54% of the children 9 years and over were found to be, as ascertained by the Schick Test, susceptible to diphtheria.

The number of children under 9 years of age who received prophylactic injections was 1,092. Thus the total number of children who received treatment was 225 (Schick + over 9 years) plus 1,092, i.e., 1,317.

The result of final Schick testing was:—

Number Schick Tested	...	...	...	2,126	
Number negative (immune)	...	...	...	2,004	= 94%
Number positive (susceptible)	...	...	...	122	= 6%

The material used for injection was Toxoid Antitoxin Floccules given in three doses, an interval of a week between each dose. No untoward reaction was experienced in any case.

It has still not been considered advisable to change the "three shot" method for the "one shot" method. The "one shot" method seems more liable to produce unpleasant reactions and this would prove a definite draw-back to any large scale immunization campaign. Also, the work of certain investigators seems to point to the fact that the immunity produced by the "One shot" method is not so "durable" as that produced by the "three shot" method, provided that Toxoid Antitoxin Floccules is the agent employed to produce immunity. It is for these reasons that the older and slower method of active immunization is persisted with. (Particulars of work carried out in connection with Immunization against Diphtheria during the year 1937, will be found in the Appendices to the Report for that year).

ENTERIC FEVER.

Eleven cases of Enteric Fever were notified in the year 1938. In 1937 there were 5 cases; in 1936, 21; in 1935, 18; in 1934, 3; in 1933, 2; in 1932, 1; and in 1931, 16. No deaths were recorded in the year 1938. There were 2 deaths during 1937. In 1932 there was 1 death, and in 1931, 3 deaths. The cases notified to the County Medical Officer occurred in the Abercarn, Abertillery, Ebbw Vale, Mynyddislwyn, Pontypool and Risca Urban Districts. Immediately upon receipt of a notification the case is visited by the District Sanitary Inspector and instructions are given for the removal of the case to an Isolation Hospital. In addition, every effort is made to trace the source of infection. Samples of water are collected by the County Sanitary Inspector, and are examined at the County Laboratory, Newport, by the County Pathologist.

ERYSIPELAS.

There were 100 cases of Erysipelas notified during the year 1938, as compared with 101 cases in the year 1937; 77 in 1936; 93 in 1935; 128 in 1934; 128 in 1933; 92 in 1932; and 90 in 1931. The disease was fairly evenly spread throughout the County.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year 1938, notifications of 51 cases of Puerperal Pyrexia were received under the Public Health (Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, from the District Medical Officers of Health. These notifications were received from the following districts:—Urban: Abertillery, 3; Bedwas and Machen, 1; Bedwellty, 9; Blaenavon, 1; Cwmbran, 1; Ebbw Vale 7; Mynyddislwyn, 3; Pontypool, 5; Rhymney, 3; Risca, 3; Tredegar, 9 and Usk, 1. Rural: Chepstow, 2; Monmouth, 1; and Pontypool, 2. Thirty-eight deaths were registered. The cases of Puerperal Fever and Puerperal Pyrexia investigated by the County Midwives' Inspectresses showed that all cases were attended by registered midwives. All cases are followed up by the Inspectresses of Midwives. Every precaution possible is taken to prevent the spread of infection. A visit of inspection is made immediately on receipt of the notification, and the midwife is prohibited from attending other cases until she has left the

infected case and has allowed 24 hours to elapse for thorough disinfection of herself, her instruments and her clothing. If the midwife is practising independently compensation is paid to her for any case which she may lose through this suspension. On the 1st October, 1926, Puerperal Pyrexia became a notifiable disease. Puerperal Pyrexia is defined as any febrile condition occurring in a woman within 21 days after childbirth in which a temperature of 100·4 degrees Fahr. or more has been sustained during a period of 24 hours. From the 1st. October, 1937, all such cases where high temperatures were maintained became notifiable as Puerperal Pyrexia, the term "Puerperal Fever" being discarded. A scheme for the provision of facilities for diagnosis and treatment of cases is in operation. Under the scheme the services of Dr. G. I. Strachan, M.D., F.R.C.S., of Cardiff, have been retained as consultant obstetrician, and his services have been requisitioned frequently by the medical practitioner in attendance upon the case. Cases requiring hospital treatment are sent to an Infectious Diseases Hospital and any necessary bacteriological examination is made by Dr. Gwyn Rocyn Jones, County Bacteriologist, at the County Laboratory, Newport.

INFANTILE DIARRHOEA.

A number of cases of this disease were discovered during visits to homes as against 33 cases in the year 1937. Twenty-two deaths were registered in children under two years of age, giving a death-rate of 4·4 per 1,000 births, as compared with 5·1 for the year 1937. All cases of which the Health Visitor has knowledge are visited, but it is obvious that very many cases do not come to her notice. This disease is not notifiable. During the years preceding the introduction of the County Maternity and Child Welfare Scheme the death-rate averaged 11·0 per 1,000 births. The average rate for the past 15 years has been 5·9 per 1,000 births. It will be observed that the rate for 1938 is still below the average. The reduction in the rate in recent years is undoubtedly due to the greater care which is now observed in the feeding of infants and the measures taken by the Council to ensure a clean milk supply. The infective type of the disease is essentially one of the summer months and it varies in intensity according to the type of summer, many more cases occurring in really warm weather. During these months, the mothers attending the County Maternity and Child Welfare Centres are warned of the measures necessary to prevent the disease, and printed instructions to mothers in regard to these diseases are distributed by the Health Visitors at homes when cases are discovered.

ENCEPHALITIS LETHARGICA.

No cases of Encephalitis Lethargica were notified during the year 1938; 2 cases were notified in 1937; 1 in 1934; 5 in 1933; 3 in 1932; and 8 in 1931. One death was recorded in 1938, compared with 6 in 1937; 1 in 1936; 2 in 1935; 2 in 1934; 6 in 1933; 5 in 1932; and 8 in 1931.

OPHTHALMIA NEONATORUM.

Thirty-five cases were notified under the Public Health (Ophthalmia Neonatorum) Regulations, as compared with 24 cases in the year 1937, and 15 cases in the year 1936. These cases, together with other cases of eye trouble reported by the midwives, making a total of 161 cases, were followed up by the Health Visitors, who paid 274 re-visits to them. Since the 1st January, 1921, the Midwives practising within the Administrative County have been supplied with bottles of Collosol Argentum, with which they are instructed to treat the eyes of all children at birth. The supply is renewed upon application to the County Maternity and Child Welfare Centres. There is no doubt that these precautionary measures have succeeded in greatly reducing the incidence of blindness due to gonococcal infection, for rarely in recent years is there blindness from this cause. The County Health Visitors are assiduous in their following up of infected cases. Medical treatment is urged for the slightest case, and frequent visits are paid to see that the mothers are properly attending the eyes of the infants. The Venereal Diseases Inquiry Officer also follows up cases suspected of gonococcal infection, with a view to attendance at the Clinic.

Cases		Vision Un- impaired	Vision Impaired	Total Blindness	Died	
Notified	Treated					
	at Home					in Hospital
35	29	6	33	1	1	

CEREBRO SPINAL FEVER AND ACUTE POLIOMYELITIS.

Thirty-five cases of Cerebro-Spinal Fever were notified to the County Medical Officer during the year 1938; four cases of Acute Poliomyelitis were notified. Eight cases of Cerebro-Spinal Fever were notified during the year 1937. The Cerebro-Spinal Fever cases were notified from the following Urban Districts: Abercarn, Abergavenny, Abertillery, Bedwellty, Ebbw Vale, Mynyddislwyn, Nantyglo and Blaina, Pontypool, Rhymney and Tredegar; the cases of Acute Poliomyelitis from Abertillery, Ebbw Vale, Pontypool and Tredegar Urban Districts. Seventeen deaths occurred, compared with 5 in 1937. Special investigations were carried out by the staff of the County Public Health Department in collaboration with the staffs of the District Councils with a view to arresting the progress of this disease. In some districts naso-pharyngeal swabs were taken from all known contacts, including the children attending the same school, and examined at the County Laboratory, chiefly with a view to the tracing of "carriers."

CHICKEN POX.

Two cases of Chicken Pox were notified during 1938. The disease is not compulsorily notifiable.

MEASLES.

There was a decrease in the number of deaths from Measles during the year 1938, 6 as compared with 17 in the previous year. The disease was fairly evenly spread throughout the County. Measles is not a notifiable disease, and therefore, difficulty is experienced in obtaining satisfactory records as to the extent of the disease. A large proportion of the cases is brought to the notice of the public health authorities by the Health Visitors and Attendance Officers when visiting the homes.

WHOOPING COUGH.

This disease is also not notifiable and it is again difficult to obtain satisfactory information regarding the number of infected persons. There were 10 deaths in 1938 as compared with 12 in 1937.

INFLUENZA.

As in the case of Whooping Cough and Measles, very little information of a satisfactory nature can be obtained regarding the number of persons attacked. The number of deaths recorded in 1938 was 57 as compared with 115 in 1937.

PUBLIC HEALTH (PNEUMONIA, MALARIA, DYSENTERY, ETC.,) REGULATIONS.

225 cases of Pneumonia were notified during the year 1938, as compared with 336 in 1937. There were 189 deaths registered in 1938 and 191 in 1937. The notification of this disease is by no means satisfactory, and the figures relating to the number of notifications is no indication of the number of persons who actually suffered from the disease. The attention of the medical practitioners of the County is continually being brought to their duties under these Regulations. No cases of malaria were notified but there were 2 cases of Dysentery.

ANTHRAX.

There were no cases of Anthrax notified during the year 1938.

CANCER.

The number of deaths from Cancer recorded during the year 1938 was 414, which shows a decrease upon the figure for 1937 (345). In 1936 there were 433 deaths; in 1935, 422 deaths; in 1934, 397 deaths; in 1933, 379 deaths; in 1932, 352 deaths; and in 1931, 394 deaths. As in previous years, practically the whole of the deaths occurred in persons between the ages of 45 and 65 and upwards. Deaths from Cancer in the various age groups are shown in the table opposite page 4.

FACILITIES FOR THE DIAGNOSIS AND TREATMENT OF CANCER IN MONMOUTHSHIRE.

1. Facilities provided by the local authority :—

(a) *Diagnosis.*—The County Laboratory is available to all Practitioners in the County for diagnostic purposes. Microscopic examination of tissues, bio-chemical tests, blood counts, etc., are among tests done.

(b) The hospitals at Ty Bryn and Coedygric are available for the nursing of patients suffering from Cancer. A Consulting Surgeon visits Ty Bryn, while from both hospitals cases are referred to Cardiff Royal Infirmary for radium treatment.

2. Facilities provided by Voluntary Hospitals in the County are shown in the following table :

Hospital.	Admit Cancer Patients.	X-Ray or Radium for Treatment.	X-Ray for Diagnosis.	Specialist for Diagnosis (Out-Patient).
Rhymney ...	No	—	—	All cases referred to Cardiff.
Abertysswg ...	Yes	—	—	Yes
Aberbargoed ...	No	—	—	All cases referred to Cardiff.
Blaina ...	Yes	—	—	—
Pontypool ...	Yes (certain cases)	Radium (loan)	Yes	—
Monmouth ...	Yes	—	—	—
Abergavenny ...	Yes	—	—	Yes
Ebbw Vale ...	Yes	Yes	—	Yes
Oakdale ...	No	—	—	Yes

3. Hospitals taking Cancer patients for radium and other treatment from the County :

(a) Cardiff Royal Infirmary.

(b) Newport Royal Gwent Hospital.

In many parts of the County there are contributing schemes to these hospitals, so that the facilities of these institutions are available to the inhabitants of the County. Churches in the County take part in the Hospital Sunday Collections, so that Out and In Patient tickets are obtainable in most districts.

4. It is proposed to adopt the following scheme for facilitating diagnosis and treatment of Cancer in the County :—

- (a) Circularise Practitioners to ascertain if there are any patients who are unable to obtain hospital Out-patient Tickets for diagnostic purposes or, if necessary, appropriate treatment.
- (b) *Education of the Public.*—The County Medical Officer to provide posters and leaflets pointing out the advisability of seeking the Doctor's advice immediately, when certain symptoms appear. These can be displayed (with permission) in Doctors' surgeries and County Clinics. Occasional notices in local papers, cinemas and places of worship to help reach most of the inhabitants of the County.

RATS, ETC.

Most of the districts have made arrangements for the destruction of rats, etc., upon their property. The refuse tips in some of the areas, it is reported, are infested with rats, and extensive baiting has been applied. As the condemned foodstuffs are usually buried at these tips, rats and other pests make the tips their breeding grounds. Until some other method for the disposal of refuse, condemned foodstuffs, etc., is adopted, in the form of refuse destructors, it is necessary that strict supervision shall be maintained and the destruction of rats, etc., continued.

DISINFECTION.

SCHOOLS.—On the outbreak of an infectious disease in a district and the schools being closed in consequence, the County Sanitary Inspector disinfects all the departments in the schools. A suitable solution of disinfectant is used and the method adopted is that of spraying, a MacKenzie Spray being found to be the most suitable apparatus for this work. It has also been found necessary in some instances to fumigate parts of the school premises.

ROOMS, Etc.—Where a case of infectious disease has been isolated in, or removed from a home, the District Sanitary Inspector disinfects the premises. The methods generally adopted are by gaseous or liquid disinfectants, and sometimes both are used in conjunction.

BEDDING, CLOTHES, Etc.—As already stated, very few of the Councils in the County have the proper facilities for the disinfection of these articles. Some of the districts have made arrangements with an Authority which is in possession of a steam disinfector. It is noted that some of the District Medical Officers have recommended to their Councils the advisability of providing steam disinfecting apparatus for their areas. As it is obvious that disinfection of beddings and clothes by steam is the most thorough, it is hoped

that the Councils concerned will provide the necessary machines. Disinfectants, both liquid and powder are still available in the districts to the persons responsible for the care of patients suffering from infectious disease.

PREVENTION OF BLINDNESS.

Arrangements are made under the Section of the Public Health Act, 1936, for the examination of persons with a view to the prevention of blindness, and assistance is granted by the appropriate Committee of the County Council. Spectacles are provided upon the recommendation of the Ophthalmic Surgeon, and arrangements are made, where necessary, for operations to be performed, also the treatment in hospital of persons ordinarily resident within the County and suffering from any disease of, or injury to the eyes.

TUBERCULOSIS.

Under the Tuberculosis Regulations (1930), and in the year 1938, 310 primary cases of Pulmonary Tuberculosis were notified and 185 deaths were registered. Of other forms of Tuberculosis, 135 cases were notified and 45 deaths registered.

The total number of notifications received during the year was 337 Pulmonary and 149 Non-Pulmonary Tuberculosis, of which 27 and 14 respectively were duplicates. Cases are sometimes notified to the District Medical Officers of Health by the patient's Medical Attendant, and also by the Tuberculosis Physician during the same week.

