

[Report 1943] / Sanitary Committee [- Medical Officer of Health], Cornwall County Council.

Contributors

Cornwall (England). County Council.

Publication/Creation

1943

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Cornwall County Council



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1943.



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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1912

Printed and Published by the Cornwall County Council

To the Chairman and Members of the Cornwall County Council.

My Lord, Ladies and Gentlemen,

I have the honour to present the Annual Report on the Health of the County of Cornwall during the year 1943.

The health of the County during the year continued to improve in spite of the stresses and strains of war-time conditions. One of the most sensitive indicators of the state of the public health is the Infant Mortality rate, and it will be seen from the body of the Report that this reached a record low level, far below the corresponding figure for the rest of the country. The five-year average of the Maternal Mortality rate also fell to a record low level, and for the first time in the history of the County it is recorded at a rate of less than 3 per thousand births.

The Council has continued to deal vigorously with the problem of providing sufficient maternity accommodation in the County. During 1943 an Annexe to the County Maternity Ward was opened at Trewirgie Corner in conjunction with the Camborne-Redruth Miners' & General Hospital and provided an additional 15 beds for maternity cases. Later in the same year, the Bodmin Maternity Home was taken over by the County Council from the Ministry of Health and added a further 12 beds to the maternity accommodation available for Cornish mothers. Even so, the demand for accommodation in the Council's Maternity Institutions continued to rise, and it was necessary during the year to contemplate the provision of still further accommodation for maternity cases.

One of the greatest problems which affected all the County Council's Medical Institutions was the difficulty of obtaining sufficient nursing and domestic staff. The adoption of the Rushcliffe Committee's recommendations increased the amount of off-duty time for nurses at a time of great shortage of nursing staff, and made the administration of the Hospitals extremely difficult. Nevertheless, every effort has been made to give the nurses the off-duty time which they so richly deserve, and it is only fitting that a tribute should be made to those who willingly sacrificed their off-duty time in moments of emergency and uncomplainingly worked longer hours in order to cope with staffing difficulties.

I repeat my acknowledgment of the help and consideration I have received from the Chairman and members of my Committee, both collectively and individually, and the loyal assistance I have received from my Staff.

I am,

Your obedient Servant,

R. N. CURNOW,

County Medical Officer.

September 1944.

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CORNWALL COUNTY COUNCIL

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1943.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area	864,126 acres.
Population, 1943 (excluding Scilly Isles) ...	327,163 (Registrar General's estimate).
Number of inhabited houses (1931 census) ...	83,544
Rateable Value	£1,586,348
Sum represented by a penny rate ...	£6,293

The chief industries according to the 1931 Census were:—

	Males.	Females.	Total.
Agricultural	22,588	1,204	23,792
Clay, Sand, Gravel, etc. pits ...	3,883	41	3,924
Tin and Copper Mines ...	665	12	677
Other Mines	2,556	18	2,574
Stone Quarries, Mines, etc. ...	2,068	14	2,082
Fishing	2,488	5	2,493

These figures exclude those persons out of employment on Census Day.

Live Births.

	Male.	Female.	Total.
Legitimate	2,378	2,246	4,624
Illegitimate	183	163	346
Total	2,561	2,409	4,970

Birth rate per 1,000 of the population 15.19.

Still Births.

	Male.	Female.	Total.
Legitimate	80	75	155
Illegitimate	5	4	9
Total	85	79	164

Deaths.

	Male.	Female.	Total.
	2,201	2,388	4,589

Death rate per 1,000 of the population, 14.02.

Deaths from Puerperal causes:—

Puerperal Sepsis ...	7	Rate per 1,000 total (live and still) births	1.36
Other Puerperal causes	6	" " "	1.17
Total	13	" " "	2.53

Death rate of infants under 1 year of age:—

All infants per 1,000 live births	35.81
Legitimate infants per 1,000 legitimate live births	35.47
Illegitimate infants per 1,000 illegitimate live births	40.46
Deaths from Cancer (all ages)	656
„ „ Measles (all ages)	4
„ „ Whooping cough (all ages)	4
„ „ Diarrhoea (under 2 years of age) ...	11

Comparative Rates.

	Cornwall.	England & Wales.
Live births, rate per 1,000 civilian population ...	15.19	16.5
Stillbirths, rate per 1,000 civilian population ...	0.50	0.51
Total deaths under 1 year, rate per 1,000 live births	35.81	49.
Diarrhoea, under 2 years, rate per 1,000 live births	2.21	5.3
Deaths from all causes, per 1,000 of the population	14.02	12.1
„ Enteric Fever per 1,000 of the population	0.003	0.00
„ Measles „ „ „	0.012	0.02
„ Scarlet Fever „ „ „	0.006	0.00
„ Whooping Cough „ „ „	0.012	0.03
„ Diphtheria „ „ „	0.036	0.03
„ Influenza „ „ „	0.443	0.37
Maternal Mortality Puerperal sepsis	1.36	0.73
rate per 1,000 Other puerperal causes ...	1.17	1.56
total births. Total	2.53	2.29

Birth Rate.

The birth rate in Cornwall for 1943 was 15.19 as compared with 14.34 for 1942, and 16.5 for England and Wales.

Infant Mortality.

The infant mortality rate was 35.81 per 1,000 live births as compared with 49 for England and Wales. Of the 178 infant deaths, 119 were due to congenital debility, premature birth, malformations, etc.

Death Rate.

The death rate for Cornwall (14.02) is higher than that for England and Wales (12.1).

Chief causes of death at all ages:—

Diseases of Heart and Blood Vessels ...	1,460
Cancer	656
Intracranial Vascular lesions	472
Respiratory disease	367
Tuberculosis	200
Nephritis	165
Suicide and deaths from violence ...	151
Influenza	145
Congenital Debility, premature birth, etc.	119

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Laboratory Facilities.

The Royal Cornwall Infirmary, Truro, Pathological Department, under the charge of Dr. F. D. M. Hocking.

The Redruth Clinical Laboratory under the charge of Dr. C. Rivers.

The Laboratory of the Public Analyst (Dr. H. E. Cox), 11, Billiter Square, London, E.C.3. Specimens of water and food, etc., are sent to this Laboratory by the County Council.

District Councils make their own arrangements with various Laboratories.

Ambulance Facilities.

Motor ambulances are provided and maintained by voluntary organisations, and there is a Joint Committee of representative members of the British Red Cross Society and The Order of St. John, the Cornwall Voluntary Aid Organisation.

The following are the motor ambulances connected with this organisation:—

Station.	Garage.	Officer-in-Charge.
St. Austell	South Street.	Commandant S. Rowley, B.R.C.S., Varenes, Penwithick Rd., Tel. 261.
Bodmin	Ambulance Station. Tel. 198.	Supt. W. W. Hearn, St. J.A.B., 14, Clifden Tce. Tel. 42.
Camborne	College Street.	Supt. J. Jory, S.J.A.B., 6, Mid Centenary Row. Tel. 3215.
Camelford	Ambulance Station. Tel. 53.	Supt. W. R. Treweeks, S.J.A.B., Sunnyside, Tel. 53.
Carnmenellis and Stithians	New Road, Stithians. Tel. 25.	Supt. S. T. Bowden, St. J.A.B., Velandrucia, Stithians. Tel. 23.
Falmouth	Ambulance Hall, Quarry Hill. Tel 83.	Supt. J. Jackman, S.J.A.B., Hazeldene, Albany Road. Tel. 583.
Goldsithney	Fore Street, Goldsithney. Tel. Marazion 162.	Supt. R. C. Edwards, St. J.A.B., Fore St., Tel. 162.
Hayle	Ambulance H.Q. Tel. 3355.	Supt. J. R. Bond, S.J.A.B., 15, Copper Tce.,
Helston	Wendron Street. Tel. 58.	Supt. J. B. Gilbert, S.J.A.B., 11, Meneage St., Tel. 58.
Illogan	Agar Road, Pool. Tel. Redruth 417.	Supt. R. J. Richards, S.J.A.B., 10, Agar Road, Illogan Highway, Redruth. Tel. 417.
St. Ives	Dove Street.	Supt. W. H. Care, S.J.A. Div., Gabriel Street, Tel. 81.

Station	Garage.	Officer-in-Charge.
Launceston	Ambulance Station, Westgate Street. Tel. 32.	Supt. W. G. Mooney, S.J.A.B., St. Mary's, Tavistock Road. Tel. 32 & 83.
Liskeard	Ambulance Station, Fair Park.	Sergt. H. H. Wenmoth, S.J.A.B. Tel. Day 124, Night, 278.
Looe	Mill Pool, West Looe.	Supt. A. J. Pengelly, St. J.A.B., Kilhallon Cottage, East Looe. Tel. 92.
Pendeen	Trewellard, Pendeen.	Amb.Off. D. J. Briggs, S.J.A.B. Tel. St. Just 52.
Penryn	Ambulance Station. Tel. 2145.	Supt. J. H. Tresidder, St. J.A.B., 11, Western Place. Tel. 2145.
Penzance	St. John's Car Park. Tel. 287.	Supt. T. C. Cooper, S.J.A.B., 14, Alverton St., Tel. 287.
Redruth	Headquarters, S.J.A. Div., Basset Street. Tel. 159.	Supt. C. C. Pellowe, S.J.A.B., 1, Close Hill, Tel. 159.
Truro	City Road. Tel. 2439.	Supt. W. E. Bennellick, S.J.A.B., 14, St. George's Villas. Tel. 2233.

Four new Ambulance Stations were established during the year at Carnmenellis and Stithians, Goldsithney, Penryn, and Looe.

In addition to the above, there are also ambulances at Bude, Newquay and Torpoint.

These ambulances are not available for ordinary infectious disease, but are used in connection with the Council's Public Health Services. The County Council make a grant of £10 per ambulance to the Cornwall Voluntary Aid Organisation, to be devoted solely to expenses in connection with road accidents.

An interesting recent development in the Ambulance Services of the County is the establishment of a central co-ordinated office for Ambulances provided by the British Red Cross Society and the Order of St. John.

The Ambulances maintained by these Organisations carry out their normal work in their own districts without reference to the co-ordinating Centre which is maintained in Truro, but if an Ambulance is required to move out of its own area, an enquiry is first sent to the co-ordinating Centre to see whether there is any other case which can usefully be picked up by the Ambulance on its journey to and from its destination. Hospitals at Plymouth and in Cornwall telephone this Central Bureau in the morning if they have any cases requiring transport which would take an Ambulance out of its ordinary district, and these journeys are arranged by the Central Bureau. The present purpose of the Bureau is the saving of rubber and petrol used

on unnecessary journeys, but it seems that this central co-ordination is serving such a useful purpose that it might well continue into peace-time. As an example of the amount of work done by this Central Bureau, it was stated that during two months it arranged transport for 476 cases.

In addition to these normal Ambulance Services maintained in the County, there is also an Ambulance maintained in connection with the County Isolation Hospital, and 64 whole time Civil Defence Ambulances which are used for various Public Health purposes in addition to their normal Civil Defence duties.

SANITARY CIRCUMSTANCES OF THE AREA.

County Councils are not Sanitary Authorities for such purposes as water supply, sewerage, and the arrangements for dealing with infectious disease, but under the Local Government Act, 1929, County Councils may make grants to District Councils in aid of schemes for water supply and sewerage. Grants have been made by the County Council in aid of water supplies for rural areas.

Rivers and Streams. Action to check pollution of rivers or streams may be taken by District Councils or by the County Council.

Schools. The sanitary condition and water supply of the Schools is constantly receiving the attention of the Education Committee, and as opportunity offers Schools are connected with water and drainage schemes.

It is hoped that with the reorganisation of the education arrangements in Cornwall about to be undertaken under the Education Act, 1944, many of the primitive sanitary arrangements at our Schools will disappear.

HOUSING.

Housing Act, 1936, and Housing (Financial Provisions) Act, 1938. Grants of £1 per house per year for 40 years have been approved in respect of houses erected for the accommodation of the agricultural population in the following Districts:—

District	No. of houses.
Camelford Rural	8
Kerrier Rural	56
Launceston Rural	6
Liskeard Rural	8
St. Germans Rural	9
Stratton Rural	8
Truro Rural	22
Wadebridge Rural	26
West Penwith Rural	35

INSPECTION AND SUPERVISION OF FOOD.

Milk (Special Designations) Orders, 1936 and 1938. These Orders provide that no person may use a "special designation" for any milk unless there is in force a milk licence authorising the use of that designation in connection with that milk, nor may any description be used in regard to the sale of milk which is calculated falsely to suggest that the cows are free

from tuberculosis or that the milk has been graded or tested by any competent person.

The County Council is responsible for the granting of licences for the production of Tuberculin Tested milk and Accredited milk. In granting these licences the County Council works in close touch with the local Sanitary Authority, whose officers are invariably consulted before the issuing of any such licence is recommended.

