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MONMOUTHSHIRE COUNTY COUNCIL.



PUBLIC HEALTH
REPORT
FOR THE YEAR 1927.



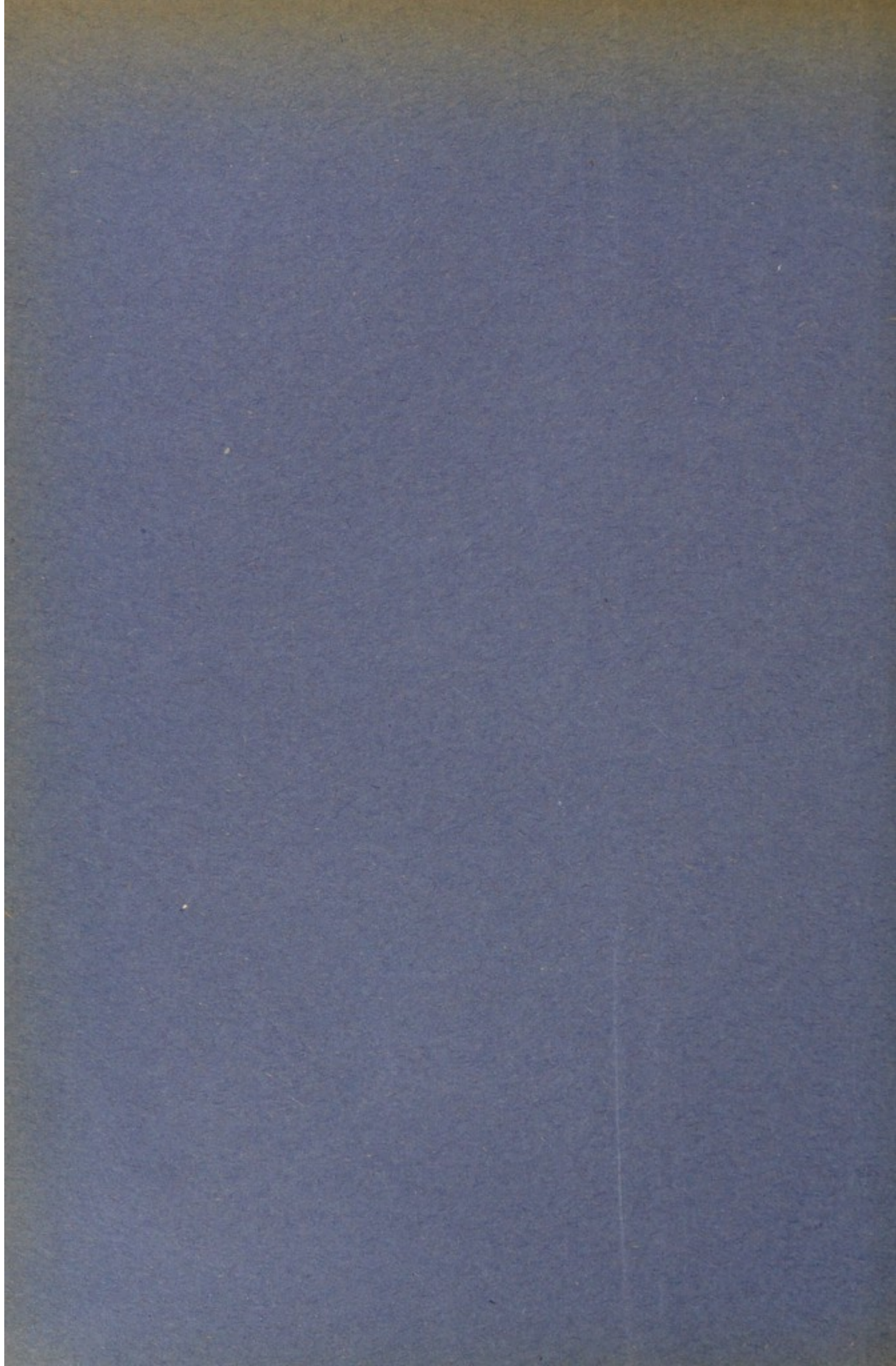
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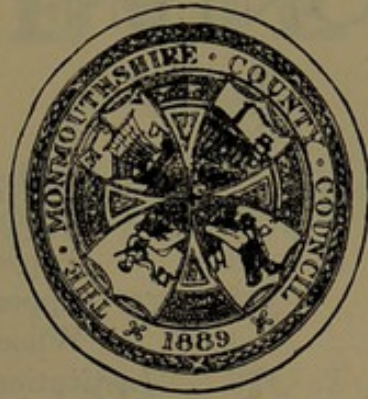
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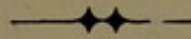
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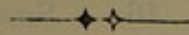




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REVIEW

OF THE

GENERAL SANITARY CONDITIONS

OF THE

COUNTY OF MONMOUTH

FOR THE YEAR 1927.

SCOPE OF THE REPORT.

Under Article 14 (3) of the Sanitary Officers Order 1926, and in accordance with Circular 834 (Wales) of the Ministry of Health (Welsh Board of Health) the Annual Reports for 1927, become the second of the second series of " Ordinary reports."

The " Survey " Reports which are of a full and detailed character are prepared at intervals of not less than five years, as required by the Ministry of Health. The Annual Report for 1925 dealt with the matters required, in a detailed form, under the various headings, and was the " Survey " Report which completed the first series of Annual Reports.

NATURAL AND SOCIAL CONDITIONS OF THE AREA.

Area (acres) 345,048.

Population (1921 Census) 358,436.

Do. (Estimated 1927) 371,350.

Number of structurally separate dwellings occupied (1921), 66,925.

Number of private families (1921) 75,898.

Rateable value, £1,565,072.

Product of a penny rate, £6,521 2s. 8d.

SOCIAL CONDITIONS.—The County of Monmouth is partly industrial and partly agricultural. The Eastern, Western, Rhymney and Sirhowy Valleys are thickly populated coal mining districts, in which are also, iron, steel and tin-plate works. There are also in some of these districts coal bye-product plants. The remaining portions of the County are practically agricultural communities.

The effects of the stoppage of work in the coalfield which lasted from May to December of 1926, was still felt during the year under review, and there was considerable unemployment.

The administration of the Poor Law Relief in the Area of Bedwellty Union was for the greater portion of the year, under the control of the Commissioners appointed by the Minister of Health. The general conditions in this portion of the County are by no means satisfactory, and there is a great deal of poverty prevailing.

The Collieries and Works have well organised medical arrangements. The Royal Gwent Hospital at Newport, also the District Hospitals in the various areas are well patronised by the residents of the County.

VITAL STATISTICS.

The Vital Statistics for England and Wales for the year 1927, compiled by the Registrar-General, are as in the subjoined table. The Monmouthshire figures are given for the purpose of comparison.

	Birth Rate per 1,000 of population.		Death Rate per 1,000 living.		Deaths under one year per 1,000 births.	
	1927	(1926)	1927	(1926)	1927	(1926)
ENGLAND & WALES ...	16.7	(17.8)	12.3	(11.6)	69.	(70.)
105 County Boroughs and Great Towns, including London ...	17.1	(18.2)	12.2	(11.6)	71.	(73.)
157 Smaller Towns (1921 adjusted populations, 20,000 —50,000) ...	16.4	(17.6)	11.3	(10.6)	68.	(67.)
London ...	16.1	(17.1)	11.9	(11.6)	59.	(64.)
MONMOUTHSHIRE ...	17.5	(20.3)	11.0	(9.4)	87.3	(66.1)

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 1927 was 6,522, made up as follows:—

	Legitimate		Illegitimate		Total		Grand Total
	Male	Female	Male	Female	Male	Female	
Urban Districts ...	2795	2714	114	99	2909	2813	5,722
Rural Districts ...	389	373	18	20	407	393	800
Total ...	3184	3087	132	119	3316	3206	6,522

In 1926 there were 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; in 1918, 8,948 births; in 1917, 8,402 births; in 1916, 8,848 births; in 1915, 10,194 births; in 1914, 9,455 births. The birth-rate for 1927 was 17·5 per 1,000 persons living. In 1926 the rate was 20·3; in 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; in 1918, 24·8; in 1917, 23·1; in 1916, 25·7; in 1915, 28·59; and in 1914, 30·2.

For the Urban Districts of the County the birth-rate was 17·8 per 1,000 for 1927, and for the Rural Districts, 16·5, compared with 21·02 and 15·84 respectively for 1926, and 22·04 and 18·34 for 1925.

It will be observed that the birth-rate continues to decline. The rate for 1927 was the lowest ever recorded for the County.

The number of births of illegitimate children was 251, which gives a rate of 38·48 per 1,000 of the total births, and ·67 per 1,000 population. Last year the number was 258, equal to 34·06 per 1,000 births, and ·69 per 1,000 of population. For the year 1925, the figures were 236, equal to 29·1 per 1,000 births, and ·63 per 1,000 population.

The birth-rate for England and Wales was 16·7.

DEATHS.—The total number of deaths registered in the Administrative County, as shown in the Registrar General's table, was 4,088, as compared with 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, 4,943 in 1918, 3,822 in 1917, 4,979 in 1916, 5,063 in 1915, and 4,356 in 1914.

The general death-rate, calculated upon the estimated population of 371,350, works out at 11·0 per 1,000 living. In 1926, the rate was 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; in 1918, 15·3; in 1917, 11·7; in 1916, 12·9; in 1915, 15·3; and in 1914, 12·8. For the Urban Districts the rate for 1927 was 10·9, and for the Rural Districts, 11·1.

The death-rate for England and Wales was 12·3.

The County death-rate of 11·0 is a substantial increase upon the previous year's figure, which was 9·4.

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

Causes of Death.	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
All Causes	4088	570	152	139	124	208	536	1004	1355
Enteric Fever	3	...	...	1	1	1	...	...	...
Small Pox	3	2	...	...	...	1	...	...	...
Measles	36	7	18	9	1	1	...	...	...
Scarlet Fever	2	...	1	1	...	...	...	...	...
Whooping Cough	35	18	13	3	1	...	...	...	...
Diphtheria	13	...	1	9	3	...	...	...	...
Influenza	175	8	3	11	3	10	30	55	55
Encephalitis Lethargica ...	13	...	1	...	8	1	1	2	...
Meningococcal Meningitis	3	...	...	1	...	1	1	...	...
Tuberculosis of the Respiratory System ..	227	2	1	3	5	56	104	52	4
Other Tuberculous Diseases	71	4	4	9	17	17	13	5	2
Cancer, Malignant Disease	317	...	...	1	1	3	33	159	120
Rheumatic Fever	15	...	...	1	4	4	3	3	...
Diabetes	31	...	1	...	...	2	4	16	8
Cerebral Hæmorrhage, etc.	222	...	...	...	...	1	7	74	140
Heart Disease	555	...	...	...	5	8	63	190	289
Arterio-sclerosis	108	...	...	...	...	...	2	31	75
Bronchitis	348	47	13	7	3	4	8	61	205
Pneumonia (all forms) ...	348	105	64	38	6	11	30	47	47
Other Respiratory Diseases	82	1	1	2	3	3	16	34	22
Ulcer of Stomach or Duodenum ...	28	...	...	...	...	...	8	17	3
Diarrhœa, etc.	65	39	9	6	...	...	1	4	6
Appendicitis and Typhlitis	31	...	...	2	10	4	9	6	...
Cirrhosis of Liver	7	...	...	...	...	...	...	6	1
Acute and Chronic Nephritis	96	...	1	2	5	4	16	40	28
Puerperal Sepsis	8	...	...	...	...	2	6	...	...
Parturition, apart from Puerperal Fever ..	29	...	...	...	...	7	22	...	...
Congenital Debility, etc. ...	258	252	...	2	2	1	...	1	...
Violence, apart from Suicide	211	5	1	14	22	35	76	44	14
Suicide	37	...	...	...	...	3	12	22	...
Other Defined Diseases ...	705	80	18	17	23	28	70	134	335
Causes ill-defined or unknown...	6	...	2	...	1	...	1	1	1

MATERNAL MORTALITY.—The number of women dying in, or in consequence of child-birth, was, from sepsis, 8; and from other causes, 29.

INFANTILE MORTALITY.—The total number of deaths under one year of age throughout the Administrative County was 570, 521 in the Urban Districts and 49 in the Rural Districts.

The rate per 1,000 births was 87·3, an increase of 21·2 upon the figure for 1926, which was 66·1, this figure being the lowest ever recorded for the County.

In the Urban Districts the rate was 91·0 per 1,000 births, and in the Rural Districts, 61·25 per 1,000 births.

In 1926, the Infantile mortality rate was 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; in 1912, 105; in 1911, 149; in 1910, 112; in 1909, 104; in 1908, 142 per 1,000 births.

The rate for England and Wales was 69.

The average Infantile Mortality rate for the 25 years, 1891—1915, was 137·4. The average for the twelve years, 1916—1927, was 85·3.

The number of deaths of illegitimate children under one year of age was 27, or 4·1 per 1,000 of all births and 107·6 per 1,000 of illegitimate births. Last year the number of deaths was 23, or 3·04 per 1,000 of all births, and 89·1 per 1,000 of illegitimate births.

The measures adopted by the County for the reduction of Infantile Mortality are fully dealt with in the Report upon Maternity and Child Welfare for the year 1927, which has already been published and presented to the Council.

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	171	20	17	18	226	95	59	68	72	520
Rural Districts	14	4	1	4	23	10	4	3	3	43
	185	24	18	22	249	105	63	71	75	563

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—Admini- strative County.
	Urban Districts.	Rural Districts.	Administrative County.	
Infectious Diseases ...	32	3	35	5.36
Diarrhoeal Diseases ...	36	3	39	5.96
Wasting Diseases ...	227	25	252	38.64
Respiratory Diseases ...	142	11	153	23.46
Tubercular Diseases ...	6	—	6	.92
Other Causes ...	78	7	85	13.03
Totals ...	521	49	570	87.3

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

Measles—all ages	...	...	...	36
Whooping Cough—all ages	...	...	...	35
Diarrhoea—under 2 years of age	...	...	...	48

The reports of the District Medical Officers of Health show that there has been a slight decrease in the number of deaths from Cancer, but the number of deaths from Respiratory Diseases are higher. There is also an increase in the number of deaths from Measles, Influenza and Heart Disease.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

HOSPITALS.

The following is a statement of the Hospital accommodation available for the Administrative County:—

A (1) Fever.

The following are the Isolation Hospitals at present in the County:—

Abergavenny Joint Hospital, Llanfoist (owned jointly by the Abergavenny Town Council and Abergavenny Rural District Council)	...	...	3 wards,	41	beds
Abersychan Urban Council " Beeches "	...	...	3	54	„
Abertillery Urban Hospital, Coedcaeddu	...	...	2	16	„
Bedwellty Urban Hospital, Coedmoeth	...	...	6	55	„

Chepstow Joint Hospital, St. Arvans (owned jointly by Chepstow Urban and Rural District Councils)	5	„	22	beds
Ebbw Vale Urban Hospital, Beaufort	5	„	10—12	„
Monmouth Borough Hospital, Buckholt	3	„	10—12	„
Nantyglo and Blaina Urban Hospital, Coalbrookvale	3	„	5—7	„
Tredegar Urban Hospital, Ash Vale, Nantybwech	2	„	20	„

Cases from Abercarn, Bedwas and Machen, Caerleon, Llanfrechfa Upper, Llantarnam, Panteg, Risca, Mynyddislwyn, and Usk Urban Districts, and Magor, Pontypool and St. Mellons Rural Districts are admitted to the Newport Borough Isolation Hospital, Allt-yr-yn, Newport, when accommodation is available. The charge in such instances to the Local Authority concerned is about £3 3s. 0d. per case per week.

In the Rhymney Urban District an ordinary dwelling house is being used for the isolation of infectious cases. This arrangement is quite unsatisfactory. The house, however, has recently been improved by the provision of bathroom and lavatory accommodation. It is possible to isolate three cases of one sex at a time.

Regarding the Isolation Hospital of the Ebbw Vale Urban District Council, the Medical Officer of Health Reports that the structural condition of this building is far from satisfactory, and is dingy and depressing, and although minor repairs have been done, the effect has only been temporary. Owing to the defective condition of the roof, the whole of the top floor is rendered damp, thereby causing the sleeping accommodation of the staff and the two extra wards occasionally used to be in a condition that is undesirable. In 1923 an estimate for thorough repairs was submitted by the Surveyor to the Local Council amounting to £800, but nothing was done owing to the financial position, and matters have consequently become worse. Something should be done immediately to remedy the serious defects and save the building from absolute ruin.

Overcrowding in some portions of the County still renders home isolation difficult and even though increased accommodation has been provided during the year for the isolation of cases of infectious disease, the provisions in the County are still inadequate. Several of the Isolation Hospitals in the County, both as regards accommodation and suitability, have been improved. This has been done in each instance where the County Council have acquired the use of the Hospitals for the purpose of isolating Small Pox cases. There still remains, however, several Isolation Hospitals which are unsuitable for the purpose.

A (2) Small Pox.

Prior to 1927 the County Council held on lease a small building at Cefn, near Newport, which has for many years been kept by the St. Mellons Rural District Council, for use as a Small Pox Hospital when required. Owing to the severe epidemic of Small Pox which became prevalent in the County, the facilities for the

Isolation of cases of this disease were totally inadequate, and during the year it became necessary for the County Council to take over and maintain for this purpose the Isolation Hospitals of the Abergavenny, Chepstow and Bedwellty Districts. The Beeches Hospital of the Abersychan Urban District Council was also taken over and three large huts erected and equipped as wards. In addition, it became necessary to utilise for a time the Isolation Hospital of the Abertillery Urban District Council at Cwmtillery, thus providing 188 beds in Isolation Hospitals within the County for the treatment of Small Pox cases. A number of beds were also available for use, both at the Cardiff Corporation Isolation Hospital and at the Small Pox Hospital of the Newport Corporation.

B (1) Tuberculosis.

Tuberculosis cases, both pulmonary and surgical, are treated at the Institutions of the Welsh National Memorial Association, the early cases for sanatoria being dealt with at the Llangwythan Sanatorium, North Wales, and the Talgarth Sanatorium, South Wales, while surgical tuberculosis cases are dealt with at the Glan Ely Hospital, Cardiff, St. Brides Hospital, Pembrokeshire, and at the surgical block of the Llangwythan Sanatorium, North Wales. The hospital cases are treated in the first instance at the Cefn Mably Hospital and at other hospitals of the Memorial Association as occasion arises.

B (2) Maternity.

There is no Maternity Hospital in the County at the time of writing. The arrangements for the opening of the Coldra, near Newport, which has been presented to the County Council by Sir John W. Beynon, Bart., C.B.E., for use as a Maternity Hospital, have been held up owing to the outbreak of Small Pox in the County.

B (3) Children.

The County has no Children's Hospital, but 12 beds have been reserved at the Royal National Orthopaedic Hospital, London, for the crippled children of Monmouthshire, and these beds are fully occupied by County patients.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS.

There is a Maternity Home and Hostel for unmarried mothers in the County situate at Nantyderry. The Hostel is provided by voluntary effort, and to which the County Council contributes a donation of £400 annually. At the Hostel there is accommodation for 16 women, who remain at the Hostel for varying periods not exceeding six months after the birth of the child. During their stay at the Home, the mothers are trained to undertake some useful work, and, as far as possible, placed in desirable situations on leaving. In most instances the infants are adopted, every care being exercised that the homes and their circumstances are in every way suitable.

AMBULANCE FACILITIES.

- (a) The County Council have an Ambulance for the removal of Small Pox patients to the Isolation Hospitals. The Ambulance of the Bedwellty Urban District Council is used also for the same purpose.
- (b) The Newport Borough Ambulance is available for County cases which are admitted to the Borough Isolation Hospital. Ambulances are in use at the Isolation Hospitals of the Bedwellty, Abertillery, Tredegar, and Ebbw Vale Urban District Councils. The latter two are horse-drawn vehicles.
- (c) The Collieries at Ebbw Vale, Six Bells, Cwmtillery, Tredegar, Cwmbran, Oakdale, and the Rhymney Valley have ambulances which are used for Colliery accident cases and under certain arrangements for the transport to Hospital of the 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 in use in the area of the Bedwas and Machen Urban District Council.

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

CLINICS AND TREATMENT CENTRES.

The County Council have established 41 Maternity and Child Welfare Centres in the County, and three Ante-Natal Clinics. Full details are given in the County Maternity and Child Welfare Report.

The County Education Committee have provided 10 School Clinics, details of which are set out in the School Medical Inspection Report.

There are no day nurseries in the County.

The 15 Tuberculosis Visiting Stations are detailed later in this Report

There is one Treatment Centre for Venereal Diseases—at the Royal Gwent Hospital, Newport.

PUBLIC HEALTH OFFICERS.

The Public Health staff of the County Council consists of the following whole-time officers:—

County Medical Officer.

County Bacteriologist and Pathologist, who is also the Deputy Medical Officer.

Nine Assistant Medical Officers (engaged on School Medical Inspection and Maternity and Child Welfare work).

County Sanitary Inspector.

Inspectress of Midwives.

Venereal Diseases Inquiry Officer.

Mental Deficiency Inquiry Officer.