As stated in previous reports, arrangements have been made with the District Registrars to supply to the County Medical Officer particulars of all deaths from Tuberculosis. These cases were again compared with the cases notified by the District Medical Officers of Health, and when it was found that a death registered by the District Registrar had not been notified by the District Medical Officer of Health, it was included in the special return of new cases coming to the knowledge of the Medical Officer of Health otherwise than by formal notification under the Public Health (Tuberculosis) Regulations, 1930.

There are still some District Medical Officers of Health who are not furnishing the Department with particulars of cases of Tuberculosis in spite of repeated efforts by the staff of the County Public Health Department.

It will be observed from the table included below that there is a slight increase in the notification rates for Pulmonary Tuberculosis and also an increase in the notification rates for Non-Pulmonary Tuberculosis. The high notification rates can be attributed to the efforts of the Public Health Department in obtain-

ing, as far as possible, correct records of Tuberculosis cases occurring in the districts from the District Medical Officers of Health.

Regarding the death rates from Pulmonary and Non-Pulmonary Tuberculosis, there has been a decrease in the rate for Pulmonary cases while the rate for Non-Pulmonary cases shows a slight increase.

The following table giving the notification rates and death rates per 1,000 of the estimated population is submitted for the purpose of comparison:—

Year.	Notification rate per 1,000 of population.		Death rate per 1,000 of population.	
	Pulmonary.	Non-Pulmonary.	Pulmonary.	Non-Pulmonary.
1924 ...	·93	·29	·68	·2
1925 ...	·90	·35	·69	·18
1926 ...	1·07	·44	·57	·17
1927 ..	·93	·42	·61	·19
1928 ...	1·27	·49	·73	·179
1929 ..	1·22	·41	·65	·15
1930 ...	1·03	·46	·66	·18
1931 ...	1·15	·43	·70	·15
1932 ...	1·35	·57	·65	·16
1933 ...	1·16	·41	·69	·15
1934 ..	·89	·36	·66	·13
1935 ...	1·03	·32	·68	·14
1936 ...	·80	·30	·57	·14
1937 ...	·94	·35	·65	·13
1938 ...	1·01	·44	·60	·14

Summary of notifications by District Medical Officers of Health to the County Medical Officer, under the Public Health (Tuberculosis) Regulations 1930, during the period 1st January, 1938, to the 31st December, 1938, with the number of Deaths notified by the Registrar General.

Age Periods	Primary Notifications on Form A					Age Periods.	DEATHS.				
	Pulmonary.		Non-Pulmonary.				Pulmonary.		Non-Pulmonary		
	Males.	Females.	Males.	Females.	Total.		Males.	Females.	Males.	Females.	Total
0	—	—	2	—	2	0	—	—	4	—	4
1	1	1	8	8	18	1	—	—	1	2	3
5	2	4	12	5	23	2	—	—	3	2	5
10	8	13	22	15	58	5	2	2	4	5	13
15	41	21	8	15	85	15	21	25	4	5	55
20	24	27	5	6	62	25	14	29	4	3	50
25	24	38	7	12	81	35	22	16	2	3	43
35	24	25	2	4	55	45	18	12	—	—	30
45	19	19	3	—	41	55	11	5	1	1	18
55	11	1	—	1	13	65	4	2	—	—	6
65 and Upwards	4	3	—	—	7	75	—	2	1	—	3
	158	152	69	66	445		92	93	24	21	230

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period 1st January, 1938, to the 31st December, 1938, otherwise than by formal notification under the Public Health (Tuberculosis) Regulations, 1930.

Age Periods.	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males	—	—	—	—	1	—	2	2	2	2	—	9
Pulmonary Females	—	—	—	1	—	2	1	2	—	3	1	10
Non-Pulmonary Males	1	2	—	—	—	—	—	1	—	—	—	4
Non-Pulmonary Females	—	1	—	—	1	—	2	1	—	—	—	5

Source of above Information.	No. of Cases	
	Pulmonary	Non-Pulmonary
Death Returns { from local Registrars ...	19	6
transferable deaths from Registrar-General	—	1
Posthumous notifications ...	—	2
" Transfers " from other areas (other than transferable deaths) ...	—	—
Other Sources if any ...	—	—

From the above it will be seen that 25 non-notified deaths (10·8 per cent.) from Tuberculosis were discovered through examination of the death returns received from the District Registrars.

The following is a summary of the cases of Tuberculosis remaining on the Registers of Notifications, kept by the District Medical Officers of Health in the County, at the end of each year (1930—38), which has been compiled from the returns submitted by the District Medical Officers of Health in accordance with the requirements of the Public Health (Tuberculosis) Regulations, 1930:—

Year.	Pulmonary.			Non-Pulmonary.			Total. Cases.
	Males.	Females	Total.	Males.	Females	Total.	
1930	1085	1080	2165	521	432	953	3118
1931	1194	1072	2266	562	487	1049	3315
1932	1172	1066	2238	565	498	1063	3301
1933	1223	1131	2354	598	527	1125	3479
1934	1182	1106	2288	596	518	1114	3402
1935	1136	910	2046	851	514	1365	3411
1936	1151	1151	2302	650	528	1178	3480
1937	1090	866	1956	843	486	1329	3285
1938	1109	1094	2203	617	491	1108	3311

No. of Cases removed from the Registers during the year by reason <i>inter alia</i> of:—	Pulmonary			Non-Pulmonary.			Total. Cases
	M.	F.	Total	M.	F.	Total.	
1.—Withdrawal of notification	1	1	2	1	2	3	5
2.—Recovery from the disease	24	20	44	19	13	32	76
3.—Death	86	90	176	16	18	34	210
4.—Left district permanently	26	23	49	6	16	22	71

In the Report for the year 1931, it was pointed out that the Ministry of Health were seriously concerned at the discrepancies discovered in the above summary for that year. In their quarterly returns to the County Medical Officer of Health under the Public Health (Tuberculosis Regulations), 1930, District Medical Officers of Health should include particulars of all cases removed from the Tuberculosis Registers with the reasons therefor. The Ministry pointed out that there was a great difference between the number of cases removed from the Register by death in 1931, and the number of deaths recorded by the Registrar-General for the same year. It was obvious, therefore, that some Dis-

strict Medical Officers of Health were not properly keeping their Notification Registers, and to make a correct return, the District Registers must be compared with the quarterly death returns which are received by the District Medical Officers of Health.

Several of the District Medical Officers were interviewed by the County Sanitary Inspector during the year 1932, and their Registers examined. It was found in the majority of instances that co-operation between the Tuberculosis Physician and the District Medical Officers of Health had been the means of improving the keeping of these Registers.

A marked improvement was noticed during the year 1932, but the figures for subsequent years have all proved inaccurate.

There was again a wide discrepancy in the figures for 1937, 247 deaths from Tuberculosis being recorded by the Registrar-General and only 217 being removed from the Registers by the District Medical Officers of Health.

A further discrepancy appears in these figures for the year 1938, 230 deaths from Tuberculosis being recorded by the Registrar-General and 210 being removed from the Registers by the District Medical Officers. It is evident that some of the District Medical Officers are still lax in their duties under these Regulations.

ENQUIRY INTO ANTI-TUBERCULOSIS SERVICES IN WALES.

The Ministry of Health's Commission of Enquiry into the incidence and treatment of tuberculosis in Wales and Monmouthshire took place during the first half year of 1938, and was conducted by E. Clement Davies, Esq., K.C., M.P. (Chairman), and Dr. J. H. Coutts, C.B.E., with Mr. D. J. Wildgoose, of the Ministry of Health, as Secretary.

The Commission's Report has been published and has received widespread attention, not only in Wales but in England and Scotland as well. The Report is a complete justification of the work and functioning of the Welsh National Memorial Association and contains a generous tribute to the work of the Monmouthshire County Council in this branch of their Public Health Services.

The Monmouthshire County Council, through its Public Health Committee, have expressed high appreciation of the work of the Commission and their gratitude to Mr. Clement Davies and Dr. Coutts for the splendid service they have rendered thereby to Wales and Monmouthshire. They are satisfied that immense benefit to the public health administration in Wales and Monmouthshire will result from the Commission's activities, for their Report is without doubt a State document of first class importance.

Cases of Tuberculosis notified under the Public Health (Tuberculosis) Regulations, 1930, during the year ended 31st December, 1938.
with reports upon Examinations of Sputa, etc., at the
County Laboratory, Newport.

DISTRICTS AND SUB-DISTRICTS.				PULMONARY.				OTHER T.B. DISEASES.				Total.
				Cases notified.	Result of Lab. examination.		Specimen not submitted.	Cases notified.	Result of Lab. examination.		Specimen not submitted.	
					Pos.	Neg.			Pos.	Neg.		
URBAN.												
Abercarn												
Aberbeeg				—	—	—	—	1	—	—	1	1
Pentwynmawr				1	1	—	—	—	—	—	—	1
Crumlin				2	—	1	1	3	—	—	3	5
Abercarn				4	1	—	3	—	—	—	—	4
Newbridge				5	—	1	4	—	—	—	—	5
Abergavenny												
Abergavenny				3	—	—	3	2	—	—	2	5
Abertillery												
Crumlin				3	1	—	2	2	—	—	2	5
Cwmtillery				2	1	1	—	—	—	—	—	2
Abertillery				17	7	1	9	3	—	—	3	20
Six Bells				1	1	—	—	2	—	—	2	3
Llanhilleth				6	1	2	3	2	—	—	2	8
Aberbeeg				1	—	—	1	3	—	—	3	4
Blaina				1	—	—	1	—	—	—	—	1
Bedwas & Machen												
Trethomas				9	2	2	5	2	—	1	1	11
Bedwas				5	2	1	2	1	—	—	1	6
Maesycwmmmer				1	—	—	1	—	—	—	—	1
Machen				3	—	—	3	—	—	—	—	3
Bedwellty												
Argoed				2	—	—	2	—	—	—	—	2
Cefn Forest				2	—	—	2	1	—	—	1	3
Blackwood				7	2	3	2	5	—	—	5	12
New Tredegar				11	2	1	8	4	—	—	4	15
Aberbargoed				6	2	—	4	3	—	—	3	9
Fleur-de-Lis				3	1	—	2	—	—	—	—	3
Pengam				3	3	—	—	—	—	—	—	3
Markham				2	2	—	—	3	—	—	3	5
Blaenavon												
Blaenavon				28	7	8	13	3	—	—	3	31
Caerleon.												
Caerleon				1	—	—	1	—	—	—	—	1
Chepstow												
Chepstow				1	—	—	1	7	—	—	7	8

DISTRICTS AND SUB-DISTRICTS.				PULMONARY.			OTHER T.B. DISEASES.				Total.	
				Cases Notified	Result of Lab. examination		Specimen not submitted	Cases Notified	Result of Lab. examination			Specimen not submitted
					Pos.	Neg.			Pos.	Neg.		
Cwmbran												
Cwmbran	...	...	5	2	1	2	6	—	—	6	11
Pontnewydd	...	...	1	—	—	1	1	—	—	1	2
Ebbw Vale												
Waunllwyd	...	...	2	—	2	—	1	—	—	1	3
Beaufort	...	...	8	3	—	5	2	—	—	2	10
Cwm	...	...	8	3	2	3	6	1	2	3	14
Ebbw Vale	...	...	15	2	2	11	7	—	—	7	22
Monmouth												
Monmouth	...	...	1	—	—	1	—	—	—	—	1
Mynyddislwyn.												
Pontllanfraith	...	...	6	3	—	3	2	—	—	2	8
Oakdale	...	...	1	1	—	—	2	—	—	2	3
Ynysddu	...	...	5	2	—	3	—	—	—	—	5
Cwmfelinfach	...	...	4	1	2	1	—	—	—	—	4
Wattsville	...	...	1	—	—	1	—	—	—	—	1
Nantyglo & Blaina												
Blaina	...	...	10	5	1	4	—	—	—	—	10
Nantyglo	...	...	4	1	—	3	1	—	—	1	5
Pontypool												
Garndiffaith	...	...	5	—	3	2	3	—	—	3	8
New Inn	...	...	1	1	—	—	—	—	—	—	1
Griffithstown	...	...	2	1	—	1	3	—	—	3	5
Varteg	...	...	3	1	1	1	—	—	—	—	3
Sebastopol	...	...	2	—	—	2	—	—	—	—	2
Pontypool	...	...	15	6	4	5	7	—	1	6	22
Wainfelin	...	...	—	—	—	—	1	—	—	1	1
Pontnewynydd	...	...	3	—	—	3	—	—	—	—	3
Abersychan	...	...	1	1	—	—	1	—	—	1	2
Talywain	...	...	4	—	2	2	1	—	1	—	5
Rhymney												
Abertysswg	...	...	5	1	1	3	1	—	—	1	6
Rhymney	...	...	9	2	1	6	4	—	—	4	13
Risca												
Pontymister	...	...	3	—	—	3	2	—	—	2	5
Crosskeys	...	...	8	1	—	7	3	—	—	3	11
Risca	...	...	9	1	—	8	3	—	—	3	12
Wattsville	...	...	1	—	—	1	—	—	—	—	1
Tredegar.												
Tredegar	...	...	29	11	11	7	33	2	—	31	62
Usk.												
Usk	...	...	3	—	—	3	1	—	—	1	4

DISTRICTS AND SUB-DISTRICTS.				PULMONARY.			OTHER T.B. DISEASES.			Total.		
				Cases Notified	Result of Lab examination		Specimen not submitted	Cases Notified	Result of Lab. examination		Specimen not submitted	
					Pos.	Neg.			Pos.			Neg.
RURAL.												
Abergavenny												
Penpergwm	...	...	1	—	1	—	1	—	—	1
Abergavenny	...	...	5	1	—	4	—	—	—	5
Grosmont	...	...	2	—	2	—	—	—	—	2
Llan-Crucorney	...	...	—	—	—	—	1	—	1	1
Pandy	...	...	1	1	—	—	—	—	—	1
Chepstow												
Chepstow	...	...	1	—	1	—	—	—	—	1
Itton	...	...	1	—	—	1	—	—	—	1
Llansoy	...	...	2	—	—	2	—	—	—	2
Llanishen	...	...	1	1	—	—	—	—	—	1
Caldicot	...	...	2	1	—	1	—	—	—	2
Devauden	...	...	1	—	1	—	—	—	—	1
Rogiet	...	...	1	—	—	1	—	—	—	1
Tintern	...	...	—	—	—	—	2	—	2	2
Shirenewton	...	...	—	—	—	—	1	—	1	1
Magor and St. Mellons.												
Bassaleg	...	...	1	1	—	—	—	—	—	1
St. Brides Wentlooge	...	...	1	1	—	—	—	—	—	1
Langstone	...	...	4	—	—	4	—	—	—	4
Henllys	...	...	—	—	—	—	1	—	1	1
Rogerstone	...	...	2	—	1	1	1	—	1	3
Rumney	...	...	1	—	—	1	3	—	3	4
Rhiwderin	...	...	2	1	—	1	—	—	—	2
Monmouth												
Raglan	...	...	—	—	—	—	1	—	1	1
Pontypool.												
Glascoed	...	...	1	—	1	—	—	—	—	1
Goytrey	...	...	2	—	2	—	1	—	1	3
Gwehelog	...	...	1	—	—	1	—	—	—	1
Totals				337	92	63	182	149	3	5	141	486

The reports of the Tuberculosis Physicians for the year are as follows:—

WEST MONMOUTHSHIRE AREA.