No. of licences on 31st December,	Tuberculin Tested. Accredited.	
	1936	1937
...	36	232
.. .. . 1937	36	299
.. .. . 1938	60	328
.. .. . 1939	96	400
.. .. . 1940	100	462
.. .. . 1941	104	471
.. .. . 1942	105	486
.. .. . 1943	125	497

The following number of samples were taken during the year, with the results shown:—

No of samples taken	Tuberculin Tested. Accredited.	

...	405	1,599
.. .. . satisfactory	297	1,140
.. .. . unsatisfactory	108	459
The unsatisfactory samples were made up as follows:—		
Failed Methylene Blue Reductase Test	38	158
Excessive bacillus coli content	40	205
Failed Methylene Blue Reductase Test and Excessive B.Coli content	30	96

MILK SUPPLIED TO SCHOOLS.

Returns of the number of children receiving milk in schools at the end of the year are not available, but early in 1944 the figure was 19,991, substantially that given in my last report. This represents about 68% of the school population, and is still far below what is desirable. Difficulties in supply still remain in a few places and 19 departments are as yet without milk. Every effort is made to maintain a high quality in the milk supplied and recent additions to the staff of the Chief Dairy Instructress have made it easier to supervise supplies, particularly of undesignated milk. Wherever this has to be provided, it is a condition of approval that the milk shall be boiled. It is very much to be regretted that all school milk cannot be delivered in one-third pint bottles and drunk through straws. Bulk supplies are inevitable at the present time, but few rural schools possess the necessary facilities for dealing with them adequately or for washing cups or mugs in a satisfactory manner.

Adulteration, etc.

Samples taken during the year under the Food and Drugs (Adulteration) Act, 1938, were as follows:—

Name of Article	Number of Samples taken	Genuine	Adulterated	Remarks
Baking Powder ...	6	4	2	Deficient in Carbon-dioxide
Barfee ...	1	1	—	
Barley Sugar Sticks ...	1	1	—	
Beef Extract ...	1	1	—	
Beef Suet ...	1	1	—	
Blackcurrent Cordial ...	1	1	—	
Butter ...	14	13	1	Contained excess of water
Cake and Pudding Mixture ...	20	20	—	
Chocolate Spread ...	2	2	—	
Citrus Products ...	4	3	1	Lime Cordial not a Cordial
Cloudy Ammonia ...	1	1	—	
Cocoa ...	1	—	1	Deficient in fat
Coffee and Coffee Powder ...	5	5	—	
Colourless Tincture of Iodine ...	1	1	—	
Cooking Fat ...	1	1	—	
Curry ...	2	2	—	
Dried Egg Mixture ...	2	2	—	
Drissauce ...	1	1	—	
Drugs ...	8	8	—	
Forcemeat ...	1	1	—	
Fruit Jubes ...	1	1	—	
Gelatine ...	5	4	1	Large excess of zinc and copper
Gravy Powder ...	2	2	—	
Lard ...	9	9	—	
Lemon Barley Crystals ...	1	1	—	
Malt Cocoa Spread ...	1	1	—	
Malted Food ...	1	1	—	
Malted Milk Tablets ...	1	1	—	
Margarine ...	4	4	—	
Meat and Vegetable Extract ...	2	2	—	
Milk ...	299	278	21	Deficient in milk fat 11 Added water 7 Def. in non-fatty solids 3
Mustard ...	1	1	—	
Orange Fruit Wine ...	1	1	—	
Pepper ...	4	4	—	
Petroleum Jelly ...	1	1	—	
Porridge ...	1	1	—	
Sage and Onion Stuffing ...	2	1	1	Contained only 0.2% sage and onion
Sauce ...	3	3	—	
Self Raising Flour ...	2	2	—	
Soups ...	2	2	—	
Spices ...	1	1	—	
Spirits ...	17	16	1	Gin contained 30% added water
Sweetened Malted Choc. Food ...	1	1	—	
Sweetened Chocolate Spread ...	1	1	—	
Tonic Wine ...	1	1	—	
Vitamin "C" Tablets ...	1	1	—	
Zinc Ointment ...	1	1	—	
TOTALS ...	440	411	29	6.59% adulterated.

There were also 367 Gerber tests of milk during 1943, all of which were found to be above the standard prescribed by the Sale of Milk Regulations, 1939.

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

Table I at the end of the Report shows the number of cases of Infectious Disease notified in each Sanitary District in the County.

Diphtheria. 225 cases with 12 deaths occurred during the year 1943 compared with 389 cases with 24 deaths during the year 1942. The disease was more prevalent than it had been in the areas of Penzance Borough and West Penwith Rural District, otherwise the incidence of the disease was much less than for the previous two years. Relatively a much higher proportion of the cases have occurred among adults and this is reflected in the admissions to the County Isolation Hospital, where 48.7 per cent. of the cases of diphtheria admitted have been adults. Diphtheria is normally a disease of childhood. The low ratio of children to adults among patients suffering from this disease may be ascribed to the success of the immunisation campaign among children in Cornwall; it might well have been that had such immunisation not been undertaken we should have had a grave epidemic of this most serious malady.

Scarlet Fever. 229 cases with 2 deaths occurred during the year 1943 as compared with 228 cases with no deaths during the previous year. Scarlet Fever thus continues to be a very mild infection and it is doubtful whether cases of this disease unless complicated require hospital treatment.

Enteric Fever. 7 cases with 1 death occurred during the year 1943 as compared with 13 cases with no deaths during the previous year.

Cerebro-spinal Fever. 28 cases with 2 deaths occurred during the year 1943 as compared with 42 cases with 15 deaths during the previous year. The treatment for this disease has been revolutionized in the last few years by the introduction of the sulphonamide group of drugs. By the use of this form of chemo-therapy the case fatality rate of this disease has been strikingly reduced.

Measles and Whooping Cough. 1,918 cases of Measles with 4 deaths and 474 cases of Whooping Cough with 4 deaths occurred during the year 1943 as compared with 184 cases of Measles with 1 death and 696 cases of Whooping Cough with 6 deaths in the previous year. It cannot too strongly be emphasised that these infections, although they are commonly regarded as trivial, are by no means always so, particularly in young children, and not only lead to many deaths, especially from broncho-pneumonia but also cause a not inconsiderable amount of chronic ill health among the survivors. The provision of Isolation Hospital accommodation for these cases is thus most desirable as skilled medical and nursing attention can greatly reduce the risk to life and the likelihood of permanent ill effects.

County Isolation Hospital, Truro.

An order of the Ministry of Health making the County Council the Isolation Hospital Authority for the whole of the County, with the exception of the Borough of Saltash, the Urban Districts of Bude-Stratton and Torpoint, and the Rural Districts of Stratton and St. Germans, came into operation on the 1st April 1943. This scheme had been submitted to the Ministry of Health by the County Council under sub-section (6) of section 185 of the Public Health Act, 1936, and provides as follows:—

CORNWALL COUNTY COUNCIL.

PUBLIC HEALTH ACT 1936.

HOSPITAL ACCOMMODATION FOR THE TREATMENT OF
INFECTIOUS DISEASE.

S C H E M E

Made on the 28th day of July, 1942, by the Cornwall County Council after consultation with the Councils of all the County Districts in the County under sub-section (6) of section 185 of the Public Health Act, 1936, for altering the Scheme made by the Cornwall County Council under section 63 of the Local Government Act, 1929, on the 3rd day of December, 1934, as approved with modifications by the Minister of Health on the 9th day of February, 1935, for the provision of Hospital Accommodation for the treatment of Infectious Disease within the County of Cornwall (hereinafter referred to as "the Principal Scheme").

-
- (1) Paragraph (1) of Part 1 of the Principal Scheme shall be varied as follows:—

The Areas numbered 1 to 6 inclusive in the said paragraph shall be combined into a single area, for which the required minimum number of beds for patients shall be 90, and the accommodation shall be provided by the County Council. Provided that, unless and until the County Council provide a new Hospital for the purpose, the minimum number of beds shall be 110 to be provided at the former Truro Public Assistance Institution.

- (2) The expenses incurred by the County Council for the purposes of this Scheme shall be defrayed as expenses for special County purposes chargeable on those County Districts mentioned in Areas 1 to 6 in the second column of the Principal Scheme.

- (3) This Scheme shall be construed as one with the Principal Scheme and shall come into operation on the date which it is approved by the Minister of Health.

The districts excepted from the Scheme are served, in the case of the Borough of Saltash, the Torpoint Urban District and the St. Germans Rural District by the Plymouth City Isolation Hospital. The Bude-Stratton Urban District and Stratton Rural District continue to provide accommodation for cases of infectious disease occurring in their areas in the Isolation Hospital at Stratton.

The County Isolation Hospital is administered by the Isolation Hospital Sub-Committee of the Health Committee and consists of 10 members of the Public Health Committee and 5 members of the Local Authorities served by the Hospital. The Medical Superintendent is the County Medical Officer, and the Clinical Medical Officer is Dr. J. G. M. Molony.

Although it is housed in a building which is far from being ideal for the purpose, the hospital has the great advantage that it is at all times staffed by a team of Trained Nurses. The experience of the year has shown that the decision to centralise the treatment of infectious disease in one

Hospital was fully justified. The appointment of a third ambulance driver during the year enabled a 24-hour ambulance service to be maintained at all times and has led to the elimination of delay in the removal of cases to hospital.

A list of the cases of different diseases admitted to the County Isolation Hospital is set out in Table II at the end of the Report, and shows the extraordinary variety of cases which find their way into the hospital. The reason for this is that the general practitioners in the county send in doubtful cases rather than endanger the health and prospects of recovery of patients by delaying admission to the hospital for treatment by waiting until bacteriological confirmation of the disease has been obtained.

Westward Ho! Isolation Hospital, Newquay, used as an Emergency Isolation Hospital under the Evacuation Scheme, and taken over from the Newquay Urban District Council in April, 1941, continued to fill a useful function throughout the year. It is primarily intended for cases of minor infectious diseases. 130 cases were admitted during the year 1943 as compared with 71 cases during 1942.

TUBERCULOSIS.

In the years before the present war an encouraging feature of our health statistics was the steady fall, year after year, in the number of persons dying from tuberculosis.

The reasons for this were many—improved housing, better economic conditions, improvement in personal hygiene, an earlier approach to the doctor for advice, and also better methods of treatment of the disease. As was anticipated, the advent of war interrupted this favourable trend and has led to an increased incidence of tuberculosis owing to overcrowding, overwork and increased strain generally.

During the year 1943 there was again an increase in the incidence of non-pulmonary tuberculosis, and in the number of deaths from this type of the disease. Much non-pulmonary tuberculosis, especially in children, is caused by the drinking of milk containing the tubercle bacillus, and much crippling of young bodies as well as many deaths are the result. It cannot too strongly be emphasized that "Pasteurised" milk is the only safe milk, although "Tuberculin Tested" milk also is relatively free from risk of infection. When supplies of milk to children, especially under the Milk in Schools Scheme, are restricted to these types we may expect fewer new cases of non-pulmonary tuberculosis.

The increased incidence of the disease during the year, together with the continued limited availability of our normal beds for non-pulmonary (orthopaedic) cases at the Royal Cornwall Infirmary, has led to an increased demand for accommodation at Tehidy Sanatorium which it has been impossible to satisfy. There has consequently been in most cases a delay of some weeks between the ascertainment of a case and the accommodation of the patients in the Sanatorium. Efforts were made during the year to provide temporary accommodation by obtaining and erecting wooden huts, but these efforts were fruitless, none of the huts being at all suitable for the purpose.

The year saw the introduction by the Government of a system of maintenance allowances for patients suffering from pulmonary tuberculosis. The purpose of these allowances is to encourage patients who are suffering from or suspected to be suffering from this disease, to give up their employment and enter a Sanatorium for observation or treatment. They are conditional on the patients undergoing the treatment prescribed by the Tuberculosis Officer, and are not intended to be given "where treatment cannot do more than alleviate a chronic condition." This distinction between the "chronic" type of patient who is ineligible for maintenance allowances and the patient who may be expected in due time to return to work is a clinical decision most difficult to make. It is invidious that for such a purpose it should be made at all. It is also difficult to understand why non-pulmonary cases should be ineligible. Arrangements for the payment of such maintenance allowances were put into operation on the 1st August, 1943. Assessment of applications for such grants is undertaken by the Public Assistance Officer and his staff, who, for this purpose, are regarded as being on the staff of the Health Department and are called Social Welfare Officers.

Maintenance allowances made to Tuberculosis patients during 1943:—

Number of persons receiving allowances	...	60
Average weekly grant	... ..	£1 18s. 8d.
Total grant	... ..	£1,109 5s. 4d.

These allowances are reimbursed in full by the Ministry of Health.