31 Health Visitors (engaged on School Medical Inspection and Maternity and Child Welfare work).

13 clerks and 3 laboratory assistants.

PROFESSIONAL NURSING IN THE HOME.

No arrangements for home nursing are made by the County Council.

There are Nursing Associations in the following districts, which maintain nurses by voluntary subscription:—

Newbridge	Devauden	Llantilio Pertholey	Blackwood
Tredeggar	Risca	Cross Keys	Pontypool
Panteg	Ebbw Vale	Cwm	Abercarn
Aberbargoed	Abersychan	Rhynney	Caerleon
Goytre	Abergavenny	Christchurch	Monmouth
Llanfrechfa Lower	Llanover	Usk	Trelleck
Llantilio Crossenny	Llangattock-vibon-avel		Tintern

General and tuberculosis nursing is undertaken, with the addition of midwifery in some districts.

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.

MIDWIVES.

The number of midwives upon the County Roll at the 31st December, 1927, was 253. Full particulars are given in the County Maternity and Child Welfare Report.

REGISTRATION OF MATERNITY HOMES.

The County Council are the Local Supervising Authority under the Midwives and Maternity Homes Act, 1926. This Act came into operation on the 1st January, 1927, and under Part II of the Act, all Maternity Homes must be Registered with the County Council. During the year five applications for registration were made, and after the inspection of the premises, in accordance with the requirements of the Act, registration was granted in each instance. The Maternity Homes are situate one at Tredeggar, one at Nantyderry, one at Abergavenny, one at Rumney and one at Tre-ap-Gwilym, Cardiff Road, near Newport. The County Medical Officer of Health has the power, under the Act, to inspect all Maternity Homes.

CHEMICAL ANALYSIS.

Samples of foodstuffs, including milk, butter, margarine, etc., are sent to Mr. G. Rudd Thompson, F.I.C., Dock Street, Newport, who is the Public Analyst appointed for the County.

BACTERIOLOGICAL LABORATORY.

Facilities are offered to all medical practitioners in the County for bacteriological examinations at the County Laboratory, and the services of the Pathologist and Bacteriologist are available for assistance which may be required in the diagnosis of disease.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER SUPPLY.

With the annual rainfall above the average, no complaints of shortage of water were received.

During 1927 considerable progress has been made with the schemes to ensure a plentiful supply of wholesome water.

The Grwyne Fawr scheme of the Abertillery and District Water Board, which supplies the Urban Districts of Abertillery, Abercarn, Risca, and the major portion of Mynyddislwyn, is now practically complete. The inauguration of the Reservoir took place on the 28th March, 1928.

The Board's first Act of Parliament was obtained in 1910, and the first Statutory Meeting of the Board was held at the County Council Offices, Newport, on October 19th, 1910. Under the Act, powers were granted for the construction of a Reservoir in the Grwyne Fawr Valley with incidental works. The authorised borrowing powers being £247,000.

In 1914 a second Act of Parliament was obtained, which extended the borrowing powers to £497,000. Power was given to the Board, pending the completion of the Reservoir, to take water from the stream in excess of 750,000 gallons per day. The minimum flow of the stream in times of drought is approximately 263,000 gallons per day, so during dry periods, the power of taking water could not be exercised.

The total quantity of water available from the Reservoir is estimated to be $2\frac{1}{4}$ million gallons per day, of which one third has to be given as compensation water to the stream, leaving $1\frac{1}{2}$ million gallons per day available for supply. The 16-inch main is sufficient to deliver the whole of the $2\frac{1}{4}$ million gallons per day into the District.

250 acres of land were purchased at a total cost of £10,000. This area included sufficient land for a second Reservoir, it being anticipated that at some future time the Board would require the whole of the water from the first Reservoir. The second reservoir would be for compensation water only. The construction of the first reservoir, supply main and incidental works, were let in two contracts to Messrs. W. Underwood and Brothers, in December, 1911. A commencement was made in February, 1912. To obtain access to the reservoir site a new road was included, $10\frac{1}{2}$ miles in length. The Contractors, however, found it very difficult to haul the heavy plant and materials by traction-engine; and early in 1913 they laid down a line of railway along the side of the new road. This railway was not included in the powers under the Board's Acts.

In April, 1915, the laying of the pipe line was completed, and water was turned into the District.

With reference to the reservoir works, a Navy Village was put up by the Contractors, at Blaen-y-cwm, two miles below the site of the works. They found great difficulty, however, in keeping any adequate supply of labour there, and frequent complaints were made by the Board as to the slow progress of the work at the reservoir. A complication also arose owing to the discovery of some marl beds in excavating for the foundations of the Dam, necessitating a great deal of extra work in the excavating of the solid rock underneath.

From 1913 onwards the Board was extremely dissatisfied at the slow rate of progress, this, of course, being further hampered through the outbreak of war in 1914. After a Conference with the Contractors, it was decided to suspend construction of the works in December, 1915, and at the same time the Board arranged to determine their agreement with the Engineer, Mr. Baldwin Latham. About this time claims for extras, amounting to £23,199, were made by the Contractors.

In December, 1916, the Board, after full discussion, met the Contractors, and an arrangement was made by which the contracts were terminated. The whole of the Contractors plant then on the ground, including ten miles of railway and the Navy Village, was acquired for the sum of £20,000, and the Contractors agreed to abandon their claim of £23,199 for extra work. The total sum paid to the Contractors was £219,212 11s. 8d., and the work done for this sum consisted of:—

- (1) A 16-inch pipe line from Grwyne Fawr Reservoir to Cwmtillery.
- (2) A 12-inch pipe line from Cwmtillery to Nantydraenog.
- (3) Two Service Reservoirs in the District, with capacities of two million gallons each.
- (4) New Road from Cwmyoy to Grwyne Fawr, $10\frac{1}{2}$ miles in length.

- (5) Certain works at the Grwyne Fawr Reservoir, consisting of excavations for Dam foundations, a portion of which had been filled up with concrete masonry. The total quantity of masonry paid for was 6,084 cubic yards, which included the Outlet Culvert underneath the Dam.

In 1917 the Board discussed the question of the best method of proceeding with the works after the war, and it was decided to go on by direct labour.

The Board also decided to extend the railway from Cwmyoy to Llanvihangel, a distance of $1\frac{1}{2}$ miles, so as to obtain direct communication with the Great Western Railway siding at Llanvihangel Station. Previously, heavy plant and material had to be unloaded from the railway wagons at Llanvihangel, and conveyed by road to the Board's railway at Cwmyoy, where it had to be reloaded, causing enormous expense and considerable delay.

In September, 1920, the Board entered into an agreement with Mr. J. Francis Jupp, M.Inst.C.E., appointing him Engineer to the Board, and after relaying that part of the Board's railway commandeered by the Government for war purposes, the actual work of construction was resumed at the Dam, on March 8th, 1921. Acting on the advice of the Engineer, the Board decided to instal up-to-date and modern plant at the Works, and acquired new plant and machinery to the value of more than £53,000.

The population of the Constituent Authorities is approximately 100,000, and during periods of drought they suffered considerable inconvenience and hardship as a result of shortage of water. The Board, therefore, decided to spare no expense in their efforts to push on and complete the work as speedily as possible. Owing to the altitude, little or no work could be carried on at the Dam during the winter months.

The Board embarked upon a scheme in 1910, estimated to cost approximately £400,000, and according to the terms of the contract should have been completed in a period of 40 months, or by June, 1915. The outbreak of war in August, 1914, upset all calculations, and was responsible for bringing all work on the scheme to a standstill in December, 1915, for a period of six years, prolonging the completion of the reservoir over a period of sixteen years, and increasing the cost to more than a million sterling.

It has taken the Board nearly seven years to complete the reservoir by direct labour. The only redeeming feature of the situation is that the scheme is now completed, and the teeming population of the constituent authorities are provided with an ample and adequate supply of pure water, sufficient for their every need for many years.

Under the terms of the Board's Act of 1910, all monies borrowed for the construction of the Works have to be paid back within a period of 60 years from date of borrowing, repayment to commence on completion of the Reservoir.

In 1926 the Board promoted a Bill in Parliament to extend the period of repayment to 80 years, and were successful in getting an extension of 10 years to 70 years, thereby relieving the financial burden on the present generation of ratepayers by approximately £2,000 per annum. There has been considerable distress in the Constituent Areas since 1921, due to trade depression in the Mining Industry. The Board decided to approach the Unemployment Grants Committee for permission to carry out certain works at the reservoir by Unemployment Schemes, such as stripping of the Quarry and increasing the capacity of the Reservoir by excavating in the bed. Sanction was obtained, and grants paid to the Board by the Government amounting to just over £27,000. In this way employment was found for hundreds of unemployed men, substantial relief afforded the local ratepayers, and in addition, the capacity of the reservoir increased by approximately 20,000,000 gallons, making it unnecessary, in the opinion of the Board, to proceed with the construction of the Compensation Reservoir.

The Grwyne Fawr Reservoir has a top water level of 1,790 feet above Ordnance Datum—probably the highest altitude of any reservoir in Great Britain. This height enables a supply of water to be given by gravitation to any point of the Board's district, the draw-off levels varying from 1,150 feet at Abertillery, to 200 feet above sea level at Risca. The capacity of the reservoir is nearly 400,000,000 gallons.

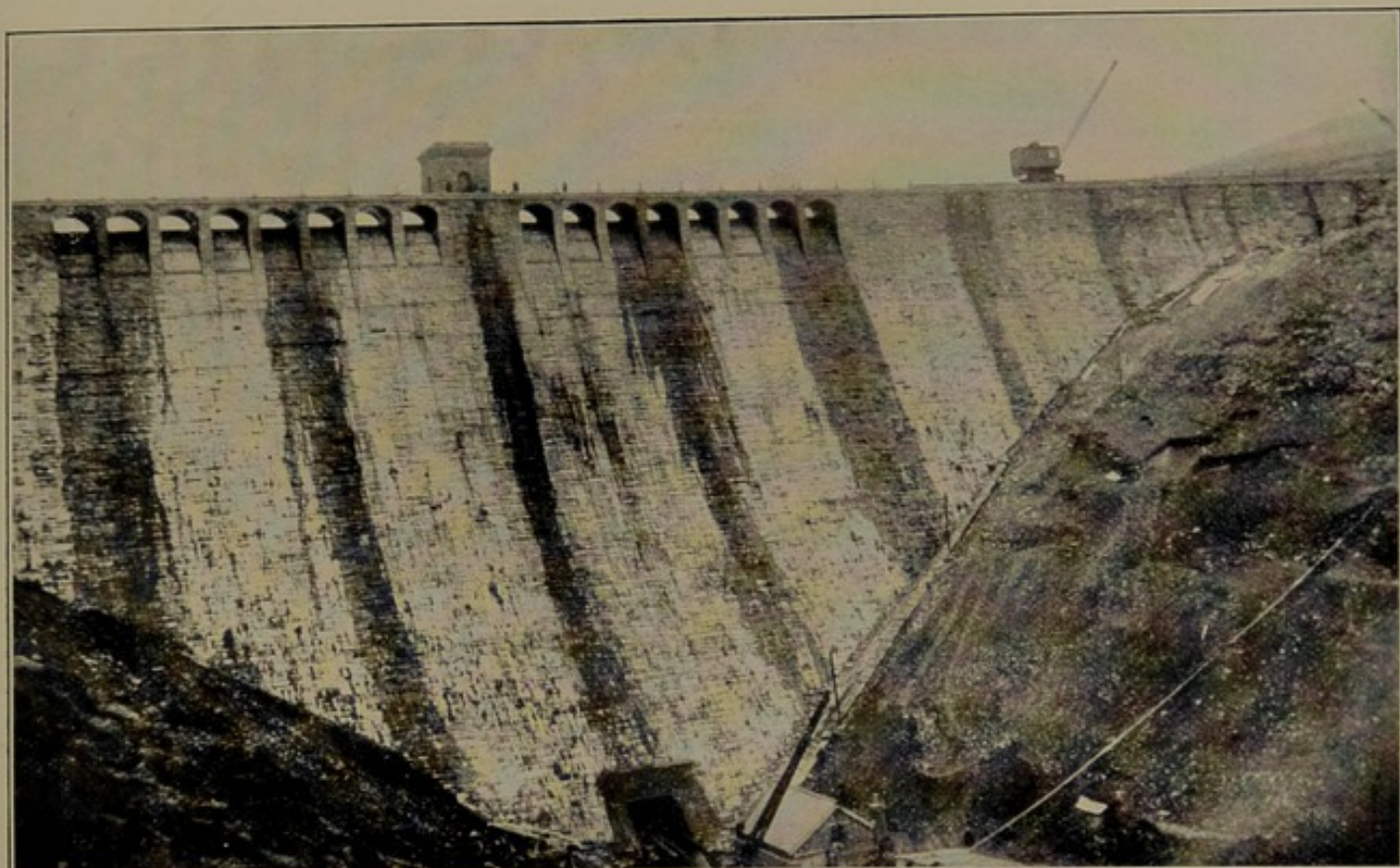
The Dam has the distinction of being the highest yet built in this country. The effective height from outlet culvert at the base to overflow weir at top is 151 feet. The roadway is 5 feet above the weir level, and the foundation of the dam 17 feet below the Culvert, giving a total height from foundation to roadway of 173 feet. The extreme length of the Dam is 918 feet and the length at top water level 655 feet. The thickness at base is 130 feet, the top width 15 feet, with a 10 feet roadway over.

The total quantity of masonry is 115,000 cubic yards, equal to a weight of approximately 207,000 tons. Over 16,000 tons of Portland Cement were used in the work. The stone was old red sandstone, quarried on the reservoir site.

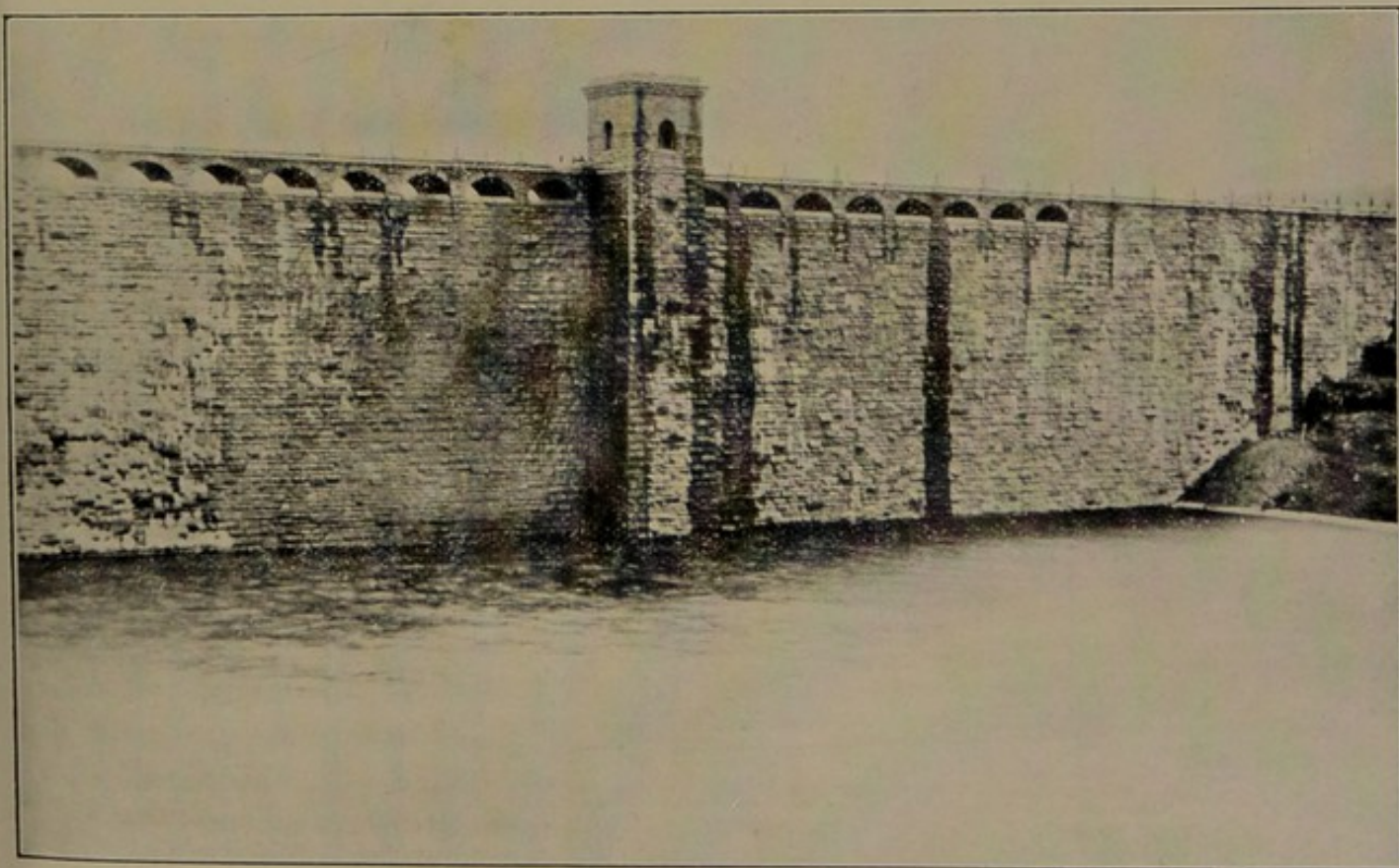
The Dam is constructed on a curve of 2,500 feet radius, 16 overflow arches are provided to carry the roadway, and give a total length of 160 feet for the overflow weir.

The water is taken from the reservoir by means of five 15 inch draw-off pipes with copper roses spaced 25 feet apart. These pass into a shaft containing the controlling valves actuated by geared headstocks in the Valve House on top of the Dam, and the water is admitted to a 15 inch vertical standpipe which connects to the supply main in the outlet culvert.

Owing to the exceptional purity of the water, no filtration is necessary, but fine copper mesh screens are provided immediately below the reservoir.



No. 1—GRWYNE FAWR RESERVOIR. VIEW OF EXTERIOR OF THE DAM.



No. 2—GRWYNE FAWR RESERVOIR. VIEW OF INTERIOR OF DAM. RESERVOIR PARTLY FILLED.



The supply main to the District consists of steel pipes 16 inches in diameter having a total length of 22 miles from the Grwyne Fawr Reservoir to Cwmtillery. This main is laid down the road to Forest Coal Pit, thence over the high ground near the Sugar Loaf, crossing the River Usk above Abergavenny, thence to Govilon, Clydach and Waunavon, through a tunnel 1,600 yards in length under the Coity Mountain to Cwmtillery, where a Service Reservoir is provided with a capacity of 2,000,000 gallons at a level of 1,330 feet above Ordnance Datum.

A steel main, 12 inches in diameter and 11½ miles in length then passes through the Board's District to a similar service reservoir above Aberbeeg and ultimately to Nantydraenog Reservoir near Mynyddislwyn Church.

The water supply of the Ebbw Vale Urban District Council was copious and constant. This 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 actions in contact with lead, but the use of lead pipes to carry the water supply has been almost entirely superceded by galvanised iron, which obviates the risk of contamination from this cause.

The exceptionally wet Summer after an abnormally dry Spring, brought the peat from the mountains into the reservoir, and discoloured the water. Analysis made at the time proved unsatisfactory. The Council immediately took action in advising the public to boil all water for consumption. Steps were also taken in the meantime to improve the filter beds. A new sand washer was installed, the whole of the filters cleansed, and 600 tons of new sand used to accelerate the filtration. The water supply since, has been analysed and found satisfactory.

The parishes of Nash, Goldcliffe, Whitson, and Bishton (part) on the Caldicot Level are supplied from the Llanwern Brook (Monk's Ditch), rain water tanks and reens. In dry summers this supply may partially fail and is liable to pollution. The rainfall during 1927 (70 inches) was much above the average, and there was no shortage of water.

The consideration of an improved water supply to these parishes has occupied much attention during the year. The Engineer has submitted several schemes. A scheme for the supply of Newport Corporation water to the parish of Bishton has been approved after an Inquiry by the Ministry of Health. A supply for the adjacent parishes is still under discussion.

The Medical Officer of Health to the Blaenavon Urban District Council reports that the Local Council should take steps to provide the inhabitants of certain farms in the Garnyrerw area with an adequate supply of pure water, and that a filter bed should be provided at the Bunkers and a larger filter bed near Edmunds' Spring.

The Council should also consider whether it is possible to add to the number of sources of supply and to further increase the storage capacity of certain reservoirs, so that it will not be necessary, even in the driest season, to give the inhabitants an intermittent supply of pure water.

The Council applied to the Ministry of Health for sanction to erect an unclimbable fence around Reservoirs 3 and 4, but sanction has not been received to proceed with the work.

The Medical Officer also recommended, in view of the many adverse reports which were received from the County Analyst, that a filter should be installed at No. 3 Reservoir to provide filtered water to the 25 houses on Llanover Road, and it is regretted that the Ministry of Health have not sanctioned the proposed expenditure.

The Shon Sheffrey spring, in the area of the Tredegar Urban District Council, is reported to be in every way satisfactory. This spring supplies the Tredegar Urban Area, and a considerable portion of the Bedwellty Urban District.