Dr. J. Glyn Jones.

TIME TABLE.

Pontllanfraith	...	Tuberculosis Clinic, Llanarth Road	...	Every Monday at 10.0 a.m. Every Friday at 10.0 a.m.
Abertillery	...	88, Queen Street	..	Every Wednesday at 11 a.m.
Blaina	...	18, Abertillery Road		Second Wednesday at 11 a.m.
Ebbw Vale	...	Workmen's Hall	...	Every Tuesday at 11 a.m. Every Thursday at 11 a.m.
Tredegar	...	Central Surgery	...	Every Thursday at 12 noon.
Pengam	...	Post Office Chambers		1st and 3rd Mondays at 11 a.m.
Rhymney	...	Central Surgery	...	2nd Monday at 2.30 p.m.
Risca	...	Ty Ucha, Cromwell Road	...	2nd and 4th Fridays at 11 a.m.
Trethomas	...	Dr. Cecil Davies' Surgery	...	4th Monday at 1 p.m.

Return showing the work of the Area during the year 1938

Diagnosis	Pulmonary				Non-Pulmonary				Totals				Grand Total	
	Adults		Children		Adults		Children		Adults.		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A. New cases examined during the year (excluding contacts)—														
(a) Definitely tuberculous	76	69	3	12	16	17	20	14	92	86	23	26	227	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	35	31	21	14	101	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	395	295	164	183	1037	
B. Contacts examined during the year:—														
(a) Definitely tuberculous	4	3	—	—	—	—	—	—	4	3	—	—	7	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	2	2	—	4	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	49	73	56	58	236	

Consultations with medical practitioners : (a) Personal, 661; (b) Other, 4,072; Visits by Tuberculosis Officer to homes (including personal consultations), 1,591; Visits by nurses or health visitors to homes for dispensary purposes, 4,792; Specimens of sputum, etc., examined, 676; X-ray examinations made in connection with dispensary work : Films, 1,647; Screenings, 818; Attendances at dispensaries and visiting stations, 6,269.

DIAGNOSIS OF NEW CASES SEEN DURING THE YEAR.

PULMONARY CASES. Adults and Children.

(1)	(2) Total number of new cases examined.	(3) Definitely Tuberculous.	(4) Diagnosis doubtful (observation).	(5) Definitely non-tuberculosis		
				(a) Patient deemed healthy.	(b) Other diagnosis made.	(c) Other diagnosis not made
Men ...	481	76	34	3	349	19
Women ...	363	69	26	9	244	15
Boys ...	137	3	13	13	100	8
Girls ...	153	12	11	14	101	15

Analysis of Column 5 (b), giving diagnosis arrived at :—

Pulmonary: Men.

Bronchitis ...	126	Neurasthenia ...	4	Anæmia ...	1
Dust ...	69	Trauma ...	3	Syphilis ...	1
Cardiac ...	52	Neoplasm of lung ...	3	Congenital cystic	
Non-tuberculous		Fibrositis ...	3	lung ...	1
fibrosis ...	12	Pyorrhoea ...	3	Gas poisoning ...	1
Pneumonitis ...	9	Pulmonary infarct...	3	Cholecystitis ...	1
Pulmonary Abscess	8	Tonsillitis ...	3	Aneurysm ...	1
Pneumonia ...	8	Hypertension ...	3	Pyelitis ...	1
Asthma ...	6	Cervical ribs ...	2	Thyrotoxicosis ...	1
Bronchiectasis ...	6	Gastritis ...	2	Foreign Body ...	1
Influenza ...	6	Scoliosis ...	2	Constipation ...	1
Empyema ...	5				

Pulmonary: Women.

Bronchitis ...	84	Pneumonia ...	4	Hodgkin's disease .	1
Cardiac ...	44	Thyrotoxicosis ...	4	Menopause ...	1
Laryngitis ...	12	Coryza ...	3	Empyema ...	1
Anaemia ...	11	Pregnancy ...	3	Pyelitis ...	1
Neurosis ...	9	Puerperal sepsis ...	3	Trauma ...	1
Influenza ...	7	Osteo-arthritis ...	3	Menorrhagia ...	1
Tonsillitis ...	7	Diabetes ...	2	Coccygeal cyst ...	1
Asthma ...	6	Carcinoma of lung .	2	Haemorrhoids ...	1
Non-tuberculous		Hypertension ...	2	Epistaxis ...	1
fibrosis ...	5	Scoliosis ...	2	Erythema nodosum	1
Bronchiectasis ...	5	Dental sepsis ...	2	Ovarian cyst ...	1
Pneumonitis ...	5	Adolescent kyphosis	2	Intercostal neuralgia	1
Pleurodynia ...	4	Septic adenitis ...	1		

Pulmonary: Boys.

Bronchitis ...	40	Dyspepsia ...	5	Hernia ...	1
Pulmonary fibrosis .	14	Pneumonia ...	4	Eneuresis ...	1
Cardiac ...	10	Bronchiectasis ...	3	Typhoid ...	1
Tonsils and adenoids ...	8	Acute rheumatism .	2	Leucaemia ...	1
Asthma ...	5	Laryngitis ...	2	Carbuncle ...	1
		Anaemia ...	2		

Pulmonary: Girls.

Bronchitis ...	24	Empyema ...	4	Worms ...	1
Post-pneumonic fibrosis ...	21	Sinusitis ...	2	Scoliosis ...	1
Tonsils and adenoids ...	13	Nephritis ...	2	Typhoid ...	1
Cardiac ...	13	Banti's disease ...	1	Avitaminosis ...	1
Gastritis ...	6	Hysterical aphonia .	1	Omphalitis ...	1
Pneumonia ...	5	Puberty ...	1	Influenza ...	1
		Herpes Zoster ...	1	Scabies ...	1

NON-PULMONARY CASES. Adults and Children.

(1)	(2) Total number of new cases examined.	(3) Definitely tuberculous.	(4) Diagnosis doubtful (observation).	(5) Definitely non-tuberculous		
				(a) Patient deemed healthy.	(b) Other diagnosis made.	(c) Other diagnosis not made
Men ...	41	16	1	—	22	2
Women ...	49	17	5	1	26	1
Boys ...	71	20	8	2	38	3
Girls ...	70	14	3	4	46	3

Analysis of Column 5 (b), giving diagnosis arrived at:—

Non-Pulmonary: Men.

		Arthritis of spine ...	2	Acute epididymitis .	1
Trauma ...	3	Gall stones ...	1	Fibrositis ...	1
Gastro-enteritis ...	2	Anal fistula ...	1	Staphylococcal	
Bronchial cyst ...	2	Varicocele ...	1	abscess ...	1
Constipation ...	2	Nephritis ...	1	Pes planus ...	1
New growth ...	2	Corneal ulcers ...	1		

Non-Pulmonary: Women.

Osteo-arthritis ...	4	Pes planus ...	1	Ganglion ...	1
Pyelitis ...	3	Chronic appendicitis	1	Lipoma ...	1
Scoliosis ...	3	Seborrhoea		Traumatic synovitis	1
Trauma ...	2	dermatitis ...	1	Fibrositis ...	1
Septic adenitis ...	2	Cervicitis ...	1	Syphilis ...	1
Bronchial cyst ...	2				

Non-Pulmonary : Boys.

Gastro-enteritis ...	12	Septic teeth ...	1	Amentia ...	...	1
Septic adenitis ...	6	Vermiculosis ...	1	Obesity ...	...	1
Tonsils and adenoids ...	4	Appendicitis ...	1	Diabetes ...	...	1
Rheumatism ...	2	Epidemic parotitis .	1	Little's disease ...	...	1
Synovitis ...	2	Glandular fever ...	1	Nephritis ...	...	1
		Ozaena ...	1	Conjunctivitis ...	...	1

Non-Pulmonary : Girls.

Septic adenitis ...	9	Fibrositis ...	1	Pink disease ...	...	1
Dyspepsia ...	8	Dermatitis ...	1	Purpura ...	...	1
Tonsils and adenoids ...	5	Mental deficiency..	1	Static Kyphosis ...	...	1
Synovitis ...	3	Coeliac disease ...	1	Retention of urine .	...	1
Conjunctivitis ...	3	Trauma ...	1	Pes planus ...	...	1
Nephritis ...	2	Post-diphtheritic	1	Cellulitis ...	...	1
Scoliosis ...	1	paralysis ...	1	Erythema nodosum	...	1
		Spina bifida occulta	1	Ovarian cyst ...	...	1

TABLES RELATING TO DEATHS.

Length of time elapsing between first examination by Tuberculosis Officer and occurrence of death.

	<i>Pulmonary</i>		<i>Non-Pulmonary</i>		<i>Total</i>
	<i>Adults</i>	<i>Children</i>	<i>Adults</i>	<i>Children</i>	
Under 3 months ...	25	—	1	4	30
3-6 months ...	10	1	2	—	13
6-12 months ...	17	—	1	1	19
Over 12 months ...	64	3	8	1	76

TABLES RELATING TO CONTACTS.

	<i>Adult</i> <i>Contacts.</i>	<i>Children</i> <i>Contacts.</i>
To 156 new cases, no contact examined ...	—	—
To 23 new cases, 1 contact examined ...	13	10
To 17 new cases, 2 contacts examined ...	23	11
To 15 new cases, 3 contacts examined ...	25	20
To 17 new cases, 4 or more contacts examined	36	45

Table showing number of contacts examined to cases seen in years previous to 1938.

	<i>Adult</i> <i>Contacts.</i>	<i>Children</i> <i>Contacts.</i>
To 26 old cases ...	34	30

[f] TABLE SHOWING THE AGE INCIDENCE AND CLASSIFICATION OF NEW TUBERCULOSIS
CASES EXAMINED.
PULMONARY.

Age Groups	Males.						Females.						Total.					
	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3
0—1
1—2
2—5
5—15	1	..	2	..	..	..	3	..	3	5	1	..	4	..	5	5	1
15—25	13	6	6	8	1	..	11	5	7	10	1	..	24	11	13	18	2
25—35	6	..	2	4	..	..	7	5	2	2	..	..	13	5	4	6	..
35—45	11	1	..	1	1	..	5	2	..	6	2	..	16	3	..	7	3
45—55	7	1	..	3	..	..	2	1	..	2	..	..	9	2	..	5	..
55—65	4	..	..	2	1	..	..	..	..	2	..	..	4	..	..	4	1
65 and over	..	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1	..
Total	43	8	10	19	3	..	28	13	12	27	4	..	71	21	22	46	7

NON-PULMONARY

Age Groups	Males.				Females.				Total.			
	Bones and Joints	Abdominal T.B.	Other Organs	Peripheral Glands	Bones and Joints	Abdominal T.B.	Other Organs	Peripheral Glands	Bones and Joints	Abdominal T.B.	Other Organs	Peripheral Glands
0—1 ...	..	..	..	..	..	..	..	..	..	..	..	..
1—2 ...	1	..	1	..	..	..	..	..	1	..	1	..
2—5 ...	..	..	..	1	1	..	1	1	1	..	1	2
5—15 ...	4	1	2	10	2	..	1	8	6	1	3	18
15—25 ...	4	1	1	..	3	..	2	3	7	1	3	3
25—35 ...	4	..	1	1	3	..	1	1	7	..	2	2
35—45 ...	1	..	..	..	1	..	1	1	2	..	1	1
45—55 ...	3	..	..	..	..	..	..	..	3	..	..	..
55—65 ...	..	..	..	..	1	..	..	..	1	..	..	..
65 and over	..	..	..	..	..	..	..	..	..	..	..	..
Total ...	17	2	5	12	11	..	6	14	28	2	11	26

A survey of the above tables reveals that during the year a total of 1,612 new cases were examined, an increase of 136 on the previous year's figures. It is of interest to note that the increase took place entirely during the first three months, and to speculate as to what extent it was attributable to the widely reported proceedings of the Committee of Inquiry then sitting. If it should prove that other areas shared our experience, it would supply a strong argument in favour of more Press propaganda in matters concerning tuberculosis.

Despite the increase in the number of new cases examined, it is gratifying to record that the number found tuberculous is slightly less than in 1937. It is also an encouraging sign that there appears to be less reluctance on the part of patients to accept hospital treatment and fewer instances of voluntary discharge before treatment is completed. Unfortunately, the benefit that the community should derive from this improved co-operation by patients, is completely negated by the Association's failure to supply the requisite number of beds to cope with the increased demand. It is a lamentable fact that during 1938, 12 patients died while awaiting admission to our institutions. Many others deteriorated to such an extent during the long waiting period that when at last admitted, their condition was no longer one that offered reasonable hope of curative treatment.

The popularity of pneumothorax treatment is steadily increasing, and during the year 371 refills were given to 40 patients, this being almost double the number given in 1937. There is no doubt that the application of collapse therapy, in suitable cases, restores many patients to full working capacity, who would otherwise be doomed to chronic invalidism. Unfortunately, this fact is not everywhere appreciated and some of these recovered patients have great difficulty in obtaining employment. One recent instance will be recorded. A university student contracted pulmonary tuberculosis in 1933 and was treated by pneumothorax and phrenicectomy at Talgarth. After discharge he did not resume his university studies but successfully completed training as a sanitary inspector, meanwhile retaining the best of health. In 1938, now weighing 13 stone and having been free from all symptoms for over four years, he applied for and was appointed to a post under an English local authority. When, however, he revealed that he had once been in a sanatorium, his appointment was immediately cancelled, despite the production of several medical certificates testifying to his complete recovery.

This policy, which is probably dictated by the exigencies of superannuation schemes, is a short-sighted one. If it is not reversed, one can envisage that those patients seen while disease is still in its early stages, will refuse sanatorium treatment lest they should prejudice their employment. This would strike at the roots of the whole campaign against tuberculosis, the main

objective of which is to detect and treat the disease before it has progressed to an advanced stage. It is surely up to the local authorities and other public bodies to set the lead in this matter, thus giving these ex-patients the chance of earning their own living and of taking their rightful position in the community.

Apart from the developments at Ebbw Vale, no marked change took place in industrial conditions during the year. The migration of young people, and often whole families, to England continues. Migration also occurs on a smaller but even more tragic scale in the opposite direction, but involved in this transference are only those whose health has broken down in their unaccustomed surroundings. It is my opinion that this factor has a considerable influence on the high tuberculosis death-rate in Wales. I have also noticed that some of these cases are of a very acute nature and arise in families hitherto free from tuberculosis. It can then only be concluded that infection occurred after leaving home.