On the same day as the maintenance allowances were introduced the County Council abolished the payment of fees for accommodation at the Sanatorium. Payment of fees by patients for accommodation at a Sanatorium is undesirable for two reasons—first, it discourages them from staying a sufficient time in the institution for treatment to be successful, and second by reducing the family income the amount of money available for food is diminished and hence malnutrition amongst other members of the family is more likely to occur and they, especially as they have been contacts, are more liable to fall victims to the disease.

It was decided during the year that a whole-time Occupational Therapist should be appointed at the Sanatorium to organise the training and supervision of the patients in such activities as carpentry, leather work, basket work, etc. The undertaking of such activities by patients is most valuable in assisting their physical and also their mental recovery.

TEHIDY SANATORIUM

The following report on the County Sanatorium has been submitted by the Medical Superintendent, Dr. Gaspey:—

A plaque in the front porch of the Sanatorium bears the following inscription:—

" THE MANSION PARK AND RESIDENCES OF TEHIDY
were purchased by a fund subscribed to perpetuate in a house
of benefit for living Cornishmen and Cornishwomen a proud
memorial of their dead who in health laid down their lives
to defend their country.

1914 — 1918

The tower of remembrance was erected by special subscription in gratitude triumphant over death and difficulty through the divine mercy.

MAJOREM HAC DELECTIONEM NEMO HABET."

The Sanatorium is situated three miles from Camborne and four miles from Redruth, in the grounds of the Tehidy Estate. The Park is well timbered, sheltering the Wards from most winds. The building consists of part of the old Mansion, to which were added two new wings, after destruction of the centre part of the old Mansion by fire. This forms the administrative block of the Institution, as well as the Nurses' Home and quarters of the Domestic staff. There are four Pavilions or Blocks; there is one Block for women (A Block) originally built for 20 patients; to this have been added 14 huts. Since the outbreak of war the Women's Recreation Room has been converted into a Ward and the entire Block now accommodates 45 patients, including the 14 in huts. There are 3 Blocks for men, built in a straight row on the north side of the administrative Block. C Block, opened in 1936 accommodates 20 patients; B Block of wooden construction, also has room for 20 patients, and the War Memorial Block takes 12 patients. Since the war 4 huts have been added at the end of this Block and by making full use of all available room, it is possible to take 56 male patients. The Conservatory of the old Mansion has been arranged as a large ward, and is at present occupied by children suffering from surgical tuberculosis. It is a complete unit, quite separate from the rest of the Institution. Provision is made here for about 20—22 patients according to the age of the children.

The Administrative Block contains on the ground floor the General Office, Medical Superintendent's Office, and Matron's Office. There is also a Laboratory, which was started in 1936 and is now fully equipped for all bacteriological work undertaken at the Sanatorium. During the present war the work of the Laboratory has increased, by reason of the fact that it has become the County Laboratory, where all medical practitioners of the County can send specimens to be examined in relation to tuberculosis. A full time laboratory technician is in charge of this department under the general supervision of the Medical Superintendent. The X-Ray Department is well equipped with modern apparatus; in 1937 a Watson Rotalix Plant, specially designed for chest radiography, was installed. In addition there is a small unit for bone radiography. A dark room was constructed adjacent to the X-ray room. The radiographs produced in the last few years have been of the very highest quality. Also adjoining the X-ray room is an Operating Theatre, equipped for minor chest surgery, and also for emergency general surgery.

There is also a Dental surgery, an Ear, Nose and Throat Department, and a Dispensary. In the same part of the building is a residential flat for a Medical Officer. The first floor of the building is entirely occupied by members of the nursing staff. In 1936 seven extra rooms were added in the north wing. There are now 26 nurses' bedrooms, together with Sisters' Sitting Room, and the Nurses' Sitting Room and on the south side are the Matron's quarters. Adjoining the building facing east, are the Patients' Recreation and Dining Rooms. The Recreation Room contains a full size Billiard table, and since Christmas 1935 has been used also for weekly cinema performances. A 35 m.m. talkie apparatus was installed at Christmas 1935

and weekly performances have been very much appreciated ever since. The installation of this cinema was made possible by the Richard Bolitho Fund. The Recreation Room is also used on Sundays for religious services. The patients' Dining Hall and Nurses' Dining Hall adjoin the Kitchen.

The Kitchen is very spacious. It contains 2 Esse and 1 Aga cookers, large steamers for potatoes, and vegetable steamers. In 1938 a meat cutting machine was acquired and this proved a great saving for two reasons; (a) the meat is cut in thin regular slices and looks most appetising, and (b) the saving in quantity as a result of the elimination of waste has been most remarkable. In 1935 electrically heated food containers were installed, so that food taken to the ward blocks is kept hot. A refrigerator was installed and has been a great value in keeping butter and milk fresh.

The Institution has its own Laundry. To the original appliances was added in 1937 a "Glad Iron," which is an electrically heated ironing machine, used mainly for ironing nurses' uniforms and white coats.

The Institution went over to the National Grid in 1937. Until that time electricity had been produced by a small power station in the grounds. Since 1937 the drains of the Institution have been connected with the main Camborne-Redruth sewage system.

The Sanatorium is well provided with vegetables, from the old walled gardens of the estate which produce excellent crops all the year round. Since the war the lawns in front of the Institution have been ploughed up and almost enough potatoes have been grown to supply our needs. It has been our policy to keep pigs, and in pre-war days there were as many as 24, but unfortunately we have had to reduce the number very considerably.

The staff of the Sanatorium consists of the Resident Medical Superintendent, Matron, Assistant Matron, two Sisters, one Night Sister, one Orthopaedic Sister, four Staff Nurses, ten Probationer Nurses and two Male Nurses, one Chef, and ten Domestic. There are also a General Clerk, Medical Superintendent's Clerk, Laboratory Technician, Sewing Woman, Laundress and Assistant Laundress. The out-door staff consists of an Electrical Engineer, a Plumbing Engineer, Carpenter, Painter, Head Gardener, and seven Assistant Gardeners, a Woman Assistant Gardener and a Boy.

Until 1937 the Dental Surgeon visited the Institution once a fortnight, but when the number of beds increased to 108, Mr. Lean of Redruth was appointed visiting dentist, and he now attends three sessions or more each month. In 1937 Mr. Sheridan, was appointed as Ear, Nose and Throat Surgeon. He visits the Institution once a month and each new patient is examined by him and if necessary kept under observation or treated. Until the year 1940 Mr. Panting of Truro was the Honorary Visiting Surgeon. Mr. W. W. Rentoul became consulting Orthopaedic Surgeon in 1937 and at the same time an Orthopaedic Sister was appointed. Mr. Rentoul visits the Institution at fortnightly intervals and during the alternate weeks his assistant Miss May sees the patients. On Mr. Panting's resignation as Visiting Surgeon, Mr. Donovan was appointed as his successor, but as he left during the year Mr. Reid has taken his place.

A very interesting appointment was made in 1939, when Mr. N. R. Barrett, became Chest Surgeon to the Institution; since then minor chest surgery such as phrenic evulsions and thoracoscopies have been performed at

the Institution, and arrangements were made for major chest operations (for the time being), to be done at Horton Emergency Hospital, Surrey. As a result of this appointment there has been an improvement in the methods and results of surgical treatment of cases of pulmonary tuberculosis admitted to the Sanatorium, especially in the case of patients treated by artificial pneumothorax. The results of treatment at Horton Hospital also have been highly satisfactory, particularly in view of the fact that most of the patients sent there would have had little prospect of recovery if treated only by ordinary Sanatorium methods.

A School was established in the Children's Ward in 1939, when Mrs. Bailey of Redruth was appointed teacher. This school was eventually recognised by the Board of Education and has been a great success and helped tremendously towards improving the general outlook of the children. To my knowledge those children who have left have been found to be well up to standard when going to the ordinary schools.

It was my privilege in 1936, to establish a Canteen; this was such a success that the building had to be doubled in size after a very short time. In pre-war days it was well stocked. Now of course we have our difficulties, but manage to keep going surprisingly well. The Canteen is well patronised by both patients and staff. A patient is usually in charge and all profits go to a "Samaritan Fund," which gives help to any patient who may be in need.

The Clerk of the Institution, Mr. H. Whitford, joined the Forces in 1942 and his wife has taken his place for the time being. As the work in the office has increased during the last few years, and especially during the war, because of numerous regulations and forms which have to be completed, the work has been divided by appointing a Secretary to the Medical Superintendent to attend to the medical correspondence.

Other members of the Staff who have joined the Forces are:—

F. Haines, carpenter; F. Woodmason, painter; W. Northey and S. Matthews, stokers; Stanley Stephens, gardener. I regret to have to report that Stanley Stephens was killed in a flying accident in 1943.

All types of cases of tuberculosis are admitted to the Institution. On the pulmonary side early as well as advanced cases are treated. The Memorial Block and the Huts on the women's side have been reserved for those patients who are up and about all day.

REPORT OF MEDICAL WORK CARRIED OUT AT TEHIDY SANATORIUM DURING THE YEAR 1943.

Admissions.

During the year 173 patients were admitted, 138 were discharged and 23 died in the Institution.

Treatment.

The main principle of treatment has been to give an initial period of complete rest. During this time an endeavour is made to assess the patient's condition by study of symptoms and signs including temperature and pulse rates, by physical examination, x-ray examination, sputum tests, blood tests, etc., and then to determine the treatment which is most likely to benefit the individual. Complete or partial rest may be continued, and some very

gratifying results have been obtained in cases where patients were immobilised completely for a period of from 9 to 12 months on a plaster bed.

Satisfactory results have also been obtained by artificial pneumothorax. A.P. was induced in 52 cases, and successfully maintained, with benefit to the patient in 43 cases. Unsatisfactory A.P. were abandoned in 9 cases, and induction attempted unsuccessfully in 11 cases.

Some artificial pneumothorax cases required further treatment, because of adhesions, and were seen by Mr. Barrett. In 24 cases thoracoscopy permitted cauterisation of all or part of these adhesions, with improved collapse of the lung. It is most unfortunate that owing to war conditions Mr. Barrett has had to curtail the number of his visits, as it is probable that many patients would benefit by further surgical interference. Phrenic nerve evulsions were performed on 16 patients, in most cases as a preliminary to abandoning the A.P. on completion of treatment.

Further work in the theatre consisted in removal of fluid from the pleural cavity, with or without gas replacement on 430 occasions. 254 injections of Gold Salts were given, but the results have not been as good as was hoped.

Statistics of Refills.

Number of Refills given:—

In-Patients	...	...	...	...	699
Out-Patients	...	...	...	...	307
					<hr/>
Total	...	...	...	...	1,006
					<hr/>

These refills are given at regular intervals. Tuesday mornings are specially reserved for Out-Patients; most of these cases require careful supervision by X-ray screening.

Examinations.

Patients are examined for physical signs at intervals of 5 weeks, have their sputum and blood tested, and X-ray pictures taken so that progress may be checked.

Clinical re-examination of In-Patients	...	...	806
Clinical re-examination of Out-Patients	...	...	102
Examination of New Patients	...	...	173
			<hr/>
Total	...	...	1,081
			<hr/>

Laboratory Work.

Sputa

Sanatorium patients, by direct method	...	...	798
Sent by Medical Practitioners by direct method	...	...	537
Culture Tests	...	...	48
			<hr/>
Total	...	...	1,383
			<hr/>

Examination of sputa submitted for examination by medical practitioners in the County, commenced on 1st July, 1943.

Other work in the Laboratory consisted of:—

Blood Sedimentation Rate Estimations	...	...	902
Blood Counts	...	...	20
Urine Examinations	...	...	194

Dental Department.

Examination of new patients	...	...	125
Re-Examination of In-Patients	...	...	26
Number of Patients to have extractions with Local Anaesthetic	...	...	72
Number of Patients to have extractions under General Anaesthesia (Nitrous Oxide)	...	...	20
Number of Fillings	...	...	31

Many of these patients have been fitted with dentures. The Canteen "Samaritan Fund" has been of great help on several occasions when patients have been in need of financial help to purchase these dentures.

Ear, Nose and Throat Department.

All new patients are examined by the Throat Specialist, and those cases under observation and treatment by him are seen at monthly intervals.

Patients treated at Horton Emergency Hospital.

Patients sent to Horton Hospital for thoracoplasty	...	11
Patients returned from Horton Hospital	...	6
Died in Horton Hospital	...	1

It has been possible in spite of great difficulties, thanks to extra work put in by, at times, sadly depleted staff, not only to keep all beds occupied, but even to have as many as 12 additional patients. Several times it was thought that a Ward would have to be closed owing to shortage of staff, but thanks to help from Civil Nursing Reserve nurses and nursing auxiliaries we have managed to keep going. We have also had difficulties with domestic staff, due partly to the fact that the Institution is rather isolated, and to difficulties of transport.

A further problem has been that of washing up after meals. As at times only a small number of patients are up all day, these have to do a large amount of washing up 4 times daily, and this has led to discontent which it has not always been easy to overcome.

A small second hand motor van was purchased during the year, for internal transport to help to solve the problem of staff shortage. Both patients and food can be taken to the Blocks from the main Building.