The Medical Officer to the Panteg Urban District Council reports that the water supply for that portion of Pontrhydyrun adjoining the Edlogan Tinworks is not satisfactory. The present supply is drawn from a small spring of doubtful quality which is positively dangerous of access. It is questionable if the water would prove fit for domestic use on analysis.

Improvement has again been made in the condition of the wells and springs which supply the rural areas of the County. The Rural District Councils are fully alive to the necessity of providing their respective areas with a sufficient clean and wholesome water supply. Samples of water from local supplies are periodically taken for analysis.

By the completion of the Taf Fechan Reservoir, which was opened on the 21st July, 1927, the water supply to the Rhymney Valley became assured for all time. The Reservoir has a capacity of 3,400 million gallons and a daily yield, after provision of compensation water, of 12 million gallons.

In addition, the Taf Fechan Board, of which the Rhymney Valley Water Board is a Constituent Authority, own the Upper and Lower Neuadd Reservoirs. The whole of the works have an impounding capacity of 3,714 million gallons, and a daily yield, after provision of compensation water, of 16 million gallons.

Under the Taf Fechan Act of 1921, as and from the date the Taf Fechan Reservoir is completed and filled with water, the Board shall supply to the Rhymney Valley Water Board a minimum quantity of 1,750,000 gallons of water per day with a maximum of 4,200,000 gallons a day.

The chief point of delivery into the Rhymney Valley is at Trelewis, from which point a 24-inch aqueduct has been laid to Gellygaer by the Rhymney Valley Water Board, and a 15-inch aqueduct from Gellygaer to Pengam, where connections have been made to the existing Trunk Main from the Rhymney Bridge Reservoirs.

Water is also obtained from the Neuadd Reservoir near Dowlais Top. This supply enables water to be turned into the Rhymney Bridge Reservoirs during any period of drought.

With the connections referred to at Pengam the area of supply dependent on the Rhymney Bridge Reservoirs can be regulated as required, and with the Neuadd Supply entering the Reservoirs any desired water level can be maintained regardless of any period of drought.

Another big advantage of the supply at Pengam is that formerly, when trouble was experienced at Troedyrhiwfwuch the whole supply to the South was affected, but under the new conditions very little inconvenience is caused.

The Housing Scheme of the Rhymney Council, known as Pen-y-dre, which was formerly supplied with water from Brynbrith Reservoir, is now supplied with water from the Rhymney and Neuadd Reservoirs and all complaints have been removed.

There have been several extensions of mains within the area during the year, more particularly in connection with Housing Schemes.

Subsidence still causes trouble throughout the area, more particularly at Troedyrhiwfwuch, Abertysswg and Llanbradach.

RIVERS AND STREAMS.

In the Rhymney Valley, the completion of the main trunk sewer, which is under the control of the Rhymney Valley Sewerage Board, has had the effect of lessening to a remarkable degree the pollution of the Rhymney River. Prior to the sewer being constructed the whole of the sewerage from this thickly populated area found its way into the river.

In the Eastern Valley the Afon Lwyd still serves as an open sewer. The position in this valley is quite unsatisfactory, especially when it is realised that this river passes through several important densely populated areas.

In several areas investigations by the County Sanitary Inspector reveals that slaughterhouses, stables, pig styes, etc., drained directly into the rivers. Also where houses are built near the river banks, the practice of depositing house refuse into the rivers and streams continues unabated. There is no real need for this

practice to continue, as the Local Authorities have made the necessary arrangements for the removal of the house refuse.

Several of the Local Councils have established refuse tips either on the banks of, or in close proximity to, the rivers, and care should be exercised to avoid pollution from this source.

There is also considerable pollution by effluent from works, colliery washing plants and slag tips.

DRAINAGE AND SEWERAGE.

The Western Valleys Sewer Board's main trunk sewer serves the whole of the Western Valleys, also the Sirhowy Valley. Practically the whole of the subsidiary sewers in the Urban Districts through which the main trunk passes are now connected to the Sewer.

Surface water is dealt with separately, as the main trunk sewer is intended solely for the purpose of dealing with sewage. Special drains for dealing with surface water have been constructed by the various Local Authorities.

During the year under review the question of the drainage of certain portions of the village of Hafodyrynys was again considered. Practically the whole of that portion of the village within the areas of the Abercarn and Abertillery Urban District Councils have been connected to the main trunk sewer, and in addition the Abertillery Council put forward a scheme for the draining of the remainder of their area. This was placed before the Ministry of Health with a view to the work being carried out, but, unfortunately, the work has not yet been proceeded with. That portion of the village in the Abersychan Urban area still remains unsewered, and something should be done by this Council to drain the houses in their area. Provision could easily be made for these houses, as the sewer of the Western Valley Sewerage Board is only a few yards away.

Since the completion in the Rhymney Valley of the main trunk sewer, the majority of the subsidiary sewers of the Local Authorities in that valley have been connected. In a few instances alterations in the subsidiary sewers are necessary before a connection can be made, but it is hoped that in the near future, the whole of this work will have been carried out.

With the exception of the Panteg Urban District, no arrangements are made in the Eastern Valleys for dealing with crude sewage. The sewage in the Panteg Urban District in some instances is conveyed to settling tanks before being turned into streams or the Afon Lwyd. The local Medical Officer of Health reports that the settling tanks are not given the attention necessary to render them efficient, nor to perform the purposes for which they are provided, and the huge

accumulations deposited near-by make them a menace to health. No effort is made to irrigate the land with the effluent as formerly.

Owing to there being no general scheme for dealing with the sewage in the Eastern Valleys, the Afon Lwyd still serves as the main sewer, a position which is far from satisfactory.

CLOSET ACCOMMODATION.

The work of converting privies and earth closets to water closets is still being carried out, especially in those areas through which the main trunk sewers pass. The completion of the main trunk sewer in the Rhymney Valley has made it possible for further considerable progress in this branch of public health work.

SCAVENGING.

The removal of house refuse and scavenging generally, in some of the industrial areas, is directly carried out by the Councils. In others the work is done by contractors. The system of collection varies according to the circumstances prevailing in the different districts. In some instances a daily collection is made, while in others, collections are made two or three times in the week. The latter being the system in the majority of cases.

In only two areas (Abertillery and Pontypool Urban) are there destructors which can deal with the whole of the refuse collected in their districts.

Tipping on land is the means adopted by practically all the other authorities for the disposal of the refuse collected. The difficulty of obtaining land suitable for the tipping of refuse becomes more and more difficult year by year, and owing to this fact several District Medical Officers of Health have recommended to their Councils the advisability of establishing suitable refuse destructors.

It is again noted that in several districts, motor lorries have been substituted for the horse drawn vehicles previously used, and it is pleasing to report that these are now fitted with covers.

The Medical Officer of Health to the Blaenavon Urban District Council reports that the present system of the collection of house refuse on alternate days is unsatisfactory in the extreme. It is no uncommon sight, particularly after the week-end, to see two or three uncovered receptacles full to overflowing with ashes, tins, papers, decaying vegetable waste and garbage outside of each house the whole length of a street or streets. The contents of these receptacles are blown about by the wind, or knocked over by straying animals, with the result that clean streets are the exception rather than the rule.

Reference is again made in the reports of some of the District Medical Officers of Health, to the nuisances arising from the depositing of house refuse

by the inhabitants in back lanes, on vacant land, and the banks of the rivers and streams instead of placing the refuse in suitable receptacles for removal by the Council's scavenging lorries and carts. The dumping of house and other refuse in close proximity to dwelling houses is not only an eye-sore but a serious matter from a public health view. Not only do these places provide an excellent home and breeding place for rats, but a happy hunting ground for children and some adults where they pick up decaying fruit, vegetables, etc., and steps should be taken by the authorities concerned to stamp out this objectionable practice.

The removal of the contents of pail closets which are still in use in some areas is effected by means of special sanitary tanks, this being done during the night or the early hours of the morning.

SANITARY INSPECTIONS OF DISTRICTS.

From the reports received from the District Medical Officers, it is again observed that considerable activity was displayed by the Sanitary Inspectors in their respective districts. 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.

Smoke Abatement.

Prior to the year 1927, the powers to deal with nuisances arising from the emission of smoke were very limited. On the 15th December, 1926, the Public Health (Smoke Abatement) Act, was passed, and came into operation on the 1st July, 1927. This Act gives local authorities greater powers to deal with the smoke question. Under the new Act they are empowered, either themselves, or in combination with other local authorities, to make Bye-laws. Section 7 deals specifically with the powers of County Councils, where upon a Local Authority failing to exercise its powers, the Minister of Health may by order, authorise the County Council to carry out those duties for a definite period, or until the Minister otherwise directs. There is nothing provided in the Act which would allow a more effectual means of dealing with the domestic smoke nuisance. This is unfortunate, as often this form of nuisance is the cause of numerous complaints.

Schools.

The sanitary condition of the schools is subject to district sanitary inspections, while the School Medical Inspectors and the County Sanitary Inspector also deal with it at their periodical visits to the schools. With regard to the spread of infectious diseases amongst school children, close co-operation exists between the District Medical Officers and the County Medical Officer. The disinfection of schools following outbreaks of infectious disease is carried out by the County

Sanitary Inspector, the whole of the interior and the lavatory accommodation being thoroughly sprayed with a suitable solution of " Kerol " disinfectant.

HOUSING.

Good progress has been made during the year with the various schemes in hand for the erection of houses. The following table shows the progress made in the construction of new dwellings by the District Councils, and also by private enterprise under the Housing Acts:—

District.	Total Number of Houses completed during year ended 31st Dec., 1927		Total
	By Local Authority.	Private Enterprise.	
URBAN.			
Abercarn ...	—	365	365
Abergavenny ...	20	16	36
Abersychan ...	17	152	169
Abertillery ...	34	6	40
Bedwas and Machen	48	6	54
Bedwellty ...	294	—	294
Blaenavon ...	—	—	—
Caerleon ...	—	3	3
Chepstow ...	—	3	3
Ebbw Vale ...	—	2	2
Llanfrechfa Upper	2	15	17
Llantarnam ...	40	12	52
Monmouth ...	—	—	—
Mynyddislwyn ...	174	93	267
Nantyglo and Blaina	20	—	20
Panteg ...	20	47	67
Pontypool ...	24	8	32
Rhymney ...	—	—	—
Risca ...	20	106	126
Tredegar ...	50	15	65
Usk ...	—	—	—
RURAL.			
Abergavenny ...	—	11	11
Chepstow ...	—	34	34
Magor ...	—	48	48
Monmouth ...	—	—	—
Pontypool ...	—	6	6
St. Mellons ...	24	603	627

WORK OF THE COUNTY SANITARY INSPECTOR.

Mr. J. Jenkin-Evans, A.R.S.I., M.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.
- 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.
- Home conditions of persons suffering from Tuberculosis, etc.

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 72 schools, comprising 133 departments, were disinfected after closure due to infectious diseases.

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 "Grade A" and "Grade A" (Tuberculin Tested) Milk licenses.

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

The operation of Part IV. of the Milk and Dairies Order, 1926, which deals with the health and inspection of cattle is carried out in conjunction with a scheme inaugurated by the County Medical Officer of Health for the taking of "informal" samples of milk sold in the County. 213 samples were taken during the year 1927.

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.

One sanitary area is selected at a time and samples taken from every milk producer and milk seller in that district. The samples are collected by the County Sanitary Inspector, accompanied by the District Sanitary Inspector, and 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. Should this be found to be present, the farm producing the milk is 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 are made for the slaughtering of the animal under the Tuberculosis Order, 1925, in which case the District Sanitary Inspector is asked to be present at the slaughtering so that the carcass, or parts of the carcass, where necessary, can be condemned as unfit for human consumption. In such cases where the Sanitary Inspector is not qualified to deal with meat inspection, a Veterinary Inspector or the County Sanitary Inspector has attended at the slaughtering of the animal. The tuberculin test is employed in cases where bacteriological examination of the sample has proved to be suspicious but has not shown definite evidence of Tuberculosis, also a close watch is kept upon the cow before its milk is again allowed to be mixed with that of the herd.

With regard to the slaughter of infected animals, it has been found that action taken under the Tuberculosis Order by the Veterinary Inspectors appointed under the Diseases of Animals Acts is better than utilising the Milk and Dairies (Consolidation) Act, 1915; much overlapping is thus eliminated.

In cases where bacteriological examination of an "informal" sample yields evidence pointing to want of care in handling the milk after it has left the cow, or to its contamination in other ways, the Clerk to the Local Sanitary Authority is advised to send a warning letter to the milk seller.

The following districts were inspected during the year under review:—

Urban.

Abertillery
Bedwellty
Blaenavon
Chepstow
Ebbw Vale
Monmouth
Mynyddislwyn
Rhymney
Tredegar

Rural.

Abergavenny
Chepstow
Pontypool

Further details in regard to the samples taken in 1927 will be found in the report of the County Bacteriologist.

Dairies, Cowsheds and Milkshops have been periodically inspected by the District Sanitary Inspectors, and in many cases remedying of defects of lighting, ventilation and drainage has resulted. Although much has been accomplished, further improvement is possible, for cowsheds generally are far from good.

Milk (Special Designations) Order, 1923.

The number of persons at present licensed by the County Council under this Order for the production of "Grade A" milk is as follows:—

Producers and Retailers	...	...	3
Producers only	...	...	3

In one instance a farm at which "Grade A" milk was previously produced, is now producing "Grade A" (Tuberculin Tested) milk, a licence having been obtained from the Ministry of Health, who are the Licensing Authority.

The six farms now producing "Grade A" milk are periodically inspected by the County Sanitary Inspector and a high standard of cleanliness is maintained as a result. Samples of milk are taken at various periods for bacteriological examination.

Samples of milk are taken on behalf of the Ministry of Health, from the retailers of "Grade A" (Tuberculin Tested) milk in the County, the cost being defrayed by the Ministry.

Arrangements have been made with the Welsh Board of Health that prior to the granting of a licence to produce "Grade A" (Tuberculin Tested) milk, the cowsheds, etc., at the farm shall be approved by the County Medical Officer of Health, so as to conform to the standard laid down in the County.

MEAT, etc.

The table giving the amount of unsound foodstuffs condemned and destroyed in the various districts is attached, and it will be noticed from the figures that great attention is being given to this very important section of public health work.

Of the 34 Sanitary Inspectors in the Administrative County, only 8 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: Bedwellty, Abertillery, Mynyddislwyn, Risca, Ebbw Vale, Blaenavon, Tredegar, and Rhymney.

The following table shows the quantities of meat and other foods condemned in the various Urban and Rural District during the year:—

DISTRICT	Fish.	Meat.	Bottled and Tinned Goods	Bacon.	Offal, etc.	Cooked Meat.	Fruit.	Miscellaneous (Vegetable chiefly).
URBAN.								
Abercarn ...	—	557 lbs.	145 tins	150 lbs.	—	—	—	—
Abergavenny ..	—	—	—	—	—	—	—	—
Abersychan ...	—	75 lbs.	2 bottles 241 tins	238 lbs	90 lbs.	—	—	9 lbs. Flour 5 packets b'k'g p'wde 3 pkts peas 2 bxs sweet
Abertillery ...	—	70 lbs.	221 tins	—	8 pigs' pluck 2 bovine lungs 1 bovine udder	151 lbs.	11 baskets strawberries	3 sacks flour
Bedwas and Machen...	37 lbs.	260 lbs.	146 tins	60 lbs.	150 lbs.	—	—	—
Bedwellty ...	84 lbs.	1682 lbs.	1130 tins	10 lbs.	20 lbs.	235 lbs.	—	672 lbs. potatoes 14 lbs. Pea
Blaenavon ...	4 boxes	—	56 tins	—	—	—	—	—
Caerleon ...	—	—	—	—	—	—	—	—
Chepstow ...	—	—	21 tins	—	—	—	—	—
Ebbw Vale ...	176 lbs.	1950 lbs.	24 bottles 292 tins	200 lbs.	260 lbs.	—	20 lbs.	1 case margarine 33 pots jam 5 sacks potatoes 1½ tons potatoes
Llanfrechfa Upper...	—	1 sheep & 1 lamb	2 tins	—	Offal of 1 sheep & 1 lamb	—	—	—
Llantarnam ...	—	—	—	—	—	—	—	—
Monmouth ...	—	—	15 tins	—	—	—	—	—
Mynyddislwyn	—	4813 lbs.	273 tins	—	2594 lbs.	—	—	—
Nantyglo and Blaina...	—	102 lbs.	—	—	—	—	—	—
Panteg ...	—	1 duck 1 fowl 90 lbs.	155 tins	270 lbs.	51 lbs.	—	24 lbs.	76 lbs. cheese 12 lbs. cake 5 lbs. sweets 31 lbs. cheese 28 lbs. jam 13 doz. eggs
Pontypool ...	—	13 rabbits & 357 lbs.	570 tins	106 lbs.	61 lbs.	—	—	—
Rhymney ...	—	—	24 tins	—	—	—	—	—
Risca ...	—	38 lbs.	528 tins	8 lbs.	165 lbs	13 lbs.	7 lbs.	—
Tredegar ...	—	3912 lbs.	—	—	1143 lbs.	—	—	—
Usk ...	—	—	—	—	—	—	—	—
RURAL.								
Abergavenny ..	—	—	—	—	—	—	—	—
Chepstow ...	—	—	—	—	—	—	—	—
Magor ...	—	—	—	—	—	—	—	—
Monmouth ...	—	—	—	—	—	—	—	—
Pontypool ...	—	—	—	—	—	—	—	—
St. Mellons ...	—	3752 lbs.	—	—	1472 lbs.	—	—	—

There is not in any district of the County a public abattoir. In several of the districts the Medical Officers of Health have recommended to their Councils the desirability of providing abattoirs, under the direct control of the Councils.

Many of the private slaughterhouses now in use are unsuitable for the purpose for which they are intended.

Regarding meat shops, stalls, vehicles and places where food is prepared, greater attention is now being paid, and the requirements of the Public Health (Meat) Regulations have, as far as possible, been put in operation in most of the districts.

SALE OF FOOD AND DRUGS ACTS.

At the 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:—

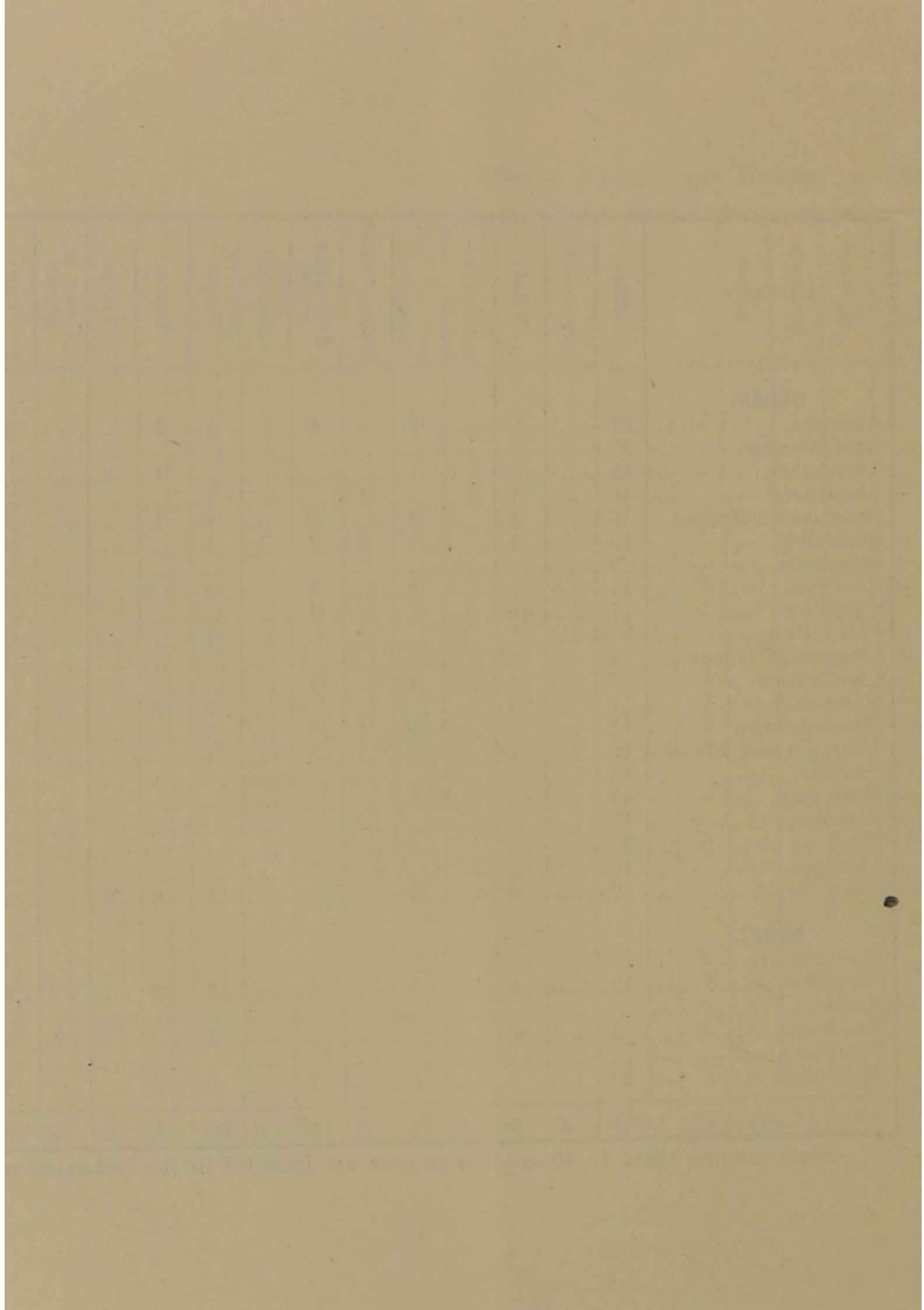
District " A " under the supervision of Inspector T. H. Lewis, with an assistant, and comprising the Municipal Boroughs of Abergavenny and Monmouth, the Urban Districts of Abersychan, Blaenavon, Llanfrechfa Upper, Llantarnam, Panteg, Pontypool and Usk, and the Rural Districts of Abergavenny, Monmouth and Pontypool.