The policy of holding twice-weekly clinics at Ebbw Vale has already justified itself. It is now proposed that a portable X-ray apparatus be supplied to serve the needs of the townships at the northern end of the valleys. So far, the scheme has been held up owing to difficulties concerning the location of the plant, but it is hoped that these will soon be overcome.

No staff changes occurred during 1938. Dr. Evans continues to give his able assistance and loyal co-operation, while Sister Williams and Miss Margaret Ridall have carried out their duties with their customary efficiency. The visits of Dr. Brownlee and his staff are regarded as of great value in the diagnosis of surgical conditions. We also welcome the co-operation which is always displayed by Dr. Ross and Dr. Mary Jones on our visits to Cefn Mably.

During the year I attended regularly the meetings of the Tuberculosis Committee of the Monmouthshire County Council. The contact thus established is of inestimable value and was favourably commented upon by the Chairman of the Committee of Inquiry. I would express my thanks for much help received from the members and officials of the County Council and, in particular, to the Medical Officer of Health, Dr. D. Rocyn Jones, C.B.E., who is responsible for the excellent co-operation which exists between the Council and the Memorial Association.

Despite the fact that Form T.1 (Wales) is still rarely seen, I can again acknowledge with sincerity the help rendered by the Medical Officers of our ten urban districts. Finally, it gives me the greatest pleasure to record the whole-hearted support of the general practitioners of the area, as it is on them that the success or failure of our work must ultimately depend.

NEWPORT AND EAST MONMOUTHSHIRE AREA.

DR. A. CARVETH JOHNSON.

TIME TABLE.

Newport	...	4, Palmyra Place	..	Mondays, 10 a.m., Men. 2.30 p.m., Women. Wednesdays, 10 a.m., Men 2.30 p.m., Children. Thursdays by appointment only. 2nd Friday in each month, Orthopaedic Clinic. By ap- pointment only. Saturdays, 10 a.m. County patients only.
Abergavenny	...	Y.M.C.A. Buildings		2nd and 4th Thursdays at 2.30 p.m.
Monmouth	...	Out-Patients' Depart- ment, Cottage		1st Friday at 12 noon. 3rd Friday, domiciliary visits only.
Pontypool	...	Park Buildings	...	Tuesdays, 10.30 a.m. Thursdays, 10.30 a.m.
Cefn Mably Hospital		Tuesday and Friday		mornings.

Return showing the work of the Area during the year 1938

Diagnosis	Pulmonary				Non-Pulmonary				Totals				Grand Total	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A. New cases examined during the year (excluding contacts)—														
(a) Definitely tuberculous	108	81	18	10	18	19	26	21	126	100	44	31	301	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	2	—	—	2	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	333	335	229	199	1096	
B. Contacts examined during the year:—														
(a) Definitely tuberculous	—	2	2	5	—	—	1	—	—	2	3	5	10	
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—	—	—	—	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	88	123	104	91	406	

Consultations with medical practitioners: (a) Personal, 512; (b) Other, 1,846;
 Visits by Tuberculosis Officer to homes (including personal consultations), 1,981;
 Visits by nurses or health visitors to homes for dispensary purposes, 4,772;

Specimens of sputum, etc., examined, 762; X-ray examinations made in connection with dispensary work: Films, 1,593; Screenings, 1,597; Attendances at dispensaries and visiting stations, 6,110.

DIAGNOSIS OF NEW CASES SEEN DURING THE YEAR.

PULMONARY CASES. Adults and Children.

(1)	(2) Total number of new cases examined.	(3) Definitely Tuberculous.	(4) Diagnosis doubtful (observation).	(5) Definitely non tuberculous		
				(a) Patient deemed healthy.	(b) Other diagnosis made.	(c) Other diagnosis not made
Men ...	415	108	—	1	67	239
Women ...	398	81	1	2	46	268
Boys ...	202	18	—	—	32	152
Girls ...	181	10	—	—	20	151

Analysis of Column 5 (b), giving diagnosis arrived at:—

Pulmonary: Men.

Malignant disease of lung ...	5	Pleurodynia ...	1	gestion of the lungs ...	1
Spontaneous pneumothorax ...	4	Empyema ...	4	Anthracosis ...	1
Chronic bronchitis ...	17	Bronchiectasis ...	2	Arterio-sclerosis ...	1
Pneumonia ...	8	Diabetes ...	2	Epistaxis ...	1
Influenza ...	2	Silicosis ...	5	Gastritis ...	1
Morbus cordis ...	7	"Maligner" ...	1	Neoplasm ...	1
		Emphysema ...	1	Abscess of lung ...	2
		Post-influenzal con-			

Pulmonary: Women.

Morbus cordis ...	16	Influenza ...	1	Ovarian cyst ...	1
Atelectasis ...	1	Septicaemia ...	1	Abscess of lung ...	1
Tonsillitis ...	2	Empyema ...	1	Neurasthenia ...	1
Malignant disease of lung ...	1	Debility after con-		Bronchial catarrh ...	2
Pneumonia ...	3	finement ...	1	Gynaecological ...	3
Tonsils and adenoids ...	1	Pyæmia ...	1	Ch. Naso-pharyngeal	
Pyorrhoea ...	1	Asthma ...	1	catarrh ...	2
		Bronchitis ...	4	Bronchiectasis ...	1

Pulmonary: Boys.

Tonsils and adenoids ...	17	Nasal catarrh ...	1	Catarrhal jaundice ...	1
Diabetes ...	1	Infantile diarrhoea ...	1	Gastro-intestinal	
Bronchial asthma ...	1	Tonsillitis ...	1	catarrh ...	1
Broncho-pneumonia ...	1	Otorrhoea ...	1	Empyema ...	1
Bronchitis ...	1	Atelectasis ...	1	Worms ...	1
		Bronchiectasis ...	1		

Pulmonary : Girls.

Tonsils and adenoids ...	9	Pneumonia ...	2	Typhoid ...	1
Bronchitis ...	4	Nasal obstruction ...	2	Debility after scarlet fever ...	1
		Bronchial catarrh ...	1		

NON-PULMONARY CASES. Adults and Children.

(1)	(2) Total number of new cases examined.	(3) Definitely Tuberculous.	(4) Diagnosis doubtful (observation).	(5) Definitely non tuberculous		
				(a) Patient deemed healthy.	(b) Other diagnosis made.	(c) Other diagnosis not made
Men ...	44	18	—	—	10	16
Women ...	39	19	1	—	12	7
Boys ...	71	26	—	—	14	31
Girls ...	49	21	—	—	12	16

Analysis of Column 5 (b), giving diagnosis arrived at :—

Non-Pulmonary : Men.

Cerebro-spinal fever	1	Dacryocystitis ...	1	Malignant disease .	1
Chronic osteomyelitis of left carpus ...	1	Albuminuria ...	1	Old tuberculous spine (non-active) ...	1
Trophic affection of foot ...	1	Neurosis ...	1	Lympho-sarcoma ...	1
		Osteo-arthritis ...	1		

Non-Pulmonary : Women.

Acute mastoiditis ...	1	Non-tuberculous		Tumour of brain ...	1
Bronchial cyst ...	1	Iridocystitis ...	1	Septic infection of Elbow ...	1
Gynaecological ...	3	Fibrositis ...	1	Sacro-iliac strain ...	1
Septic bursitis ...	1	Lympho sarcoma ...	1		

Non-Pulmonary : Boys.

Tonsils and adenoids ...	4	Perthe's disease ...	1	Osteo-myelitis of clavicle ...	1
Septic glands ...	3	Nephritis ...	1	Septic abscess of neck ...	1
Enlarged glands ...	1	Traumatic orchitis .	1		
		Cerebro-spinal fever	1		

Non-Pulmonary : Girls.

Tonsils and adenoids	...	4	Osteo-chondritis of spine	...	...	1	Debility after measles	...	...	1
Septic glands	...	2	Blepharitis	...	...	1	B. Coli Bacilluria	...	...	1
Appendicitis	...	1	Caries of teeth	...	...	1				

TABLES RELATING TO DEATHS.

Length of time elapsing between first examination by Tuberculosis Officer and occurrence of death.

		<i>Pulmonary</i>		<i>Non-Pulmonary</i>		<i>Total</i>
		<i>Adults</i>	<i>Children</i>	<i>Adults</i>	<i>Children</i>	
Under 3 months	...	13	1	—	6	20
3-6 months	...	21	2	1	1	25
6-12 months	...	23	—	1	—	24
Over 12 months	...	65	—	3	—	68

TABLES RELATING TO CONTACTS.

	<i>Adult Contacts.</i>	<i>Children Contacts</i>
To 197 new cases, no contact examined	...	—
To 40 new cases, 1 contact examined	...	26
To 26 new cases, 2 contacts examined	...	25
To 16 new cases, 3 contacts examined	...	29
To 22 new cases, 4 or more contacts examined	49	55

Table showing number of contacts examined to cases seen in years previous to 1938.

	<i>Adult Contacts.</i>	<i>Children Contacts</i>
To 83 old cases	...	84
	...	88

TABLE SHOWING THE AGE INCIDENCE AND CLASSIFICATION OF NEW TUBERCULOSIS
CASES EXAMINED.
PULMONARY.

Age Groups	Males.						Females.						Total.					
	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3	T.B. +1	T.B. +2	T.B. +3	T.B. -1	T.B. -2	T.B. -3
0—1 ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1—2 ...	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
2—5 ...	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3	..
5—15 ...	..	..	3	..	11	..	..	..	1	..	9	..	..	..	4	..	20	..
15—25 ...	1	..	13	..	22	1	1	..	14	..	13	..	2	..	27	..	35	1
25—35 ...	1	..	12	..	13	..	..	4	12	..	12	1	1	4	24	..	25	1
35—45 ...	1	..	8	..	3	..	..	..	4	..	7	1	1	..	12	..	10	1
45—55 ...	..	1	9	..	8	1	..	..	5	..	3	..	..	1	14	..	11	1
55—65 ...	..	..	6	..	6	..	..	..	..	..	1	..	..	..	6	..	7	..
65 and over	..	..	1	..	1	..	..	..	2	..	1	..	..	..	3	..	2	..
Total ...	3	1	52	..	68	2	1	4	38	..	46	2	4	5	90	..	114	4

NON-PULMONARY

Age Groups	Males.				Females.				Total.			
	Bones and Joints	Abdominal T.B.	Other Organs	Peripheral Glands	Bones and Joint	Abdominal T.B.	Other Organs	Peripheral Glands	Bones and Joints	Abdominal T.B.	Other Organs	Peripheral Glands
0—1 ...	1	..	..	..	..	..	..	..	1	..	..	..
1—2 ...	2	..	..	2	1	..	1	..	3	..	1	2
2—5 ...	3	..	..	3	..	..	..	5	3	..	..	8
5—15 ...	1	..	6	8	2	1	3	8	3	1	9	16
15—25 ...	3	..	1	4	..	1	2	6	3	1	3	10
25—35 ...	..	1	3	3	1	..	3	3	1	1	6	6
35—45 ...	..	..	2	1	..	..	1	2	..	..	3	3
45—55 ...	..	..	..	..	..	..	..	..	..	..	..	..
55—65 ...	..	..	..	..	..	..	..	..	..	..	..	..
65 and over	..	..	..	..	..	..	..	..	..	..	..	..
Total ...	10	1	12	21	4	2	10	24	14	3	22	45

The total number of new cases and contacts seen in 1938 was 1,815, representing 1,399 new cases referred and 416 contacts. Tuberculosis was found to be present and active in 301 referred cases (21.5 per cent.) and in 10 contacts (2.4 per cent.).

So far this is the highest number of new cases referred in this area in one year, and the proportion of these found tuberculous (21.5 per cent.) is the lowest. It is gratifying that increasing use is made of the diagnostic facilities available.

Unfortunately, however, of the 217 cases of pulmonary tuberculosis 90 (41 per cent.) were already in an advanced and infectious stage (T.B. plus 3) when first seen. In many cases the reason for this is the insidious nature of the onset; the patient has felt abnormally tired for several months and has perhaps had a morning cough or what he calls a "smoker's cough," but has not thought it necessary to seek medical advice. In consequence his chances of complete recovery from the disease have diminished considerably.

Patients on the Newport Dispensary Register decreased in number by 3, while the figures for the East Monmouthshire Register show an increase of 31. This does not appear to be due to any great increase in tuberculosis in East Monmouthshire, but is rather due to the difficulty experienced in getting old patients to attend for examination. As long as they feel well they will not attend. Many are at work and well, and could probably be removed from the Register as recovered if they would attend for examination. They have been sent for year after year, but fail to attend.

During 1938 there was a decrease in the number of new cases of pulmonary tuberculosis added to the Register, 17 less in Newport, and 12 less in East Monmouthshire. New cases of non-pulmonary tuberculosis added were 6 less in Newport and 25 more in East Monmouthshire. The increase in East Monmouthshire is partly due to the fact that there are 17 more cases of cervical gland tuberculosis.

The number of contacts examined is 2 less than last year. This is still unsatisfactory. Although invitations to attend the examination were sent to families of nearly all the 301 new cases, yet contacts to only 104 of these attended.

In Newport, contacts to 63 out of 161 families attended, 147 being examined. In East Monmouthshire, contacts to 41 out of 141 families attended, 97 being examined. In addition, 58 contacts to 30 old Newport cases were seen, and 114 contacts to 53 old East Monmouthshire cases. This represents $2\frac{1}{4}$ contacts per infecting case, in those families that attended. There are probably at least another 400 contacts in the other families who did not attend.

It is very important that adolescent and adult contacts and tuberculin-positive child contacts should be X-rayed. Other methods of examination must not be omitted either; indeed, the proper examination of a contact takes as much time and care as that of a patient referred to the clinic.

Although only 10 contacts, or 2.4 per cent. of those examined, were found to have active tuberculosis needing treatment, many others were found to be infected and are being kept under observation.

Some contacts who were at work were unable to attend at the ordinary consulting hours. For these special evening sessions were held, but only a few availed themselves of the opportunity for examination.

The number of X-ray examinations has increased by over 250, half the examinations being screenings only. Sputum examinations increased by 100. Attendances at the clinics were the same; personal consultations increased by 73; and visits to homes by the Tuberculosis Officer by 229.

There were 165 deaths in the Registrar-General's return for the area—79 in Newport and 86 in East Monmouthshire. This is 13 less than in the previous year for the whole area. Of these, 142 were seen by the Tuberculosis Officer. Of the 23 not seen :—

- 13 died in institutions other than those of the W.N.M.A.;
- 6 had very advanced disease when first seen by the doctor;
- 1 died on the day after notification;
- 1 was diagnosed as the result of a coroner's inquest;
- 2 no apparent reason.

Artificial pneumothorax treatment was induced on three patients in Woolston House Infirmary, in 2 because of advanced pregnancy, and in 1 because of the long waiting list for beds in Memorial Institutions and the inadvisability of delaying treatment.

Twenty-seven refills were given at Woolston House Infirmary, and 330 at the Newport Clinic. Altogether 27 patients were treated.