A Patients' Committee has been formed to meet Matron and myself to try and solve problems created by food rationing, or difficulties in cooking. This Committee is now also being interviewed every other month by a Sub-Committee of the Tuberculosis Committee.

The Cinema shows have been well attended as usual.

There was generous help in the form of money and clothing from many individuals and organisations at Christmas. All donors were thanked.

The Glimax Entertainments Committee gave a concert at Redruth to provide the Laboratory with a new Microscope, and I wish to express my gratitude to the organisers.

An appeal to the " Readers Union " for books, brought gifts of volumes from all parts of the Country.

I would like to express my thanks to Mr. Fox for the support he has given me during his 8 years as chairman, and the great interest he has always shown in the affairs of Tehidy.

My thanks are due also to the Matron, Nursing Staff, and the members of the staff for the support they have given me during the year, and the excellent way they have performed their duties.

Apart from the County Sanatorium, there are Tuberculosis Treatment Centres at Penzance, Tuckingmill, Truro, St. Austell and Liskeard. A table showing the work done at the Treatment Centres is given at the end of the Report (Table III).

The Tuberculosis Officer, on receipt of a notification, informs the notifying practitioner that he proposes to follow up the notification unless the practitioner reports that there are special reasons why this should not be done.

No action has been taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from Pulmonary Tuberculosis employed in the milk trade), or under Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to hospital of persons suffering from Tuberculosis).

The following Table shows the cases actually diagnosed as tuberculosis by the County Tuberculosis Officer:—

NEW (DEFINITE) CASES.

Year	Pulmonary					Non-Pulmonary					Pulmonary and Non-Pulmonary Total
	Men.	Women	Boys	Girls	Total.	Men	Women	Boys	Girls	Total	
1926	136	98	7	3	239	18	18	14	11	61	300
1927	111	89	7	8	215	9	16	16	6	47	262
1928	106	105	10	5	226	11	11	12	5	39	265
1929	110	88	3	3	204	12	17	7	6	42	246
1930	94	92	3	7	196	13	12	13	2	40	236
1931	107	95	4	5	211	9	10	4	4	27	238
1932	102	92	8	3	200	8	15	8	7	38	238
1933	103	73	—	7	183	13	7	2	2	24	207
1934	91	74	1	4	170	12	18	7	8	45	215
1935	87	51	2	—	140	8	10	4	4	26	166
1936	77	66	1	4	148	7	5	4	2	18	166
1937	79	60	6	3	148	12	4	5	1	22	170
1938	92	56	3	—	151	17	11	8	6	42	193
1939	74	64	3	3	144	10	13	8	10	41	185
1940	93	68	5	2	168	10	5	6	9	30	198
1941	97	68	1	5	171	9	6	11	10	36	207
1942	126	58	2	3	189	7	5	9	5	26	215
1943	104	67	2	3	176	10	13	11	8	42	218

New Cases and Mortality during 1943.

Age Period.	New Cases Notified.				Deaths.			
	Pulmonary		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1 ...	—	—	—	1	—	1	3	—
1—5 ...	2	1	3	5	—	—	3	6
5—15 ...	3	2	10	9	1	2	3	1
15—45 ...	106	73	14	11	41	36	9	12
45—65 ...	42	12	2	2	45	15	4	3
65 and upwards	4	2	—	1	7	7	1	1
Totals ...	157	90	29	29	94	61	23	23
	247		58		155		46	
	305				201			

The notifications of non-pulmonary tuberculosis were as follows:—

	1939	1940	1941	1942	1943
Bones and joints ...	26	23	24	10	18
Glands ...	9	9	16	20	17
Meninges ...	7	8	4	7	9
Abdomen and peritoneum	3	5	3	17	9
Kidneys and Bladder ...	4	2	4	1	4
Others ...	2	2	2	2	1
	51	49	53	57	58

Number of Cases receiving treatment in Residential Institutions on 31.12.43.

	Ex-service (accepted cases)		Pulmonary			Non-Pulmonary			Total
	Pulm.	Non-Pulm.	M	F.	Ch.	M	F.	Ch.	
Institutions belonging to Authority ...	31*	—	24	41	2	1	1	20	120
Institutions belonging to other Local Authorities ...	2	—	2	5	—	1	2	1	18
Voluntary Institutions	—	2	2	1	—	5	4	7	21
Total ...	33	2	28	47	2	7	7	28	154

*Including 3 Women.

VENEREAL DISEASES.

Treatment Centres: (1) Royal Cornwall Infirmary, Truro, (2) Tuckingmill, near Camborne, (3) The City Hospital, Plymouth. All Treatment Centres in the Country are open to all comers.

Summary of Work done:—

	TREATMENT CENTRE AT PLYMOUTH. (Patients from Cornwall only).				TREATMENT CENTRE AT TUCKINGMILL.				TREATMENT CENTRE AT TRURO			
	1940	1941	1942	1943	1940	1941	1942	1943	1940	1941	1942	1943
No. of Persons dealt with at the out-patient Dept. for the first time and found to be suffering from:—												
Syphilis	4	8	10	8	13	38	40	39	69	225	331	408
Soft Chancre	1	1	2	—	1	—	1	1	2	7	9	14
Gonorrhœa	12	11	13	8	25	40	38	51	116	239	210	229
Conditions other than Venereal	18	13	19	53	10	17	23	29	83	130	300	491
Total	35	33	44	69	49	95	102	120	270	651	850	1162
Total No. of attendances at the out-patient dept.	546	415	532	610	529	562	700	909	2083	4138	5223	6989
Aggregate No. of in-patient days	397	89	253	255	—	—	—	—	990	2415	2464	1867
No. of doses of Arsenobenzene Compounds given. (Out-patients and In-patients.)	111	87	170	104	176	237	285	421	748	1810	2803	2887
Examination of pathological material at the Treatment Centre or sent to an approved laboratory for—												
Detection of Spirochetes	—	—	—	—	—	—	—	—	21	73	81	215
„ Gonococci	137	92	188	186	44	60	73	97	272	636	423	888
Wassermann reaction	62	61	83	90	59	77	75	97	164	449	855	1308
Others	19	14	32	46	38	69	49	77	149	215	785	1191
Total ...	218	167	303	322	141	206	197	271	606	1373	2144	3602

Summary for Cornish Patients.

	1937.	1938.	1939.	1940.	1941.	1942.	1943.
New cases	219	222	279	354
Total attendances at Clinics	2,090	2,121	2,439	3,158
Specimens examined	559	708	923	965
				1,746	2,644	4,195	

It must be noted that the total attendances under the Rural Practitioners Scheme were 435 in the year 1942 and 1,637 in the year 1943; a truer picture of the increase in Venereal Disease may be obtained by adding these attendances to the attendances at Clinics. The corresponding totals for the 2 years will then be 6,890 and 10,145 respectively.

The following shows the number of new cases at the Treatment Centres actually found to be suffering from venereal diseases:—

1920.	1922.	1925.	1930.	1935.	1939.	1940.	1941.	1942.	1943.
166	75	102	144	122	188	243	619	654	778

It will be noted from these Tables that there has been a steady increase in the amount of Venereal Disease in this County since the outbreak of War, this increase having affected more particularly Syphilis, which has increased by about 25 per cent. as shown by the number of new cases dealt with at the Treatment Centres during the year. Gonorrhoea has increased by about 10 per cent.

The new cases of non-venereal disease dealt with at the Treatment Centres show an increase of about 66 per cent. on the preceding year, and this may be taken as some indication of anxiety among the general public resulting from the increased incidence of venereal disease, and from the increased awareness of the public which has arisen from the Ministry of Health's propaganda on the subject.

Regulation 33B, which enables Special Medical Practitioners formally to notify the alleged source of infection in proved cases, and which permits the institution of compulsory examination of a person alleged to have infected two other people, continued to operate during the year; 41 notifications were received, 6 persons being the subject of a double notification.

The Rural Practitioners Scheme, which began in July 1941, and provides treatment for Venereal Diseases at the surgeries of 8 medical practitioners with special skill and experience in the treatment of these diseases, was continued during the year. As mentioned above, 1,637 attendances were made by patients under this Scheme in 1943 as compared with 435 in 1942.

Five beds are reserved at the Royal Cornwall Infirmary Truro, for cases requiring in-patient treatment. Arrangements are made for new cases to be seen there at any time. The Pathological Department of the Royal Cornwall Infirmary, under the direction of Dr. F. D. M. Hocking, has been approved by the Minister of Health for the examination of specimens from persons suffering, or suspected to be suffering, from Venereal Disease. The necessary outfits and directions are supplied to medical practitioners by Dr. Hocking.

CANCER.

The Cancer Act 1939 requires every County and County Borough Council to provide facilities for the treatment of persons within their area suffering from cancer. The date before which schemes under this Act had to be submitted by Local Authorities to the Ministry of Health was postponed until 31st March, 1944, and accordingly during the year under review a great deal of work was undertaken in the preparation of this Scheme. It has been recommended by the National Radium Commission that the area to be served by a Cancer Organisation should be of such a size that not less than 1,000 cases are treated in a year. Such a number can be expected from a population of 1,000,000 and the Radium Commission accordingly recom-

mends that this should normally be the smallest number of persons for which a Cancer Organisation should be established. Thus it will be seen that Cornwall by itself has too small a population to run an independent Cancer Organisation and therefore it is necessary for this County to join with the County of Devon and the County Boroughs of Plymouth and Exeter to form one joint scheme. The Scheme which is set forth below was adopted by the County Council during the year, and later, as required by the Act, consultations were held on the proposals with representatives of the governing bodies and the medical and surgical staffs of the voluntary hospitals in the County and of the British Medical Association. As a result of these consultations certain modifications of the Scheme were introduced, and the Scheme as amended and accepted by the four constituent Local Authorities is as follows:—

C A N C E R A C T 1 9 3 9 .

Draft Scheme for certain areas in the South West.

1. The Authorities to take part in the joint scheme will be the Counties of Devon and Cornwall and the County Boroughs of Exeter and Plymouth. Such a joint scheme would cover a population of approximately 1,000,000.

2. The Councils referred to in the preceding paragraph will arrange to secure all necessary facilities so that every person in the two Counties and the two County Boroughs who is, or is suspected to be, suffering from cancer may obtain advice and that every such person who is found to be suffering may obtain adequate treatment.

3. This Cancer Organisation will have its Administrative Centre at Plymouth.

4. Arrangements will be made for utilising the facilities for diagnosis and treatment (both surgical and radiotherapeutic) at "clinical centres" viz:—Exeter (Royal Devon and Exeter Hospital); Plymouth (City General and Prince of Wales Hospitals); Torquay (Torbay Hospital); Redruth (Camborne-Redruth Miners' & General Hospital) and the Royal Cornwall Infirmary, Truro (for surgery only). Certain members of the staff of each of these hospitals, nominated by the Medical Advisory Committee referred to in Clause 10 or suggested by Hospital Managements and appointed by the Joint Committee under Clause 5, will be members of the Cancer team and only such members will take part in these arrangements. Patients will thereby not be required to travel unnecessarily long distances to obtain advantage of the scheme. Other diagnostic and treatment centres may from time to time be included in the Scheme if the Joint Cancer Committee so decide.

5. The principal member of the Cancer Team will be a whole-time Director with a wide experience of cancer. He will work from the hospital which is the Administrative Centre and he will be in control of the arrangements made under this Scheme for the diagnosis and treatment of cancer. The Director will be responsible to the Joint Cancer Committee referred to below. The remainder of the Team will consist of physicians, surgeons, gynaecologists, radiotherapists, radiologists, pathologists and physicists, appointed by the Joint Cancer Committee who will consider any representa-

tions which may be made to them by Hospital Managements or any nominations submitted to them by the Medical Advisory Committee to be appointed under Clause 10 of this scheme.

6. Arrangements will be made for examination of pathological specimens in all cases where necessary at Plymouth, Exeter, Truro and Torbay.

7. Arrangements will be made for the payment where necessary of travelling expenses of patients (including where necessary the expenses of a companion) incurred by persons in availing themselves of the services provided. Hostel arrangements will be made when patients are required to be away from home overnight.

8. Records will be kept in such form as the Minister of Health may approve.

9. The Councils will by such means as appear desirable give such publicity to these arrangements as they may think necessary for bringing them to the notice of persons to whom they may apply.

10. The administration of the scheme will be carried out by a Joint Cancer Committee composed of representatives as follows:—

C.B. Exeter, 3; C.B. Plymouth, 4; County of Cornwall, 5; County of Devon, 6; and in an advisory capacity the Chairman of the Medical Advisory Committee or his Deputy and the Medical Officer of Health together with such other principal officers of each of the four Councils as may be necessary. Co-option of persons with special knowledge or interest will not exceed a total of 4 persons and will be terminated annually, but will be renewable. The Joint Cancer Committee shall appoint a Medical Advisory Committee to whom they shall from time to time refer medical matters of importance for consideration and report.