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

District " C," under the supervision of Inspector J. R. Gamble, with Mr. H. Lanceley, an additional Inspector and an Assistant, and comprising the Urban Districts of Abercarn (part), Chepstow, Llantarnam, Mynyddislwyn (part), and Risca, and the Rural Districts of Chepstow, Magor, and St. Mellons.

During the year, 986 samples were examined by the County Analyst, Mr. G. R. Thompson, F.I.C., F.C.S., details of which are given in the report following:

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.
Abergavenny	Milk	22.67% deficient in fat	Dismissed.
"	"	7.33% deficient in fat	Fined £3.
Abersychan	"	4.71% added water	Dismissed.
"	"	5.18% added water	Fined £5.
"	"	13.01% added water	Ordered to pay £3 costs. No conviction.
"	"	8.33% deficient in fat	Ordered to pay £2 costs.
"	Malt		
"	Vinegar		Fined £1.
Bedwellty	Milk	10% deficient in fat	Dismissed.
Ebbw Vale	"	12.33% deficient in fat	Cautioned by the Clerk.
"	"	7.33% deficient in fat	Cautioned by the Clerk.
"	"	10.33% deficient in fat	Cautioned by the Clerk.
"	"	8.71% added water	No action taken. Samples taken in course of delivery from Farmer to this Vendor.
"	"	6.67% deficient in fat	Cautioned by the Clerk.
"	"	20.47% added water	Fined £5, and ordered to pay £3 3s. 0d. costs
"	"	7.53% added water	Dismissed on payment of 4s. costs.
Llantarnam	"	6.47% added water	Ordered to pay 10s. costs. No conviction.
Mynyddislwyn	"	19.33% deficient in fat	Ordered to pay £2 costs. No conviction.
"	"	6.33% deficient in fat	Ordered to pay £3 3s. costs. No conviction.
Nantyglo and Blaina	"	3.06% added water	Cautioned by the Clerk.
Panteg	"	8.00% deficient in fat	Cautioned by the Clerk.
Rhymney	"	6.67% deficient in fat	Cautioned by the Clerk.
Tredegar	"	5.40% added water	Fined £2.
"	"	9.06% deficient in fat and 2.94% added water	Fined £2.
"	"	22% deficient in fat	Dismissed.
Chepstow Rural	"	9.29% added water	Fined £5.

The report of the County Analyst for the year is as follows:—

“ During this period I have analysed 986 samples submitted to me from the following sources:—

From the Inspector in Division “ A ”	...	...	288
“ ” “ ” “ B ”	...	...	341
“ ” “ ” “ C ”	...	...	357

Included in the above, 898 were official samples, and the remaining 88 were unofficial or trial samples.

Of the total number analysed, 683 were milk samples, of which number, 26 have proved to be adulterated, i.e., 3.81% of the milk samples taken.

The adulterated samples were composed of 13 samples deficient in fat to extents varying from 22.67% and 6.33%, and 12 samples containing added water varying between 20.47% and 1.88%.

One sample contained added water and was in addition deficient in fat.

It will thus be noted that although the percentage of adulteration is not unduly high it was, nevertheless, somewhat serious in several of the cases mentioned.

No case occurred of either dyes or preservatives being found so that we have, on the whole, a satisfactory state of affairs from the point of view of the milk supply.

Classified in my usual manner, the details for the year are as under:—

According to content of fat:

Under 3%	3 to 3.49%	3.5 to 3.99%	4 to 4.49%	4.5% and over.
17	248	293	88	37

According to content of solids-not-fat:

Under 8.5%	8.5 to 8.69%	8.7 to 8.89%	8.9 to 9.09%	9.1% & over
14	228	210	148	83

The average composition of all samples analysed for the year is:—

Fat, 3.62%; Solids-not-fat, 8.77%; Total solids, 12.39%.

The average composition was extremely satisfactory, in spite of the fact that certain samples were seriously adulterated, and compares favourably with the averages for the past nine years, as shown in the following table:—

Year.	Fat.	Solids not Fat.	Per cent. of Adulteration.
1918	3.67%	8.63%	7.59%
1919	3.73%	8.74%	5.07%
1920	3.58%	8.61%	4.38%
1921	3.52%	8.84%	5.20%
1922	3.67%	8.84%	4.60%
1923	3.66%	8.88%	4.08%
1924	3.59%	8.87%	4.81%
1925	3.57%	8.90%	4.26%
1926	3.63%	8.82%	5.97%

Only one sample of evaporated milk was submitted for analysis during the year, and this proved to be in accordance with the requirements of the Public Health, (Condensed Milk) Regulations, 1923.

Of the six samples of separated milk examined 5 were satisfactory, but one specimen contained a small percentage, i.e., 5.40% of added water. The butter samples over the year have proved to be most satisfactory, for we have not encountered a single case of admixture or substitution of foreign fats, and the percentage of water has in all but two cases been less than the legal maximum, the two samples against which I have had to issue certificates contained 20.50% and 16.35% of water respectively.

The most noteworthy point, however, with regard to the Butter samples has been that of the 43 specimens examined, 35 were entirely free from boric acid, the remainder containing .30, .26, .24, .22, .18, .14 of this preservative.

It is thus obvious that manufacturers and retailers find little difficulty in dispensing with the use of boric acid as a preservative in butter, and it is to be anticipated that in the year 1928 the use of boric acid will entirely cease in accordance with the requirements of the preservatives in Food Regulations.

Both the samples of margarine were highly satisfactory in every way, and free from added preservatives.

The samples of lard examined, 21 in all, were quite satisfactory in character, being free from admixture with foreign fats and containing no added water whilst in no case was the acidity abnormally high.

The samples of potted meat and fish paste, numbering 4 in all, were free from boric acid, sulphur di-oxide, and other preservatives, and were perfectly wholesome in character.

The nine samples of sugar were all highly refined products, free from any harmful ingredient, whilst the two specimens of honey consisted of the genuine article, unmixed with glucose or other sugars.

No exception could be taken to any of the 22 specimens of flour analysed during the year, all being genuine wheat flours of high quality. A careful search was made in every case for deleterious ingredients which may have been introduced during the process of manufacture, but no trace of any such substance could be detected.

The majority of the 21 rice samples were free from added facing or polishing agents used to improve the appearance of the article, and where such have been employed, the substances added have been perfectly harmless in nature and the quantity present so minute as to be negligible.

Of the 9 samples of tapioca all were perfectly genuine and free from admixture with cheaper flours, the same remark applying to the two specimens of sago and one of arrowroot.

Other cereal products examined included cornflour, pearl barley, "Shelloni," semolina, macaroni, and milkaroni, and all these were found to be nutritious in character and free from any objectionable impurities.

Leavening agents sold for the use in preparation of cakes, etc., i.e., baking powders and egg powders, were all perfectly wholesome, but in connection with the so-called "egg powder" it may be remarked that the proportion of egg in these preparations is practically nil. None of the 20 samples of pepper contained any ingredients other than those naturally present in the peppercorn, and all were of satisfactory strength.

The samples of cocoa, 18 in number, were free in every case from contamination by arsenic and other injurious metallic compounds, and in each case the shell or husk had been efficiently removed from the bean during the process of manufacture.

All the coffee samples, numbering 10, were free from chicory, and other substances foreign to the coffee bean.

Samples sold as malt vinegar, 5 in number, have been analysed during the year, and of these, 4 were quite satisfactory in every way, but the remaining sample consisted of a dilute solution of acetic acid prepared by distillation, and was consequently not of the nature, substance, and quality of malt vinegar. A certificate was, therefore, issued against this sample.

The various pharmaceutical preparations were all in accordance with the requirements of the British Pharmacopoeia, and the remaining specimens analysed call for little comment.

As already mentioned under my quarterly reports, the general quality of the articles submitted for analysis has been highly satisfactory, and it cannot be said that any real gross case of adulteration has been found outside the milk samples and the one sample of vinegar to which reference has been made.

Certificates have been issued against 30 samples over the year, which of the total number received gives an adulteration of 3.04%."

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912 AND 1917.

Report for the year ended 31st December, 1927.

(1) Milk and Cream sold as Preserved Cream.

	(a) Number of samples examined for the presence of a Preservative.	(b) Number in which a Preservative was reported to be present.
Milk	683	Nil
Separated Milk	6	Nil
Cream	3	Nil
Condensed Milk	1	Nil

(2) Cream sold as preserved Cream.

Nil

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

Nil

(i) Correct statements made Nil

(ii) Statements incorrect Nil

(iii) Percentage of Preservative found in each sample.	Percentage stated on Statutory label.
Nil.	Nil.

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

(i) Above 35 per cent. Nil

(ii) Below 35 per cent. Nil

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved Cream in Article V (1) and the proviso in Article V (2) of the Regulations have not been observed.

Nil

(d) Particulars of each case in which the Regulations have not been complied with, and action taken.

Nil

(3) Thickening substances.—Any evidence of their addition to cream or preserved cream:—

Nil

Action taken where found Nil

(4) Other observations, if any Nil

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES.

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

These diseases caused 140 deaths and gave a Zymotic death-rate of $\cdot 377$ for the County, as compared with a rate of $\cdot 30$ for the year 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, $1\cdot 86$ for 1912, $2\cdot 5$ for 1911, $1\cdot 22$ for 1910, $\cdot 87$ for 1909, $1\cdot 5$ for 1908 for the County.

Table showing death rate and attack (notification) rate of Zymotic Diseases in the County of Monmouth during the year 1927.

Population for death rate and attack (notification) rate, 371,350.

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	3	$\cdot 008$	1900	$5\cdot 116$	$\cdot 00$
Measles (including German Measles)	36	$\cdot 097$	Not notifiable	...	$\cdot 09$
Scarlet Fever	2	$\cdot 005$	353	$\cdot 94$	01
Diphtheria (including Membranous Croup)	13	$\cdot 035$	254	$\cdot 68$	$\cdot 07$
Whooping Cough	35	$\cdot 09$	Not notifiable	...	$\cdot 09$
Fever (including Typhus, Enteric and Continued Fevers)	3	$\cdot 008$	16	$\cdot 04$	$\cdot 01$
Diarrhoea (under two years of age)	48	$\cdot 129$	Not notifiable	...	...
Totals	140	$\cdot 377$	*2523	$6\cdot 77$	...

* Notifiable Diseases only.

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	...
1927	...	...	...	·097	·005	·09	·035	·008	·008

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

DISTRICTS	Estimated Population, 1927	Notification rate	Small-pox	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pneumonia.	Pulmonary Tuberculosis	Other Tubercular Diseases.	Erysipelas.	Puerperal Fever.	Encephalitis Lethargica.	Ophthalmia Neonatorum.	Chicken Pox	Cerebro Spinal Fever.	Acute Poliomyelitis.	Dysentery	Puerperal Pyrexia
URBAN.																		
Abercarn ...	20,920	67	...	6	...	2	2	2	2	1	...	...	...	16	...	...	...	3
Abergavenny (Borough) ...	9,186	2	12	5	...	...	...	7	1	1	...	...	1	25	...	...	...	1
Abersychan ...	29,070	898	38	26	...	...	...	16	11	3	...	...	...	166	...	...	...	2
Abertillery ...	36,290	59	13	26	3	...	...	37	20	6	...	...	1	202	...	...	...	5
Bedwas and Machen ...	9,820	...	4	4	...	...	...	15	8	4	...	...	1	...	1	...	...	...
Bedwellty ...	33,690	119	51	51	...	...	...	37	11	8	...	...	6	89	...	...	...	...
Blaenavon ...	12,750	297	1	5	...	...	...	6	3	1	...	...	...	4	...	...	...	...
Caerleon ...	2,328	2	5	...	...	...	...	1	...	...	...	...	...	36	...	...	...	...
Chepstow ...	4,820	...	6	4	...	...	...	4	2	1	...	...	...	27	...	...	...	...
Ebbw Vale ...	36,310	173	47	39	...	2	69	43	19	12	3	1	2	83	1	1	...	2
Llanfrechfa Upper ...	4,810	2	8	...	...	1	2	3	3	3	...	...	...	6	...	...	...	1
Llantarnam ...	81,09	2	17	...	...	...	6	5	3	1	...	...	...	11	...	...	1	...
Monmouth (Borough) ...	4,901	...	5	...	...	...	...	...	1	...	...	...	...	6	...	...	...	...
Mynyddislwyn ...	16,090	26	19	11	1	...	...	14	6	2	...	...	2	48	...	...	...	...
Nantyglo and Blaina ...	16,040	84	16	1	7	...	75	20	11	6	...	1	3	90	1	...	...	1
Panteg ...	11,570	23	10	4	...	...	...	12	2	...	...	...	2	6	...	...	...	...
Pontypool ...	7,695	131	4	1	...	...	2	10	6	1	...	...	...	42	...	...	...	...
Rhynney ...	11,910	3	3	15	...	...	...	9	5	4	...	3	2	51	...	...	...	...
Risca ...	17,890	6	4	19	...	1	1	17	6	...	1	1	...	32	...	...	...	2
Tredegarr ...	25,330	1	38	16	...	...	37	44	22	7	1	...	2	138	...	...	...	...
Usk ...	1,371	...	...	...	...	...	1	...	1	1	...	...	...	6	...	...	...	...
Totals	320,900	1895	301	244	15	290	302	143	63	9	21	37	1084	2	2	1	17	
RURAL.																		
Abergavenny ...	9,335	1	10	2	...	...	...	7	2	1	...	...	...	12	...	...	...	...
Chepstow ...	8,980	1	4	...	...	...	...	7	2	...	1	...	...	45	...	...	...	...
Magor ...	6,445	2	6	...	1	...	...	5	2	1	...	...	...	14	...	...	...	...
Monmouth ...	6,565	...	5	1	...	...	...	3	...	1	...	...	...	13	...	...	...	1
Pontypool ...	5,295	...	4	...	...	...	...	2	...	1	...	...	...	4	...	...	...	...
St. Mellons ...	13,830	1	23	7	...	...	...	20	7	...	...	...	...	50	...	...	...	...
Totals	50,450	5	52	10	1	16	44	15	4	1	10	21	37	138	2	2	1	18
Grand Totals	371,350	1900	353	254	16	306	346	158	67	10	21	37	1222	2	2	1	18	

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

DISTRICT		Small Pox	Diphtheria	Erysipelas	Scarlet Fever	Tuberculosis	Ophthalmia Neonatorum	Cerebro-Spinal Fever	Acute Poliomyelitis	Enteric Fever	Puerperal Fever	Chicken Pox	Pneumonia	Encephalitis Lethargica
Urban—														
Abercarn	...	45	...	...	...	...	...	...	...	...	...	...	...	...
Abergavenny	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Abersychan	...	441	1	...	...	...	...	...	...	...	...	...	...	...
Abertillery	...	51	...	1	...	...	...	...	...	1	...	...	...	...
Bedwas and Machen	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bedwellty	...	110	11	...	5	...	...	...	...	...	...	...	...	...
Blaenavon	...	260	...	...	...	...	...	...	...	...	...	...	...	...
Caerleon	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Chepstow	...	1	1	1	4	...	...	...	...	...	...	1	5	3
Ebbw Vale	...	170	40	...	...	...	...	...	...	2	...	...	...	...
Llanfrechfa Upper	...	2	...	...	2	...	...	...	...	...	...	...	...	...
Llantarnam	...	1	...	...	9	...	...	...	...	...	...	...	...	...
Monmouth	...	...	6	...	4	...	...	...	...	...	...	...	...	...
Mynyddislwyn	...	24	...	...	...	...	...	...	...	...	...	...	...	...
Nantyglo and Blaina	...	82	...	...	...	...	...	...	...	7	...	...	...	...
Panteg	...	21	...	...	...	...	...	...	...	...	...	...	...	...
Pontypool	...	114	...	...	1	...	...	...	...	...	...	...	...	...
Rhymney	...	3	...	...	...	...	...	...	...	...	1	...	...	...
Risca...	...	5	3	...	1	...	...	...	...	...	...	...	...	1
Tredegar	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Usk	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rural—														
Abergavenny	...	1	...	...	6	...	...	...	...	...	...	...	...	...
Chepstow	...	...	...	...	...	...	...	...	...	...	...	3	...	...
Magor	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Monmouth	...	...	1	...	6	...	...	...	...	...	...	...	...	...
Pontypool	...	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Mellons	...	1	2	...	6	...	...	...	...	...	...	...	...	...
Totals	...	1339	65	2	44	...	...	...	...	10	1	4	5	4

See Table later in this Report.

Analysis of the Cases Notified and Deaths from Infectious Diseases according to Age Groups.

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	5	12	17	15	16	99	41	21	19	11	1	...	257	...	2	3	5	1	1	...	...	...	...	1	...	13
Typhus Fever
Erysipelas	...	1	1	4	4	6	6	11	33	6	72
Scarlet Fever	3	9	17	44	57	151	56	13	13	3	2	...	368	...	...	1	...	...	1	...	...	...	...	...	2	...
Tuberculosis	2	2	4	4	4	42	66	73	189	69	46	3	504	...	5	2	4	5	7	13	45	55	72	50	5	269	
Ophthalmia Neonatorum	37	...	...	...	...	...	...	...	...	...	...	...	37	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	...	...	1	...	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	...	...	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	2	4	5	1	3	...	1	...	16	...	...	...	...	...	...	...	1	2	...	...	...	3
Puerperal Fever...	...	...	...	...	...	...	...	1	7	2	...	...	10	...	...	...	...	...	...	...	6	2	...	...	...	8
Puerperal Pyrexia	...	...	...	...	...	...	...	...	10	8	...	...	18	...	...	...	...	...	...	...	...	...	...	...	...	...
Polioencephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	40	32	25	24	18	41	21	17	28	22	26	10	304	105	64	12	18	3	3	6	5	30	47	47	348		
Encephalitis Lethargica	...	...	...	...	...	2	4	4	2	4	5	...	21	...	1	...	...	2	4	2	1	1	2	...	...	13
Small Pox	42	21	40	34	39	313	279	330	326	160	296	20	1900	2	...	...	...	...	...	...	...	1	...	...	...	3
Chicken Pox	55	82	86	164	218	458	126	9	4	...	2	...	1204	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	184	159	193	285	354	1114	602	476	607	290	412	39	4715	113	72	17	28	14	13	21	54	69	106	100	52	659	

With the exception of the Small Pox figures, the above table has been compiled from the returns submitted by the District Medical Officers of Health.

Measles.

The number of deaths from Measles in the year 1927 was 36, compared with 9 for the previous year. The Medical Officer of Health to the Abertillery Urban District Council reports that two localised outbreaks occurred in his area during the year, resulting in 4 deaths, two males and two females.

Scarlet Fever.

353 cases of this disease were notified during the year. This figure is a slight increase upon that of the previous year, which was 335. The number of deaths recorded being 2, a decrease of 1 upon the figure for 1926, and which gives a death-rate of 5·6 per 1,000 cases notified.

The rate for 1926 was 8·9 per 1,000 cases notified. The County death-rate for this disease per 1,000 of the population is ·005, as compared with ·01 for England and Wales.

It is essential that prompt notification of this disease be made by all medical practitioners.

Several of the Local Medical Officers report that the cases of Scarlet Fever were of a mild form.

The general procedure in the districts of the County is that immediately upon receipt of the notification of a case of Scarlet Fever, the house is visited and the person in charge of the patient is instructed as regards isolation and disinfection. Where efficient isolation in the house is found to be impracticable, the patient is removed to an Isolation Hospital.

The " Dick " test does not appear to have been carried out in any of the districts, nor do the recent methods of immunisation seem to be practised.

Diphtheria.

A marked decrease in the number of notifications of Diphtheria is shown for the year 1927, there being 254 cases, as compared with 355 in 1926, and 470 in 1925. It is also a pleasing feature that the number of deaths from this disease is much below those of the previous year, the figures being 13 in 1927, 24 in 1926, and 39 in 1925. The death-rate per 1,000 persons living for 1927 was ·035, for 1926, ·06, and for 1925, ·10.

The Medical Officer of Health to the Risca Urban District Council reports that of the 19 cases notified, in that area, the majority were traced to the presence of a " carrier " amongst the school children.

Supplies of Anti toxin are available for practitioners from the local authorities.

From the reports received, no use has been made of the " Schick " test in any of the districts.

Enteric Fever.

Sixteen cases of Enteric Fever were notified during the year, as compared with 35 for 1926. The number of deaths recorded being 3 in 1927 and 5 in 1926.