Other treatments given at the Clinic are tuberculin injections and gold salt injections; in surgical cases, aspiration of abscesses and the application of plaster of Paris splints.

Cefn Mably Hospital is usually visited twice weekly. Here the Tuberculosis Officer is responsible for looking after 20 patients and treating suitable cases by artificial pneumothorax and other methods.

Surgical clinics are held once a month by Dr. Brownlee or his deputy, and are well attended.

There is no Care Committee in the area, but close co-operation is maintained with the Public Assistance Committee and Unemployment Assistance Board.

Waiting lists for Hospital have been distressingly long. Many patients have become worse, and the opportunity for adequate treatment has been missed because of the great delay in obtaining admission.

The staff consists of the Tuberculosis Officer, the Assistant Tuberculosis Officer and a part-time assistant. During the early part of the year Dr. H. L. Ackerman worked as a part-time assistant. He duly obtained his T.D.D., and left for a post in Cardiff at the end of September. Dr. E. A. M. Halsted succeeded him.

Sister Gray attends the clinic on two or three days a week. She also does all the plaster work for surgical cases and as much of the visiting in East Monmouthshire as time permits. As she is also attached to other areas, this means less than one day a week for visits.

Sister Oldfield, the Newport Corporation Health Visitor, attends the clinic three days a week, and visits Newport patients.

Miss Richards attends to the clerical work. Extra help has been available occasionally.

In view of the fact that during 1938 an inquiry was held into the tuberculosis service in Wales, it seems appropriate to give a very brief survey of the area and mention the chief points from the Tuberculosis Officer's view, where improvements might be made.

COUNTY BOROUGH OF NEWPORT. Area 7,873 acres, population 97,000, is a seaport with a very mixed population and many important industries. There are no slums and very little overcrowding.

On December 31st, 1938, there were 645 pulmonary cases and 257 non-pulmonary cases of tuberculosis known to the Tuberculosis Officer. Of the pulmonary cases, probably not more than half are in an infectious state.

A new central clinic in Newport is urgently needed. The present premises have been used as a clinic for about 26 years, and have, for a long time, been totally inadequate for dealing with the work which is increasing yearly. The amount of work done should increase even more rapidly when adequate

accommodation is available. It will then be possible to deal more thoroughly with all contact examinations, and there are other directions in which the work could be expanded with benefit to the community.

An extra Assistant Tuberculosis Officer is desirable because of the increasing amount of work, and particularly for dealing with the examination of contacts.

A full-time Clinic Sister is urgently needed. This would release the present health visitor for more visiting, but in my opinion two full-time health visitors are essential for visiting.

An additional full-time Clerk is also necessary.

A Care Committee with adequate funds is absolutely essential and it appears likely that the Newport Corporation will organise this in the near future.

EAST MONMOUTHSHIRE AREA. Area, 340,110 acres; population, 305,300.

On December 31st, 1938, there were 435 pulmonary and 209 non-pulmonary cases of tuberculosis known to the Tuberculosis Officer.

The area comprises:

1. The Eastern Valley with a population of an industrial area which has suffered very badly from trade depression, but at present things seem to be improving. Most of the tuberculosis is in this section.

2. Agricultural area in the central and eastern parts of the County, and includes the towns of Abergavenny, Monmouth, Usk and Chepstow. There are still a good many cases of tuberculosis in Abergavenny. Elsewhere it is diminishing, although some of the country cottages are most unsuitable for tuberculosis cases. New houses and cottages are being built in all districts.

3. Magor and St. Mellons Rural District includes the outskirts of Newport and the urban area of Rogerstone as well as the country districts. Some of the tuberculosis cases from Newport have moved out into this district.

Much has been effected in improving housing conditions but there is a great deal more to be done.

CLINIC AND VISITING STATIONS. Many of the patients attend the Newport Clinic and all X-ray examinations are done there. As indicated under "Newport," a new clinic is needed.

PONTYPOOL. The visiting station at Park Buildings, owned by the Pontypool Council, serves the Eastern Valley. The situation is very convenient but it is extremely difficult to keep it dry and warm in winter. If a new X-ray plant is obtained for Newport, the old plant might be transferred here.

ABERGAVERN. The Y.M.C.A. Buildings are used. They are not ideal, but the attendances are not large.

MONMOUTH. The Cottage Hospital Out-Patient Department is used and is very satisfactory.

When the Chepstow Visiting Station was closed some years ago, a promise was made that the Tuberculosis Officer would visit regularly all patients who could not conveniently attend at Monmouth or Newport. This is being done and proves a very satisfactory arrangement.

There appears to be no need for further visiting stations.

The medical staff is as for Newport.

Health visiting is done to a small extent by the Welsh National Memorial Association part-time Clinic Sister, and housing conditions of notified cases are investigated by the District Sanitary Inspectors.

The main requirements are :—

1. Much more health visiting. As the area is large it should be done by health visitors who know the local conditions.
2. A Care Committee for the area with adequate funds.

A final note on health visiting. This must be done with the utmost tact so that the patients feel that the one idea is to help them. My experience during 25 years with the Welsh National Memorial Association has been that tuberculosis patients are often exceptionally difficult to deal with and if there is any idea that notification imposes any handicap then patients will not approach their doctors until absolutely necessary and probably too late to do anything for them, and many contacts will have been infected.

After all, the eradication of tuberculosis is now largely in the hands of the general public. There is a general medical practitioner within easy reach of everyone and there does not seem to be any record of a Tuberculosis Officer complaining that he cannot deal with the large number of early cases of tuberculosis that are being sent to him.

Thanks are due to the Medical Officers of Health for Newport and Monmouthshire, District Medical Officers of Health, School Medical Officers, the Medical Superintendent of Woolston House Infirmary and all Medical Practitioners for their co-operation and assistance.

CEFN MABLY HOSPITAL.

The following is the Report of Dr. Henry A. Ross, Resident Medical Officer, Cefn Mably Hospital, for the year ended 31st December, 1938.

Return showing the extent of Residential Treatment and Observation during the year ended December 31st, 1938.

					In Institu- tion on January 1	Admitted during the year.	Dis- charged during the year.	Died in Institu- tion.	In Institu- tion on December 31.
Doubtfully tuberculous cases admitted for observation :—									
Adult males	...	...	...	...	4	34	38	—	—
Adult females	...	...	...	...	—	1	—	—	1
Children	...	...	...	...	—	—	—	—	—
Total	...	...	...	...	4	35	38	—	1
Definitely tuberculous patients admitted for treatment :—									
Adult males	..	...	...	...	56	91	60	24	63
Adult females	...	...	...	...	38	64	52	16	34
Children	...	...	...	...	6	11	6	2	9
Total	...	...	...	...	100	166	118	42	106
Grand Total	..	...	...	...	104	201	156	42	107

Table showing results of treatment of patients and of observation cases discharged during the year 1938.

Classification on Admission to Institution.		Number Discharged.												TOTAL	
		Quiescent			Improved			No Material Improvement							Died
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
Patients, i.e. Definitely T.B. Non-Pulmonary Cases.	T.B. Minus ...	—	—	—	21	11	3	—	2	2	1	1	—	41	160
	T.B. Plus :—														
	Group 1 ...	—	—	—	1	2	—	—	—	—	—	—	—	3	
	Group 2 ...	—	—	—	12	13	1	5	1	—	4	3	—	39	
	Group 3 ...	—	—	—	18	12	—	3	11	—	19	12	2	77	—
	Bones & Joints ...	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Abdominal ...	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Other Organs ...	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Peripheral Glands	—	—	—	—	—	—	—	—	—	—	—	—	—	
TOTALS ...	—	—	—	52	38	4	8	14	2	24	16	2	160		
Observation Cases for Diagnosis.		Found Tuberculous			Found Non-Tuberculous			Doubtfully Tuberculous							
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.					
		1	—	—	36	—	—	1	—	—	38				
GRAND TOTAL ...												198			

NUMBER DISCHARGED.—Fit for light work, 11; Not fit for work, 80; Not fit for school, 3; Number transferred to other institutions, 24.

NUMBER (INCLUDED ABOVE) WHO LEFT BEFORE COMPLETION OF TREATMENT, *i.e.*, at own request with permission, left against advice, or discharged for disciplinary reasons, 31.

DENTAL.—Extractions, 145; Fillings, 22; Scalings, 16; Local anaesthetics, 114.

PNEUMOTHORAX.—Inductions, 32; Attempted inductions, 3; Refills, 380; Aspirations, 16.

X-RAY.—Films, 378; Screenings, 1,055.

INJECTIONS.—Ametox sodium thiosulphate, 95; Solganol B, 14; Tuberculin, 1; Vaccines, 2.

SPECIAL EXAMINATIONS.—Aspiration psoas abscess, 2; Plasters, 6; Phrenic Crush, 6; Wassermann reactions, 5; Lipiodol examinations, 4; Eye examinations, 2.

GENERAL OBSERVATIONS.

From time to time we have had occasion to point out that patients, on leaving the hospital, behave as though there was no need for them to take any special care of their general health or their lung condition. This has always been one of the greatest depressing factors in the treatment of pulmonary tuberculosis. Too often it appears that a breakdown in health was caused by negligence on the part of the patient. During the past year one has been pleased to note evidence that at least some of the patients realise that a breakdown is not inevitable and that steps should be taken to prevent it.

The tuberculous person, in spite of his disability, has to compete in a market which is already overstocked with healthy people. His problem is two-fold. First, he has to obtain employment, and secondly he has to retain it. To fulfil the second requirement he must adjust his life so that he will keep fit for his job. We have evidence that some of our patients are tackling this courageously. For a time they may have to cut down or alter their recreations or amusements but they have the satisfaction of returning to an active life. Too frequently the case histories of our patients seem to indicate that how they spend their leisure time is as important, if not more important, than their working hours.

Many interesting cases have been admitted to the hospital during the year. It is common enough to get several members of one family admitted to the hospital but it is not so common to have two brothers in the hospital at the same time and both suffering from a pleurisy with effusion. Another two patients are of interest in that they were already far advanced in a first pregnancy when admitted. In both of these cases an artificial pneumothorax was induced and the confinement was uneventful. Their condition is such that

it would appear that it will not be necessary for them to return to hospital for further treatment, as they appear to be progressing satisfactorily under home conditions.

In addition to disease confined to the lung only, we have had cases complicated by diabetes, tubercular meningitis, tubercular osteo-myelitis, intestinal tuberculosis, and one case which showed a ring-worm of the arm. Two cases were admitted for treatment after a thoracoplasty and one case was transferred for a thoracoplasty operation. One case of malignant disease of the lung was admitted.

In the early summer one of the nurses contracted diphtheria from an outside source. Later, two patients were found to harbour the bacillus in the throat although not presenting symptoms of clinical diphtheria. One of them, a child, was transferred to the isolation hospital so as to permit the readmission of patients. The other patient could not be removed as he had recently had an haemoptysis. It is interesting to note that this patient, long confined to bed, made steady progress after his injection of anti-toxin and improved so much that it was possible to send him on for sanatorium treatment. The three cases cleared up satisfactorily and without any complications.

As in past years, we have taken part in the clinical teaching of students from the Welsh National School of Medicine. The work has been stimulating and interesting. In addition, we have helped during the year in the refresher courses for general practitioners.

CLASSIFICATION OF ADMISSION.

				No. Admitted.	Early %	Inter- mediate. %	Advanced. %
Men	...	...	...	93	5.37	31.18	61.30
Women	...	...	...	64	14.06	23.44	60.94
Children	...	...	...	11	18.18	27.27	54.55

In addition, two cases of malignant disease of the lungs, two cases of bronchiectasis, and 28 cases of uncomplicated silicosis were admitted.

One case died from fatal haemoptysis. During the year 1938 the total number of patients treated was 304, of whom 197 were discharged, leaving 107 under treatment on December 31st, 1938. The daily average number of patients confined to bed was 67.77 per cent. and the percentage of patients admitted who were found to have tubercle bacilli in the sputum was 69.7.

X-RAY.—Once again we have been impressed by the value of the lateral X-ray film, not only in cases of interlobar effusion, etc., but also in some of

the cases showing thickening of the pleura. The film taken in the postero-anterior position may fail to show cavities which are received by the lateral film.

A few cases have been X-rayed on a tomograph which was constructed at the hospital, for use in one of our other hospitals. What impressed us most was that cavities which in the ordinary film appear to be spherical were proved to have an irregular outline. The other noteworthy feature was that cavities which appear to be unaffected by an artificial pneumothorax were shown to be collapsed in a postero-anterior direction. Although presenting a circular outline the cavities were of little thickness. This has also been seen in lateral films.

TREATMENT.—The therapeutics of tuberculosis is rapidly reaching a state in which the question is no longer "Can anything be done for the patient?" but rather, "Which procedure shall we adopt and when shall we begin it?" Of the two questions, the latter is perhaps the more difficult. With a clearer appreciation of the indications for a certain mode of treatment should come a greater measure of success in its application.

The most interesting feature in the treatment of the patients has been the possibility of having phrenic interruption performed without having to transfer the patient. Some of the patients appear to have responded to this treatment though its main use may be as an adjuvant to other modes of treatment. It is anticipated that a greater number of patients will receive the treatment in future.

The following tables give details of the work undertaken by the Welsh National Memorial Association in the Administrative County during the year ended 31st December, 1938.

TABLE 1.
Return showing the work of the Dispensaries during the year ended December 31st.

DIAGNOSIS.	Pulmonary				Non-Pulmonary				Total			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts):—												
(a) Definitely tuberculous ...	129	101	9	16	22	30	32	28	151	131	41	44
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	35	32	21	14
(c) Non-Tuberculous ...	...	...	...	...	...	...	...	...	551	433	243	250
B.—CONTACTS examined during the year:—												
(a) Definitely tuberculous ...	4	5	2	3	...	...	1	...	4	5	3	3
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	...	2	2	...
(c) Non-tuberculous ...	...	...	...	...	...	...	...	...	94	134	109	102
C.—CASES written off the Dispensary Registers as:—												
(a) Recovered ...	32	28	2	4	10	13	10	3	42	41	12	7
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Registers as tuberculous) ...	...	...	...	...	...	...	...	...	683	601	367	369
D. — NUMBER OF CASES on Dispensary Registers on December 31st:—												
(a) Definitely tuberculous ...	495	448	58	59	140	161	138	112	635	609	196	171
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	40	36	28	16

TABLE 1 (Continued).

1.—Number of cases on Dispensary Registers, on January 1st. ...	1688	8.—Number of visits by Tuberculosis Officers to homes (including personal consultations). ...	2988
2.—Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years. ...	53	9.—Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ...	5613
3.—Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of." ...	80	10.—Number of :— (a) Specimens of sputum, etc., examined ...	994
4.—Cases written off during the year as dead (all causes). ...	212	(b) X-Ray examinations made in connection with Dispensary work ...	3303
5.—Number of attendances at the Dispensaries (including Contacts) ...	8131	11.—Number of "Recovered" cases restored to Dispensary Registers, and included in A (a) and A (b) above ...	11
6.—Number of Insured Persons under Domiciliary Treatment on the 31st December. ...	153	12.—Number of "T.B. plus" cases on Dispensary Registers on December 31st. ...	451
7.—Number of consultations with Medical Practitioners :— (a) Personal ...	975		
(b) Other ...	4854		

TABLE 2.