11. The net cost of the Scheme will be borne by each of the four Councils in such proportion as shall be decided hereafter.

This Scheme was submitted to the Ministry of Health early in 1944.

656 deaths occurred from Cancer during the year 1943 as compared with 644 during the year 1942 and 643 during the year 1941.

BLIND PERSONS.

There are 5 Home Teachers, four sighted and one blind. These work under the County Blind Association and visit the homes of blind persons and teach Moon and Braille reading, and otherwise keep under observation all blind persons who wish to be visited. There are 17 blind Home Workers in the County.

Prevention of Blindness. The Council have adopted a system of voluntary notification by medical practitioners of persons threatened with blindness.

There were 798 registered blind persons on 31st March, 1944, 309 males and 489 females, a decrease during the 12 months of 17. 57 new cases were

registered during the year 1943. The following Table shows the age groups of blind persons:—

Number of Blind Persons in Age Groups		Ages at which Blindness occurred.	
Age Period.	Number.	Age Period.	Number.
0—1	—	0—1	71
1—5	2	1—5	7
5—16	10	5—10	24
16—21	13	10—20	34
21—40	42	20—30	46
40—50	54	30—40	59
50—65	156	40—50	85
65—70	94	50—60	151
Over 70	427	60—70	151
		Over 70	170
Total	798	Total	798

Blind Children of School Age, 5—16

	Normal.	Mentally Deficient.	Physically Defective	Total.
In Schools for the Blind ...	5	—	—	5
Other Schools ...	—	—	—	—
Not at School ...	1	4	—	5
Total ...	6	4	—	10

Training and Employment (Age period 16 and upwards).

Employed—

By Blind Organisations

(a) Workshops ...	—
(b) Home Workers ...	17
All others not included in (a) or (b)	104
Total employed	121

Undergoing Training—

Industrial ...	2
Secondary ...	2
Professional or University ...	—
Total undergoing training	4
Unemployable ...	661
Total ...	786

Physically and Mentally Defective (all ages).

(a) Mentally Defective	...	...	33
(b) Physically Defective	...	...	44
(c) Deaf	...	...	35
(d) Combination of (a) and (b)	...	...	9
(e) Combination of (a) and (c)	...	...	6
(f) Combination of (b) and (c)	...	...	5
(g) Combination of (a), (b), (c)	...	...	3
Total	...	...	135

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

Homes for the Blind	...	...	5
Mental Hospitals	...	...	20
Poor Law Institutions	...	...	32
Total	...	...	57

VACCINATION.

The following is a summary of returns showing the number of certificates and Statutory declarations received by Vaccination Officers during recent years, relating to children whose births were registered during the preceding year:—

Year.	No. of births. (Preceding year).	Success-fully vaccinated.	Insus-ceptible of vaccination.	Statutory declarations of conscientious objections.	Died unvaccinated.	Postpone-ment by Medical Certificate.	Removed to other Districts.	Removed to places unknown.	Not account- ed for.	Percentage of births vaccinated.
1940	3,955	601	7	2,780	149	22	77	139	180	15.19
1941	4,630	831	24	2,831	144	25	154	407	224	17.95
1942	5,205	1,102	16	2,748	176	32	274	622	335	21.17
1943	5,066	1,321	22	2,452	151	36	276	446	362	26.07

MATERNITY AND CHILD WELFARE.

Area. The County Council is the Supervising Authority under the Midwives Acts for the whole County, but for other Maternity and Child Welfare work the Boroughs of Penzance and Falmouth are separate Authorities. (These Boroughs are also separate Education Authorities).

County Maternity Unit. (33 beds). The County Maternity Unit is maintained by the County Council at the Camborne-Redruth Miners' and General Hospital under an agreement with the governing body of that hospital. As mentioned below the Emergency Maternity Home at Hayle was closed on the 25th February, 1943. This Home had been set up under the evacuation

scheme and a certain number of County cases had been dealt with there. It was stated in the last Annual Report that the County Council's maternity accommodation at the Redruth Hospital was already working to capacity, and the demand for maternity beds continued to increase during the early part of 1943; these facts coupled with the closure of the Hayle Maternity Home rendered an increase of accommodation at Redruth imperative, and it was then that the hospital adapted for this purpose "Trewirgie Corner," a large private house situated some 540 yards to the E.S.E. of the hospital. By this addition the accommodation at the Council's maternity unit was increased to a total of 33 beds. "Trewirgie Corner" was opened on the 25th February, 1943.

During the year 458 patients were admitted to the Unit as a whole, these included a great variety of abnormal cases drawn from all parts of the County. 427 babies were born, including 8 pairs of twins and one set of triplets, all the triplets surviving. Of the admissions just over 40% were primigravidae. 40% of all admissions were emergencies, 11% were antenatal cases, and 4% were post-natal cases, the remaining 45% being normal booked cases. There were 35 stillbirths and 10 neonatal deaths. There were 4 maternal deaths; this was a notably small number, especially so having regard to the increased work carried on at the Unit during the year, and should be considered in the light of the fact that the County's maternal mortality reached a record low level in 1943.

9 patients were delivered by Caesarean Section, and no less than 16 patients who had had Caesarean Sections on former occasions delivered themselves naturally. The average bed occupancy for the year at the Maternity Ward in the Hospital was 20.1, the maximum number of patients during any one day being 26 and the minimum number 9. The corresponding figures for "Trewirgie Corner" were 13.01, 22 and 8.

Once again it will be seen that available maternity accommodation was working to capacity, frequently passing this point, and throwing a great strain on the staff in making provision for the flow of abnormal maternity cases which must be taken, frequently at very short notice, at any time of the day or night, and which can never be refused.

County Maternity Home, Bodmin. (12 beds). This home ceased to be an Emergency Maternity Home on the 30th June and became a County Maternity Home. 174 babies (including 2 pairs of twins) were born; there were 4 stillbirths and 2 neo-natal deaths. There were 10 forceps deliveries (5.8% of the total). Approximately 47% of the deliveries were first births.

Emergency Maternity Homes.

(a) **Hayle.** (15 beds). As mentioned above this home was closed on the 25th February. In the two months of 1943 during which it was open 18 patients were delivered without incident.

(b) **Looe.** (18 beds). 196 babies (including 2 pairs of twins) were born; there were 1 stillbirth and 2 neo-natal deaths. There were 9 forceps deliveries (4.6% of the total). Approximately 41% of the deliveries were first births. As before, the majority of patients at Looe came from Plymouth.

It will be seen that 815 births took place in the County Council's maternity accommodation during 1943, this being 16.4 per cent. of the County's total births in that year, the corresponding figure for the preceding year is 15.4.

Other Maternity Beds. In the Institutions transferred to the County Council under the Local Government Act, 1929, there are 14 maternity beds, to which 40 women were admitted during the year.

Rosemundy Home, 19 beds, for unmarried girls, is maintained by the Cornwall Social and Moral Welfare Association. The girls are usually retained for one year.

Consultants. A second opinion was obtained by medical practitioners for 11 patients under the Council's scheme, in addition to consultations with the County Obstetrician.

Ante-natal and Post-natal Services. The Council has arrangements under which a midwife may obtain for each of her patients two ante-natal examinations and one post-natal examination by a medical practitioner, and 980 such examinations were made in 1943.

Ante-natal Clinics. The ante-natal clinics which the Council opened in March of last year at St. Austell, Liskeard, Looe, Launceston, Bodmin, Newquay, Redruth and Hayle were continued each week, with the County Obstetrician in attendance. The average attendances continued to increase and the figures, together with the percentage of new cases, for each clinic for the last quarter of the year are as follows:—

Clinic.	Average Attendances.	Percentage of new cases.
St. Austell	11	19
Liskeard	5	8
Looe	4*	20
Launceston	6	15
Bodmin	14	16
Newquay	7	13
Redruth	26	17
Hayle	8	18

*In addition to patients in the Ante Natal Hostel.

Place of Birth. The increasing tendency for women to seek institutional confinement has been a prominent feature in recent years. In Cornwall the situation has been complicated by the Evacuation Scheme and the setting up of the Emergency Maternity Homes; the official evacuees have been frequently in billets in which confinement is virtually impossible and women who have evacuated to the County under private arrangements have often been in addition persons more prone than are the Cornish women to look upon institutional confinement as the normal thing. Nevertheless, the matter is one worth keeping under observation, and the following figures, which apply to births notified as occurring in the County Council's area as Welfare Authority, are of interest:—

Percentage of Births occurring in Various Places.

Year.	Patient's own Home.	Nursing Homes.	Emergency Homes & Maternity Home, Bodmin.	County Maternity Ward, Redruth.	County Maternity Ward Annexe, "Trewirgie Corner."	Other
						Hospitals & Public Assistance Institu- tions.
1941	65.2	15.7	9.9	5.7	—	3.5
1942	63.4	16.5	12.1	4.5	—	3.5
1943	58.5	21.7	8.7	4.6	3.25	3.25

Home Helps. During the year a Scheme was inaugurated for the employment of Home Helps in homes for women at the time of their confinement. Although this Scheme is at present in its early stages, it is hoped that it will develop into a most useful service.

Residential Nurseries.

1. **Perranporth Residential Nursery.** (22 beds). This Nursery continued its useful work; 42 children were admitted, bringing the total admissions since the opening of the Nursery in 1941 to 206.

2. The Health Department continued to provide general medical supervision for the three L.C.C. Nurseries at Looe, Carbis Bay and Newquay, and for the two "Save the Children" Fund Nurseries at Redruth and Looe. Again, a considerable amount of epidemiological work was carried out.

War-Time Nurseries.

The four day nurseries at St. Austell, Camborne, Newquay and Polzeath were continued, the average daily attendances for the year being respectively 26, 12, 18 and 20 and the maximum attendances on any one day being respectively 41, 33, 35 and 33.

Midwifery.

	1941.	1942.	1943.
Number of births in the County	6,413	5,126	5,134
Number attended by Midwives acting as Midwives	1,690 (26.35%)	3,016 (58.83%)	2,919 (58.85%)
Number attended by Midwives acting as Maternity Nurses	1,089 (16.98%)	1,657 (32.32%)	1,968 (38.33%)
Total attended by Midwives in either capacity	2,779 (43.33%)	4,673 (91.16%)	4,887 (95.18%)

Medical help was sent for by Midwives in 39.94% of their cases as compared with 43.96% for 1942 and 52.23% for 1941.

REPORT OF THE SUPERVISOR OF MIDWIVES.

Total number of midwives who have notified their intention to practise during the year 1943 is 260.

Number in practice on December 31st, 1943 231

Available for work as follows:—

Domiciliary	...	...	...	...	...	...	186
Nursing Homes	...	...	...	...	...	...	25
Institutions	...	...	...	...	...	...	20
Total	...	...	...	...	...	...	231

Of the Domiciliary Midwives:—

Work under the Cornwall County Nursing Association	...	...	...	...	...	...	152
Under Independent Association	...	...	...	...	...	...	1
In private Practice	...	...	...	...	...	...	33
Total	...	...	...	...	...	...	186

The Domiciliary Midwives working under the Cornwall Nursing Association are of 3 classes:—

Village Nurse Midwives	...	...	...	...	...	...	112
S.R.N. and S.C.M.	...	...	...	...	...	...	21
Queen's Nurses, S.R.N. S.C.M. and District Training	...	...	...	...	...	...	19
Total	...	...	...	...	...	...	152

Cases attended by Midwives in different groups:—

	As Midwives	As Maternity Nurses.
Cornwall County Nursing Association	1,683	1,099
Independent Association	47	41
Institutions (County Maternity Unit and Homes)	749	61
Nursing Homes and Public Assistance Institutions	396	698
Private Practice	44	69
Total	2,919	1,968

During the year 487 visits were paid in addition to 278 special visits of enquiry; an average of 3 visits to each practising midwife.

	As Midwife.	As Maternity Nurse.
Notifications Received.		
Cases Attended	2,919	1,968
Stillbirths	42	—
Death of Mother	4	1
Death of Child	22	—
Artificial Feeding	92	—
Liability to be Infectious	70	—

Number of Times Medical Aid Sought.

	1942.	1943.
For Mother—		
During Ante-natal period	275	262
At Labour	766	659
During Puerperium	120	90
For Child	165	155
	1,326	1,166

Of the 42 stillbirths:—

Full term	...	...	...	...	...	...	28
Premature	...	...	...	...	...	...	14
Macerated	...	...	...	...	...	...	23

Deaths of Infants.

Of the 22, 5 were premature.

Maternal Deaths.

Of the 4 maternal deaths, 2 occurred in Hospital and 2 at home, the causes of death being certified as follows:—

Phlebitis and Pylitis
 Coronary Embolism
 Gas Gangrene
 Puerperal Insanity.

There was also one maternal death in which the midwife was acting as maternity nurse.