In the Nantyglo and Blaina Urban District 7 cases were notified, all of which were removed to the District Isolation Hospital. Of these cases, one proved fatal. Practically all the cases were in the Ffosmaen and Coedcae areas. The local Medical Officer of Health reports that the only possible cause of the Typhoid cases in the Ffosmaen and Coedcae areas is the inadequate water supply. The inhabitants have to resort to streams and wells which are polluted by animals. The tanks are totally inadequate to meet the demand.

The case of Typhoid Fever in the parish of Nash in the Magor Rural District, which proved fatal, was investigated, and it was found that the water supply of the house was a shallow well or pool in the garden. A sample was analysed and reported to be grossly contaminated with animal matter and to be unfit for human consumption.

Diarrhoea and Enteritis

Forty-eight deaths were registered from this disease, in children under two years of age, giving a death-rate of 7.36 per 1,000 births, which, when compared with the rate of 5.94 for the year 1926, is fairly satisfactory. In many of the districts handbills dealing with the method of prevention of Diarrhoea and Enteritis are circulated by the local authorities. Printed instructions to mothers in regard to these diseases are distributed by the County Health Visitors when cases come to their notice.

Cerebro Spinal Fever and Acute Poliomyelitis.

Two cases of Cerebro Spinal Fever and two cases of Acute Poliomyelitis were notified during the year, as compared with one case of Cerebro Spinal Fever and one case of Acute Poliomyelitis for the year 1926. There were, however, no deaths recorded.

Small Pox

The epidemic of Small Pox in Monmouthshire has given rise from about the second week of February, 1927, to December 31st, 1927, to an incidence of 1,900 cases, which co-incides with that officially recorded by the Registrar-General, although we are satisfied that this notification does not embrace the actual number of cases which had occurred during the period under review.

Early in February the attention of the Department was drawn by Dr. J. Lloyd Davies to some curious cases at the Caerleon Training College, and which cases were immediately isolated and kept under supervision. One case was

removed to his home for further supervision, whilst later the second case was definitely diagnosed as Small Pox and removed to the Cefn Isolation Hospital.

From information gleaned from these two cases investigations were immediately conducted in the Abersychan area, and to the astonishment of the Department evidence was forthcoming that Small Pox had been in existence in this area for some considerable time, and they were able to trace very definitely the onset of a case on February 2nd, in a girl of 14 years of age.

Very shortly afterwards other cases were discovered in the Blaenavon, Abertillery, and Abercarn areas, whilst an inmate from Abertillery was also diagnosed as suffering from Small Pox at the Royal Infirmary, Cardiff, on the 19th February.

By March 5th, there had been notified 7 cases at Abercarn, 4 at Abertillery, 105 cases in the Abersychan Urban Area, and at Blaenavon 4 cases.

In September, Small Pox first appeared at Ebbw Vale, and later the incidence increased very rapidly.

During this time there had always been a few cases in Sirhowy, Blackwood, Pengam, and Bedwellty, and in the month of December cases began to increase in the Bedwellty district generally.

Except for occasional cases the agricultural districts were almost free from Small Pox.

When the outbreak commenced, the County Council were in the unfortunate position of having made practically no provision for coping with an epidemic of Small Pox, but we are glad to record that no expense and no action was spared to deal with the situation that had arisen by way of providing adequate and sufficient isolation hospital facilities.

The Beeches Isolation Hospital, Abersychan, was established and equipped with a provision of 54 beds, and while it is built on temporary lines it has a complete and satisfactory efficiency. The beds are provided by way of three huts built to the specification, etc., of Messrs. Humphries, Ltd., Contractors, Knightsbridge, London, a firm on the Admiralty and Government list, who specialize in hospital provision and equipment. The administrative block is provided by the user of a building which was a private house and which is the property of the Abersychan Urban District Council. The whole curtilage is self-contained, walled-off and easily controlled.

The County Council entered into arrangements with the Joint Hospital Committee in the Abergavenny area for the user of the Llanfoist Isolation Hospital and upon which site Messrs. Humphries, Ltd, built for the County Council another hut, the whole site giving a bed accommodation of 41.

Chepstow Joint Isolation Hospital Committee loaned their hospital upon terms, and it gave an accommodation of 26 beds, some of which accommodation was provided by the County Council erecting a Nurses Chalet, thereby releasing the user of a ward for the treatment of Small Pox cases.

Arrangements were also entered into with Bedwellty Urban District Council for the user of their Infectious Diseases Hospital, and as the result of equipment and re-arrangement of facilities by the County Council, an accommodation of 55 beds was provided.

Later in the year the Isolation Hospital at Abertillery was taken over with the cordial approval of the Abertillery Urban Council, and here again with a little re-arrangement and equipment a bed accommodation of 18 was provided.

The above accommodation was supplemented from time to time by the kindness of the Cardiff City Corporation and the Newport Borough Corporation, who came to the aid of the department by placing as many beds as they possibly could for the accommodation of the Small Pox cases from the Administrative County. The accommodation provided by these two authorities varied from time to time according to the need for accommodation.

It is not too much to say that had the County Council not been able to make arrangements with the above authorities for the loan and user of their hospitals, the plight of the County Council would have been rather a sorry one, and the County Council and the people of the Administrative County are greatly indebted to those authorities for the facilities they so readily and handsomely provided.

For the more efficient despatch of cases to the Hospitals the County Council bought an up-to-date motor ambulance, and thus, with the motor ambulance of the Bedwellty area, supplemented by the user of those of the City of Cardiff and the Borough of Newport, the department was able to remove to hospital the cases notified with all reasonable speed. Occasionally lapses occurred, but these lapses were unavoidable and could only be eradicated in an ideal State where the frailties of human nature have no chance of operating.

The notification attack rate per 1,000 of the population was 5.116. The death-rate per 1,000 of the population was .008, and this death-rate is calculated upon the incidence of three officially notified deaths, but we have definite information that there is another death not officially recorded.

The total number of cases removed to Hospital were 1,339, and they were accommodated as follows:—

Cefn (Newport Corporation)	...	...	...	75
Cardiff	...	...	...	61
Llanfoist	...	...	...	313
Bedwellty	...	...	...	406
Chepstow	...	...	...	126
The Beeches, Abersychan	...	...	...	342
Abertillery	...	...	...	15
Rhydney	...	...	...	1

In this connection it should be recorded that when accommodation was most severely taxed, Dr. Redwood, the Medical Officer of the Rhymney Urban District Council, very kindly obliged us with temporary accommodation in the old Hospital at Rhymney.

The number of cases officially notified from the various areas is as follows:

URBAN:—

Abercarn	...	...	67	Abergavenny	...	...	2
Abersychan	...	...	898	Abertillery	...	...	59
Bedwellty	...	...	119	Blaenavon	...	...	297
Caerleon	...	...	2	Ebbw Vale	...	...	173
Llantarnam	...	...	2	Llanfrechfa Upper	...	...	2
Mynyddislwyn	...	...	26	Nantyglo and Blaina	...	...	84
Panteg	...	...	23	Pontypool	...	...	131
Rhymney	...	...	3	Risca	...	...	6
Tredegar	...	...	1				

RURAL:—

Abergavenny	...	...	1	Chepstow	...	...	1
Magor	...	...	2	St. Mellons	...	...	1

During the year under review several reports were provided, and they are appended to this section as follows:—

1. Interim Report upon the incidence of Small Pox, February to July, 1927, being the Vaccinal Condition of the first 1,230 cases, with related data and activities, by Dr. H. M. Ayres, one of the Assistant Medical Officers. (This report is enclosed herewith.)
2. The Vaccinal Condition of the School Children of Monmouthshire, by Dr. Nathan Rocyn Jones, Assistant Medical Officer, September, 1927.
3. The Minutes of Proceedings of the Panel Committee of the Medical Practitioners in Monmouthshire, dated 22nd April, 1927.

At the time of writing, Small Pox is still with us, although it has abated considerably to what it was some months ago, and it is thought unwise to proceed further with any comment upon the epidemic until a later date.

This much can, however, be recorded—that the activities of the department have been rendered more difficult and considerably handicapped by the campaign of the so-called anti-vaccinationists who, when faced with probable fatal results in other illnesses, generally throw over their anti-vaccinationist principles to save their own skins and protect and preserve their lives.

At the time of going to press the Special Report prepared by a Committee appointed by the Minister of Health has been published. The Committee was to inquire and report from time to time:—

(i) On matters relating to the preparation, testing and standardization of vaccine lymph;

(ii) on the practical methods which are available in the light of modern knowledge to diminish or remove any risks which may result from vaccination;

(iii) on the methods of vaccination which are most appropriate to give protection against risk of small pox infection in epidemic and non-epidemic periods;

and to co-ordinate the work of investigation on these questions in this country and abroad, having regard to corresponding work undertaken by international health organizations.

The Committee consisted of eminent doctors and surgeons, with Sir Humphrey Rolleston, Regus Professor of Medicine, at the University of Cambridge, and a former President of the Royal College of Physicians, as Chairman.

Experience has shown, according to the report, that there is a readier acceptance of vaccination and re-vaccination during the time of small pox outbreaks, and that this acceptance, coupled with the vigilance of the sanitary authorities, has repeatedly succeeded in controlling the outbreaks.

Unfortunately, however, there is an increasing tendency by parents to claim exemption for their children and a growing belief that re-vaccination is ordinarily unnecessary.

THE OBJECTORS.

So far as the committee have been able to ascertain, says the report, the objectors to vaccination can be divided into three classes, namely:—

(1) Convinced anti-vaccinators, who systematically claim exemption for their children;

(2) Persons who habitually claim exemption, largely from indifference or in order to avoid possible trouble with a fretsome child; and

(3) A class which has appeared spontaneously during the prevalence of mild small pox and alleges that small pox to-day is accompanied by less discomfort than vaccination.

In the last class, the report adds, there are many who maintain that it is possible to continue at work with little or no discomfort during an attack of mild small pox, whereas abstention from work is commonly necessary after vaccination.

CONCLUSIONS.

“ We are confident,” continues the report, “ that vaccination and re-vaccination systematically and efficiently carried out would eradicate small pox and would render negligible the risk of the disease gaining any footing in the future. We know of no action other than this which would secure for the individual and for society effective protection against small pox.”

“ If an alteration of the Vaccination Acts is decided upon the committee would view with some trepidation any alteration which did not give power to the Minister of Health, or to local sanitary authorities with the Minister's consent, to require vaccination, generally or locally, from time to time should circumstances demand such action.”

NINE RECOMMENDATIONS.

The following recommendations are made:—

- (1) In place of the officially advocated four insertions, trial be made of vaccination and re-vaccination in one insertion, with a minimum of trauma, and that multiple scarification and/or cross-hatching be deprecated.
- (2) Primary vaccination be performed in infancy, between the ages of two and six months, as at present, and that re-vaccination be offered at the time when a child enters school (5 to 7 years) and again on leaving (14 to 16 years).
- (3) Vaccination in multiple insertions be available for such persons as desire to obtain the maximum protection against small pox obtainable at one operation.
- (4) In public vaccination parents be informed that if, in consequence of vaccination, a child required medical attention, it is the duty of the public vaccinator concerned to provide such attention without cost to the parents.
- (5) Instead of the one inspection now required in the case of public vaccination there be two, the first not earlier than the seventh or later than the tenth day, and the second not earlier than the fourteenth or later than the seventeenth day.
- (6) A partial reversion to the principle of stational vaccination be considered.
- (7) The syllabus of instruction in vaccination of medical students be revised in the light of present-day knowledge and of these recommendations.
- (8) Experimental observations be made to ascertain if it is feasible to increase the dilution of vaccine lymph beyond the present degree without impairing its efficacy.

(9) Provision be made for the continuance of experimental investigation with a view to the furtherance of knowledge of vaccinia and of the virus diseases in general, with special reference to the pathogenesis of the nervous complications which occasionally follow those diseases.

Chicken Pox

Owing to the epidemic of Small Pox in the County, Chicken Pox was made notifiable in practically all the Urban and Rural areas. 1,222 cases were notified during the year.

Whooping Cough.

The number of deaths from this disease during the year was 35, and shows an increase upon the figure for 1926, which was 27, in 1925 there were 88 deaths, in 1924, 27 deaths, and 81 deaths in 1923. The disease is not compulsorily notifiable.

Encephalitis Lethargica

Of the 21 cases notified by the District Medical Officers, there were 13 deaths recorded. The figures for the year 1926 were 11 cases notified and 10 deaths. The cases were notified from the following Urban districts:—Abergavenny, 2; Abersychan, 1; Abertillery, 1; Blaenavon, 7; Chepstow, 4; Ebbw Vale, 1; Nantyglo and Blaina, 1; Rhymney, 3; Risca, 1.

Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations, 1919.

348 deaths from Pneumonia occurred during the year 1927, which is unfortunately, an increase of 102 upon the figure for 1926. Although there is a slight improvement in the notifications under these Regulations, the position is still far from satisfactory, consequently the figures available are no indication of the number of persons attacked. In Abertillery, the Medical Officer of Health reports that notice was duly given to all medical practitioners in the area of the duties imposed upon them by these Regulations, and their special attention has again been called to the fact that cases of acute Pneumonia and Influenzal Pneumonia were notifiable diseases.

Influenza.

The number of deaths from influenza in 1927, was 175, as compared with 96 in 1926. The Medical Officers of Health for the Urban Districts of Pontypool, Panteg and Llantarnam report that Influenza became epidemic in the early part of the year, especially among the very young.

With a view to preventing the spread of the disease the infants' department of the Griffithstown School was closed for a time.

In the Magor Rural District the disease was prevalent also during the first quarter of the year.

Erysipelas

The Medical Officers of Health for the Districts have made no comment of importance regarding this disease.

Cancer

It is pleasing to record a decrease in the number of deaths from Cancer the figures being 317 in 1927, as against 325 in 1926. The high death-rate from this cause during recent years is a matter of grave concern to local authorities and the general public. The Ministry of Health issued in 1923, 1924, and 1926 Memoranda for the guidance of local authorities. A further Memorandum was issued in 1927, dealing with certain conditions of this disease.

Ophthalmia Neonatorum.

Thirty-seven cases of this disease were notified under the Public Health (Ophthalmia Neonatorum) Regulations, 1914. The disease is fully commented upon in the County Maternity and Child Welfare report for the year 1927.

Notified	Cases		Vision Un- impaired	Vision Impaired	Total Blindness	Deaths while under treatment from causes other than Ophthalmia Neonatorum
	Treated					
	at Home	in Hospital				
37	29	8	37	...	...	2

Puerperal Fever.

During the year 1927, notifications were received from the District Medical Officers of 10 cases, while in the return of deaths furnished by the Registrar-General the number due to Puerperal Sepsis was 8. In the year 1926, 19 cases were notified, with 7 deaths; in 1925, 22 cases with 8 deaths; in 1924, 15 cases, with 10 deaths; in 1923, 19 cases, with 9 deaths; in 1922, 11 cases, with 14 deaths; in 1921, 17 cases, with 12 deaths; in 1920, 24 cases, with 20 deaths; in 1919, 19 cases, with 11 deaths; in 1918, 6 cases, with 3 deaths; in 1917, 4 cases, with no death; while in 1916, 13 cases were notified, 8 being fatal. The attack rate per 1,000 births in 1927 was 1.5. The attack rate per 1,000 of population equalled .027, and the death-rate per 1,000 of population .02.

Anthrax and Rabies.

No cases of these diseases were notified during the year.

DISINFECTION.

Schools.

The disinfection of schools following outbreaks of infectious disease is carried out by the County Sanitary Inspector, a MacKenzie spray, with a suitable solution of "Kerol" disinfectant being used.

Rooms, etc.

The methods adopted generally in the districts of the County are, by gaseous or liquid disinfectants. Both methods have their distinct advantages, as in instances where it is found to be not advisable to use one of the methods, the other system serves.

Bedding, Clothes, etc.

Very few of the districts in the County have made suitable provision for the disinfection of these articles. For their proper disinfection, a steam disinfecting apparatus is necessary. The articles being usually of such a bulky nature, close contact with the disinfecting agent for a sufficient time is necessary, and this can only be effected by the provision of the necessary facilities. The efficiency of disinfection by properly constructed steam apparatus is very great; if the steam penetrates, sterilisation is absolute; the most resistant spores are certainly destroyed and it has been proved by suitable tests that the steam does penetrate when the apparatus is properly worked.

In most districts disinfectants, both liquid and powder are distributed free of cost to persons responsible for the care of patients suffering from an infectious disease.

TUBERCULOSIS.

During the year, 346 cases of Pulmonary Tuberculosis were notified, and 227 deaths were registered. Of other forms of Tuberculosis, 158 cases were notified and 71 deaths registered.

TUBERCULAR DISEASES.—Notification rate per 1,000 of population:—

Pulmonary Tuberculosis:—

1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
2·45	2·3	2·47	2·26	1·9	1·27	·78	·86	1·05	1·18	·93	·90	1·07	·93

Other forms of Tuberculosis:—

·65	·68	·65	·51	·48	·37	·27	·21	·34	·51	·29	·35	·44	·42
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TUBERCULAR DISEASES.—Death Rate per 1,000 of population:—

Pulmonary Tuberculosis:—

1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
·6	·80	·94	·82	·96	·77	·68	·7	·69	·65	·68	·69	·57	·61

Other forms of Tuberculosis:—

·23	·28	·26	·27	·27	·21	·19	·2	·18	·21	·2	·18	·17	·19
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It will be observed that the Pulmonary notification rate for 1927 is below the rate for the previous year. The Non-Pulmonary rate is also slightly below the rate for 1926, but, unfortunately, the death-rates from both Pulmonary and Non-Pulmonary tuberculosis are above those recorded for the year 1926.

Tuberculosis is a disease which generally extends over a period of years, so that in 1914, and the years immediately following, notifications were received of chronic and long-standing cases as well as the new cases coming to the knowledge of the practitioners of the County. It can now be surmised that the old cases have been detected, and that the great majority of the cases notified in recent years are new cases only.

There was an improvement in the notification of tuberculosis during the year under review, but the notification of the disease is still anything but satisfactory, and much difficulty arises in the compilation of any comparative statistics. Some District Medical Officers of Health do not render their weekly notification forms to the County Office as regularly as they should do.

Summary of notifications by District Medical Officers of Health to the County Medical Officer, under the Public Health (Tuberculosis) Regulations 1912, during the period 2nd January, 1927, to the 31st December, 1927, with the number of Deaths notified by the Registrar General.

Age Periods.	* NEW CASES.					Age Periods.	DEATHS.				
	Pulmonary.		Non-Pulmonary.				Pulmonary.		Non-Pulmonary		
	Males.	Females.	Males.	Females.	Total.		Males.	Females.	Males.	Females.	Total
0	1	...	1	...	2	0	2	...	2	2	6
1	2	4	3	5	14	1	...	1	3	1	5
5	3	5	11	10	29	2	2	1	6	2	11
10	8	17	12	16	53	5	1	3	8	8	20
15	19	28	10	14	71	15	19	32	10	6	67
20	30	36	5	9	80	25	33	60	10	2	105
25	24	48	16	9	97	45	30	16	2	2	50
35	29	29	7	4	69	65	3	...	1	1	5
45	25	6	3	3	37	75	...	...	...	...	...
55	4	4	...	1	9	...	...	...	...	...	...
65 and upwards	3	...	...	...	3	...	...	...	...	...	...
Totals	148	177	68	71	464		90	113	42	24	269

* Including Primary notifications on Form " A " and any other new case coming to the knowledge of the Medical Officer of Health.

No. of Notifications on Form " B " (School Medical Inspectors)				
Age Periods.	Pulmonary.		Non-Pulmonary	
	Males.	Females.	Males.	Females.
Under 5	...	...	...	...
5-10	3	1	6	3
10-15	4	2	4	3
Totals	7	3	10	6

No. of Notifications on Form " C " Admissions to:—							
HOSPITALS				SANATORIA.			
Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary	
Males	Females	Males	Females	Males	Females	Males	Females
112	108	27	23	29	20	9	4

Cases of Tuberculosis notified under the Public Health (Tuberculosis) Regulations, 1912, during the year ended December 31st, 1927
with reports upon Examinations of Sputa, etc., at the
County Laboratory.