Return showing the Extent of Residential Treatment and Observation in Institutions during the year ended December 31st.

		In Institutions on Jan. 1st.	Admitted during year.	Discharged during year.	Died in Institutions.	In Institutions on Dec., 31st.
Number of doubtfully tuberculous cases admitted for observation	Adult Males ...	5	19	21	—	3
	Adult Females..	—	9	9	—	—
	Children	11	16	18	—	9
	Total ...	16	44	48	—	12
Number of patients suffering from pulmonary tuberculosis	Adult Males ...	84	125	95	22	92
	Adult Females..	62	76	73	18	47
	Children	17	24	22	3	16
	Total ...	163	225	190	43	155
Number of patients suffering from non-pulmonary tuberculosis	Adult Males ...	10	21	19	3	9
	Adult females ...	11	9	13	1	6
	Children ...	29	24	28	1	24
	Total ...	50	54	60	5	39
Grand Total ...	Total ...	229	323	298	48	206

TABLE 3.

Return showing the immediate results of treatment of definitely Tuberculous patients discharged from Residential Institutions during the year ended December 31st.

HOSPITAL (PULMONARY CASES).

Classification on admission to Institution.	Condition at time of discharge.	Under 3 months			3—6 months			6—12 months			More than 12 months			Total
		M	F	Ch	M	F	Ch	M	F	Ch	M	F	Ch	
Class. T.B. Minus.	Quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Not Quiescent ...	2	3	...	9	2	...	4	1	...	1	1	2	25
	Died ...	...	...	...	...	...	...	1	...	...	...	1	...	2
Class. T.B. Plus. Group 1.	Quiescent ...	...	...	...	...	...	...	...	2	...	...	...	...	2
	Not Quiescent ...	...	2	...	...	...	...	1	...	1	...	...	...	4
	Died ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Class. T.B. Plus. Group 2.	Quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Not Quiescent ...	2	1	...	10	4	...	4	7	...	1	5	1	35
	Died ...	1	1	...	...	1	...	1	...	...	1	1	...	6
Class. T.B. Plus. Group 3.	Quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Not Quiescent ...	4	4	...	8	4	...	8	6	...	6	4	1	45
	Died ...	5	1	2	4	6	...	...	2	...	6	1	1	28
Totals ...		14	12	2	31	17	...	19	16	3	13	13	5	147

TABLE 3(a)

Return showing the results of observation of doubtfully Tuberculous cases discharged from Residential Institutions during the year ended December 31st.

HOSPITAL (PULMONARY CASES).

Diagnosis on discharge from observation.	Stay under 4 weeks			Stay over 4 weeks			Total		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous ...	2	...	...	...	...	...	2	...	...
Non-Tuberculous ...	3	...	...	6	...	...	9	...	...
Doubtful ...	2	...	...	...	1	...	2	1	...
Totals ...	7	...	...	6	1	...	13	1	...

TABLE 4.

Return showing the Immediate results of treatment of definitely Tuberculous patients discharged from Residential Institutions during the year ended December 31st.

SANATORIUM (PULMONARY CASES).

Classification on admission to Institution.	Condition at time of discharge.	*Under 3 months			3-6 months			6-12 months			More than 12 months			Total
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Class. T.B. Minus.	Quiescent				2	7	2	8	6	7	1		1	34
	Not Quiescent				2	1	1	4	2	1	1		1	13
	Died													
Class. T.B. Plus. Group 1.	Quiescent					2								2
	Not Quiescent				1				1					2
	Died													
Class. T.B. Plus. Group 2.	Quiescent										1			1
	Not Quiescent			1		2	2		2	1		2		10
	Died													
Class. T.B. Plus. Group 3.	Quiescent													
	Not Quiescent			1		1			1		2	1		6
	Died								1					1
Totals		2			8	12	3	14	12	8	7	1	2	69

TABLE 4(a)

Return showing the results of observation of doubtfully Tuberculous cases discharged from Residential Institutions during the year ended December 31st.

SANATORIUM (PULMONARY CASES).

Diagnosis on discharge from observation.	Stay under 4 weeks			Stay over 4 weeks			Total		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	2	1		1	2	1	3	3	1
Non-Tuberculous					1	3		1	3
Doubtful						4			4
Totals	2	1		1	3	8	3	4	8

* Patients whose stay in Residential Institutions has not exceeded 28 days are no longer included in this table.

TABLE 5.

Return showing the Immediate results of treatment of definitely Tuberculous patients discharged from Residential Institutions during the year ended December 31st.

HOSPITAL (NON-PULMONARY CASES.)

Classification on admission to Institution.	Condition at time of discharge.			Under 3 months			3-6 months			6-12 months			More than 12 months			Total
				M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Bones and Joints.	Quiescent	...	...	...	...	...	2	...	1	...	1	1	2	2	6	15
	Not Quiescent	...	...	2	1	...	1	...	...	3	2	1	1	...	3	14
	Died	...	...	...	...	...	1	...	...	...	1	1	1	...	...	4
Abdominal.	Quiescent	...	...	...	...	...	1	...	1	...	...	1	...	...	...	3
	Not Quiescent	...	...	1	...	1	...	...	1	...	1	1	...	...	...	5
	Died	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Organs.	Quiescent	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
	Not Quiescent	...	...	1	1	1	1	...	1	...	...	...	...	...	...	5
	Died	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peripheral Glands.	Quiescent	...	...	...	1	...	...	...	1	...	...	1	...	...	...	3
	Not Quiescent	...	...	...	1	4	...	1	...	...	...	...	...	...	...	6
	Died	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals				4	4	6	6	1	7	3	5	6	4	2	9	57

TABLE 5(a).

Return showing the results of observation of doubtfully Tuberculous cases discharged from Residential Institutions during the year ended December 31st.

HOSPITAL (NON-PULMONARY CASES)

Diagnosis on discharge from observation.	Stay under 4 weeks			Stay over 4 weeks			Total		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	1	1	1	...	...	1	1	1	2
Non-Tuberculous	1	2	...	2	1	7	3	3	7
Doubtful	...	...	...	1	...	1	1	...	1
Totals	2	3	1	3	1	9	5	4	10

VENEREAL DISEASES.

The following is a summary of the scheme of the County Council for the prevention and treatment of these diseases:—

The Treatment Centre for the Administrative County is at the Royal Gwent Hospital, Newport. The days and hours of the sessions are:—

MALES.—Mondays at 10 a.m.

Wednesdays at 2 p.m.

Thursdays, at 4.30 p.m.

Fridays at 6 p.m.

FEMALES.—Mondays at 2 p.m.

Thursdays at 2 p.m.

Facilities for the irrigation of cases of gonorrhœa are also available.

Dr. P. C. P. Ingram is the Medical Officer in charge of the Centre for men, and Dr. Mary Gordon, Assistant Medical Officer under the County Council, attends the women's sessions. This arrangement came into force on the 28th September, 1925.

The bacteriological examinations in connection with the Centre are conducted at the County Laboratory by the County Pathologist and Bacteriologist. Laboratory facilities for private practitioners are also provided, and outfits from the Laboratory are sent to them when required.

The medical profession in the County has been circularised with the details of the scheme, and a propaganda campaign is periodically conducted by advertisements in the local newspapers, posters on public hoardings, in public and railway station urinals, and by separate public lectures for men and for women.

In necessitous cases the County Council provides rail fares for patients attending the Treatment Centre, which amounted to £265/6/0 in the year 1938

There is every indication that the scheme is sufficient to meet the needs of the County.

The reports of the Medical Officers in charge of the Treatment Centres are as follows:—

A.—DR. P. C. P. INGRAM.

“The number of persons attending for the first time shows an increase on the previous year and is within nine of the number seen in 1936. Those suffering from syphilis were nearly double but as in that year they only reached a total of 12 the figures are too small to attach much importance to. Only eight were in the early and communicable stage, and there does not appear any evidence of an increase in the incidence of the disease. The number of new cases of gonorrhœa remains again at a pretty constant figure of about 150.

"In my report of last year I mentioned that a new drug had been introduced in the treatment of gonorrhoea. This is sulphonamide and in various compounds has been used in increasing quantities during the year. Much work has been done on its use in several of the large clinics and has now been published and its different aspects discussed at no less than three meetings of the Medical Society for the Study of Venereal Diseases. There is now, I think, no doubt that it is making as big a revolution in the treatment of gonorrhoea as the arsenobenzol compounds did in the treatment of syphilis. It shortens to a remarkable extent the period during which the patient requires treatment, but, for the present at any rate, a longer period of observation is necessary before he can be discharged as cured. This will mean an increase in the number of specimens to be examined at the laboratory and the cost of the drugs is high. These drugs have been in general use in the Clinic during the past year and the results fully bear out my expectations. It is, of course, much too soon for it to have any effect on the figures as shown in the return except that there is a noticeable increase in the number of specimens sent to the laboratory, the increased period of observation after cessation of treatment off-setting the period under actual treatment.

"The attendance of patients was again well maintained and a satisfactory number discharged cured after fulfilling all the necessary tests."

B.—Dr. MARY H. M. GORDON.

"The new cases reporting for the first time showed an increase over last year's figure, due to a larger number of new cases reporting with gonorrhoea and to an increase in the non-venereal patients attending for the first time.

"Of the new cases of syphilis, none were in the primary or secondary stages; 3 belonged to the congenital syphilitic group and the remainder were in the last stages of the disease. There was no new congenital syphilitics reporting under one year old, so that treatment of the pregnant mother suffering from the effects of syphilis is beginning to bear fruit.

"The 3 new congenital syphilitics suffered from eye lesions. The actual number of new cases reporting with syphilis was less than last year.

"There is a marked increase in the new cases of gonorrhoea reporting for the first time though this may be partly due to a larger proportion of the infected reporting to the Treatment Centre. A larger proportion of single girls attended for the first time and some of those who were pregnant were sent to the London Lock Hospital if home conditions were unsuitable. Lack of beds for in-patient treatment and difficulty in travelling during the last few weeks of pregnancy are hindrances towards the effective treatment of the syphilitic pregnant woman. Several cases were successfully treated and delivered in Ty Bryn and Coed-y-Gric Institutions. The majority of these

expectant mothers were referred to the Treatment Centre from the Maternity and Child Welfare Clinics and County Midwives.

"During the year, trial has been made of drugs belonging to the sulphonamide group of compounds in the treatment of gonorrhoea and, while it is too early yet to assess the full value of these drugs as far as duration and effectiveness of treatment are concerned, there is definite ground for hoping that by means of these remedies, the incidence of gonorrhoea may be greatly reduced, as patients appear to be rendered non-infectious quickly.

"The increase in the number of non-venereal cases reporting is satisfactory, showing that patients are taking advantage of the facilities afforded them.

"There is an increase in the number of patients discharged cured after treatment of syphilis and gonorrhoea. It is still very difficult to persuade patients attending for observation of a cured syphilitic lesion to continue for the necessary time of observation.

"Three new cases of gonorrhoea vulvo-vaginitis in children were reported. One hopes that the new sulphonamide drugs will justify the expectations one is building up round it as a specific cure for gonorrhoea in children as well as in adults.

"It is due largely to the untiring efforts of the Lady Inquiry Officer that the number of defaulters from treatment is not more. She follows up patients to their homes and persuades them to persevere with treatment."

Comparison with reports of other Counties proves that the proportion of attendances of women to men at the County Treatment Centre is greater in Monmouthshire than in most other Counties. This can be attributed to the work of the Inquiry Officer, Nurse E. M. Walters, who follows female patients (old and new) to their homes, and she invites them to undergo and persevere with treatment at the Centre. She also attends at the Treatment Centre on the days fixed for female patients, and this procedure has proved to be a great encouragement to the women to visit the Centre regularly. The work accomplished by her during the year was as follows:—

Number of visits paid in the Administrative County :

	1938	1937
To new cases which came to her knowledge and which had not undergone treatment	462	446
To old cases in which visits to the Treatment Centre had been discontinued before completion of treatment, also to old cases still under treatment	1676	1591
To members of Voluntary Agencies, District Nurses, etc...	384	317
Total	2522	2354

Since her appointment in July, 1918, Nurse Walters has visited 7,798 new cases.

The medical practitioners of the County approve the scheme most cordially, and the majority of them send patients to the Centre for treatment. Advantage is also taken of the facilities for tests at the County Laboratory, and 801 specimens were examined for private practitioners during the year 1938.

Details of the work carried out at the Laboratory and Treatment Centre during the year 1938 are as follows :—

**I.—COUNTY LABORATORY, COUNTY HALL.
RETURN OF SPECIMENS EXAMINED.**

	1938										Previous Year	
	For detection of Spirochaetes.		For detection of Gonococci.		Implement Fixation Test (Gonorrhoea)		For Wassermann reaction (Syphilis).		Other Examinations.		TOTAL.	1937
	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males		
From County of Monmouth—												
Treatment Centre ..	21	—	598	1555	213	177	462	430	21	9	3486	2623
Practitioners ..	—	—	103	137	28	4	330	163	17	19	801	715
From County Borough of Newport—												
Treatment Centre ..	26	1	301	469	170	53	223	280	9	3	1535	1434
Practitioners ..	1	—	43	126	8	12	204	136	5	3	538	562
From Other Districts—												
Glamorganshire ..	1	—	3	—	1	—	3	—	—	—	8	15
Brecon ..	—	—	13	—	5	—	4	3	—	—	25	15
Lancashire ...	—	—	1	—	1	—	1	—	—	—	3	2
Gloucestershire ...	1	—	2	—	1	—	3	—	—	—	7	6
Cardiff ...	2	—	18	—	1	—	11	—	—	—	32	19
Devon ...	—	—	—	—	—	—	—	—	—	—	—	1
Hereford ...	—	—	1	2	1	—	—	—	—	—	4	—
Totals	52	1	1083	2289	429	246	1241	1012	52	34	6439	5392

No. of doses of substitutes for Salvarsan supplied to Medical Practitioners:—

		1938.	1937.
Novarsenobillon	·6 grm. =	21	21
„	·45 „ =	8	12
„	·3 „ =	7	23
	Totals	36	56
Stabilarson	·6 grm. =	—	20
(Boots)	·45 „ =	—	20
	·4 „ =	—	12
	·3 „ =	3	—
	Totals	3	52
Kharsulphan	·6 grm. =	3	12
„	·45 „ =	2	2
„	·3 „ =	2	2
„	·15 „ =	1	2
	Totals	8	18

			1938.	1937.
Neokharsivan	·6 grm. =	...	—	10
„	·45 „ =	...	—	1
„	·3 „ =	...	—	1
„	·15 „ =	...	—	1
	Totals	...	—	<u>13</u>
Sulfarsenol	·3 grm. =	...	—	2
„	·45 „ =	...	—	2
„	·6 „ =	...	—	2
	Totals	...	—	<u>6</u>
Sulphostab	·6 grm. =	...	1	
„	·45 „ =	...	21	
„	·36 „ =	...	6	
„	·3 „ =	...	1	
„	·24 „ =	...	11	
„	·18 „ =	...	6	
„	·15 „ =	...	6	
	Totals	...	<u>52</u>	

The number of practitioners upon the register for the supply of salvarsan substitutes is twenty-three.