Liability to be a source of Infection.

Of the 70 cases notified:—

Rise of temperature	...	...	...	...	...	44
Discharging Eyes	...	...	...	...	...	6
Rash	...	...	...	...	...	3
Illness of Nurse	...	...	...	...	...	2
Other Causes	...	...	...	...	...	15

Puerperal Pyrexia.

Of the 55 cases:—

Midwives' cases at home	...	...	...	...	13
Doctors' cases at home	...	...	...	...	8
Occurred in Nursing Homes	...	...	...	...	7
Occurred in County Maternity Ward	...	...	...	...	27

Of the 21 cases delivered at home, 9 were admitted to Hospital and 12 were nursed at home.

Of the 7 cases delivered in Nursing Homes, 4 were admitted to Hospital.

Maternal Mortality. There were 7 deaths from Sepsis and 6 from other causes connected with child bearing, making a total of 13 deaths. The following are the rates per 1,000 births, including still births, in recent years.

	Sepsis.	Other Causes.	Total Cornwall.	England & Wales.
1919-22	0.76	3.26	4.02	—
1924	0.58	2.12	2.70	3.90
1925	1.82	5.05	6.87	4.08
1926	0.62	2.47	3.09	4.12
1927	1.27	3.17	4.44	4.11
1928	1.71	3.86	5.57	4.42
1929	1.94	3.24	5.18	4.33
1930	0.86	3.87	4.73	4.40

		Sepsis.	Other Causes.	Total Cornwall.	England & Wales.
1931	...	0.85	2.78	3.63	3.94
1932	...	0.87	2.85	3.72	4.06
1933	...	1.81	2.72	4.53	4.23
1934	...	1.81	4.09	5.91	4.41
1935	...	0.68	3.88	4.57	3.93
1936	...	1.14	2.75	3.89	3.65
1937	...	0.48	3.12	3.60	3.11
1938	...	1.42	3.32	4.74	2.97
1939	...	0.72	2.62	3.34	2.82
1940	...	0.22	2.18	2.40	2.16
1941	...	1.13	3.20	4.33	2.23
1942	...	0.39	1.56	1.95	2.01
1943	...	1.36	1.17	2.53	2.29

The rates for particular years are very variable owing to the comparatively small number of births. The following are the rates for recent five year periods:—

1924-28	...	4.53
1929-33	...	4.36
1934-38	...	4.54
1939-43	...	2.91

In comparisons with the rest of the country it is wise to use the quinquennial figure for Cornwall, as a rate such as this which depends on a small figure of actual deaths is liable to fluctuate violently and the general trend is difficult to follow. Using then the quinquennial rates for maternal mortality, the number of deaths in the five year period 1939/1943, had the maternal mortality rates of 1914/1918 applied, would have been 115, whereas in fact only 71 mothers lost their lives during these years for reasons connected with childbirth.

Infant Mortality.

Infant mortality rates:—

				Cornwall.	England & Wales.
1898	...	...	...	156	160
1900	...	...	...	126	154
1910	...	...	...	85	105
1911	...	...	...	129	130
1920	...	...	...	59	80
1930	...	...	...	51	60
1931	...	...	...	54	66
1932	...	...	...	54	65
1933	...	...	...	52	64
1934	...	...	...	57	59
1935	...	...	...	46	57
1936	...	...	...	51	59
1937	...	...	...	49	58
1938	...	...	...	50	53
1939	...	...	...	59	50
1940	...	...	...	48	55
1941	...	...	...	52	59
1942	...	...	...	46	49
1943	...	...	...	36	49

The Infant Mortality rate for this County has now reached a record low figure which is well below that for England and Wales. In the year 1900 more than a thousand children under the age of one year died in this County giving an Infant Mortality rate of 126 per thousand live births. Last year the number of children under the age of one year who died in the County was only 178, representing an Infant Mortality rate of 36 per thousand, the lowest rate ever recorded in this County and far below the rate (49) for England and Wales. The reduction in the death rate of these young children means that having regard to the present birth rate, there were saved last year the lives of 448 young children who would have died had the Infant Mortality rate been what it was in 1900.

Work of the Cornwall County Nursing Association for the Year 1943.

Number of District Nursing Associations	...	121
Number of Nurses employed	... ..	152
19 are Queen's Nurses.		
21 are State Registered Nurses and State Certified Midwives.		
112 are State Certified Midwives.		

New Patients attended.

Medical	... ..	7,835
Surgical	... ..	4,904
Midwifery and Maternity	... ..	2,782
		<hr/>
		15,521
		<hr/>

Visits Paid.

General	... ..	191,857
Midwifery	... ..	31,414
Maternity	... ..	21,408
Casual	... ..	44,833
Ante-natal Visits	... ..	19,515
Health Visits	... ..	70,745
Operations attended	... ..	270
Nights on duty	... ..	1,865

Work of the Health Visitors. The following is the work of the whole-time Health Visitors and District Nurses acting as Health Visitors:—

	1942.	1943.
Health visits to mothers and children	64,052	70,745
Attendances at Clinics and Treatment Centres	265	1,199
Visits to tuberculosis patients	2,343	2,881
Lectures and talks to mothers	169	248
School Medical inspections attended	536	420
School Cleanliness inspections attended	2,825	3,903
School children followed up	10,471	12,564
Visits to boarded out children	580	789

Excluding the Boroughs of Penzance and Falmouth, which have separate Maternity and Child Welfare Schemes, the County Health Visitors with the District Nurses acting for the County Council made the following visits:—

To Expectant Mothers—

	1941.	1942.	1943.
First visits	3,079	3,321	3,701
Total visits	16,429	19,293	19,787

To children under 1 year of age—

First visits	3,529	3,928	4,236
Total visits	23,531	30,703	31,517

To children between the ages of 1 and 5 years—

Total visits	26,964	34,757	39,228
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Infant Welfare Centres. No Centres are maintained by the Council. The following Centres are maintained by Voluntary Associations in the County Maternity and Child Welfare Area:—

Bodmin.	Padstow.
Bude.	Penryn.
Callington.	Perranporth.
Camborne.	Perranwell.
Camelford.	Portscatho.
Delabole.	Redruth.
Downderry.	St. Agnes.
Grampond Road.	St. Austell.
Hayle.	St. Blazey and Par.
Illogan (Pool).	St. Day.
Launceston.	St. Mawes.
Liskeard.	Tintagel.
Looe.	Truro.
	Wadebridge.

Total number of children who attended at the Centres for the first time during the year:—

	1938.	1939.	1940.	1941.	1942.	1943.
Number of Centres	22	23	22	25	23	27
(i) Children under 1 year of age	532	541	868	1,185	829	949
(ii) Children between the ages of 1 and 5 years	306	320	597	636	301	380
Percentage of notified live births represented in (i) above ...	15.24	15.37	22.31	26.40	16.76	23.12

In a rural county such as Cornwall most mothers find the distances too great to attend the Centres, and the Health Visitors follow up cases to their homes.

Ophthalmia Neonatorum.

Noti- fied.	Cases		Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths
	At Home.	In Hospital.				
28	15	8	28	—	—	—

Many of the cases notified were very mild. An emergency nurse is supplied for home nursing when necessary.

Child Life Protection. 68 persons receiving children for reward were on the Register at the end of the year and 104 such children were registered.

Squint. Arrangements are made for the examination of children under school age with Squint, and for the provision of glasses in necessitous cases. 9 children under school age were so examined during the year, and glasses provided free in 2 cases.

Nursing Homes Registration. There are 25 registered Nursing Homes. Exemption from registration has been granted to 15 Hospitals. No powers have been delegated.

ORTHOPAEDIC TREATMENT.

Clinics. There are 13 Orthopaedic Clinics in the County which are run by the County Council in conjunction with the Cornwall Committee for the Care of Cripples. The relationship between the County Council and the Cornwall Committee for the care of Cripples is so intimate that it is not easy to say precisely where the functions of the one ends and the other begins. Broadly speaking, the County Council pays for the services of the consulting Orthopaedic Surgeon and the Orthopaedic Sisters, pays the rent of the premises, and makes a grant towards the cost of transport. The Cornwall Committee for the Care of Cripples undertakes the vast amount of voluntary work involved in the actual running of the Clinics. Only those assisting with the administration of the Scheme can possibly realise the hours of devoted work which have for years been spent by Mrs. Martin, Honorary Secretary of the Committee, and her voluntary helpers and clinic secretaries in building up the Service to its present level of efficiency under the general guidance of Mr. W. W. Rentoul, the consulting Orthopaedic Surgeon.

It is being increasingly recognised that the proper place for Clinics of all kinds is the out-patient department of a general Hospital wherever possible, and steps are being taken to bring the Orthopaedic Clinic Service into closer relationship with the larger general Hospitals.

Following are particulars of the present Clinics:—

Clinic.	Where held.	Day & time.	Doctor's day.
St. Just	Women's Institute.	2nd & 4th Thursdays, 10 a.m.	Second Thursday.
Penzance	West Cornwall Hospital.	Thursdays, 1.30 p.m.	Last Thursday.
Helston	Public Assistance Institu- tion.	Mondays, 10 a.m.	Third Monday.
Camborne	Church Mission Hall, Trelowarren Street.	Wednesdays, 10 a.m.	Fourth Wednesday.
Falmouth	Falmouth Hospital	Tuesdays, 2 p.m.	Second Tuesday.
Truro	The Royal Cornwall Infirmery.	Mondays, 2 p.m.	First Monday.

Newquay	Dartford Physical Training College, Kingsfield, Pentire.	2nd & 4th Fridays, 1.30 p.m.	Second Friday.
St. Austell	Health Centre, Moorland Road.	Tuesdays, 10 a.m.	Third Tuesday.
Bodmin	Centenary Assembly Rooms, Fore Street.	1st & 3rd Fridays, 2 p.m.	First Friday.
Wadebridge	Congregational Church Rooms, Molesworth Rd.	Fridays, 10 a.m.	Third Friday.
Liskeard	Welfare Centre, Fair Park Road.	Saturdays, 10 a.m.	Second Saturday.
Camelford	St. John Ambulance Brigade Hall.	2nd & 4th Friday, 10 a.m.	Fourth Friday in February and at 2 monthly intervals.
Bude	Women's Institute.	Fridays, 2 p.m.	Third Friday in January and at 2 monthly intervals.

The Clinics at Penzance and Falmouth are provided in conjunction with the Penzance and Falmouth Local Education Authorities.

There are in addition the following Clinics:—

Launceston.—(Maintained by the Devonian Association).

Doctor's day: 1st Monday in the month at 2.30 p.m.

Mount Gold, Plymouth. — (Maintained by the Plymouth City Council). Doctor's days: 2nd and 4th Fridays in the month at 2.30 p.m.

Hospitals.

Truro.—The Royal Cornwall Infirmary, Truro.

Plymouth.—The Mount Gold Hospital, Mount Gold Road, Plymouth.

Exeter.—The Princess Elizabeth Orthopaedic Hospital, Buckerell Bore, Exeter.

Ivybridge.—The Dame Hannah Rogers' Orthopaedic Hospital, Ivybridge, Devon.

The number of Orthopaedic beds at the Royal Cornwall Infirmary, Truro, is 42.

Particulars of the work of the Clinics is shown in Table IV at the end of the Report.

The first part of the paper is devoted to a general
 introduction of the subject. It is then divided into
 three main sections. The first section deals with
 the general principles of the theory. The second
 section is devoted to the application of these
 principles to the case of a particular system.
 The third section discusses the results of the
 calculations and compares them with the
 experimental data. The paper concludes with a
 summary of the main findings and a few
 remarks on the future work.

The author wishes to express his appreciation
 to the members of the staff of the
 Institute for their kind hospitality and
 to the National Science Foundation for
 their generous support of this work.

TABLE I.

Infectious Diseases notified in each district during the Year 1943.