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									
Pentwynmawr ...	1	...	...	1	1	...	...	1	2
Cwmcarn ...	1	1	...	...	1	...	..	1	2
Abergavenny									
Abergavenny ...	7	3	...	4	1	...	...	1	8
Abersychan									
Abersychan ...	4	1	2	1	3	...	...	3	7
Pantygasseg ...	1	1	...	...	...	...	...	...	1
Pontypool ...	...	...	...	...	2	...	...	2	2
Pontnewynydd ...	3	2	1	...	2	...	...	2	5
Cwmffrwdroer ...	1	...	..	1	..	...	...	...	1
Varteg ...	1	...	...	1	1	..	1	...	2
Penygarn ...	2	1	...	1	...	...	...	...	2
Garndiffaith ...	3	3	...	...	1	...	...	1	4
Talywain ...	1	1	...	...	1	..	...	1	2
Wainfelin ...	...	...	...	...	1	...	...	1	1
Abertillery									
Llanhilleth ...	14	4	6	4	6	..	1	5	20
Abertillery ...	11	5	2	4	9	...	1	8	20
Six Bells ...	2	2	...	...	2	...	2	...	4
Aberbeeg ...	7	2	2	3	3	...	...	3	10
Crumlin ...	1	1	...	...	...	...	...	...	1
Cwmtillery ...	1	1	..	...	...	...	...	...	1
Blaina ...	1	...	..	1	...	...	...	...	1
Bedwas & Machen									
Trethomas ...	8	3	2	3	3	...	...	3	11
Bedwas ...	4	3	1	...	1	...	...	1	5
Machen ...	2	1	...	1	2	...	...	2	4
Maesycwmmmer ...	1	...	..	1	2	...	...	2	3
Bedwellty									
Argoed ...	3	1	..	2	2	...	1	1	5
Blackwood ...	7	4	2	1	2	...	...	2	9
Aberbargoed ...	4	2	1	1	1	...	...	1	5
Cefn Forest ...	5	2	1	2	...	...	...	...	5
Phillipstown ...	2	1	1	...	2	...	...	2	4
Fleur-de-lis ...	4	2	1	1	1	...	1	...	5
Pengam ...	3	1	1	1	...	...	...	...	3
Maesycwmmmer ...	...	...	..	...	1	...	...	1	1
Cwmsyflog ...	3	1	2	...	...	...	...	...	3
Markham Village ...	2	1	...	1	1	...	...	1	3
New Tredegar ...	4	2	1	1	1	...	...	1	5

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.		
Blaenavon									
Blaenavon	6	2	2	2	3	...	...	3	9
Caerleon.									
Caerleon	1	...	...	1	...	...	...	...	1
Chepstow									
Chepstow	4	1	...	3	2	...	1	1	6
Ebbw Vale									
Cwm	12	4	5	3	2	...	1	1	14
Ebbw Vale	26	8	9	9	11	...	1	10	37
Beaufort	2	...	...	2	3	...	...	3	5
Waunllwyd	3	2	1	...	3	...	...	3	6
Llanfrechfa Upper.									
Pontnewydd	1	1	...	...	2	...	1	1	3
Upper Cwmbran	2	1	1	...	1	...	...	1	3
Llantarnam.									
Cwmbran	4	1	1	2	3	...	...	3	7
Pontnewydd	1	...	...	1	...	...	...	...	1
Monmouth									
Monmouth ... ..	...	...	...	...	1	...	...	1	1
Mynyddislwyn.									
Ynysddu	3	2	...	1	1	...	...	1	4
Oakdale	7	4	2	1	1	...	1	...	8
Pontllanfraith ... ..	...	...	...	...	2	...	...	2	2
Fleur-de-lis	1	...	...	1	...	...	...	...	1
Cwmfelinfach	2	2	...	...	2	...	...	2	4
Gellygroes	1	1	...	...	...	...	...	...	1
Nantyglo & Blaina									
Nantyglo	8	1	4	3	2	...	1	1	10
Blaina	12	...	4	8	9	...	2	7	21
Panteg.									
New Inn	1	...	...	1	...	...	...	...	1
Panteg	3	1	...	2	...	...	...	...	3
Griffithstown	5	3	2	...	2	...	...	2	7
Sebastopol	3	2	...	1	...	...	...	...	3
Pontypool									
Pontypool	10	3	3	4	6	...	1	5	16
Rhymney									
Abertysswg	3	1	1	1	5	...	...	5	8
Rhymney	6	3	1	2	...	...	...	...	6
Risca									
Risca	4	2	1	1	2	...	...	2	6
Crosskeys	9	3	4	2	3	...	...	3	12
Pontymister	3	1	1	1	1	...	...	1	4
Wattsville	1	...	1	...	...	...	...	...	1

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.			
Tredegar.										
Tredegar	33	16	12	5	22	...	3	19	55	
Dukestown	1	...	1	...	...	...	...	...	1
Tavarnaubach	1	...	...	1	...	...	...	...	1
Scwrfa	1	...	1	...	...	...	...	...	1
Sirhowy	7	2	3	2	...	...	...	...	7
Trevil	1	...	...	1	...	...	...	...	1
Usk.										
Usk ... ..	...	...	...	...	1	...	1	...	1
RURAL.										
Abergavenny										
Cwmyoy	1	...	...	1	...	...	...	...	1
Llanwenarth Ultra	1	...	...	1	...	...	...	...	1
Grosmont	2	...	...	2	...	...	...	...	2
Llanover	1	...	...	1	...	...	...	...	1
Abergavenny ... ..	...	...	...	...	1	...	...	1	1
Llanwenarth Citra	1	...	...	1	...	...	...	...	1
Llanvair	1	...	1	...	...	...	...	...	1
Llanvetherine ... ..	...	...	...	...	1	...	...	1	1
Chepstow										
Chepstow	1	...	...	1	...	...	...	...	1
Caldicot	3	...	1	2	2	...	...	2	3
Shirenewton	1	...	...	1	...	...	...	...	1
Sudbrook	1	1	...	...	...	...	...	...	1
Portskewett	1	...	...	1	...	...	...	...	1
Magor.										
Magor	5	...	...	5	2	...	...	2	7
Monmouth										
The Hendre	2	...	...	2	...	...	...	...	2
Llangoven	1	...	...	1	...	...	...	...	1
Pontypool.										
Nantyderry	1	...	...	1	1	...	...	1	2
Llantrissent ... ..	...	...	...	...	1	...	...	1	1
Gwehelog	1	...	...	1	...	...	...	...	1
St. Mellons.										
Rogerstone	7	2	3	2	4	...	...	4	11
Rumney	2	...	...	2	...	...	...	...	2
Coedkernew	1	...	...	1	...	...	...	...	1
Henllys	1	1	...	...	...	...	...	...	1
St. Mellons	2	1	...	1	2	...	...	2	4
Malpas	2	1	...	1	...	...	...	...	2
Rhiwderin	1	1	...	...	...	...	...	...	1
Ty-to-maen	1	...	...	1	...	...	...	...	1
Cardiff Road, Newport	3	2	...	1	1	...	...	1	4
Totals	346	128	91	127	158	...	20	138	504	

The reports of the Tuberculosis Physicians of the Welsh National Memorial Association for the year ended March 31st, 1928, are as follows:—

West Monmouthshire Area. (Dr. J. L. Thomas)

TIME TABLE.

Abertillery	...	83 Queen Street	...	Every Wednesday at 11 a.m.
Blaina	...	Council Buildings	...	1st and 3rd Wednesdays at 11 a.m.
Ebbw Vale	...	Central Surgery	...	Every Tuesday at 11 a.m.
Newbridge	...	30 Alexandra Place	...	Every Friday at 10.30 a.m.
New Tredegar	...	Workmen's Hall	...	1st and 3rd Mondays at 11 a.m.
Pengam	...	Post Office	...	Every Monday at 10.30 a.m.
Rhymney	...	Central Surgery	...	2nd Monday at 12.30 p.m.
Risca	...	Public Hall	...	2nd and 4th Fridays at 10 a.m.
Trethomas	...	Dr. Barnard's Surgery	...	4th Monday at 12.30 p.m.
Tredegar	...	Central Surgery	...	Every Thursday at 12 noon.

Return Showing the Work of the Area During the Year 1927.

Diagnosis	Pulmonary				Non-Pulmonary				Totals				
	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	57	71	7	9	20	20	22	20	77	91	29	29	
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	38	38	65	45	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	145	136	194	143	
B. Contacts examined during the year:—													
(a) Definitely tuberculous	4	11	4	4	1	2	1	1	5	13	5	5	
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	1	5	9	13	
(c) Non-tuberculous	—	—	—	—	—	—	—	—	3	15	14	13	

- (1) Number of Consultations with Medical Practitioners:—
- (a) At homes of applicants 222
- (b) Otherwise 1243
- (2) Number of other visits by Tuberculosis Officer to homes ... 220
- (3) Number of:—
- (a) Specimens of sputum, etc., examined 663
- (b) X-ray examinations made in connection with Dispensary work 65
- (4). Number of attendances at the Dispensaries and Visiting Stations ... 5715

Children Referred by School Medical Officers for Examination.

	No. under observation pending diagnosis on 1st day of year.	No. of children referred for examination during the year.	Total.	No. found to be suffering from Tuberculosis.		No. with no evidence of active Tuberculosis.	No. still under observation pending diagnosis last day of year.
				Pul.	Other than Pul.		
Boys ...	15	71	86	4	—	58	24
Girls ...	9	35	44	1	3	25	15
Total ...	24	106	130	5	3	83	39

STATISTICS.—During the last year there has been again a very considerable diminution in the number of new cases examined—1,059 as compared with 1,248 in the previous year, but the percentage of definite cases of tuberculosis has not varied to a great degree—22·5 instead of 23·6. The total of attendances at the various Visiting Stations also displays a marked reduction—5,715 as compared with 7,116.

If this diminution could be depended upon to continue through the years it would be hailed with great satisfaction, but at present it will be safer to look upon it as a passing phase in the aetiology of the disease and to hope for the best.

On the other hand, there has been a considerable increase in the number of cases seen by us in the home of the patient—222 instead of 126—and as these patients are usually too ill to attend at our Visiting Stations one cannot look upon such an increase with satisfaction. But such visits provide a better opportunity of inculcating the dangers and the means of preventing infection of other members of the household. Of course, the manner of living and the surroundings are learned more surely than from any report however efficiently rendered.

DIAGNOSIS, PROGNOSIS, AND TREATMENT.—The very close liaison between the School Medical Officers and ourselves makes it now almost impossible for a child of school age to escape diagnosis and treatment of tuberculosis, but the periods of adolescence and young manhood and womanhood are still the dangerous ones and still provide the unwelcome surprises, the prevention of which

is the task of the family medical attendant and the tuberculosis officer. Time and again in taking a history one hears the words anaemia and gastritis—not to mention influenza and neurasthenia—which have been used to slur over early manifestations of tuberculosis.

Prognosis in pulmonary tuberculosis has often been difficult to decide upon because power of resistance to disease and the personal factor were not easy of estimation, and the treatment at Cefn Mably Hospital has frequently provided welcome surprises.

PENSION CASES.—In the passage of years most of the cases of pulmonary tuberculosis have ended in death, and there only remains a balance of chronic mixed infections—syphilis, bronchiectasis, and fibrosis following gun-shot wounds combining with tuberculosis to lengthen the pensionable period. To these may be added joint and bone lesions, which do not make for convalescence from various reasons. But they cannot earn a livelihood.

SOCIOLOGY.—Many of the districts in the West Monmouthshire Area have suffered severely and for a lengthened period from trade depression, but so far there has not been definite evidence that want of nourishment has been productive of an increased incidence of tuberculosis. Indeed, one has been surprised by the maintenance of bodily weight and resistance to disease in children living in homes where the pinch of poverty must have been felt. But one cannot help thinking that the mothers' resistance to tuberculosis has broken down under the strain.

CARE WORK.—The After-care Committees, which were appointed four years ago, have not yet commenced to function on account of want of the necessary funds, but we have had the services of the District Nurses and the County Health Visitors, whom we have supplied with the names and addresses of patients requiring attention. The Orthopaedic Nurses from Glan Ely Hospital have regularly looked after their particular cases, who also have the advantage of attendance at Dr. Brownlee's monthly clinic as required.

PERSONNEL.—Dr Frank Wells has been my willing helper in the work of the area, and the duties of Tuberculosis Sister have, as heretofore, been efficiently carried out by Miss Elizabeth Williams. As required, we have had the services of the County Health Visitors at our Visiting Stations, which have been supplied with all the necessaries and appliances requisitioned.

ACKNOWLEDGMENTS.—As in all the years, we have worked in close touch with the County Health Authority, Local Medical Officers of Health, and all the General Practitioners in the area. This hearty collaboration is very cheering in a task which presents so many difficulties and sources of discouragement.

East Monmouthshire Area. (Dr. A. Carveth Johnson.)

TIME TABLE.

Pontypool	...	...	Park Buildings	...	Tuesdays 10.30 a.m. and 2 p.m. Thursdays 10.30 a.m.
Abergavenny	...	...	Y.M.C.A. Buildings	...	2nd and 4th Thursdays in the month, 2.30 p.m.
Chepstow	...	...	Tycastroggy, Moor Street	...	Fridays 2.30 p.m.
Monmouth	...	...	St. John's Parish Room	...	1st and 3rd Friday in the month at 12 noon
Newport	...	...	4 Palmyra Place	...	Saturdays 10 a.m.

Return Showing the Work of the Area During the Year 1927.

Diagnosis	Pulmonary				Non-Pulmonary				Totals			
	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	106	99	16	4	22	21	31	33	128	120	47	37
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	3	3	7	3
(c) Non-tuberculous	—	—	—	—	—	—	—	—	164	201	220	205
B. Contacts examined during the year:—												
(a) Definitely tuberculous	4	7	9	6	1	—	—	3	5	7	9	9
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	3	2	2	2
(c) Non-tuberculous	—	—	—	—	—	—	—	—	50	84	78	104

(1) Number of Consultations with Medical Practitioners:—

(a) At homes of applicants	...	...	...	...	492
(b) Otherwise	...	...	...	...	1768

(2) Number of other visits by Tuberculosis Officer to homes ... 121

(3) Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ... 1054

(4) Number of:—

(a) Specimens of sputum, etc., examined ... 400

(b) X-ray examinations made in connection with Dispensary work 69

(5) Number of attendances at the Dispensaries and Visiting Stations ... 3580

Children Referred by School Medical Officers for Examination.

	No. under observation pending diagnosis on 1st day of year.	No. of children referred for examination during the year.	Total	No. found to be suffering from Tuberculosis.		No. with no evidence of active Tuberculosis.	No. still under observation pending diagnosis last day of year.
				Pul.	Other than Pul.		
Boys ...	2	98	100	5	10	82	3
Girls ...	—	49	49	—	6	41	2
Total ...	2	147	149	5	16	123	5

The chief point of interest is that fewer new persons were examined during 1927 than in 1926. This falling off has been almost entirely in the Monmouthshire part of the area and chiefly at the Pontypool Visiting Station.

The number of attendances has also fallen off considerably. This is partly accounted for by the Ministry of Health instructing that insured persons should be referred as far as possible to their own doctors, and should not make a habit of regular attendance at the Tuberculosis Institute or Visiting Station. Then there has also been an extraordinary falling off in attendances at Pontypool, which will be referred to later.

DEATHS.—In the Monmouthshire part of the area there were 105 deaths, 74 cases having been seen by the Tuberculosis Officer. Of the others, in 18 cases there seem to have been no reason for their not having been referred to the Tuberculosis Officer.

The following table gives the time that elapsed between the first examination of the patient by the Tuberculosis Officer and the time of death:—

Under 3 months	...	...	48
3—6 months	...	...	20
6—12 months	...	...	29
Over 12 months	...	...	71

168

COMMENTS ON DIAGNOSIS.—All possible efforts are made to make an accurate diagnosis. The definite cases, as a rule, are only too easy to diagnose. For the others the test question appears to be, "Is the tubercle bacillus responsible for this patient's ill health?" In the large class of doubtful cases the answer is usually no.

Early cases are seldom referred direct, but they are found in increasing numbers among the "contacts," and I am more than convinced of the importance of this part of the work.

The Von Pirquet tuberculin test is still very largely used for children, and when properly interpreted, is of great assistance, although it now appears to be fashionable among the experts to run it down.

Increasing use has been made of the X-ray plant at Cefn Mably Hospital for out-patients, and several cases have shown X-ray evidence of tubercle where no signs could be found on ordinary examination. At the same time, several unsuspected aneurisms have been revealed.

As to the treatment, comparatively few cases can be sent to sanatorium direct. Most of the medical cases are offered treatment at Cefn Mably and some are later transferred to sanatorium. Some excellent results have been obtained with artificial pneumothorax treatment.

Now the surgical care scheme is in full working order, it is often possible to treat surgical cases at home, and some excellent results have been obtained. In many cases, however, the home conditions are so bad that hospital treatment is essential.

PENSIONERS.—There are now very few pensioners having active treatment but many are still under supervision.

Quite a number have been removed from the register as "cured," but in some cases there is considerable doubt as to the accuracy of the diagnosis. Unfortunately, many of those discharged from the service with acute tuberculosis have died.

GENERAL AND SOCIOLOGICAL.—The decrease in attendance, especially in the Eastern Valley, has been referred to. Now this is the part of the area which has been worst hit by the closing down of collieries, the Blaenavon works, and general lack of employment. It is generally thought that this is precisely the cause of the increased tuberculosis, but from new cases, attendances, notifications, and death returns there appears to be a definite diminution in tuberculosis. Not only this, but the average weights of children attending are up to normal and no actual case of starvation has been reported.

It is evident that so far the people are obtaining an adequate supply of food, although undoubtedly it is of the plainest variety in many cases.

This question of unemployment and possible increase of tuberculosis is being carefully watched. Personally, I think that as tuberculosis is not very common, the sources of infection are limited and the disease is not likely to spread very much.

CARE WORK.—Unfortunately, there is no care committee in the area. The Newport Citizen Guild of Help, which was of great assistance in Newport, has now ceased to exist. A certain amount of good can be done in this direction from the Institute, but there is need of care committees with adequate funds.

PERSONNEL.—The Staff for the area, besides the Tuberculosis Officer, consists of Dr. R. J. Matthews, Assistant Tuberculosis Officer, Sister Davies, who is also the Newport Corporation Health Visitor, and one clerk at the Institute.

The Institute at Newport has recently been painted and decorated. The part for patients is well equipped and convenient. The Office accommodation, which is also used for the West Monmouthshire Area, is now hardly sufficient, and will be quite inadequate in a few year's time owing to the increase in patient's case files, card index files, etc.

Of the Visiting Stations, Pontypool and Chepstow are quite satisfactory. At Abergavenny the Y.M.C.A. rooms are still used and provide plenty of accommodation, although they are not ideal. At Monmouth the Visiting Station is not satisfactory, but so far attempts to obtain the use of the Out-patient Department at the Cottage Hospital have failed.

Close co-operation is maintained with School Medical Departments and Health Departments in Monmouthshire, and thanks are due to the County Medical Officer for his assistance, and to all District Medical Officers and General Practitioners who are giving their support.

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, 1927.

Table I.—DIAGNOSIS.

Table showing the number of Persons Examined for Diagnostic Purposes.

	Under observation pending diagnosis on the 1st of Jan., 1927	Number of new cases, including contacts, examined during the Year ended 31st Dec., 1927,	TOTAL.	Number found to be suffering from Tuberculosis.		Number with no evidence of active Tuberculosis.	Number still under observation pending diagnosis last day of Year ended 31st Dec., 1927.
				Pulmonary.	Other than Pulmonary.		
Boys ...	...	393	481	18	37	340	76
Men ...	88	390	449	104	33	251	39
Girls ...	59	319	390	14	38	257	62
Women ...	71	418	502	130	38	258	45
Total ...	84	1520	1822	266	146	1106	222

Table II.—ELEMENTARY SCHOOL CHILDREN.

Table showing the number of Children attending Public Elementary Schools, who were referred by the School Medical Officers for examination by the Tuberculosis Physicians, with the result of the Examination.

	Number under observation pending diagnosis 1st Jan., 1927	Number of children referred for examination during the Year ended 31st Dec., 1927	TOTAL.	Number found to be suffering from Tuberculosis.		Number with no evidence of active Tuberculosis.	Number still under observation pending diagnosis last day of Year ended 31st Dec., 1927
				Pulmonary.	Other than Pulmonary.		
Boys ...	16	100	116	5	3	83	25
Girls ...	9	51	60	1	4	38	17
TOTAL	25	151	176	6	7	121	42

Table IIa. Analysis of the cases shown above as suffering from Tuberculosis.

	Total Number	Age Groups {	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	Over 13
Pulmonary ...	5 1	Boys Girls	2 ...	... ...	... ...	1 1	... ...	... ...	... ...	2...	......
Non-Pulmonary ...	2 5	Boys Girls	1 ...	... 2	... 1	... ...	... ...	... 1	... ...	1 ...	... 1
TOTAL ...	13		3	2	2	2	1	1	...	3	1

Table III.—SANATORIUM TREATMENT.

Table showing results of Sanatorium Treatment

	Number under Treatment 1st Jan., 1927		Number admitted during the Year ended 31 Dec., 1927		TOTAL.		Number discharged fit for work		Number improved (Not fit for work).
	Pulmonary		Pulmonary		Pulmonary		Pulmonary		
	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	
Boys	9	9	18	9	27	9	1	1	
Men	23	24	47	15	62	10	4	4	
Girls	2	4	6	4	10	5	1	1	
Women	7	19	26	11	37	5	1	1	
Total	41	56	97	39	136	15	6	6	

Table IV.—HOSPITAL TREATMENT.

Table showing results of Hospital Treatment

	Number under Treatment 1st day of Jan., 1927		Number admitted during the Year ended 31 Dec., 1927		TOTAL.		Number discharged fit for work		No. sent to Sanatorium	Number Improved
	Pulmonary		Pulmonary		Pulmonary		Pulmonary			
	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum	Tubercle bacilli absent from sputum	Tubercle bacilli present in sputum		
Boys	5	15	9	19	14	34	4	4	2	4
Men	29	80	100	25	129	45	13	43	11	11
Girls	5	17	16	23	21	40	1	6	8	8
Women	31	7	88	15	119	22	8	35	8	8
Total	70	59	213	82	295	141	26	86	36	36

of Pulmonary Cases.