2.—TREATMENT CENTRE.

(ROYAL GWENT HOSPITAL, NEWPORT).

Returns of Dr. P. C. P. INGRAM, Medical Officer of Centre, to the Medical Officer of Health, relating to persons residing in the Administrative County of Monmouth.

	1938.			1937.		
	Males.	Females.	Total.	Males.	Females.	Total.
1.—Number of persons dealt with at or in connection with the Out-patient Clinic for the first time and found to be:—						
Suffering from Syphilis ...	23	9	32	12	14	26
" " Soft Chancre ...	16	—	16	12	—	12
" " Gonorrhœa ...	143	112	255	133	81	214
Not suffering from venereal disease ...	43	100	143	32	84	116
Total ...	225	221	446	189	179	368
2.—Number of persons discharged from the Out-patient Clinic after completion of treatment for:—						
Syphilis ...	10	8	18	14	5	19
Soft Chancre ...	9	—	9	7	—	7
Gonorrhœa ...	70	27	97	85	18	103
Not suffering from venereal disease ...	35	76	111	27	83	110
Total ...	124	111	235	133	106	239
3.—Number of persons who ceased to attend the Out-patient Clinic without completing treatment, and who were suffering from:—						
Syphilis ...	17	28	45	18	33	51
Soft Chancre ...	2	—	2	2	—	2
Gonorrhœa ...	51	62	113	70	39	109
Not suffering from venereal disease ...	—	—	—	—	—	—
Total ...	70	90	160	90	72	162
4.—Total attendances of all persons at the Out-patient Clinic who were:—						
Suffering from Syphilis ...	1551	1407	2958	1799	1901	3700
" " Soft Chancre ...	64	—	64	42	—	42
" " Gonorrhœa ...	2807	1485	4292	2561	1043	3604
Not suffering from venereal disease ...	88	255	343	61	143	204
Total ...	4510	3147	7657	4463	3087	7550

				1938.			1937.		
				Males.	Females.	Total.	Males.	Females.	Total.
5.—Aggregate number of " In-patient days " of treatment given to persons suffering from:—									
Syphilis	...	...	...	162	102	264	335	65	400
Gonorrhoea	...	...	...	381	326	707	196	532	728
Soft Chancre	...	...	...	—	—	—	2	—	2
Not suffering from Venereal disease	...	...	...	14	—	14	31	—	31
Observation Cases	...	...	...	—	—	—	—	—	—
Total				557	428	985	564	597	1161
6.—Number of persons treated with Salvarsan substitutes				34	84	118	30	148	178
7.—Number of doses of Salvarsan substitutes given:—									
Name of Drugs—Novarsenobillon									
Silversalvarsan									
Stabilarsan									
Kharsulphan									
Sulphostab									
Arseno Argenticum									
dose	.05	...	...	—	—	—	—	2	2
dose	.1	...	...	—	1	1	12	10	22
dose	.15	...	...	9	6	15	38	35	73
dose	.2	...	...	—	46	46	3	143	146
dose	.25	...	...	—	27	27	—	48	48
dose	.3	...	...	24	152	176	21	167	188
dose	.45	...	...	63	197	260	48	291	339
dose	.6	...	...	50	32	82	70	39	109
dose	.75	...	...	1	—	1	2	—	2
Name of Drug—Bismuth dose .2 grm.				381	449	830	398	517	915
Quinostabo (sol.) dose .3 grm.				357	69	426	342	44	386
Total				885	979	1864	934	1296	2230
8.—Examination of Pathological material:—				Males.	Females.	Total.	Males.	Females.	Total.
Specimens from persons attending at the Treatment Centre which were sent for examination to an independent Laboratory—									
For detection of spirochaetes				21	—	21	17	1	18
" " gonococci				598	1555	2153	503	882	1385
Complement Fixation Test				213	177	390	170	111	281
For Wassermann reaction				462	430	892	455	458	913
Cerebro Spinal Fluid				10	5	15	8	8	16
Others				11	4	15	10	—	10
Totals				1315	2171	3486	1163	1460	2623

No action has been taken under the Venereal Diseases Act, 1917, in the County as no evidence has been available of breach of its provision.

MATERNITY AND CHILD WELFARE.

This work has been fully dealt with in the special report which has been published.

BLIND PERSONS ACTS, 1920 AND 1938.

The number of blind persons upon the County Register at the 31st March, 1939, was 817—398 males and 419 females. Details are given in the accompanying tables.

The Consultant Ophthalmic Surgeon to this Authority, Dr. W. J. Roche, examined at his consulting Room, Newport, 306 cases which were referred to this Department for examination under the Blind Persons Acts, 1920 and 1938. The results of his examinations were 112 certified blind, 119 not blind and in 75 cases glasses were prescribed in order to prevent blindness.

In addition, Dr. E. D. Owen, Assistant Medical Officer, made 90 domiciliary examinations as the cases were unable to travel to Newport.

Grants are made to the unemployable blind after consideration of the cases by the Blind Persons Act Sub-Committee of the Public Health Committee and during the financial year 1938-1939, weekly grants were made to 435 persons, the total amount of the grants being £10,817.

The Blind Persons Act, 1938, came into operation on the 1st April, 1938. The principal amendment effected by the Act is the extension of those provisions relating to blind persons in the Old Age Pensions Act, 1936, to persons of 40 years of age and over; the age at which a blind person is entitled to receive the Old Age Pension is thus reduced from 50 years to 40 years. The duty previously imposed upon County Councils of making arrangements for promoting the welfare of blind persons in their respective areas is re-enacted. It also becomes incumbent upon a Council when considering, in the case of blind persons, applications for financial assistance, to take into account not only the needs of the blind person but also the needs of all members of the household dependent upon him. New Regulations made under the Act have been approved by the County Council and came into operation on the 1st April, 1939.

The Monmouth County Association for the Blind ceased its activities on the 30th June, 1938, and the new Association for the Blind of the County Borough of Newport and the Administrative County of Monmouth then commenced its activities under the Secretaryship of Mr. F. Lionel Watkins, 199 Chepstow Road, Newport, Mon.

The new Association for the Blind continues to provide social amenities for the blind persons. A Christmas treat was organised in many of the districts and each blind person in the County received a gift of the value of 5/- and each registered blind child 2/6. A summer outing was arranged for Barry Island in July, 1938. A whole day was spent there and luncheon and tea provided.

Up to the end of June, 1938, there were 20 local Blind Welfare Area Committees in the County helping in the work. These Area Committees have rendered valuable service to the blind of Monmouthshire.

Blind Registrations as at 31st MARCH, 1939.

TABLE I.—Age Periods.

0-1		1-5		5-16		16-21		21-40		40-50		50-65		65-70		70 and upwards		Total of all age groups											
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.									
1	...	1	3	1	4	11	11	22	9	7	16	23	36	59	26	27	53	84	102	186	73	63	136	168	172	340	398	419	817

TABLE II.—Ages at which Blindness occurred.

0-1		1-5		5-10		10-20		20-30		30-40		40-50		50-60		60-70		70 and upwards		Un-known												
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.		T.	M.	F.	T.	M.	F.	T.	M.	F.	T.		
35	34	69	12	31	43	16	7	23	10	17	27	17	21	38	32	31	63	38	43	81	72	81	153	101	89	190	65	63	128	...	2	2

TABLE III.—Training and Employment. Age period 16 and upwards.

Employed										Undergoing Training.										Trained but unemployed		No training but Trainable		Unemployable		TOTAL.						
By Blind Institutions.					All others not included in (a) & (b)					Total employed		Industrial		Secondary		Professional or University		(h)		(i)		(j)		TOTAL.								
Workshops (a)					Home Workers (b)					(c)		(d)		(e)		(f)		(g)		(h)		(i)		(j)		TOTAL.						
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
...	1	1	2	...	2	17	...	17	19	1	20	5	3	8	1	...	1	7	5	12	7	5	12	343	394	738	383	408	791

TABLE IV.—Physically and Mentally Defective.

(a) Mentally Defective			(b) Physically Defective			(c) (i) Deaf (ii) Deaf-Mute			Combination of (a) and (b)			Combination of (a) and (c)			Combination of (b) and (c)			Total		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
7	9	16	5	3	8	8	9	17	1	...	1	...	2	2	...	...	...	21	24	45

TABLE V.—Occupations of Employed.

Within Institutions for the Blind	Ministers of Religion	Dealers, Agents, Shopkeepers (etc.)	Hawkers	Musicians & Teachers	Turners	Poultry Farmers	Masseurs	Miscellaneous	Total.
In approved Home Workers Schemes	...	...	...	...	2	...	...	...	2
Others (not pastime Workers)	1	4	1	1	2	3	1	4	17
Total	1	4	1	1	4	3	1	5	20

TABLE VI.—Children of School age, 5-16.

In Schools for the Blind ...	Normal.		Mentally Defective.		Physically Defective.	
	M.	F.	M.	F.	M.	F.
Other Schools ...	10	11	...	...	...	...
Not at School ...	...	...	1	...	...	...

TABLE VII.—Unemployable persons resident in Homes for the Blind, Mental Hospitals or Poor Law Institutions.

Homes for the Blind ...	Mental Hospital.		Poor Law Institution.	
	M.	F.	M.	F.
...	4	2	6	7
Total	4	2	6	7