SANITARY DISTRICT	Smallpox	Diphtheria	Scarlet Fever	Typhoid Fever	Paratyphoid Fever	Erysipelas	Puerperal Pyrexia	Ophthalmia Neonatorum	Encephalitis Lethargica	Acute Polio-Encephalitis	Acute Poliomyelitis	Cerebro-Spinal Fever	Pneumonia	Malaria	Dysentery	Measles	Whooping Cough	Totals
URBAN																		
Bodmin	..	1	..	..	..	..	..	..	..	..	..	..	1	..	48	..	..	50
Bude-Stratton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Camborne-Redruth	..	29	35	..	..	14	32	13	..	..	..	3	47	2	4	424	14	617
Falmouth	..	1	5	1	..	3	5	2	..	..	..	1	18	..	..	137	8	181
Fowey	3	..	..	..	1	..	..	..	..	..	..	..	..	6	2	12
Helston	..	7	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	9
Launceston	2	..	..	..	..	..	2	7	..	..	49	2	62
Liskeard	2	..	..	1	2	..	..	..	..	..	9	..	..	6	3	23
Looe	4	..	..	1	3	..	..	..	..	..	8	1	..	17	1	35
Lostwithiel	1	1	..	..	..	..	8	..	..	6	4	20
Newquay	..	2	12	..	1	1	2	..	..	..	..	2	1	1	..	100	28	150
Padstow	4	..	..	..	..	..	..	..	..	..	1	..	1	..	..	6
Penryn	1	..	3	..	..	..	..	..	..	1	5	..	1	68	9	88
Penzance	..	88	22	1	..	2	1	1	1	..	..	4	5	..	..	36	52	213
St. Austell	..	9	15	..	..	3	3	..	..	..	..	1	4	..	..	147	74	256
St. Ives	..	2	1	..	..	..	1	..	..	..	..	..	15	..	..	7	21	47
St Just	..	5	7	..	..	..	..	1	..	..	..	2	9	..	..	1	1	26
Saltash	..	3	4	..	..	5	1	..	..	..	..	..	20	..	..	165	24	222
Torpoint	..	1	..	..	..	8	1	..	..	..	..	..	8	..	..	12	7	37
Truro City	..	5	2	..	..	..	1	..	..	..	..	2	5	..	..	13	..	28
TOTALS	..	153	118	2	4	40	54	18	1	..	..	18	172	4	54	1195	250	2083
RURAL																		
Camelford	..	2	4	..	..	5	..	..	..	..	..	..	1	2	2	9	62	87
Kerrier	..	5	1	2	..	5	1	1	..	..	..	5	3	..	3	45	13	84
Launceston	..	1	4	..	..	3	..	1	..	..	..	..	9	..	..	20	3	41
Liskeard	..	2	34	..	..	4	3	1	..	..	..	1	17	..	..	76	7	145
St. Austell	..	2	2	..	..	2	1	..	..	..	..	2	12	..	..	79	32	132
St. Germans	..	11	17	..	..	7	4	1	..	..	..	..	49	..	1	368	20	478
Stratton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Truro	..	4	12	1	2	2	3	2	..	..	..	1	19	..	..	106	53	205
Wadebridge	..	8	30	1	..	1	3	..	..	..	..	..	12	2	1	10	24	92
West Penwith	..	37	6	1	..	2	1	..	..	..	..	1	19	1	..	10	10	88
TOTALS	..	72	111	5	2	31	16	6	..	..	..	10	141	5	7	723	224	1353
Whole County	..	225	229	7	6	71	70	24	1	..	..	28	313	9	61	1918	474	3436

TABLE I

Lowest and highest values in each class

Class	Lowest value	Highest value
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TABLE II.

(a) ANALYSIS OF CASES TREATED AT THE COUNTY ISOLATION HOSPITAL, TRURO (in age groups of years).

Year ended 31st December, 1943.

Disease	0—		1—		5—		15—		20—		25—		30—		35—		45—		55—		65—		TOTAL	Deaths	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Diphtheria:—																									
Cases	2	—	11	5	37	44	11	19	13	13	5	10	1	6	4	10	—	1	1	—	—	—	193	44.06%	6
Carriers	—	—	4	—	12	5	—	—	1	—	—	1	—	1	—	1	—	—	—	—	—	—	25	5.71%	—
Contacts	1	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	.88%	—
Scarlet Fever	1	—	6	9	22	42	5	3	2	6	—	1	2	2	3	2	—	—	—	—	—	—	105	23.97%	1
Cerebro-Spinal F.	—	2	2	1	5	2	—	—	—	1	2	—	3	—	1	2	1	—	—	—	—	—	22	5.02%	3
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mumps	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	.46%	—
Chicken Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rubella	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	.23%	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	.46%	—
Poliomyelitis	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3	.68%	—
Encephalitis	—	—	—	—	—	—	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	3	.68%	—
Erysipela	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	1	—	—	—	—	3	.68%	—
Typhoid	—	—	1	—	—	—	1	—	2	1	1	—	—	—	—	—	2	1	—	1	1	—	10	2.28%	2
Paratyphoid	—	—	—	—	1	1	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—	—	5	1.14%	—
Dysentery	—	—	—	1	—	—	—	—	2	1	1	—	1	—	2	—	—	—	—	—	—	—	8	1.83%	—
Vincent's Angina	—	—	—	—	—	—	1	1	3	—	2	—	—	—	1	—	—	—	—	—	—	—	8	1.83%	—
Puerperal Sepsis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pemphigus Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Miscellaneous	2	—	—	1	6	5	1	5	4	5	4	2	2	1	1	1	4	3	—	—	—	1	48	10.97%	2
	6	2	24	18	84	99	20	30	26	31	16	14	10	11	13	16	7	7	1	1	1	1	438		14
	8	—	42	—	183	—	50	—	57	—	90	—	21	—	29	—	14	—	2	—	2	—			
	1.83%	—	9.59%	—	41.78%	—	11.41%	—	13.01%	—	6.85%	—	4.79%	—	6.62%	—	3.20%	—	.46%	—	.46%	—			

(b) ANALYSIS OF CASES TREATED AT THE WESTWARD HO! ISOLATION HOSPITAL, NEWQUAY (in age groups of years).

Year ended 31st December, 1943.

Disease.	0—		1—		5—		15—		20—		25—		30—		35—		45—		55—		65—		TOTAL	Deaths	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Chicken Pox	—	—	12	12	4	4	2	—	6	1	—	—	2	—	2	—	—	—	—	—	—	—	45	34.62%	—
Measles	—	—	1	3	7	4	2	2	6	5	3	1	3	1	—	—	—	1	—	—	—	—	29	30.00%	—
Mumps	—	—	3	—	—	—	4	1	2	8	4	—	2	—	3	—	—	—	—	—	—	—	27	20.77%	—
Rubella	—	—	—	—	—	1	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	3	2.31%	—
Whooping Cough	—	1	3	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	6.15%	—
Miscellaneous	—	—	—	—	1	—	—	3	1	2	—	—	1	—	—	—	—	—	—	—	—	—	8	6.15%	—
	—	1	19	15	14	11	8	6	15	17	7	1	9	1	5	—	—	1	—	—	—	—	130		—
	—	.77%	26.15%	—	25	—	14	—	32	—	8	—	10	—	5	—	—	1	—	—	—	—			
	—	.77%	26.15%	—	19.23%	—	10.77%	—	24.62%	—	6.15%	—	7.69%	—	3.85%	—	—	.77%	—	—	—	—			

MISCELLANEOUS CASES.

County Isolation Hospital, Truro.

Streptococcal infections	...	8
Streptococcal infection contact	...	1 (infant—with mother)
Tonsillitis	...	8
Not infectious	...	6 (all ? C.S.F.)
Sub-arachnoid haemorrhage	...	2
Not infectious	...	2 (? Scarlet Fever)
Quinsy	...	2
Pyelitis	...	2 (a member of staff—admitted twice)
Myocardial degeneration	...	1 (a member of staff)
B. Coli infection	...	1
Influenza	...	1
? Renal	...	1
T. B. Meningitis	...	1 (died)
Non-specific enteritis	...	1
Infective hepatitis	...	1
Lymphocytic meningitis	...	1
Post-diphtheritic cardiac complication	...	1
Meningococcal encephalitis	...	1
Nettle Rash	...	1
Urticaria	...	1
Transverse Myelitis	...	1 (? Poliomyelitis)
Cervical Adenitis	...	1
?Peritonitis	...	1 (? Paratyphoid)
Neoplasm Chest	...	1 (? Typhoid—Died)
Herpes	...	1

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Westward Ho! Isolation Hospital, Newquay.

Scarlet Fever	...	1
Urticaria	...	1 (? Measles)
Not infectious	...	2 (1 ? Rubella and 1 ? Chicken Pox)
Insect Bites	...	1 (? Chicken Pox)
Influenza	...	1 (? Measles)
Cervical Adenitis	...	1 (? Mumps)
Toxic Erythema	...	1 (? Measles)

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TABLE III.

STATEMENT OF TUBERCULOSIS—ANNUAL RETURN 1943.

	Pulmonary.				Non-Pulmonary.				Total.				Grand Total.	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.														
(1) Number of definite Cases of Tuberculosis on Register at beginning of Year ...	505	339	11	9	105	108	49	46	610	447	60	55	1,172	
(2) Transferred from other Counties ...	23	20	—	—	1	1	1	2	24	21	1	2	48	
(3) Lost sight of Cases returned during the year ...	1	—	—	—	—	—	—	—	1	—	—	—	1	
B.														
Number of New Cases diagnosed as TB during the year—														
(1) TB — ...	33	21	1	1					114	80	13	11	218	
(2) TB + ...	71	46	1	2										
Total TB— and TB+ ...	104	67	2	3										
(3) Non Pulmonary ...	—	—	—	—	10	13	11	8						
C.														
Number of Cases Written off during the year:—														
(1) Recovered ...	12	13	—	1	4	—	1	2	16	13	1	3	33	
(2) Dead (all causes) ...	59	40	1	2	6	2	1	1	65	42	2	3	112	
(3) Removed to other Areas ...	26	19	—	1	4	2	5	1	30	21	5	2	58	
(4) For other Reasons ...	4	4	—	—	—	1	1	—	4	5	1	—	10	
D.														
Number of definite Cases of TB on Dispensary Register at end of year ...	534	351	10	7	104	121	51	48	638	472	61	55	1,226	

TABLE
STATEMENT
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STATEMENT

No.	Description	Debit	Credit	Balance
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TABLE IV. ORTHOPAEDIC TREATMENT.

ATTENDANCES AT CLINICS AND NUMBERS ON REGISTERS, 1943.
(including the Boroughs of Penzance and Falmouth).

Clinic.	Attendances on Surgeon's Days.								Total Attendances on all Days.					Number of Cases on Register. on 31.12.43.				
	New Cases.				Total Attendances.				Under School age.	School age.	Tuber- culosis. (all ages)	Adults.	Total.	Under School age.	School age.	Tuber- culosis (all ages)	Adults.	Total.
	Under School age.	School age.	Tuber- culosis. (all ages)	Total.	Under School age.	School age.	Tuber- culosis. (all ages)	Total.										
St. Just ...	2	14	—	16	21	238	47	306	111	977	58	53	1199	3	56	8	9	76
Penzance (County cases)	23	53	—	76	119	295	52	466	340	1951	88	471	2850	33	140	11	93	277
(Borough cases)	—	30	—	30	—	177	—	177										
Helston ...	8	44	1	53	75	381	35	491	140	1303	99	322	1864	28	118	12	66	224
Camborne ...	19	51	—	70	123	419	46	588	257	1496	157	525	2435	56	207	25	142	430
Falmouth (County cases)	28	33	—	61	165	193	42	400	449	1433	95	223	2200	53	111	12	52	228
(Borough cases)	—	12	—	12	—	177	—	177										
Truro ...	55	87	—	142	369	875	85	1329	708	3694	233	228	4863	122	230	30	50	432
St. Austell ...	30	109	1	140	288	878	40	1206	578	4144	148	497	5367	100	300	18	136	554
Bodmin ...	12	39	—	51	44	369	14	427	53	1247	35	156	1491	33	115	4	58	210
Wadebridge ...	29	40	—	69	168	501	13	622	212	2744	23	310	3298	65	167	2	82	316
Liskeard ...	33	87	—	120	161	552	16	729	382	2559	48	608	3597	74	258	12	138	482
Newquay ...	48	38	1	87	59	465	22	546	78	2994	114	322	3508	14	151	5	29	199
Camelford ...	11	24	—	35	50	124	—	174	129	474	4	150	757	21	57	1	21	100
Bude ...	14	45	—	59	74	231	5	310	168	1033	28	65	1294	30	91	2	19	142
Totals of County Council Clinics ...	312	706	3	1021	1656	5875	417	7948	3605	26049	1130	3939	34723	632	2001	142	895	3670
Launceston ...	9	37	—	46	39	243	—	282	49	299	—	—	348	15	57	—	—	72
Mount Gold ...	—	—	—	—	—	5	—	5	—	7	—	—	7	—	2	—	—	2
Totals of Cornish Cases	321	743	3	1067	1695	6123	417	8235	3654	26355	1130	3939	35078	647	2060	142	895	3744

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MATERNAL MORTALITY.

GRAPHS.