Number Stationary	Number Worse	Number left off treatment against advice	Number discharged for disobedience	Admitted for observation and discharged as non-tuberculous	Number of Deaths.		Number still under treatment last day of Year ended 31st Dec., 1927.
					Certified as primarily due to tuberculosis	Certified as primarily due to causes other than tuberculosis	
...	1	...	9
...	1	...	12
...	2	...	4
...	3	...	24

of Pulmonary and Non-Pulmonary Cases.

Number Stationary	Number Worse	Number left off treatment against advice	Number discharged for disobedience	Admitted for observation and discharged as non-tuberculous	Number of Deaths				Number still under treatment last day of Year ended 31st Dec., 1927	
					Certified as primarily due to tuberculosis		Certified as primarily due to causes other than tuberculosis		Pulmonary	Non-Pulmonary
...	1	1	...	...	5	19
...	1	2	...	...	27	17
...	1	1	...	...	11	29
...	17	15	...	...	24	5
...	24	4	...	...	67	70

Patients treated (Sanatorium and Hospital) during the year ended 31st December, 1927, at:—

Males. Females. Total.			Males. Females. Total.				
North Wales			North Wales				
Sanatorium ...	5	22	27	Surgical Block	15	7	22
Cefn Mably				Talgarth Sanatorium	66	—	66
Hospital ..	143	152	295	St. Brides			
West Wales				Hospital ...	11	14	25
Sanatorium ...	1	6	7	Mardy Hospital	3	—	3
Glan Ely Hospital	61	40	101	Adelina Patti			
Preston Hall ...	2	—	2	Hospital ...	—	1	1
Penhesgyn							
Sanatorium ...	—	1	1	Totals ...	307	243	550

Places of residence of the above patients.

Males. Females. Total.			Males. Females. Total.				
URBAN.			Rhydney ...	6	6	12	
Abercarn ...	22	13	35	Risca ...	13	15	28
Abergavenny	8	11	19	Tredegar ...	27	16	43
Abersychan	10	4	14	Usk ...	1	3	4
Abertillery	47	23	70				
Bedwas & Machen	4	13	17	Total Urban	285	224	509
Bedwelty ...	48	25	73				
Blaenavon ...	5	3	8	RURAL.			
Caerleon ...	1	1	2	Abergavenny	4	3	7
Chepstow ...	2	4	6	Chepstow ...	2	2	4
Ebbw Vale ...	32	28	60	Magor ...	—	2	2
Llanfrechfa				Monmouth ...	8	3	11
Upper ...	1	2	3	Pontypool ...	1	—	1
Llantarnam	6	7	13	St. Mellons ...	7	9	16
Monmouth ...	2	6	8				
Mynyddislwyn	19	14	33	Total Rural	22	19	41
Nantyglo &							
Blaina ...	15	14	29	Grand Total	307	243	550
Panteg ...	5	4	9				
Pontypool ...	11	12	23				

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.—Tuesdays at 4.30 p.m.
 Wednesdays at 2 p.m.
 Thursdays (old cases only) at 4 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, and 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 every winter 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 average about £150 a year.

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 new cases shows an increase on last year, though the total does not reach that of the year 1925. The increase is practically made up by the cases of syphilis, gonorrhœa showing an increase of only two and non-venereal of one.

For the past four years the numbers of new cases have varied but little, there being only a difference of 32 between the highest figure, 281 in 1925, and the lowest, 251 in 1926. The figures for gonorrhoea are practically stationary—130, 129, and 131 in the last three years.

The totals from year to year appear to be reaching a stationary level, and a review of the figure for the ten years during which the clinic has been in existence shows a rapid rise in numbers to a peak year (1920) when 428 new cases were seen; a fall, considerable in the next year which may have been accentuated by the industrial trouble in the County; followed by a rise, smaller than the fall to figures that have become almost stationary.

The number of patients discharged cured shows little change. Of the 170 who are shown as ceasing to attend before completing treatment it would not be fair to consider these as being in an acutely infectious condition. It must be remembered that a patient who has syphilis must, to pass the tests for cure as laid down by the Ministry of Health, attend for surveillance at intervals of from one to three months for a period of at least two years after he has had the recognised treatment. A recent survey of the case cards shows that many do not keep this up for more than a few months. They would, judging from the results of such tests that have already been done, probably be quite free at the end of the period had they been seen again. In gonorrhoea the tests are such that a long period of surveillance is not necessary and while some of those who cease to attend are probably non-infectious, the probability of their being so is less than in the case of syphilitic patients.

The industrial depression has probably something to do with the fall in attendances, which is shown both in the cases of gonorrhoea and syphilis, but improvements in the results of treatment requiring less attendances per case is also, I think, a factor."

B.—Dr. Mary H. M. Gordon.

"The work of the clinic was conducted on much the same lines as in the previous year.

There is a slight decrease in the total number of persons attending for the first time, due to a falling-off in the number of new cases suffering from Syphilis. Of the new adult cases of Syphilis attending for the first time, the majority showed symptoms compatible with the later stages of the disease—many were the mothers of children sent to the clinic with symptoms of congenital Syphilis. These mothers seemed healthy and presented no apparent signs of the disease, but a blood examination showed that treatment for Syphilis was necessary.

Syphilis, therefore, appears to be on the decline—certainly the number of new infections is decreasing.

Opposed to the decrease in Syphilis cases is a slight increase in the number of new cases of Gonorrhoea attending for the first time. The increase, fortunately, is not as great as in the previous year.

Of the new patients reporting with Gonorrhoea, only 15% were unmarried women.

As in the previous year, many of the cases suspected to be suffering from Gonorrhoea were referred to the clinic from the Maternity and Child Welfare Centres of the County.

Corresponding with the increase last year in the number of new patients suffering from Gonorrhoea, there is a substantial increase this year in the number discharged after having completed their course of treatment. The figure for those discharged after the cure of Syphilis remains much the same.

There is a decrease in the number of persons suffering from Syphilis who ceased to attend without completing treatment. There is, however, an increase in the number of patients with Gonorrhoea, who ceased to attend before being properly cured.

The tests for cure in the latter disease are stringent, and patients often find it irksome to report at intervals when they feel well. That the number of defaulters is not more, is due to the untiring efforts of the Lady Inquiry Officer, who spares no pains to follow up cases and advise them to persevere with treatment.

The number of persons treated with Salvarsan drugs is fewer than last year. The drugs used were much the same as those of the previous year. Salvarsan compounds with Bismuth or Mercury being employed in the treatment of Syphilis."

Comparison with the 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:

	1927	1926
To new cases which came to her knowledge and which had not undergone treatment	388	386

To old cases in which visits to the Treatment Centre had been discontinued before completion of treatment, also to old cases still under treatment	...	1809	1872
To members of Voluntary Agencies, District Nurses, etc.	... ..	293	291
Total	... ..	2490	2549

Since her appointment in July, 1918, Nurse Walters has visited 3,520 new cases.

The medical practitioners of the County approve most cordially the scheme, 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 528 specimens were examined for private practitioners during the year 1927.

Details of the work carried out at the Laboratory and Treatment Centre during the year 1927, are as follows:—

1.—COUNTY LABORATORY, COUNTY HALL.

RETURN OF SPECIMENS EXAMINED.

	1927.								TOTAL.	Previous Year (1926)
	For detection of Spirochaetes.		For detection of Gonococci.		For Wassermann reaction (Syphilis).		Other Examinations.			
	Males	Fe- males	Males	Fe- males	Males	Fe- males	Males	Fe- males		
From County of Monmouth—										
Treatment Centre ...	30	—	505	662	401	335	23	10	1966	2005
Practitioners ...	2	—	99	74	251	98	3	1	528	487
From County Borough of Newport—										
Treatment Centre ...	51	3	395	127	446	164	5	3	1194	1310
Practitioners ...	3	—	134	64	168	96	1	2	468	507
From Other Districts—										
Leicester ...	—	—	—	2	—	1	—	—	3	—
Glamorganshire ...	1	—	4	1	10	2	—	—	18	25
Brecon ...	—	—	1	—	7	—	—	—	8	2
Cardiff ...	1	—	5	—	7	—	—	—	13	4
Hereford ...	—	—	—	—	1	—	—	—	1	—
Totals ...	88	3	1143	930	1291	696	32	16	4199	4340

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

		1927	1926
Novarsenobillon	·6 grm. =	115	243
„	·45 „ =	38	39
„	·3 „ =	13	69
	Totals ...	166	351
Stabilarsen	·6 grm. =	20	...
	·45 „ =	10	...
		30	...

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

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.

	1927.			1926.		
	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 ...	51	41	92	43	56	99
" " soft chancre ...	11	—	11	5	—	5
" " gonorrhœa ...	131	57	188	129	54	183
Not suffering from venereal disease ...	75	88	163	74	83	157
Total ...	268	186	454	251	193	444
2.—Number of persons discharged from the Out-patient Clinic after completion of treatment for:—						
Syphilis ...	12	4	16	11	4	15
Soft chancre ...	3	—	3	3	1	4
Gonorrhœa ...	58	22	80	59	14	73
Not suffering from venereal disease ...	82	86	168	91	94	185
Total ...	155	112	267	164	113	277
3.—Number of persons who ceased to attend the Out-patient Clinic without completing treatment, and who were suffering from:—						
Syphilis ...	49	67	116	63	74	137
Soft chancre ...	4	—	4	—	—	—
Gonorrhœa ...	117	53	170	84	37	121
Not suffering from venereal disease ...	—	—	—	—	—	—
Total ...	170	120	290	147	111	258
4.—Total attendances of all persons at the Out-patient Clinic who were:—						
Suffering from syphilis ...	1613	2030	3643	1735	1826	3561
" " soft chancre ...	36	—	36	33	—	33
" " gonorrhœa ...	1810	893	2073	2183	890	3073
Not suffering from venereal disease ...	257	291	548	232	268	500
Total ...	3716	3214	6930	4183	2984	7167

	1927.			1926.		
	Males.	Females.	Total.	Males.	Females.	Total.
5.—Aggregate number of "In-patient days" of treatment given to persons suffering from:—						
Syphilis	139	28	167	167	26	193
Gonorrhœa	313	389	702	296	409	705
Soft Chancre	14	—	14	6	—	6
Not suffering from Venereal disease	4	—	4	—	—	—
Total	470	417	887	469	435	904
6.—Number of persons treated with Salvarsan substitutes	183	269	452	209	242	451
7.—Number of doses of Salvarsan substitutes given:—						
Name of Drugs—Novarsenobillon						
Silversalvarsan						
Stabilarsan						
Sulfarsenal						
dose .01		—			—	
dose .05		81			61	
dose .1		63			90	
dose .15		84			47	
dose .18		—			4	
dose .2		252			202	
dose .3		279			236	
dose .36		—			16	
dose .4		—			—	
dose .45		554			388	
dose .5		—			—	
dose .6		447			343	
dose .75		—			—	
Name of Drug—Bicreol						
dose .5cc		18			—	
dose 1cc		256			442	
dose 2cc		44			42	
Total		2078			1871	
8.—Examinations of Pathological material:—						
Specimens from persons attending at the Treatment Centre which were sent for examination to an independent Laboratory—						
For detection of spirochaetes	30	—	30	27	2	29
" " gonococci	505	662	1167	516	588	1104
For Wassermann reaction	401	335	736	430	407	837
Others	23	10	33	30	5	35
Total	959	1007	1966	1003	1002	2005

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

Lectures upon the Prevention and Treatment of Venereal Diseases were delivered in various parts of the County during the winter by Dr. W. J. Roche, Newport, to men, and Dr. Laura G. Rees, Newport, to women.

Their reports are as follows:—

A.—Dr. W. J. Roche.

“ I delivered thirteen lectures this year on Venereal Diseases—many more lectures could have been arranged, but it was considered advisable to avoid the districts where the Small Pox epidemic was most prevalent.

The following is a list of the dates and places at which lectures were delivered:—November 30th. at Cwmfelinfach; December 5th, New Tredegar; December 6th, Rhymney; December 14th, Griffithstown; December 15th, Pontnewydd; December 16th, Bedwas; February 6th, Wattsville; February 8th, Risca; February 15th, Aberbargoed; March 1st, Crumlin; March 7th, Newbridge; March 8th, Oakdale; March 14th, Abercarn.

The average attendance at lectures was 150, which was very much higher than in previous years, the largest attendances were at Rhymney and Oakdale.

Each year the attendances at these lectures are larger, and it is pleasing to note that this year about 80% of the audiences were young men, which is vastly different from the first year that I lectured, when 80% of the audiences were middle-aged and old men. I have always appealed to my listeners to stimulate their unmarried friends to attend the next lecture in the district—and the results have been satisfactory.

At every lecture without exception the audience were attentive and interested, and if one can judge by the Chairmen's speeches and those of the people who proposed votes of thanks, these lectures are doing much good, and are undoubtedly, increasing the moral tone of the people.

After each lecture the audience are invited to ask questions, and, judging by the number and type of questions asked, I am convinced that the people know much more about Venereal Diseases than they did five years ago.

The pamphlets on the subject, which are prepared by the Medical Officer of Health, contain a wealth of useful information. A pamphlet is distributed to each person, and I invariably exhort them to give these pamphlets to their friends when they have finished perusing them, as there are some types of men who never attend a lecture of any kind, and these pamphlets are an education in themselves; also they stimulate the readers to attend a lecture on a future occasion.

In several districts I was again asked to convey the appreciation of the audience to Dr. Rocyn Jones and the Health Committee for having instituted these lectures. One Chairman remarked that "prevention was better than cure" and that lecture propaganda was undoubtedly the means of deterring young men from indiscretions."

B.—Dr. Laura G. Rees.

"I beg to submit the following as my report on the lectures delivered in the County, 1927-28, to women, on Venereal Disiases.

Five lectures only were given, viz., at Risca, Caldicot, Ynysddu, Blackwood, and Pontllanfraith. At Risca there was a good attendance—well over 100 present—but the average for the other four lectures was about 40, ranging from 25 to 60.

Many of those attending these lectures had previously attended so that the subject-matter was not as new to all as it was a few years ago—so that one missed the enthusiasm of former years. There was a fair proportion of young people present, and I think some good will result, and the knowledge is more likely to spread than in earlier years when only the more mature attended. Questions were fewer than usual, but there seemed to be general appreciation among those who did attend."

MATERNITY AND CHILD WELFARE.

This work is fully dealt with in the special report published on 9th May, 1928.

BLIND PERSONS ACT, 1920.

The scheme formulated by the County Council for the Welfare of the Blind remains in operation. Under its provisions a grant of £350 per annum is paid to the Newport and Monmouthshire Blind Aid Society towards the cost of maintaining Home Workers and Home Teachers in the County.

A register is kept of the blind persons in the Administrative County, and at the 31st March, 1928, there were 473 blind persons on the register. All of them have been visited by one of the Assistant Medical Officers for the purpose of obtaining a complete record and classification as required by the Ministry of Health,

The return shows that there were 249 males and 224 females who are blind within the meaning of the Act. In age periods they are as follows:--

0—5	5—16	16—21	21—30	30—40	40—50	50—60	60—70	70 & Upwards.
4	23	17	10	22	45	76	128	148

The following table shows the age periods in which blindness commenced:

0-1	1-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	70 & upwards	Unknown
67	13	15	22	23	44	58	78	95	51	7

Of the total of 473, and excluding those 16 years of age and under, 13 persons were employed; 15 trained, but unemployed; 26 under training; 45 had received no training but were trainable; and 357 were unemployable.

Cases of necessity amongst blind persons of the County are considered by the County Committee, and grants were made during the financial year 1927-28 to 163 persons. the total amount of the grant being £2,136 1s. 0d.

PUBLIC HEALTH LABORATORY.

Facilities are offered to all Medical Practitioners in the Administrative County for bacteriological examinations, and the services of the Pathologist and Bacteriologist are available for any other assistance which may be required in the diagnosis of cases of disease. The following table shows the number of specimens examined during the year and also in the previous year. The majority of the sputum tests were conducted for the Welsh National Memorial Association, whilst Venereal Diseases specimens for the most part came through the treatment centre at the Royal Gwent Hospital, Newport.

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

Nature of Specimen.	No. Examined.		No. Positive.		No. Negative.	
	1926	1927	1926	1927	1926	1927
Wasserman Test for Syphilis	2211	1988	914	624	1297	1364
Smears and Urines for Gonococcus	1933	2065	323	339	1610	1726
Serum for Spirochaeta Pallidum	134	91	47	30	87	61
Sputa for Tuberculosis, etc.—						
For Tuberculosis Physicians	1861	1410	339	357	1522	1053
County Cases	426	392	71	58	355	334
Concentration Methods	24	48	—	—	—	—
Mixed Infections	40	15	—	—	—	—
Throat Swabs for Diphtheria	3902	2848	222	160	3680	2688
Widals	118	101	23	13	95	88
Hairs for Ringworm	156	111	98	72	58	39
Blood Films and Counts	117	45	—	—	—	—
Autopsies	2	1	—	—	—	—
Tissues for Section	188	104	—	—	—	—
Urines for Chemical Examination	453	338	—	—	—	—
Pus	101	58	—	—	—	—
Effusions	16	15	—	—	—	—
Vaccines	67	59	—	—	—	—
Waters	33	45	—	—	—	—
Milks	380	437	—	—	—	—
Cerebro-Spinal Fluids	45	44	—	—	—	—
Miscellaneous	364	336	—	—	—	—
Total	12571	10551	—	—	—	—

The County Pathologist reports that:—

“ The total number of specimens examined in the County Laboratory during the year 1927 shows a decrease of 2,020 as compared with the year 1926; this can be attributed to several causes. In the first place it will be noticed that the number of swabs for Diphtheria is 1,054 less, a circumstance due to the diminished incidence of this disease which will be commented upon later. Secondly, owing to the serious outbreak of Small Pox in the County, the County Pathologist and the County Sanitary Inspector, in conjunction with the other Officers of the Department, were fully occupied during the first four months of the year in connection with the diagnosis of cases, the tracing of contacts, the disinfection of schools and many other aspects of the organisation of measures for the controlling of the epidemic, which, in the early stages, was of such a magnitude as almost to seem a hopeless task. That Small Pox should have claimed the attention of the Department to the exclusion of most of its other activities was but natural, and it was necessary to curtail certain routine examinations during that period.

Under the Venereal group the welcome diminution in the number of exudates from sores yielding a positive result for the Spirochaeta Pallidum, which

was commented upon in last year's report continued to manifest itself during the year 1927, the figure being 30, as compared with 47 for 1926 and 75 for 1925. Of these 30 cases, 29 were males, and 1 female. The female case resided in the Borough of Newport. Of the 29 males, 6 belonged to the County, 14 resided in Newport, 8 were sailors, and 1 was a patient coming from Cardiff. The figure 6 for the County of Monmouth is less than half that for last year—a very satisfactory finding.

The figures for Gonorrhoeal specimens are, unfortunately, a little higher than for the year 1926, and no improvement in connection with this disease is at all noticeable.

Pulmonary Tuberculosis would appear to be on the increase if the figures indicate a true state of affairs, seeing that fewer specimens altogether were examined in 1927 than in 1926, but a higher proportion of these yielded a positive result.

The incidence of Diphtheria during 1927 was less than in 1926, and the decline in the annual number of cases since 1924 was maintained, the number of notifications for 1924, 1925, 1926 and 1927 being respectively 514, 470, 355 and 254. This satisfactory state of affairs was general throughout the Country, and while one must look upon it as a matter for congratulation, it is well to bear in mind that Diphtheria is one of the diseases which are liable to explosive outbreaks from time to time.

MILK.—The milk examinations were continued during 1927, the object of the investigation 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 Foods 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 enumeration of the total number of bacteria.
2. The estimation of the B.Coli 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 inoculations for the detection of B. Tuberculosis.

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.

Of the 437 samples of milk examined in the County Laboratory, 223 belong to this research, a smaller number than that of 1926, viz., 277—this being accounted for as already pointed out by the outbreak of Small Pox, and the detailing of the County Sanitary Inspector for work in connection with the latter. From the results obtained, these 223 milks can be classified as follows:—

1. Those which conform to the standard laid down by the Ministry of Health for " Certified Milks "	.. .. .	25
2. Those which conform to the standard laid down for " Grade A " milks	.. .. .	66
3. Those which conform to the standard laid down for " Grade A " milk as regards the total number of bacteria, but contain B.Coli in 1/100cc though not in less	.. .. .	20
(This group would constitute borderline cases).		
4. Those which are unsatisfactory in that they possess a high bacterial content (this in several cases numbering many millions), but are satisfactory in respect of their B.Coli content	.. .. .	35
5. Those which are unsatisfactory because of a high B.Coli content, though not containing more than 200,000 bacteria per cc.	.. .. .	10
6. Those which are unsatisfactory on account of the high bacterial content as well as a high B.Coli. content	.. .. .	67

Therefore, of the 223 samples of mixed milk as retailed to the consumer, 91, or approximately 41% were of a satisfactory standard of bacteriological purity; 112, or approximately 50% were frankly unsatisfactory, while 20, or approximately 9% formed a borderline group.