TABLE I. - Values of some important constants.											
Physical constants						Mathematical constants					
Symbol	Value	Symbol	Value	Symbol	Value	Symbol	Value	Symbol	Value	Symbol	Value
c	299,792,458 m/s	h	6.626,069,57 x 10 ⁻³⁴ J.s	k_B	1.380,650,486 x 10 ⁻²³ J/K	π	3.141592653589793	e	2.718281828459045	$\ln 2$	0.6931471805599453
G	6.674,30 x 10 ⁻¹¹ m ³ /kg.s ²	m_e	9.109,383,56 x 10 ⁻³¹ kg	m_p	1.672,621,92 x 10 ⁻²⁷ kg	ϕ	1.618033988749895	$\ln 10$	2.302585092994046	$\ln 3$	1.098612288668109
R	8.314,472 J/mol.K	α	7.297,352,5698 x 10 ⁻¹⁸ rad/s	β	1.370,359,875 x 10 ⁻¹⁶ m	γ	0.5772156649015329	$\ln 4$	1.386294361119891	$\ln 5$	1.609437912434100
N_A	6.022,140,76 x 10 ²³ mol ⁻¹	μ_B	9.274,009,47 x 10 ⁻²⁴ J/T	μ_N	5.050,783,24 x 10 ⁻²⁷ J/T	δ	0.08948987143791401	$\ln 6$	1.791759469228055	$\ln 7$	1.945910149055313
ϵ_0	8.854,187,817 x 10 ⁻¹² F/m	μ_0	1.256,637,061 x 10 ⁻⁶ H/m	$\mu_0/4\pi$	10 ⁻⁷ H/m	ϵ	2.718281828459045	$\ln 8$	2.079441541679836	$\ln 9$	2.197224577336219
ϵ_0/c^2	2.997,924,58 x 10 ⁻²⁶ F.s/m	μ_0/c^2	1.256,637,061 x 10 ⁻²⁷ H.s/m	$\mu_0/4\pi c^2$	10 ⁻²⁷ H.s/m	$\ln 10$	2.302585092994046	$\ln 11$	2.397895272798371	$\ln 12$	2.484906649788003
ϵ_0/c	8.854,187,817 x 10 ⁻¹⁸ F.s	μ_0/c	1.256,637,061 x 10 ⁻¹⁸ H.s	$\mu_0/4\pi c$	10 ⁻¹⁸ H.s	$\ln 12$	2.484906649788003	$\ln 13$	2.564949357461537	$\ln 14$	2.639057319614514
ϵ_0/c^3	8.854,187,817 x 10 ⁻²⁹ F.s ³ /m	μ_0/c^3	1.256,637,061 x 10 ⁻²⁹ H.s ³ /m	$\mu_0/4\pi c^3$	10 ⁻²⁹ H.s ³ /m	$\ln 14$	2.639057319614514	$\ln 15$	2.708050000468642	$\ln 16$	2.772588722239781
ϵ_0/c^5	8.854,187,817 x 10 ⁻³³ F.s ⁵ /m	μ_0/c^5	1.256,637,061 x 10 ⁻³³ H.s ⁵ /m	$\mu_0/4\pi c^5$	10 ⁻³³ H.s ⁵ /m	$\ln 16$	2.772588722239781	$\ln 17$	2.833213344056217	$\ln 18$	2.890369254371354
ϵ_0/c^7	8.854,187,817 x 10 ⁻³⁷ F.s ⁷ /m	μ_0/c^7	1.256,637,061 x 10 ⁻³⁷ H.s ⁷ /m	$\mu_0/4\pi c^7$	10 ⁻³⁷ H.s ⁷ /m	$\ln 18$	2.890369254371354	$\ln 19$	2.944668649491414	$\ln 20$	2.995732273553991
ϵ_0/c^9	8.854,187,817 x 10 ⁻⁴¹ F.s ⁹ /m	μ_0/c^9	1.256,637,061 x 10 ⁻⁴¹ H.s ⁹ /m	$\mu_0/4\pi c^9$	10 ⁻⁴¹ H.s ⁹ /m	$\ln 20$	2.995732273553991	$\ln 21$	3.044522437723453	$\ln 22$	3.094378135466357
ϵ_0/c^{11}	8.854,187,817 x 10 ⁻⁴⁵ F.s ¹¹ /m	μ_0/c^{11}	1.256,637,061 x 10 ⁻⁴⁵ H.s ¹¹ /m	$\mu_0/4\pi c^{11}$	10 ⁻⁴⁵ H.s ¹¹ /m	$\ln 22$	3.094378135466357	$\ln 23$	3.138476419834633	$\ln 24$	3.184383864376239
ϵ_0/c^{13}	8.854,187,817 x 10 ⁻⁴⁹ F.s ¹³ /m	μ_0/c^{13}	1.256,637,061 x 10 ⁻⁴⁹ H.s ¹³ /m	$\mu_0/4\pi c^{13}$	10 ⁻⁴⁹ H.s ¹³ /m	$\ln 24$	3.184383864376239	$\ln 25$	3.218875824868200	$\ln 26$	3.258096534685121
ϵ_0/c^{15}	8.854,187,817 x 10 ⁻⁵³ F.s ¹⁵ /m	μ_0/c^{15}	1.256,637,061 x 10 ⁻⁵³ H.s ¹⁵ /m	$\mu_0/4\pi c^{15}$	10 ⁻⁵³ H.s ¹⁵ /m	$\ln 26$	3.258096534685121	$\ln 27$	3.295836866004384	$\ln 28$	3.332204510170946
ϵ_0/c^{17}	8.854,187,817 x 10 ⁻⁵⁷ F.s ¹⁷ /m	μ_0/c^{17}	1.256,637,061 x 10 ⁻⁵⁷ H.s ¹⁷ /m	$\mu_0/4\pi c^{17}$	10 ⁻⁵⁷ H.s ¹⁷ /m	$\ln 28$	3.332204510170946	$\ln 29$	3.367196259641022	$\ln 30$	3.401197381662159
ϵ_0/c^{19}	8.854,187,817 x 10 ⁻⁶¹ F.s ¹⁹ /m	μ_0/c^{19}	1.256,637,061 x 10 ⁻⁶¹ H.s ¹⁹ /m	$\mu_0/4\pi c^{19}$	10 ⁻⁶¹ H.s ¹⁹ /m	$\ln 30$	3.401197381662159	$\ln 31$	3.436426436981601	$\ln 32$	3.465735902809725
ϵ_0/c^{21}	8.854,187,817 x 10 ⁻⁶⁵ F.s ²¹ /m	μ_0/c^{21}	1.256,637,061 x 10 ⁻⁶⁵ H.s ²¹ /m	$\mu_0/4\pi c^{21}$	10 ⁻⁶⁵ H.s ²¹ /m	$\ln 32$	3.465735902809725	$\ln 33$	3.494136974965710	$\ln 34$	3.521385664384290
ϵ_0/c^{23}	8.854,187,817 x 10 ⁻⁶⁹ F.s ²³ /m	μ_0/c^{23}	1.256,637,061 x 10 ⁻⁶⁹ H.s ²³ /m	$\mu_0/4\pi c^{23}$	10 ⁻⁶⁹ H.s ²³ /m	$\ln 34$	3.521385664384290	$\ln 35$	3.550147899665318	$\ln 36$	3.579819546069461
ϵ_0/c^{25}	8.854,187,817 x 10 ⁻⁷³ F.s ²⁵ /m	μ_0/c^{25}	1.256,637,061 x 10 ⁻⁷³ H.s ²⁵ /m	$\mu_0/4\pi c^{25}$	10 ⁻⁷³ H.s ²⁵ /m	$\ln 36$	3.579819546069461	$\ln 37$	3.596573564787869	$\ln 38$	3.622989644640059
ϵ_0/c^{27}	8.854,187,817 x 10 ⁻⁷⁷ F.s ²⁷ /m	μ_0/c^{27}	1.256,637,061 x 10 ⁻⁷⁷ H.s ²⁷ /m	$\mu_0/4\pi c^{27}$	10 ⁻⁷⁷ H.s ²⁷ /m	$\ln 38$	3.622989644640059	$\ln 39$	3.649387366688780	$\ln 40$	3.676959382025478
ϵ_0/c^{29}	8.854,187,817 x 10 ⁻⁸¹ F.s ²⁹ /m	μ_0/c^{29}	1.256,637,061 x 10 ⁻⁸¹ H.s ²⁹ /m	$\mu_0/4\pi c^{29}$	10 ⁻⁸¹ H.s ²⁹ /m	$\ln 40$	3.676959382025478	$\ln 41$	3.703972064344304	$\ln 42$	3.730158219937221
ϵ_0/c^{31}	8.854,187,817 x 10 ⁻⁸⁵ F.s ³¹ /m	μ_0/c^{31}	1.256,637,061 x 10 ⁻⁸⁵ H.s ³¹ /m	$\mu_0/4\pi c^{31}$	10 ⁻⁸⁵ H.s ³¹ /m	$\ln 42$	3.730158219937221	$\ln 43$	3.748514357014946	$\ln 44$	3.774687968684216
ϵ_0/c^{33}	8.854,187,817 x 10 ⁻⁸⁹ F.s ³³ /m	μ_0/c^{33}	1.256,637,061 x 10 ⁻⁸⁹ H.s ³³ /m	$\mu_0/4\pi c^{33}$	10 ⁻⁸⁹ H.s ³³ /m	$\ln 44$	3.774687968684216	$\ln 45$	3.794393746157479	$\ln 46$	3.819842069179850
ϵ_0/c^{35}	8.854,187,817 x 10 ⁻⁹³ F.s ³⁵ /m	μ_0/c^{35}	1.256,637,061 x 10 ⁻⁹³ H.s ³⁵ /m	$\mu_0/4\pi c^{35}$	10 ⁻⁹³ H.s ³⁵ /m	$\ln 46$	3.819842069179850	$\ln 47$	3.839864609054493	$\ln 48$	3.864634353443441
ϵ_0/c^{37}	8.854,187,817 x 10 ⁻⁹⁷ F.s ³⁷ /m	μ_0/c^{37}	1.256,637,061 x 10 ⁻⁹⁷ H.s ³⁷ /m	$\mu_0/4\pi c^{37}$	10 ⁻⁹⁷ H.s ³⁷ /m	$\ln 48$	3.864634353443441	$\ln 49$	3.864634353443441	$\ln 50$	3.891261951126196
ϵ_0/c^{39}	8.854,187,817 x 10 ⁻¹⁰¹ F.s ³⁹ /m	μ_0/c^{39}	1.256,637,061 x 10 ⁻¹⁰¹ H.s ³⁹ /m	$\mu_0/4\pi c^{39}$	10 ⁻¹⁰¹ H.s ³⁹ /m	$\ln 50$	3.891261951126196	$\ln 51$	3.917034334727323	$\ln 52$	3.941692243956369
ϵ_0/c^{41}	8.854,187,817 x 10 ⁻¹⁰⁵ F.s ⁴¹ /m	μ_0/c^{41}	1.256,637,061 x 10 ⁻¹⁰⁵ H.s ⁴¹ /m	$\mu_0/4\pi c^{41}$	10 ⁻¹⁰⁵ H.s ⁴¹ /m	$\ln 52$	3.941692243956369	$\ln 53$	3.941692243956369	$\ln 54$	3.965698956436478
ϵ_0/c^{43}	8.854,187,817 x 10 ⁻¹⁰⁹ F.s ⁴³ /m	μ_0/c^{43}	1.256,637,061 x 10 ⁻¹⁰⁹ H.s ⁴³ /m	$\mu_0/4\pi c^{43}$	10 ⁻¹⁰⁹ H.s ⁴³ /m	$\ln 54$	3.965698956436478	$\ln 55$	3.965698956436478	$\ln 56$	3.988989564364780
ϵ_0/c^{45}	8.854,187,817 x 10 ⁻¹¹³ F.s ⁴⁵ /m	μ_0/c^{45}	1.256,637,061 x 10 ⁻¹¹³ H.s ⁴⁵ /m	$\mu_0/4\pi c^{45}$	10 ⁻¹¹³ H.s ⁴⁵ /m	$\ln 56$	3.988989564364780	$\ln 57$	3.988989564364780	$\ln 58$	4.001498956436478
ϵ_0/c^{47}	8.854,187,817 x 10 ⁻¹¹⁷ F.s ⁴⁷ /m	μ_0/c^{47}	1.256,637,061 x 10 ⁻¹¹⁷ H.s ⁴⁷ /m	$\mu_0/4\pi c^{47}$	10 ⁻¹¹⁷ H.s ⁴⁷ /m	$\ln 58$	4.001498956436478	$\ln 59$	4.001498956436478	$\ln 60$	4.013989564364780
ϵ_0/c^{49}	8.854,187,817 x 10 ⁻¹²¹ F.s ⁴⁹ /m	μ_0/c^{49}	1.256,637,061 x 10 ⁻¹²¹ H.s ⁴⁹ /m	$\mu_0/4\pi c^{49}$	10 ⁻¹²¹ H.s ⁴⁹ /m	$\ln 60$	4.013989564364780	$\ln 61$	4.013989564364780	$\ln 62$	4.026459564364780
ϵ_0/c^{51}	8.854,187,817 x 10 ⁻¹²⁵ F.s ⁵¹ /m	μ_0/c^{51}	1.256,637,061 x 10 ⁻¹²⁵ H.s ⁵¹ /m	$\mu_0/4\pi c^{51}$	10 ⁻¹²⁵ H.s ⁵¹ /m	$\ln 62$	4.026459564364780	$\ln 63$	4.026459564364780	$\ln 64$	4.038909564364780
ϵ_0/c^{53}	8.854,187,817 x 10 ⁻¹²⁹ F.s ⁵³ /m	μ_0/c^{53}	1.256,637,061 x 10 ⁻¹²⁹ H.s ⁵³ /m	$\mu_0/4\pi c^{53}$	10 ⁻¹²⁹ H.s ⁵³ /m	$\ln 64$	4.038909564364780	$\ln 65$	4.038909564364780	$\ln 66$	4.051339564364780
ϵ_0/c^{55}	8.854,187,817 x 10 ⁻¹³³ F.s ⁵⁵ /m	μ_0/c^{55}	1.256,637,061 x 10 ⁻¹³³ H.s ⁵⁵ /m	$\mu_0/4\pi c^{55}$	10 ⁻¹³³ H.s ⁵⁵ /m	$\ln 66$	4.051339564364780	$\ln 67$	4.051339564364780	$\ln 68$	4.063749564364780
ϵ_0/c^{57}	8.854,187,817 x 10 ⁻¹³⁷ F.s ⁵⁷ /m	μ_0/c^{57}	1.256,637,061 x 10 ⁻¹³⁷ H.s ⁵⁷ /m	$\mu_0/4\pi c^{57}$	10 ⁻¹³⁷ H.s ⁵⁷ /m	$\ln 68$	4.063749564364780	$\ln 69$	4.063749564364780	$\ln 70$	4.076139564364780
ϵ_0/c^{59}	8.854,187,817 x 10 ⁻¹⁴¹ F.s ⁵⁹ /m	μ_0/c^{59}	1.256,637,061 x 10 ⁻¹⁴¹ H.s ⁵⁹ /m	$\mu_0/4\pi c^{59}$	10 ⁻¹⁴¹ H.s ⁵⁹ /m	$\ln 70$	4.076139564364780	$\ln 71$	4.076139564364780	$\ln 72$	4.088509564364780
ϵ_0/c^{61}	8.854,187,817 x 10 ⁻¹⁴⁵ F.s ⁶¹ /m	μ_0/c^{61}	1.256,637,061 x 10 ⁻¹⁴⁵ H.s ⁶¹ /m	$\mu_0/4\pi c^{61}$	10 ⁻¹⁴⁵ H.s ⁶¹ /m	$\ln 72$	4.088509564364780	$\ln 73$	4.088509564364780	$\ln 74$	4.100859564364780
ϵ_0/c^{63}	8.854,187,817 x 10 ⁻¹⁴⁹ F.s ⁶³ /m	μ_0/c^{63}	1.256,637,061 x 10 ⁻¹⁴⁹ H.s ⁶³ /m	$\mu_0/4\pi c^{63}$	10 ⁻¹⁴⁹ H.s ⁶³ /m	$\ln 74$	4.100859564364780	$\ln 75$	4.100859564364780	$\ln 76$	4.113189564364780
ϵ_0/c^{65}	8.854,187,817 x 10 ⁻¹⁵³ F.s ⁶⁵ /m	μ_0/c^{65}	1.256,637,061 x 10 ⁻¹⁵³ H.s ⁶⁵ /m	$\mu_0/4\pi c^{65}$	10 ⁻¹⁵³ H.s ⁶⁵ /m	$\ln 76$	4.113189564364780	$\ln 77$	4.113189564364780	$\ln 78$	4.125489564364780
ϵ_0/c^{67}	8.854,187,817 x 10 ⁻¹⁵⁷ F.s ⁶⁷ /m	μ_0/c^{67}	1.256,637,061 x 10 ⁻¹⁵⁷ H.s ⁶⁷ /m	$\mu_0/4\pi c^{67}$	10 ⁻¹⁵⁷ H.s ⁶⁷ /m	$\ln 78$	4.125489564364780	$\ln 79$	4.125489564364780	$\ln 80$	4.137759564364780
ϵ_0/c^{69}	8.854,187,817 x 10 ⁻¹⁶¹ F.s ⁶⁹ /m	μ_0/c^{69}	1.256,637,061 x 10 ⁻¹⁶¹ H.s ⁶⁹ /m	$\mu_0/4\pi c^{69}$	10 ⁻¹⁶¹ H.s ⁶⁹ /m	$\ln 80$	4.137759564364780	$\ln 81$	4.137759564364780	$\ln 82$	4.149989564364780
ϵ_0/c^{71}	8.854,187,817 x 10 ⁻¹⁶⁵ F.s ⁷¹ /m	μ_0/c^{71}	1.256,637,061 x 10 ⁻¹⁶⁵ H.s ⁷¹ /m	$\mu_0/4\pi c^{71}$	10 ⁻¹⁶⁵ H.s ⁷¹ /m	$\ln 82$	4.149989564364780	$\ln 83$	4.149989564364780	$\ln 84$	4.162179564364780
ϵ_0/c^{73}	8.854,187,817 x 10 ⁻¹⁶⁹ F.s ⁷³ /m	μ_0/c^{73}	1.256,637,061 x 10 ⁻¹⁶⁹ H.s ⁷³ /m	$\mu_0/4\pi c^{73}$	10 ⁻¹⁶⁹ H.s ⁷³ /m	$\ln 84$	4.162179564364780	$\ln 85$	4.162179564364780	$\ln 86$	4.174329564364780
ϵ_0/c^{75}	8.854,187,817 x 10 ⁻¹⁷³ F.s ⁷⁵ /m	μ_0/c^{75}	1.256,637,061 x 10 ⁻¹⁷³ H.s ⁷⁵ /m	$\mu_0/4\pi c^{75}$	10 ⁻¹⁷³ H.s ⁷⁵ /m	$\ln 86$	4.174329564364780	$\ln 87$	4.174329564364780	$\ln 88$	4.186439564364780
ϵ_0/c^{77}	8.854,187,817 x 10 ⁻¹⁷⁷ F.s ⁷⁷ /m	μ_0/c^{77}	1.256,637,061 x 10 ⁻¹⁷⁷ H.s ⁷⁷ /m	$\mu_0/4\pi c^{77}$	10 ⁻¹⁷⁷ H.s ⁷⁷ /m	$\ln 88$	4.186439564364780	$\ln 89$	4.186439564364780	$\ln 90$	4.198509564364780
ϵ_0/c^{79}	8.854,187,817 x 10 ⁻¹⁸¹ F.s ⁷⁹ /m	μ_0/c^{79}	1.256,637,061 x 10 ⁻¹⁸¹ H.s ⁷⁹ /m	$\mu_0/4\pi c^{79}$	10 ⁻¹						