The main features to be observed are as follows:—

1. Mortality from causes other than sepsis.

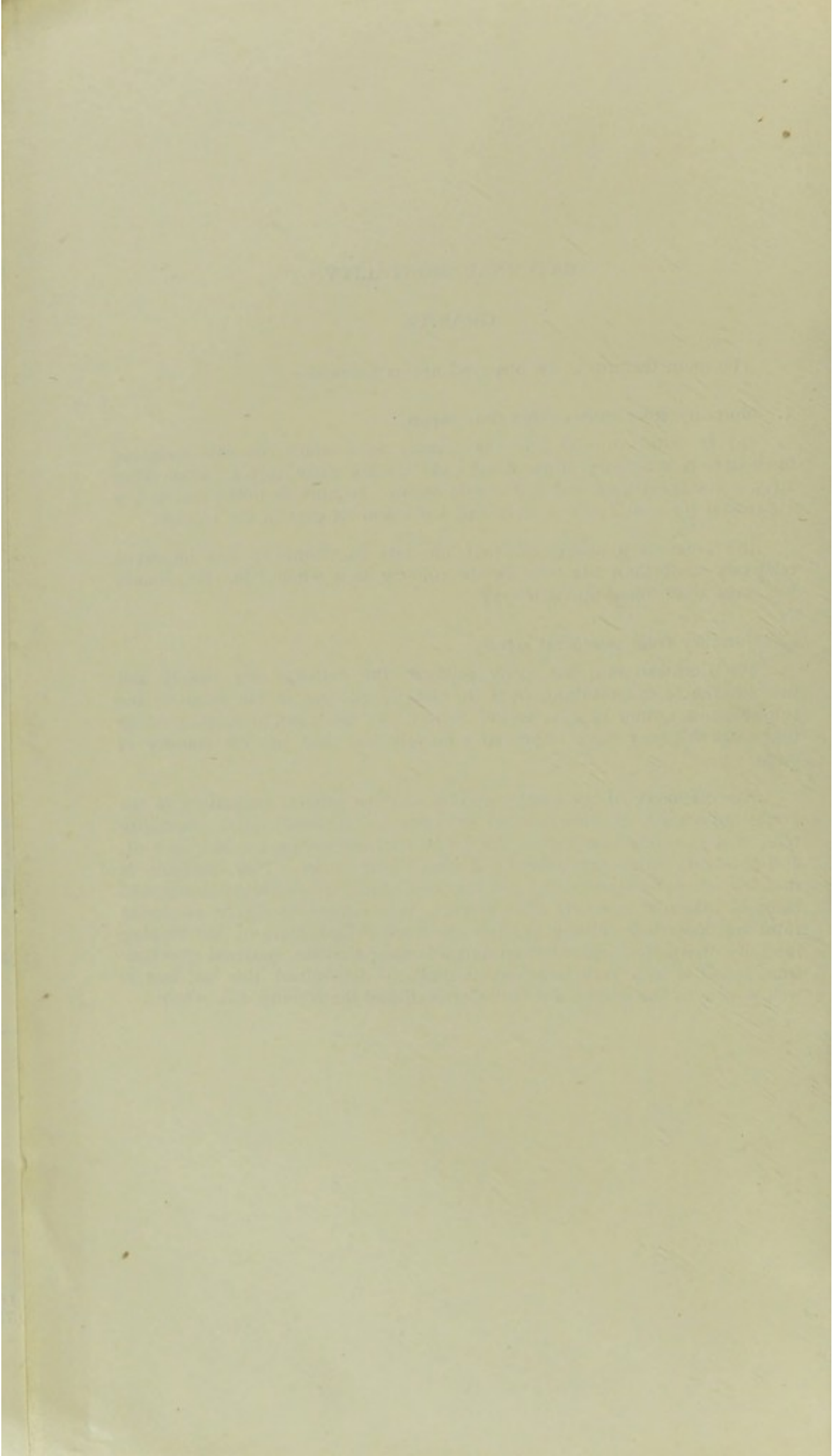
(a) In both Cornwall and the country as a whole the rate remained more or less stationary from about 1920 till the early 1930's. Soon after 1935, a remarkable decline in the rate began. It must be noted that this is a **national** phenomenon and Cornwall has taken its part in the change.

(b) There is a suggestion that the rate for Cornwall has improved relatively more than has that for the country as a whole, that the County has more than made up its leeway.

2. Mortality from puerperal sepsis.

The Cornwall rate has again followed the national rate closely and the remarkable fall resulting from the coming into use of the drugs of the sulphonamide group in 1934 is well shown. In this case, it seems possible that Cornwall may have improved relatively less than has the country at large.

The discovery of the sulphonamides and the general realization of the great importance of streptococcal infection in maternal sepsis mortality renders it of interest to add to the graph curves showing the incidence of, and mortality from, erysipelas in England and Wales. This condition is due to haemolytic streptococci and the parallelism between these curves and those of maternal mortality from sepsis is very remarkable. The erysipelas rates are dependent entirely on, and are sensitive indicators of, the varying intensity of streptococcal infection and it is clear that the maternal mortality from sepsis is to a very large extent similarly determined; this last fact is well shown, in the graphs, for both Cornwall and the country as a whole.



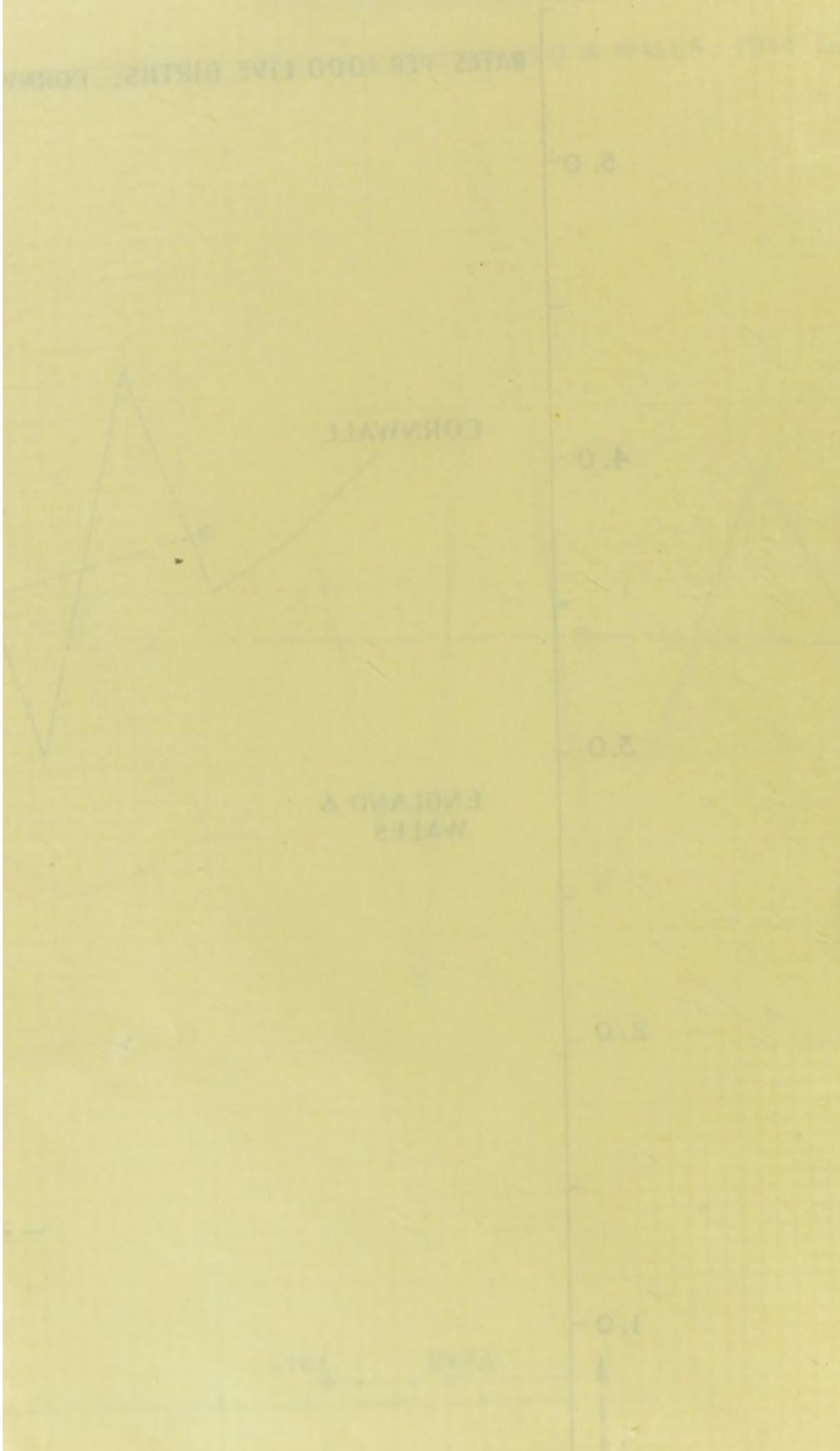
MATERNAL MORTALITY

RATES PER 1000 LIVE BIRTHS, CORNWALL (ADMINISTRATIVE COUNTY) AND ENGLAND & WALES, 1914 to 1943, FOR CAUSES OTHER THAN SEPSIS.



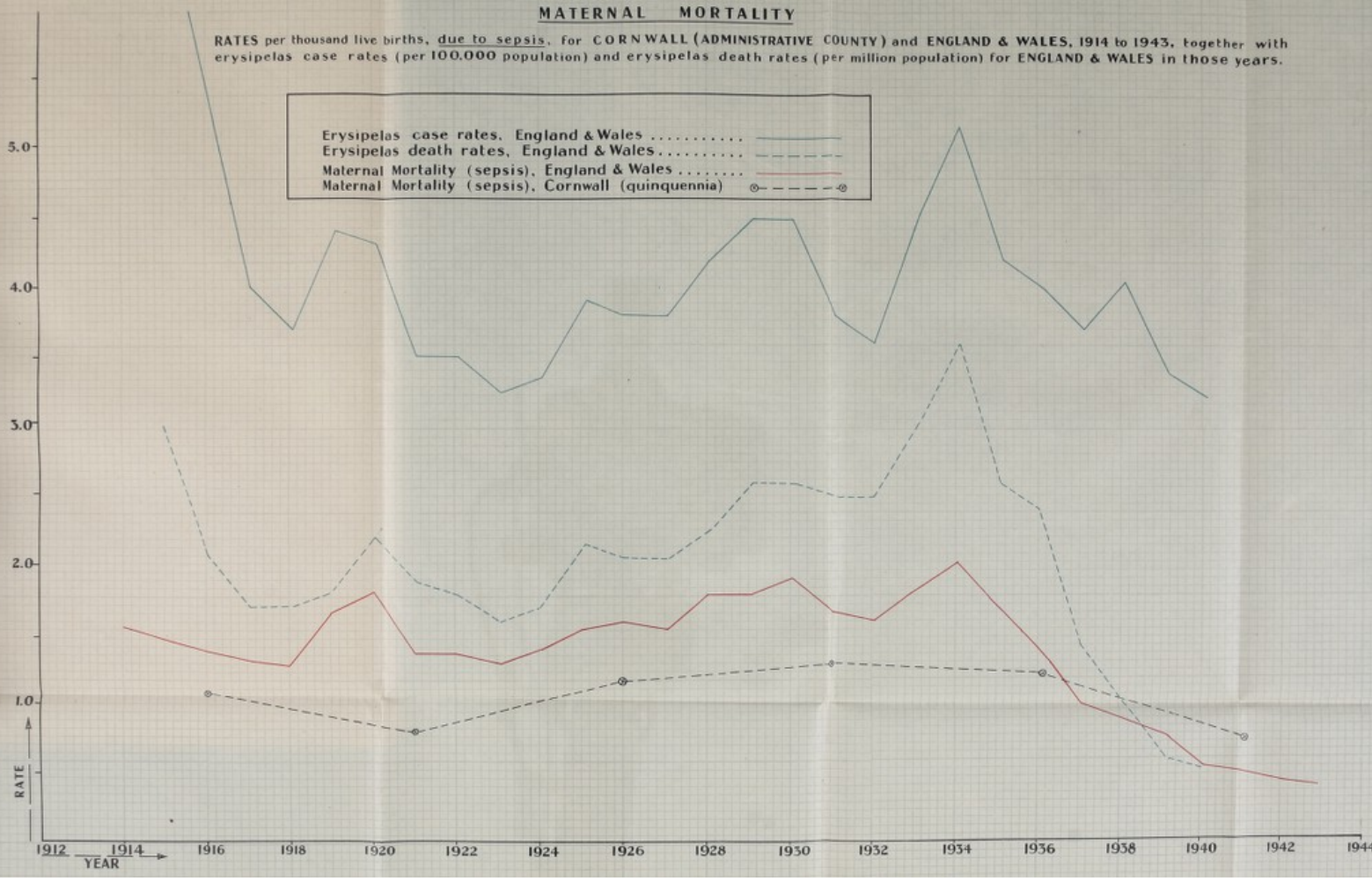
MORTALITY

RATES PER 1000 LIVE BIRTHS



MATERNAL MORTALITY

RATES per thousand live births, due to sepsis, for CORNWALL (ADMINISTRATIVE COUNTY) and ENGLAND & WALES, 1914 to 1943, together with erysipelas case rates (per 100,000 population) and erysipelas death rates (per million population) for ENGLAND & WALES in those years.



MATERNAL MORTALITY

STATISTICAL YEAR BOOK OF RAJES (continued in Part II)