These figures, compared with those of last year and the year previous, show a decided improvement in the quality of the milk supply, and this is to be attributed in part to the fact that a larger number of vendors than before are going in for the production of " Grade A " and " Grade A " (Tuberculin Tested) Milk, thus setting up a competition which is all for the good of the public, and also to the wise policy which this department has now been following for some years, viz., of having periodical milk samples collected from certain districts in the County.

In no instance were the bacilli of Diphtheria, Typhoid, Paratyphoid, or Dysentery isolated, whilst with respect to the bacillus Tuberculosis, this was

discovered on three occasions by means of the animal inoculation test. The farms implicated were visited by the County Sanitary Inspector, County Veterinary Inspector and officials of the Local Authority, and the animals in each instance identified, removed from the herd, and dealt with satisfactorily. There were, in addition, two positive results amongst milks submitted by Veterinary Surgeons under the Tuberculosis Order, 1925, and from other miscellaneous sources. The same method of procedure was adopted as mentioned above.

Of the 104 tissues for section, 29 are grouped as malignant growths. Six were cancers of the breast, 9 were cancers in other regions of the body such as uterus, ovary, intestine, etc.; 9 were epitheliomata originating in organs such as lips, skin, tongue, etc.; 3 were sarcomata. In this group are also included 1 rodent ulcer and 1 endothelioma.

This class of specimen does not call for any particular comment.

Under the heading of " **Miscellaneous** " are included specimens of:—

Blood-Urea Estimations

Fæces,

Secretions from eye,

Blood Cultures,

Blood for Sugar content,

Vomits and Gastric content

Fluid from Knee.

Cystic and other Fluids, etc.

Diastatic tests.

etc.

This group also includes experiments carried out on animals under 39 and 40 Vic. Cap. 77, Certificates A3 and B1, licence for which has been granted to me by the Home Secretary. The experiments consisted mostly of inoculations for the detection of B. Tuberculosis, and were reported to the Home Office on 31st December, 1927.

APPENDIX 1. (Enclosure)

APPENDIX 2.

MONMOUTHSHIRE COUNTY COUNCIL.

THE VACCINAL CONDITION OF SCHOOL CHILDREN
OF MONMOUTHSHIRE.

1. The object of this investigation was to obtain statistics with regard to the vaccinal condition of the school children of the County, and with these, a comparative estimate was established in two instances of the number of cases of Small Pox among children of approximately the same age.

2. The scope of the investigation is as follows:—

Data have been obtained from all the schools, excepting those of the Abertillery and Ebbw Vale Districts, and the Secondary schools; the former two are autonomous areas and do not fall under the administration of the County Authorities. Information was obtained on the following points from each school:—

- (a) The number of children on the school register.
- (b) „ „ „ „ vaccinated in infancy.
- (c) „ „ „ „ vaccinated during the epidemic for the first time.
- (d) The total number of vaccinated children.
- (e) „ „ „ „ unvaccinated children.
- (f) The number of children vaccinated in infancy and subsequently re-vaccinated.

The cases of Small Pox used for comparison with the vaccinal statistics are those occurring in children from the age of five years up to, but not including, 14 years of age. The vaccination returns include a number of children under 5 years of age and over 14. This is unavoidable. It precludes an absolutely accurate comparison of the Small Pox and vaccination statistics, but does not invalidate any conclusions which have been drawn.

3. The figures obtained have been arranged in several ways so as to bring out different aspects of the problem. For instance:—

- “ A ” This table gives the gross figures and percentages in each of the sections enumerated above, i.e., No. of children vaccinated in infancy, etc.
- “ B ” This is a summary of the returns from which “ A ” has been obtained. It compares the figures of the different groups of schools into which the County is divided for administrative purposes.
- “ C ” 1 & “ C ” 2. These are simplified forms of the report “ B ” together with the number of cases of Small Pox among school children.
- “ D ” This is a comparison of the vaccinal conditions in the Rural and agricultural areas.

TABLE “A ”

This section gives the gross figures for the County. They are as follows:—

(a)	Number of children on school registers	...	53,381
(b)	“ “ “ vaccinated in infancy	...	19,187 or 35·75%
(c)	“ “ “ “ during the epidemic		
		for first time	11,222 or 21·2 %
(d)	Total number of children vaccinated	...	30,409 or 56·95%
(e)	“ “ “ “ unvaccinated	...	22,972 or 43·05%
(f)	Number of children vaccinated in infancy and sub-		
		sequently re-vaccinated	4,552

It will be noticed that a large majority of these children were unvaccinated before the epidemic began, and it shows how inevitable was the subsequent spread of Small Pox. A large number of children have since been vaccinated for the first time, i.e., 11,222, but even this brings the total of vaccinated children up to only 30,409, or 56·95%, out of 53,381 children.

Another interesting fact is that 4,552 children have been re-vaccinated after having been done in infancy. Many, if not most, of these have probably been re-vaccinated during the epidemic, so that the number of vaccinations performed during the epidemic was probably between 14,000 and 15,000.

“ B ”

This is a full summary of the returns submitted by the various schools. The different groups represent certain well defined areas of the County, and correspond very closely with those co-ordinated by the Education Department for administration purposes. The following are the differences: The schools of Goytre, Mamhilad, Glascoed, Usk Council and Llanhennock, have been transferred from the Eastern Valley group to the Usk group, to which they belong geographically.

SUMMARY

GROUP.	Number on Register.			Vaccinated in Infancy.			Vaccinated during Epidemic for the first time.			Total number vaccinated.			Total number not vaccinated.			Vaccinated in infancy and subsequently re-vaccinated.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Rhymney Valley ...	3718	3663	7381	1813	1764	3577	529	574	1103	2342	2338	4680	1376	1325	2701	145	172	317
Bedwas ...	1424	1467	2891	606	589	1195	239	264	503	845	853	1698	579	614	1193	195	177	372
Tredegar ...	5177	4993	10170	2092	1989	4081	675	763	1438	2767	2752	5519	2410	2241	4651	248	277	525
Nantyglo and Blaina ...	1718	1577	3295	607	444	1051	174	300	474	781	744	1525	937	833	1770	45	88	133
Abercarn, Risca and Rogerstone ...	3985	3826	7811	1333	1285	2618	968	1000	1968	2301	2285	4586	1684	1541	3225	370	457	827
Eastern Valleys ...	7093	6991	14084	1631	1571	3202	1850	1965	3815	3841	3536	7017	3612	3455	7067	549	557	1106
Abergavenny ...	1229	1186	2415	438	430	868	392	370	762	830	800	1630	399	386	785	158	142	300
Monmouth ...	831	787	1618	422	411	833	168	139	307	590	550	1140	241	237	478	109	137	246
Chepstow ...	1327	1312	2639	669	604	1273	286	307	593	955	911	1866	372	401	773	236	262	498
Usk ...	560	517	1077	262	227	489	121	138	259	383	365	748	177	152	329	129	99	228
Totals ...	27062	26319	53381	9873	9314	19187	5402	5820	11222	15275	15134	30409	11787	11185	22972	2184	2368	4552

TA

This is a similar report to

		Number of vaccinated and unvaccinated attending the schools.						
GROUP.	Vaccinated in Infancy.			Vaccinated during Epidemic for first time.			No. Vaccinated	
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
Rhymney Valley ...	1813	1764	3577	529	574	1103	2342	2342
Bedwas ...	606	589	1195	239	264	503	845	845
Tredegar ...	2092	1989	4081	675	763	1438	2767	2767
Nantyglo and Blaina ...	607	444	1051	174	300	474	781	781
Abercarn, Risca and Rogerstone ...	1333	1285	2618	968	1000	1968	2301	2301
Eastern Valleys ...	1631	1571	3202	1850	1965	3815	3481	3556
Abergavenny ...	438	430	868	392	370	762	830	830
Monmouth ...	422	411	833	168	139	307	590	551
Chepstow ...	669	604	1273	286	307	593	955	914
Usk ...	262	227	489	121	138	259	383	365
Totals ...	9873	9314	19187	5402	5820	11222	15275	15133
Percentages ...	36.48	35.38	35.75	19.96	21.70	21.20	56.44	57.00

TABLE "C" 2.

This is a similar report to "C" 1, but somewhat more detailed.

GROUP.	Number of vaccinated and unvaccinated children attending the schools.											*Number of cases of Small-pox.								
	Vaccinated in Infancy.			Vaccinated during Epidemic for first time.			No. Vaccinated.			Number not Vaccinated.			in children vaccinated in Infancy or before incubation period.	in children Vaccinated in incubation period.			in unvaccinated children.			
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Male and Female.	Males.	Females.	Total.	Males.	Females.	Total.	
Rhymney Valley ...	1813	1764	3577	529	574	1103	2342	2338	4680	1376	1325	2701	—	—	—	—	2	2	4	
Bedwas ...	606	589	1195	239	264	503	845	853	1698	579	614	1193	—	—	—	—	—	—	—	
Tredegar ...	2092	1989	4081	675	763	1438	2767	2752	5519	2410	2241	4651	—	—	2	2	2	1	3	
Nantyglo and Blaina ...	607	444	1051	174	300	474	781	744	1525	937	833	1770	—	—	—	—	—	1	1	
Abercarn, Risca and Rogerstone ...	1333	1285	2618	968	1000	1968	2301	2285	4586	1684	1541	3225	—	1	3	4	3	7	10	
Eastern Valleys ...	1631	1571	3202	1850	1965	3815	3481	3536	7017	3612	3455	7067	—	4	7	11	129	128	257	
Abergavenny ...	438	430	868	392	370	762	830	800	1630	399	386	785	—	—	—	—	—	—	—	
Monmouth ...	422	411	833	168	139	307	590	550	1140	241	237	478	—	—	—	—	—	—	—	
Chepstow ...	669	604	1273	286	307	593	955	911	1866	372	401	773	—	—	—	—	—	—	—	
Usk ...	262	227	489	121	138	259	383	365	748	177	152	329	—	—	—	—	—	—	—	
Totals ...	9873	9314	19187	5402	5820	11222	15275	15134	30409	11787	11185	22972	—	5	12	17	136	139	275	
Percentages ...	36.48	35.38	35.75	19.96	21.70	21.20	56.44	57.08	56.95	43.56	42.92	43.05	*Among children of school age from 5 years up to 14 years, but not including those actually 14 years of age.							

“ C ” 1 and “ C ” 2.

This section contains in simplified form the facts already presented in “ B ” together with a list of cases of Small Pox. Thus:—

“ C ” 1. (a) As regards children vaccinated in infancy.

It will be seen that the group with the lowest percentage of vaccinated children is the “ Eastern Valleys ” group, 3,202 children vaccinated out of 14,084, or 22·74%. The highest figures are those of the “ Monmouth ” group, 833 children vaccinated out of 1618, or 51·48% and the “ Rhymney Valley ” group, 3,577 children vaccinated out of 7,381, or 48·46%.

(b) As regards children vaccinated during epidemic for the first time.

The lowest percentages of vaccinations under this heading are in the “ Tredegar ” group, 1,438 children, or 14·14% being vaccinated, and the “ Blaina ” group, 474 children, or 14·41% being vaccinated.

The best figures are those of the “ Abergavenny ” group, 762 children, or 31·56% being vaccinated. The other groups vary between 17% and 27%.

(c) Total number of vaccinated children.

The worst areas under this heading are the “ Nantyglo and Blaina ” group, 1,525 children vaccinated out of 3,295, or 46·28%, and the “ Eastern Valleys ” group, 7,017 children vaccinated out of 14,084, or 49·82%.

The best areas are the “ Chepstow ” group, 1,866 children vaccinated out of 2,639, or 70·71%, and the “ Monmouth ” group, 1,140 children vaccinated out of 1,618, or 70·46%.

The other groups have between 54% and 68% of vaccinated children.

(d) Cases of Small Pox.

The “ Eastern Valley ” group was badly protected against Small Pox before the epidemic, and it is there that an overwhelming proportion of the cases of Small Pox have occurred. Even now only half of the children are vaccinated, after eight months of the epidemic.

In the Bedwas, Abergavenny, Monmouth, Chepstow, and Usk Districts there have been no cases of Small Pox.

In the “ Nantyglo and Blaina ” group, with the lowest percentage of vaccinated children, Small Pox has gained a foothold, and it will be interesting to watch developments in that area.

“ D ”

This section contains a comparison of the vaccinal condition of school children in the Rural and Industrial areas.

First of all the following points should be noticed:—

- (a) The schools at Henllys have been transferred from the “ Abercarn ” group.
- (b) Llanfrechfa, Caerleon, and Malpas have been transferred from the “ Eastern Valleys ” group.
- (c) Rhiwderin, Rumney, Marshfield, Peterstone, St. Brides, Bassaleg, Michaelstone-y-vedw, and St. Mellons have been transferred from the “ Bedwas ” group.

In each case the district thus transferred so as to be included in the Rural area, is a Rural one, but its schools are normally grouped with an Industrial area for administrative purposes. The figures for these areas have, therefore, been deducted from the total for Industrial areas and added to that for the purely Rural areas, i.e., to Monmouth, Abergavenny, Usk, and Chepstow.

The figures given below need no explanation beyond this. Before the epidemic, 46·20% of school children in the Rural areas were vaccinated, and 33·71% of those in the Industrial areas.

By the end of September 70·1% of the school children in the Rural area were vaccinated, and only 54·09% in the industrial area.

There have been 37·31% re-vaccinations, i.e., of children vaccinated in infancy, in the Rural area, and 19·66% in the Industrial area.

The following comparisons are based on report “ C”, and not “ D.”

Before the epidemic there was a larger percentage of vaccinated children in three of the Rural groups, Chepstow, Monmouth and Usk, than in any of the Industrial groups.

The “ Abergavenny ” group had only 35·93% of vaccinated school children, less than the “ Rhymney Valley, Bedwas, and Tredegar ” groups, the latter being in the Industrial area. In fact the “ Rhymney Valley ” group was second only to the “ Monmouth ” group, 48·46% and 51·48% respectively.

At the end of September, seven months later, each of the four Rural groups. “ Abergavenny, Chepstow, Monmouth and Usk,” had a higher percentage of vaccinated children than any of the Industrial groups.

TABLE "D"

Comparison of Rural and Industrial Areas.

GROUP.	Number of children on Register.	Number Vaccinated in Infancy.		Number Vaccinated during Epidemic for first time.		Total number vaccinated.		Total number Unvaccinated.		Number vaccinated in Infancy and subsequently revaccinated.
		No.	%	No.	%	No.	%	No.	%	
RURAL AREA	9553	4414	46.20	2287	23.95	6701	70.15	2852	29.85	1647
INDUSTRIAL AREA	43828	14773	33.71	8935	20.38	23708	54.09	20120	45.91	2905
TOTALS	53381	19187	35.75	11222	21.20	30409	56.95	22972	43.05	4552

CONCLUSIONS.

1. Everything in this report emphasises the orthodox opinion that vaccination does protect against Small Pox. Briefly:—Among 30,409 vaccinated children there has not been a single case of Small Pox. Among 22,972 unvaccinated school children, (and some vaccinated in the incubation period) there have been 294 cases of Small Pox.
2. The protection against Small Pox at the beginning of the epidemic was quite inadequate, since only 35.75% of the children were vaccinated. In view of this, the epidemic, once started, was bound to spread.
3. During the epidemic only 11,222 unvaccinated children were vaccinated out of a total of 34,194 unvaccinated (up to 30th September, 1927). This again helps to explain the difficulty in controlling the spread of the epidemic.
4. Vaccination seems to provide a longer period of immunity to Small Pox, or, at any rate, to the type prevalent in Monmouthshire, than is usually taught. There has not been a case recorded of Small Pox in a child under the age of 14, who was vaccinated in infancy; and out of the 19,187 children vaccinated in infancy, only 4,552 were re-vaccinated. This leaves a total of 14,635 children vaccinated in infancy only among whom no case of Small Pox occurred.
5. The greatest number of cases of Small Pox have occurred in a district in which the percentage of vaccinated children was almost the lowest. However, the comparatively low percentage of vaccinated children in most groups makes it impossible to compare the relation of the percentage of vaccinated children to the Small Pox incidence in one group with that of any other group of schools.
6. The Rural areas are better protected against Small Pox by vaccination than are the Industrial areas, but perhaps not sufficiently so to explain their absolute immunity from infection. Other factors, such as lack of inter-communication between Rural and Industrial areas owing to geographical situation must also be considered.
7. Vaccination during the incubation period of Small Pox cannot be guaranteed absolutely to prevent an attack of Small Pox, as there have been 17 cases of the disease amongst children vaccinated during the incubation period.

(Signed) D. N. ROCYN JONES,

Assistant Medical Officer.

September 30th, 1927.

APPENDIX 3.

MINUTES OF PROCEEDINGS of the Panel Committee of the Medical Practitioners in the Administrative County of Monmouth, held at the County Hall, Newport, on Friday Afternoon, the 22nd day of April, 1927.

PRESENT.—Colonel W. D. Steel, Abergavenny (in the Chair), Drs. R. J. S. Verity, J. McCaig, J. O'Sullivan, A. W. Hayles, R. T. J. Burns, T. J. Frost, F. Carlton Jones, G. W. Armstrong, R. E. Roberts, and John Griffiths, with Dr. D. Rocyn Jones, Dr. H. W. Catto, and Mr. D. J. Treasure, Solicitor, Pengam (Assistant Secretary).

The Chairman explained that the Committee had been called at the request of the County Council to consider the question of the epidemic of Small Pox in Monmouthshire, and to devise some means by which the profession could render the County Medical Officer help in dealing with and surmounting the scourge. He was sure that as far as the medical profession in Monmouthshire were concerned they were at one with him in hoping that the epidemic would soon be over and that Monmouthshire would again have a clean bill of health as far as Small Pox was concerned. As Dr. Hayles, the Chairman of the Monmouthshire Division of the British Medical Association, was also a member of the Public Health Committee of the County Council, and was present when the County Council decided to call in the aid of the profession in Monmouthshire, he would now ask Dr. Hayles to speak.

Dr. A. W. Hayles outlined the discussion that had taken place at the County Council, and stated that the County Council were sincere and anxious in asking for the help of the profession in Monmouthshire to overcome the scourge of Small Pox. A very long debate upon this epidemic had taken place and the County Public Health Committee suggested that the profession might arrange to hold public meetings in the various centres to explain the epidemic of Small Pox as it was now affecting the County, and also explain the need and the value of vaccination as a preventative measure. They felt that if the local medical practitioners took a hand in the matter, the public might realise sooner the seriousness of the position.

Dr. Rocyn Jones, the County Medical Officer, then outlined the position as it affected the County. He stated that the County authorities first had knowledge of this epidemic in the last week of February of this year, although there was evidence to prove that it had prevailed in the Abersychan area since December last. At the moment they had 762 cases discovered, 722 of them being actually

notified officially. There were treated at the Isolation Hospitals 296 cases, of which 130 had been discharged as free of infection, while 166 were now in the Isolation Hospitals receiving treatment. The County Council provided accommodation at the following Hospitals:—

Cardiff Isolation Hospital	...	...	6 beds
Cefn (Newport) do.	...	...	14 beds
Chepstow do.	...	...	24 beds
Bedwellty do.	...	...	54 beds
Llanfoist do.	...	...	41 beds
Beeches (Abersychan) Isolation Hospital	...	...	36 beds

making a total of 175 beds.

Having regard to the incidence and type of the disease, the County Council had now ordered two further hut wards which would give an additional accommodation of 36 to 40 beds, as well as arranging for the provision of one of the rural schools in the County for Isolation Hospital purposes.

The total cost to the County by way of capital and equipment expenditure in respect of the above would amount to something like £10,000, and the isolation of 200 cases at £2 10s. 0d. per case per week for the next six months would mean a maintenance cost to the County Council of £13,000.

On behalf of the County Council he appealed to the profession in Monmouthshire to render the County Medical Staff all the help they possibly could in this matter as indicated by Dr. Hayles.

A brisk discussion ensued, when many questions were asked and answered, and several issues thoroughly ventilated.

It was unanimously resolved that the County Council be recommended:—

- (1) To appoint whole-time medical lecturers to visit the various centres to deliver public lectures explaining the seriousness of the position in respect of the Small Pox scourge and the value of vaccination as a preventative measure; the meetings for holding the lectures to be convened through the local councils and at which the local medical practitioners, with the District Medical Officers of Health, be invited to attend on the platform and to take part in the meetings.
- (2) To impress upon the Ministry of Health and the Boards of Guardians in the County that each panel doctor (subject to his consent) be made an assistant public vaccinator to the district public vaccinator during the period of the epidemic of Small Pox in the County, and to be subject to the same remuneration as that of the district public vaccinator.

- (3) That the medical practitioners in the County be requested to notify as soon as possible to the District Medical Officers of Health all cases of chicken pox or suspicious Small Pox cases coming to their knowledge professionally.
- (4) That the panel practitioners in the Administrative County be requested to render every possible help to the County Medical staff in combating the epidemic of Small Pox now prevailing in the County.
- (5) That a memorandum embodying the views and decision of this meeting be drawn up and circulated as early as possible to every medical practitioner in the County.

(1) That the medical practitioners in the County of ...
be enabled to the fullest extent of their ability to ...
the ...

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